Libraries and Learning Services

Academic & information literacy (AIL) programme:

Curriculum integration

Professional development for librarians and learning advisers at the University of Auckland

Learning Objectives

Librarians and advisers will:

- Gain an understanding of AIL and its importance to the University of Auckland, as well as the responsibilities of all stakeholders in providing AIL education to students.
- Analyse faculty/school/departmental (referred to as faculty in this document) curricula to identify potential courses for AIL integration.
- Understand different collaborative approaches when working with faculty, peers and other professional staff within UoA.
- Understand and apply the Research Skills Development Framework (RSDF) and the Wang AIL integration model in AIL curriculum integration.
- Learn to measure the impact of AIL integration
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Programme overview

The academic and information literacy (AIL) curriculum integration programme was developed from a needs analysis study, conducted at the University of Auckland Libraries & Learning Services (LLS) in 2009/2010. The pilot programme was conducted in 2011. The programme was revised based on extensive evaluation at the end of 2011 and again in 2014.

The target audience of the programme is subject and learning support services librarians and learning advisers. The programme is compulsory for all new subject librarians, learning support services librarians (referred to as librarians in this document) and learning advisers (referred to as advisers in this document) who have started at the University of Auckland (UoA) LLS since January 2011.

1. Learning outcomes

Librarians and advisers will:

- Gain an understanding of AIL and its importance to the University of Auckland, as well as the responsibilities of all stakeholders in providing AIL education to students.
- Analyse faculty/school/departmental (referred to as faculty in this document) curricula to identify potential courses for AIL integration.
- Understand different collaborative approaches when working with faculty, peers and other professional staff within UoA.
- Understand and apply the Research Skills Development Framework (RSDF) and the Wang AIL integration model in AIL curriculum integration.
- Learn to measure the impact of AIL integration

2. Training modules and times

The training programme consists of five modules:

Module 1: AIL for learning
- Understand the concept of academic and information literacy (AIL)
- Comprehend that AIL is transformative rather than skills based
- Understand the importance of AIL in the University of Auckland context and the role of librarians and advisers.

Module 2: Understanding your faculty curriculum
- Understand the curriculum and different levels of curriculum at UoA
- Understand curriculum structure of an academic programme or a department and identify potential courses for integrating AIL
- Understand frameworks which underpin curriculum analysis

Module 3: Collaboration: the foundation of AIL integration
- Understand the nature of collaboration
- Learn who to collaborate with at the University
- Understand the LLS process of collaboration
Module 4: Integration of AIL into the curriculum and designing integration activities
• Understand the Wang integration model in curricular integration of AIL
• Apply the AIL frameworks
• Design AIL integration activities

Module 5: Measuring the impact of AIL integration
• Learn to measure the impact of AIL integration

Time expectations:
• Module 1: AIL for learning (2-3hrs reading and assignment + team discussion).
• Module 2: Understanding your faculty curriculum (3-4hrs reading & assignment + 4hr class).
• Module 3: Collaboration: the foundation of AIL integration (3-4hrs reading & assignment + 4hr class).
• Module 4: Integration of AIL into curriculum and designing integration activities (4-5hrs reading & assignment + 4hr class)
• Module 5: Measuring the impact of AIL integration (4-5hrs reading and assignments online)

3. Programme assignment
There is an assignment at the end of each module for which a template is provided. All the module assignments should be completed by each participant. The participant’s team manager will give written feedback on each module before you submit it. The assignment (MS Word) should then be emailed to the Learning Services Support Manager. Members of the LLS Teaching and Learning Portfolio group will also provide feedback on this assignment.

4. Delivery methods
The programme is delivered in a number of different formats: discussion with your team organised by your manager, face-to-face workshops, and online self-learning.

• Module 1 is a team discussion. Participants complete the assignment questions after the team discussion. The manager may decide to invite LLS members outside of the team e.g. a learning support services librarian and a learning adviser to join the discussion.
• Modules 2-4 are face-to-face workshops where relevant LLS and faculty teaching staff facilitate or participate in the group discussions.
• Module 5 is a self-paced online learning module.

5. Programme website
The programme website is available at:
http://flexiblelearning.auckland.ac.nz/iltraining/index.html

6. Time frame
The programme will be offered in 2016 on the following dates:

• Module 1 (team Discussion): the module content is available on the programme website, assignment due Monday 4 April 2016.
• **Module 2 (Workshop)**: 9-1pm Tuesday 19 April 2016, assignment due Monday 2 May 2016

• **Module 3 (Workshop)**: 9-1pm Thursday 17 May 2016, assignment due Monday 30 May 2016

• **Module (Workshop) 4**: 9-1pm Tue 21 June 2016, assignment due Monday 4 July 2016

• **Module 5 (Online)**: the module content is available on the programme website, assignment to be completed by Mon 29 Aug 2016

### 7. Training related documents

There are several documents relating to this programme, including handouts, information for team managers and PowerPoint presentations for modules 2-4. These documents are available from the programme website.

- **Handout (modules 1-4)**: this is for participants. The handout (this document) contains all the key information including module learning outcomes, learning activities and module assessments. It is used at all the training sessions in combination with the PowerPoint presentations. The handout will be sent out module by module.

- **Information for Managers**: this is for team managers. It informs managers of the requirements of each module and module assessment, and the steps for signing off each module.

- **Module 2 presentation (PPT)**: is used in the group workshop in combination with the handout.

- **Module 3 presentation (PPT)**: is used in the group workshop in combination with the handout.

- **Module 4 presentation (PPT)**: is used in the group workshop in combination with the handout.


### Training certificate

An AIL curriculum integration programme certificate will be awarded to those who have successfully completed **all five modules and all assignments**.

### Mentor/Peer support

During the course of this programme you may elect to have a mentor or peer that you could work with. A mentor may be someone who has done the programme before, or a peer may be someone who is currently on the course with you.

### Contacts

If you have any suggestions or comments on the programme, please contact one of the programme committee members: Li Wang ([l.wang@auckland.ac.nz](mailto:l.wang@auckland.ac.nz)), Chris Moselen ([c.moselen@auckland.ac.nz](mailto:c.moselen@auckland.ac.nz)), Julie Bartlett-Trafford ([j.trafford@auckland.ac.nz](mailto:j.trafford@auckland.ac.nz))
Module 1: AIL for learning

Module 1 provides an overview of academic and information literacy (AIL) in relation to both LLS and university frameworks. It also sets the scene for AIL within the university context and outlines the responsibilities of all those involved in AIL education.

Delivery of the module happens within the participants’ own team and is a discussion involving the participant, the team manager and team members. The team manager may also include LLS staff from outside the team – such as the learning support librarians and student learning advisers.

1. Learning outcomes

   • Understand the concept of academic and information literacy (AIL) as the basis of the AIL integration
   • Comprehend that AIL is transformative rather than skills based
   • Understand the importance of AIL in the University of Auckland context and the role of librarians and advisers in taking responsibility for AIL integration.

2. Readings

   Links to the readings are available on the course website.

      [Read the truncated version which is available on the course website]

      [Read Definition and terminology, p5-6]


   5. University of Auckland. *UoA Graduate Profiles* (New Graduate Profile to be implemented in 2016, can also use the summary sheet on the programme site.

3. Team discussion
(joined by other subject librarians/learning advisers and organised by manager)
Read the required documents and discuss the following questions:

1. Based on the readings 1-3, what is your understanding of academic and information literacy in the higher education context?

2. How do readings 2 & 3 inform the idea that AIL is transferrable and transformational rather than just a set of skills?

3. In the new UoA graduate profile, all the capabilities are divided into 6 themes. Which themes are relevant to AIL and why?

4. Read the ACRL Framework and the new graduate profile. ACRL Framework consists of six key threshold concepts. You will be given one of the threshold concepts (see the programme website) to map with one of the themes of the Graduate Profile. In your team discussion, you need to discuss the relationship between the threshold concept that you have been given and the theme from the Graduate Profile you choose. Focus on the following questions:
   a. what does this threshold concept mean to you and your team?
   b. how might this threshold concept relate to the work that you and your team do?

5. Based on the UoA Information Literacy Guidelines and Principles, reflect on the roles of librarians/advisers and faculty in terms of information literacy education and curriculum integration of information literacy?

6. Find out if the faculty you are working with has accrediting bodies such as the Institution of Professional Engineers NZ (IPENZN) or the New Zealand Teachers Council. Which attributes are related to AIL? Please provide the URL of the accrediting documents. (this question is only for the professional faculties who have accrediting bodies)

4. Module assignment and completion

1. Record the discussions of you and your team in the template below in Module 1 Appendix.

2. Watch the video Reflective Writing available on the programme website. The video gives guidance on writing reflectively. You will be asked to write reflections throughout this programme.

3. Your manager should comment on and sign your completed form (module 1 Appendix). Email the Word version of your signed form to the Learning Support Services Manager l.wang@auckland.ac.nz so your completion of Module 1 can be recorded and feedback can be provided to you.

4. Read the two readings below in preparation for Module 2.

## 5. Module 1 Appendix: AIL for learning assignment template

<table>
<thead>
<tr>
<th>Name of librarian/adviser:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of discussion:</td>
</tr>
<tr>
<td>Discussion topics:</td>
</tr>
</tbody>
</table>

1. Based on readings 1-3 what is your understanding of AIL in the higher education context? (300 Words max)

2. How do readings 2 & 3 inform the idea that AIL is transferable and transformational rather than just a set of skills? (300 Words max)

3. In the UoA graduate profile the capabilities are divided into 6 themes. Which themes are relevant to AIL and why? (300 Words max)

4. Read the ACRL Framework and the new graduate profile. ACRL Framework consists of six key threshold concepts. You will be given one of the threshold concepts (see the programme website) to map with one of the themes of the Graduate Profile. In your team discussion, you need to discuss the relationship between the threshold concept that you have been given and the theme from the Graduate Profile you choose. Focus on the following questions:
   4.1 what does this ACRL threshold concept mean to you and your team?
   4.2 how might this threshold concept relate to the work that you and your team do? (500 words max)
5. Based on the UoA *Information Literacy Guidelines and Principles*, reflect on the roles of librarians/advisers and faculty in terms of information literacy education and curriculum integration of information literacy? (300 words max)

6. Find out if the faculty you are working with has accrediting bodies such as the Institution of Professional Engineers NZ (IPENZN) or the New Zealand Teachers Council. Which attributes are related to AIL? Please provide the url of the accrediting documents. (this question is only for the professional faculties who have accrediting bodies) (100 words max)

**NOTE:** This question is only for professional faculties who have accrediting bodies.

**Team manager’s comments:** (include comments on participant’s preparedness for the discussion, understanding of AIL, understanding of reflection)

**Manager’s name:**
(endorcing completion of Module 1)

Date:

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Email the above document to the Learning Support Services Manager (l.wang@auckland.ac.nz) by 4th April 2016.

**Preparation for module 2:** Read the following required readings before you attend Module 2:


Module 2: Understanding your faculty curriculum

This module covers an overview of curricula in higher education, different types of curricula at the University of Auckland, the curricular design process at the University, the scaffolding frameworks that underpin curriculum mapping, as well as how to analyse a programme curriculum to identify what is being taught and the requisite pathway connections of that programme.

1. Learning outcomes:
   • Understand the curriculum and different levels of curricula at UoA to effectively integrate AIL into different levels of curriculum
   • Understand curriculum development process at UoA to determine the AIL integration opportunities
   • Be able to analyse an academic programme curriculum structure and identify potential courses for AIL integration
   • Understand the scaffolding learning frameworks to underpin the integration of AIL at different levels

Prerequisites:
Module 1

2. Module 1 Revision

Activity 1: Welcome morning tea

Activity 1: Introduce yourself to someone you do not know and find out:
   • your partner’s name, position & team
   • work experience
   • something interesting about him/her

Activity 2: Review of Module 1

Activity 2: Module 1 assignment summary
Reflection of M2 readings

Activity 3: M2 reading reflection in pairs:

1. What is your understanding of curriculum in higher education?
2. What are different levels of the curriculum? (refer to Wang’s article)
3. What are some challenges to map the curriculum against graduate capabilities? (refer to Spencer’s article)

Report back to the class

3. What do we mean by ‘curriculum’ in this training programme?

‘Curriculum’ is an educational plan to enable students to obtain knowledge and skills leading to a degree or diploma. It not only refers to the official list of courses and their content offered by a university, but also refers to its purposes, organisation, delivery and activities, and the evaluation programme developed in an institution.

Curricula at the University of Auckland

There are different levels of the curriculum at the University: institutional, faculty, programme, course and class.

At the institutional level, the curriculum refers to the university graduate profiles and the teaching and learning policies (e.g. IL guidelines and principles) which guide the implementation of the offered curriculum (what the staff are going to teach).

At the faculty level, the curriculum refers to faculty teaching and learning policies and professional graduate requirements, as well as the official list of academic programmes and courses offered by that faculty. For example, the Engineering Faculty undergraduate programmes at the University of Auckland consist of general education courses, compulsory courses and electives. A faculty curriculum includes the organisation of the programmes and the courses and the assessment of student learning.

At the programme level, the curriculum refers to programme organisation, course objectives, content, delivery and activities, assessment and evaluation. For example, the undergraduate Nursing programme and the undergraduate Planning programme.

At the course level, the curriculum refers to course organisation, course objectives, content, delivery and activities, assessment and evaluation.

Below the course level of the curriculum there is the class level, which refers to class learning objectives, content, activities, assessment and evaluation.

AIL can be integrated into all these levels of curricula. First of all, let’s look at the curriculum design at the University.
4. Process of creating & changing courses at UoA

**TEC/MOE - CUAP**

| UOA - APC | L&LS Managers |
| FACULTY - AP Sub Committee | L&LS Managers |
| PROGRAMME - Programme Coordinator | L&LS Librarians/Advisors |
| COURSE – Course Coordinator/lecturers | L&LS Librarians/Advisors |

**AP**: Academic Programme sub-committee (APC at each faculty level)

**APC**: Academic Programme Committee

**CUAP**: Committee on University Academic Programmes

**MOE**: Ministry of Education

**TEC**: Tertiary Education Commission

**Video 1**: An overview of when the course curriculum can be revised. The video focuses on this question:

- When would faculty teaching staff change the course content, assignments and assessment tasks?

- Video 2: An overview of the process of making the changes in a course at the University of Auckland. The video focuses on this question:

- Video 3: An overview of the process of developing a new course at the University of Auckland. The video focuses on this question:

- What is the curricular approval process for a new course in a department or faculty?
**Summary of analysing an academic curriculum**

- Any major change: at least a year in advance in order to be included in the University calendar
- Course coordinators are the key in assignment or other course changes
- Percentage of exam in assessment: 30%+70% or 50%+50%
- New course development: often starts from a special topic then elective so new courses have more opportunity to integrate AIL in.

It is important to understand your faculty curriculum and the student body in each academic course. This facilitates your work with faculty teaching staff when you aim to integrate AIL into teaching. You can obtain faculty curricular programme information through these channels:

- University calendar (either print or online [http://www.calendar.auckland.ac.nz/](http://www.calendar.auckland.ac.nz/));
- Your faculty undergraduate handbook or prospectus;
- Faculty or departmental course website;
- Departmental manager for a course list and course coordinators and lecturers.

You can obtain the number of students enrolled in a course through the University Student Services Online website ([http://www.studentservices.auckland.ac.nz/uoa/sso-class-search](http://www.studentservices.auckland.ac.nz/uoa/sso-class-search)).

### 5. Understanding curriculum at programme level

In order to understand a programme curriculum, we need to understand the programme structure. We start with programme curriculum structure analysis by looking at two different examples.

**Example 1: Civil engineering programme curriculum structure analysis**

Below is a real example of analysing an engineering undergraduate curricular programme to understand what is being taught and the requisite pathway connections. Based on the results of the analysis, courses with potential for AIL integration can be identified in each year as shown in the diagram below.
Example 2: BHSc programme curriculum structure analysis

Below is another real example of analysing a Bachelor of Health Science undergraduate curricular programme to understand what is being taught and the requisite pathway connections. This programme is different from the above Engineering one as it does not have core courses cross all years. For this kind of programme, the pre-requisite approach can be used to identify the courses which have the most impact on the programme.
Summary: process of analysing a faculty curricula programme structure

- Identify all courses in each year
- Identify course coordinators/teaching staff for each course where possible
- List all courses and course coordinator and teaching staff by year and semester with a short description
- Analyse opportunities for AIL integration

6. Scaffolding learning frameworks for understanding curricula

There are many different frameworks that can be used to understand the faculty programme structure, how to design learning activity and assessment in a scaffolded, increasingly sophisticated manner, integrating AIL capabilities into course and programme curricula. We will illustrate a few widely used, useful frameworks as we think about the curriculum structure, AIL curriculum design and integration.

6.1 Bloom’s taxonomy

Bloom’s taxonomy identifies six levels of learning within the cognitive domain, from the simple recall of knowledge through increasingly more complex mental interaction such as understanding, application, analysis, synthesis to evaluation. Bloom’s taxonomy provides us with a framework for scaffolding knowledge to build AIL learning outcomes from a lower level to an increasingly higher level. Once you have decided appropriate levels for the learning outcomes, all AIL learning activities can be developed based on these learning outcomes. Below are some examples of AIL learning outcomes developed at the different years.

An example of Bloom’s taxonomy application in Education

<table>
<thead>
<tr>
<th>Using information to learn</th>
<th>Year 1 – Support &amp; scaffolding</th>
<th>Year 2 – Developing independence</th>
<th>Year 3 – Independent learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NB Categories below developed from items in blue:</strong></td>
<td>Bloom’s Taxonomy – remember and understand</td>
<td>Bloom’s Taxonomy – apply and analyse</td>
<td>Bloom’s Taxonomy – evaluate and create</td>
</tr>
<tr>
<td><strong>Recognise need for information/decide</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Profile II (e)</td>
<td>Understand the appropriate learning management system – Cecil/Moodle – and what courses are located where</td>
<td>Analyse assignment topics and choose keywords for searching</td>
<td>Determine when further information is needed and be able to find it from relevant sources</td>
</tr>
<tr>
<td>UoA IL Policy – Skills (a)</td>
<td>Record ideas using thinking tools such as brainstorming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANZIIL IL Standards (1)</td>
<td>Understand the assignment questions and requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Locate/find/sort information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Profile II (e)</td>
<td>Understand the Education Library – know how to get course readings, find books, check out and return books, lending policies, where to get study help, special collections</td>
<td>Construct a keyword concept map for searching the Catalogue and Databases</td>
<td>Compare Google Scholar and the Education set of databases for finding articles</td>
</tr>
<tr>
<td>UoA IL Policy – Skills (b)</td>
<td>Identify items on a reading list – understand differences between journals, articles, book chapters, books</td>
<td>Find the full-text of an article both electronically and in print</td>
<td>Create advanced Catalogue searches using features by saving searches and using facets</td>
</tr>
<tr>
<td>ANZIIL Standards (2)</td>
<td>Discriminate between primary and secondary sources of information</td>
<td>Develop a mental map of Catalogue, Databases and Internet (Google) – understand limitations of Internet</td>
<td>Create advanced Internet/database searches – use social bookmarking to store and retrieve information</td>
</tr>
<tr>
<td><strong>Use/record information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Profile II (e)</td>
<td>Understand what plagiarism is, the UoA policy on plagiarism, and the CLL contract</td>
<td>Discriminate between primary and secondary sources of information</td>
<td>Evaluate a variety of information sources including conference papers, audio-visual information such as podcasts, and reports</td>
</tr>
<tr>
<td>UoA IL Policy – Skills (a)</td>
<td>Identify the main ideas from information obtained</td>
<td>Locate government electronic information relating to education/social work</td>
<td></td>
</tr>
<tr>
<td>**ANZIIL Standards (a)</td>
<td>Demonstrate familiarity with study skills such as highlighting, note-taking skimming and scanning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RSDF (Research Skills Development Framework) has been developed and widely used in Australian universities to provide scaffolding opportunities for students to develop their research skills from a lower level (supported/guided) to a high level (completely independent). It covers research processes including: academic and information literacy, from clarifying required knowledge, to finding, evaluating, organising, analysing and applying information. It was developed based on the ANZIIL framework linked with Bloom’s taxonomy. For more information and examples of how to apply this framework, please visit: http://www.adelaide.edu.au/rsd/framework/.

As mentioned in Module 1 & 3, RSDF can be used to analyse and map a programme or course curriculum, it can also be used to develop learning outcomes, and/or assessment marking criteria to provide scaffolding learning opportunity for students.
An example of curriculum assignments analysis of identified courses using RSDF

<table>
<thead>
<tr>
<th><strong>B. Find &amp; Generate</strong></th>
<th>Collect and record required information or data using a prescribed methodology from a prescribed source in which the information/data is clearly evident.</th>
<th>Collect and record required information and/or data using a prescribed methodology from prescribed source/s in which the information/data is not clearly evident.</th>
<th>Collect and record required information/data from self-selected sources using one of several prescribed methodologies.</th>
<th>Collect and record self-determined information/data from self-selected sources, choosing an appropriate methodology based on structured guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGGEN 140</strong></td>
<td><strong>CIVIL 201:</strong></td>
<td></td>
<td><strong>ENNGEN 303:</strong></td>
<td><strong>CIVIL 705 Library Tutorial:</strong></td>
</tr>
<tr>
<td>Project Part 1:</td>
<td>• use Library Search</td>
<td>• use specified engineering databases guided by educators</td>
<td>• select from a range of given information sources e.g. databases, official information, statistics, patents and standards</td>
<td>• conduct a literature review using a variety of self-selected information sources</td>
</tr>
<tr>
<td></td>
<td>• use prescribed search methodology relating to biofuel</td>
<td>• use prescribed search methodology required for GIS and land information</td>
<td>• use one of several prescribed searching methodologies required for the case study</td>
<td>• use appropriate search methodology based on the research questions</td>
</tr>
<tr>
<td><strong>ENGGEN 140</strong></td>
<td><strong>ENNGEN 204</strong></td>
<td></td>
<td><strong>ENGGEN 303:</strong></td>
<td><strong>CIVIL 705:</strong></td>
</tr>
<tr>
<td>Project Part 1 and</td>
<td>• Use common language to write a pre-structured report and to</td>
<td>• Use discipline-specific language and genres to demonstrate scholarly understanding for a specified audience. Apply the knowledge developed to diverse contexts. Specify ESC issues in initiating, conducting and communicating.</td>
<td>• Write a system project report by applying knowledge learnt from the Mini Case Study and the Information Management lecture to demonstrate scholarly understanding for a specific audience.</td>
<td>• Write a literature review to address gaps on the research topic.</td>
</tr>
<tr>
<td>Part 2:</td>
<td>demonstrate understanding for lecturer/ teacher as audience.</td>
<td>• Present report scholarly using engineering specific language. Respond to feedback from peer assessments in the course.</td>
<td>• Present report scholarly using engineering specific language. Respond to feedback from peer assessments in the course.</td>
<td>• Write a research proposal and interim report for a self-selected audience.</td>
</tr>
<tr>
<td></td>
<td>• Cite references from a book, a journal and a website using</td>
<td>• Use information with respect of work of others by referencing appropriately and using different types of reference styles.</td>
<td>• Identify ethical, social and cultural issues in the system engineering report writing.</td>
<td>• Design poster to present own project research</td>
</tr>
<tr>
<td></td>
<td>the Engineering Number Reference Style with educator’s guidance.</td>
<td></td>
<td></td>
<td>• Write Project report and present it in the final year project seminar by applying innovatively the knowledge developed from the research project.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Specify ethical, social, and cultural issues relevant to the research topic.</td>
</tr>
</tbody>
</table>

**F. Communicate and Apply**

Write, present and perform the processes, understandings and applications of the research, and respond to feedback, accounting for ethical, social and cultural (ESC) issues.

<table>
<thead>
<tr>
<th><strong>ENNGEN 140</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Part 1 and Part 2:</td>
</tr>
<tr>
<td>• Use common language to write a pre-structured report and to demonstrate understanding for lecturer/ teacher as audience.</td>
</tr>
<tr>
<td>• Cite references from a book, a journal and a website using the Engineering Number Reference Style with educator’s guidance.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th><strong>ENNGEN 204</strong></th>
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<tbody>
<tr>
<td>• Write a team based report &amp; produce an oral presentation using some discipline-specific language for a specified audience with educator’s guidance</td>
</tr>
<tr>
<td>• Use information with respect of work of others by referencing appropriately and using different types of reference styles.</td>
</tr>
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<thead>
<tr>
<th><strong>ENNGEN 303</strong></th>
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<tbody>
<tr>
<td>• Write a system project report by applying knowledge learnt from the Mini Case Study and the Information Management lecture to demonstrate scholarly understanding for a specific audience.</td>
</tr>
<tr>
<td>• Present report scholarly using engineering specific language. Respond to feedback from peer assessments in the course.</td>
</tr>
<tr>
<td>• Identify ethical, social and cultural issues in the system engineering report writing.</td>
</tr>
</tbody>
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<thead>
<tr>
<th><strong>CIVIL 705</strong></th>
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<tbody>
<tr>
<td>• Write a literature review to address gaps on the research topic.</td>
</tr>
<tr>
<td>• Write a research proposal and interim report for a self-selected audience.</td>
</tr>
<tr>
<td>• Design poster to present own project research</td>
</tr>
<tr>
<td>• Write Project report and present it in the final year project seminar by applying innovatively the knowledge developed from the research project.</td>
</tr>
<tr>
<td>• Specify ethical, social, and cultural issues relevant to the research topic.</td>
</tr>
</tbody>
</table>
There are more examples of applying RSDF to develop assessment marking criteria (rubrics). You can visit this site to find more

**Activity 5:** Explore the Bloom’s taxonomy and RSDF. Highlight the keywords which show:

- Increasing students’ autonomy;
- How students are scaffolded from a lower to a higher level of research capabilities.

Report back to the class


**Summary of the module**

- What is curriculum?
- Different levels of curricula at UoA
- Process of curriculum design at UoA
- Understanding and analysing faculty curriculum

**7. Module assignment**

**This assignment consists of 3 parts:**

1. Find out about your faculty or a faculty of your choice:
   1.1. What are the requirements regarding changes to existing courses?
   1.2. When they change the course content, assignments and assessment tasks, do they need an approval? If so, from whom?

2. Use the template (or use the pre-requisite approach) below to complete Activity 6 which was begun in class.

3. Reflection
   3.1 What have you learnt from the curriculum analysis process?
   3.2 How can you apply this to other programme analysis in the future?
**Activity 6:** Analysing an academic programme curriculum (start in the class)

1. Select a subject or programme in your faculty (either undergraduate or postgraduate)
2. Analyse the curricular structure of the selected subject/programme by completing the following:
   a. Identify course coordinators and lecturers for each course.
   b. List all courses by year and semester with lecturer’s name(s) for each course.
3. Identify opportunities for AIL integration with these courses. Explain the reasons for choosing these courses (choose at least one course across each level of an academic programme).

   - Obtain information about faculty/departmental curricular programmes via:
     - University calendar [http://www.calendar.auckland.ac.nz/](http://www.calendar.auckland.ac.nz/)
     - Faculty or departmental course website
     - Faculty handbooks
     - Faculty prospectus
     - Contact the departmental manager to get course list and course coordinators and lecturers

   - Obtain student numbers in a course – Student Services Online: [http://www.studentservices.auckland.ac.nz/uoasso-class-search](http://www.studentservices.auckland.ac.nz/uoasso-class-search) (the link is available on the programme site)

Email the Word doc with manager’s feedback to Li by **2nd May 2016**.

**8. Required readings**


**Additional readings:**

9. Module 2 Analysing a programme curriculum – assignment template

(If the academic programme that you are analysing does not have clear core courses in each year, please use the pre-requisite approach to analyse it as BSHc programme structure analysis shown above.)

<table>
<thead>
<tr>
<th>Year 4 Programme name (core courses or potential courses coloured)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3 Programme name (core courses or potential courses coloured)</td>
<td></td>
</tr>
<tr>
<td>Year 2 Programme name (core courses or potential courses coloured)</td>
<td></td>
</tr>
<tr>
<td>Year 1 Programme name (core courses or potential courses coloured)</td>
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</table>

Preparation for module 3

Please read the following required readings before you attend Module 3:

Module 3: Collaboration: the foundation of AIL integration

This workshop covers two aspects of working with your faculty - collaborating with different groups of people within the University to promote AIL integration and understanding the LLS process of collaboration.

1. Learning outcomes:

   • Understand the nature of collaboration to enable effective team work or leadership
   • Understand who you can work with in the University to ensure effective collaborations
   • Understand the process of collaboration to ensure appropriate communication channels are used.

Prerequisite:
Module 1 & 2

2. What is collaboration

   • To work together, especially in a joint intellectual effort (The Free Dictionary, http://www.thefreedictionary.com/collaboration)
   • To work with another person or group in order to achieve or do something (Meriam-Webster, http://www.merriam-webster.com/dictionary/collaborate)

Activity 1: Group discussion.

Based on Meulemans & Carr’s article:

1. What is your opinion about the service orientation approach vs. the partner/collaborator approach?

2. What is needed for successful collaboration?
3. A collaboration theory - the S²J² collaboration approach

Research (required reading 2) has identified a successful S²J² collaboration approach, detailed below:

- **Shared understanding.** All the partners need to have a shared understanding of the purpose and importance of curriculum integration of AIL and the outcomes of AIL integration;

- **Shared knowledge.** All partners need to share specialised knowledge and provide support from different areas of expertise, such as subject knowledge, information resources, writing, referencing, learning design, and IT;

- **Joint dialogue with respect and tolerance.** All the partners need to interact, negotiate and communicate with mutual respect and tolerance to achieve the same goals;

- **Joint efforts with trust and support.** All partners need to work together with a high level of trust and support to complete the agreed tasks. The curricular integration of AIL can involve an intensive workload including the designing of assignments, designing of class or online activities, developing teaching resources and support material, developing assessment methods, and marking AIL work. All partners need to make a commitment to carry out the agreed tasks in any AIL integration project.

4. Panel discussion on collaboration case studies of collaboration

A team has been invited to share their experiences of AIL integration. The discussion will be based on the questions below:

1. Can you talk about the relationship building that happened before the collaboration began?
2. How did the collaboration initially start?
3. How was the collaboration organised? E.g. how did you decide who would take the lead? Who took the lead? Who organised meetings? How did you meet the deadline? etc
4. How did you find working with each other? What were the opportunities and challenges?

Panel members: MedSci 101: Anuj Bhargava (MedSci 101 course coordinator), Liz Sowden (SLS), Fran Clements (subject librarian FMHS) and Steph Cook (LSS).

**Activity 2: Group discussion.** Reflect on the panel discussion and the LLS Collaboration Guidelines. Use the scenario in Activity 3(2) to discuss how you could use the opportunity to further the relationship and look for collaborative opportunities for an AIL curriculum integration project.
5. University wide collaboration

For Subject Librarians, Learning Advisers and Learning Services Librarians to work together effectively with academic staff in the Learning and Teaching environment, each party should:

- Have an awareness of each other’s roles, team skills and areas of expertise
- Actively promote each other’s expertise where appropriate
- Recognise when a team approach is appropriate
- Assign a team leader for specific projects
- Communicate project-related information to other team members (and teams) as appropriate

The AcRSS’ Working Party on Collaboration has developed a set of guidelines to assist staff in effective collaboration. *Collaboration within Libraries and Learning Services: Guidelines for Learning and Teaching Roles and Responsibilities* (see the programme website Module 3). The guidelines recommend that:

- The operational plan for each part of the AcRSS team needs to reflect collaborative opportunities.
- A L&LS project outline should be completed for all collaborative initiatives: the personnel involved, their roles and responsibilities and the agreed timelines.
- Approaches by academic staff to discuss an information or academic literacy workshop should be used as an opportunity to suggest AIL integration. It is also an opportunity to outline the role which can be made by a combined L&LS team to contextually integrate AIL skills into the curriculum or the course.

6. LLS collaboration
Collaboration speed dating

Colleagues from CleaR, LLS media team, LSS, SLS and LLS web team are invited to talk about the following questions:

- How can SLs and advisers collaborate with your team on AIL integration?
- What process should SLs and advisers follow to initiate contact with your team?

7. Staff development opportunities at the University of Auckland

Working collaboratively requires a unique set of skills. The University of Auckland Leadership Framework highlights the value of relationship building, the cornerstone of collaboration, and makes provision for the development of such skills in the Continuing Capability Development Guide.

The UoA also provides professional development which may assist in developing essential skills for collaboration. Workshops such as those below can assist:

- Building and managing relationships
- Influencing and interacting with other constructively
- Influencing without authority
- Negotiation essentials (online)
- Negotiation skills

Is there an aspect of collaboration you might need to develop which could contribute to your next Evolve?

8. Module assignment

Questions for reflection (refer to the reflective writing video on the programme site to structure your assignment):

1. What is one thing you learnt that made you think about collaboration in a different way?
2. What actions would you like to take this year regarding collaboration?

Record your reflections on module 2 using the template in Module 3 Appendix and discuss it with your manager. Ask your manager to comment on your reflection. Within 2 weeks of the workshop email the Word document to the Learning Support Services Manager to record your completion of Module 2.

9. Required readings


10. Module 3 Appendix: Collaboration: the foundation of AIL integration assignment

Module 2 assessment template

<table>
<thead>
<tr>
<th>Name of librarian/adviser:</th>
<th>Name of your Manager:</th>
</tr>
</thead>
<tbody>
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</table>

1. What is one thing that made you think about collaboration in a different way? (500 words max)

2. What actions would you like to take this year regarding collaboration? (500 words max)

Please email the completed and signed form (Word version including your name) to the Learning Support Services Manager (l.wang@auckland.ac.nz) to record the completion of the Module by 30th May 2015.

Please read Module 4 required readings before coming to the next session.

Prepare for Module 4 by reading the following before the next class


   http://www.tandfonline.com/doi/abs/10.1080/07294360701658609#.VOOxq-aUfzg
Module 4: Design and integration of AIL into the curriculum

This module covers practical examples of integrating AIL into curriculum and redesigning an academic course assignment.

1. Learning outcomes:

- Understand related models and frameworks to integrate AIL into curriculum
- Apply related models and frameworks to develop constructively aligned AIL learning outcomes
- Integrate AIL into curriculum by modifying an assignment for an academic course

Prerequisites:
- Module 1 - 3

2. Different approaches to AIL education

Currently, there are four main approaches to AIL education in high education:

- **Generic** (extra-curriculum): the AIL component is normally taught by librarians and advisors outside course work. AIL is not normally assessed but informal self-assessment may be provided for immediate feedback to students for the benefit of their own learning as shown in the figure.

Examples of the extra-curricular approach at UoA are:

- **Course related** (inter-curriculum): the AIL component is taught as an add-on session for an academic curriculum by librarians in consultation with, or at the request of, individual academic staff. Attendance may be a requirement of the course or programme. AIL teaching is generally related to an academic course or programme. Students normally view such library teaching as an add-on session. AIL may or may not be assessed. The inter-curricular approach is shown in the figure below.

Examples of inter-curricular approach at UoA are:
• **Integrated** or embedded: the AIL component is integrated into an academic curriculum via collaboration between academic staff and librarians during curricular design, delivery or assessment. AIL integration means weaving AIL into the curricular content, structure and sequence. AIL classes may be taught by library staff or academic staff, or co-taught by both of them. AIL teaching is a part of the academic curriculum. The intra-curricular approach is shown in the figure below.

Examples of integration approaches at UoA are:


• **Stand-alone**: the AIL component is taught as an independent curricular course solely devoted to AIL. It is taught either as an elective course for-credit or non-credit or as a compulsory course as part of the general education program offered in a faculty or university. The stand-alone approach is shown in the figure below.

Examples of stand-alone approach at UoA are:


Questions based on the readings:

1. What are the three key characteristics of IL integration? Any examples from your subject?

A:

________________________________________________________________________________
3. The Wang AIL integration model:

Summary of the Wang AIL integration model:

4. How to integrate AIL into the curriculum?

The How element deals with AIL curricular design, as shown in the figure below.

- How can AIL be contextualised to become part of the academic curriculum?
- How can students be provided with an ongoing interaction with information throughout a single course, as well as across multiple courses?
- How can learning theories/pedagogy and the six frames for AIL education be applied in AIL curricular design?

AIL can be contextualised in the course learning outcomes, assignment, class activities, lab activities, self-study activities, online activities, and course assessment and evaluation process. Learning theories, Bloom’s taxonomy, RSDF (Research Skills Development Framework), the six frames for IL education, IL frameworks can also be used as guidelines, and as models that can be applied in AIL curricular design.

Activity 1: Using the programme you mapped in M2, choose one AIL capability (e.g. writing or evaluating information) and describe how you would scaffold the development of the capability throughout the programme. (Discuss in pairs) Refer to Bloom’s Revised Taxonomy and RSDF from Module 2.

5. Constructive alignment

The concept of ‘constructive alignment’ (Biggs, 1996) has been widely embraced by the academic community. It is built on Shuell’s (1986) notion that curriculum components constitute a system in which ‘elements complement one another to form an integrated whole, creating a web of consistency that optimizes [students’] learning’ (Biggs, 1999, p. ix). When its ‘constructive’ and ‘alignment’ components are considered it is possible to see how it might be a useful adjunct to the spiral curriculum in terms of helping to foster critical reflection. The ‘constructive’ element of constructive alignment refers to what the learner does, which is to construct meaning through relevant learning activities.
Biggs builds on the work of Tyler who argues that learning takes place through the active behaviour of the student: it is what he does that he learns [sic.], not what the teacher does’. This ideology supports the constructivist view of learning consistent with the underpinning philosophy of critical reflection. On the other hand, the lecturer’s role is to ensure that ‘alignment’ occurs, which involves establishing a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes. Alignment is dependent on consideration being given to establishing clear learning outcomes, teaching methods, assessment procedures, a climate conducive to student/teacher interaction and a supportive institutional climate (Biggs, 1996).

Constructive alignment conjures up an image of learning that is largely prescribed and indeed Biggs maintains that ‘the learner is in a sense ‘trapped’ and finds it difficult to escape without learning what is intended should be learned’ (Biggs, 2003, p. 2) because alignment has been achieved’.

Source: https://curve.coventry.ac.uk/open/file/4cc20e95-2a71-0cfd-0a12-d963be08a727/1/Promotion%20of%20Reflective%20Learning.pdf

6. Revision: Scaffolding learning frameworks for understanding curricula

- **Bloom’s taxonomy** see Module 2, 5.1
- **RSDF** see Module 2, 5.2
- **ACRL** see Module 1 Reading and discussion

7. AIL integration into course assignments

AIL can be integrated into course objectives, class activities, assignments and assessments. Assignment integration is the most common way. You can modify an existing assignment to include an AIL component or you can develop a new AIL related assignment.
The diagrams below help us to understand the process of curriculum development so we can always map the course assignment or class activities to the course learning outcomes which will in turn be mapped to the competencies or skills required by the University Graduate Profiles.

### 3(b). A capacity to locate, contextualise, critically evaluate, synthesise, and use information effectively.

II 5. An ability to recognise when information is needed and a capacity to locate, evaluate and use this information effectively.

(Use UoA Graduate Profile (2011) as an example.)

<table>
<thead>
<tr>
<th>UoA Graduate Profile (WHAT)</th>
<th>Accrediting professional requirements (for professional degree only) (WHAT)</th>
<th>ACRL (WHY)</th>
<th>RSDF/Blooms (HOW) e.g. Prescribed sources &amp; methods / Locating</th>
<th>RSDF/Blooms (HOW) e.g. Selected sources &amp; prescribed methods / Understanding</th>
<th>RSDF/Blooms (HOW) e.g. Selected sources &amp; prescribed methods / Summarising</th>
<th>RSDF/Blooms (HOW) e.g. Selected sources &amp; prescribed methods / Structuring queries / Evaluating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching as strategic exploration</td>
<td>Information has value</td>
<td>Authority is constructed and contextual</td>
<td>Examples of all learning outcomes in Year 1</td>
<td>ENGEN100</td>
<td>Examples of all learning outcomes in Year 2</td>
<td>ENGEN200</td>
</tr>
</tbody>
</table>

- **2.2.2 Apply research and analytical skills to design activities.** (Use IPENZ Engineers NZ (2009) as an example)

**Wang’s model**

- Demonstrate competency in using a range of databases and other online tools;
- Apply database search skills to any new or unforeseen databases or search engines;
- Understand how to do a literature review;
- Understand what makes a good research proposal;
- Know of other experts and practitioners, professional organisations, official and business organisations, community resources.
Activity 3: Modify an existing assignment

Look at an assignment of your choice, identify how you would integrate AIL into the assignment.

(Refer to Wang model, ACRL, GP and Bloom’s taxonomy and RSDF to guide your discussion.)

Example of integrating AIL into an assignment

The following example shows how an existing assignment in a Nursing course has been modified to incorporate AIL skills.

An original assignment:
*Select a new development in the area of land management. Write a 2500 word essay discussing the impact the new development has had in New Zealand. Make sure your arguments are supported by evidence.*

Modified assignment:
(Blooms taxonomy and RSDF have been used in order to restructure and reword the assignment.)

Watch the Australian video ‘Our environment’ and select one of the following segments to research further:
- Land: Soil cancer
- Losing the land
- Soil salinity
- Mining and minerals

Use the topics mentioned in your chosen video segment to search for reliable information, discuss the impact the new development has had in New Zealand. You must use a range of resources, e.g. reference material, books, journal articles and websites.

Using the information you have found from your searches critique the argument and evidence presented in the video. In doing this you must discuss how accurate you think the information in the video is and how applicable you think the information is to the same problem in New Zealand.

Your assignment must not exceed 2500 words and all information used in your assignment must be accurately referenced using APA 6th style.

Summary of the module
This module has covered:
- Understanding the Wang AIL integration model and application: Why, Who and How
- Bloom’s taxonomy and its application in AIL integration
- RSFD and its application in AIL integration
8. Module assignment (see template on the programme site)

1. Using the programme identified from M2, develop one AIL learning outcome for one course in each year level by applying Bloom’s & RSDF, underpinned by ACRL, GP etc. (see module 4 template).

2. Reflect on how you have applied the models and frameworks in your AIL learning outcome development.

3. Choose an existing assignment from one of your identified courses and modify it by integrating AIL.

4. Explain how you have modified it by integrating AIL into it.

Use the assignment template on the programme site and submit BOTH the original and modified assignments.

Both of the above tasks need to be commented on and signed by your manager. Email them to Li by 4th July.

9. Readings

Required readings:


   http://www.tandfonline.com/doi/abs/10.1080/07294360701658609#.VOOxq-aUfzg

Further readings:


2. Spronken-Smith, R. (2013) Toolkit to Assist Lecturers to Engage with Graduate Outcomes. Retrieved from: [www.akoatearoa.ac.nz/graduate-outcomes](http://www.akoatearoa.ac.nz/graduate-outcomes) (This provides various examples of real-world curriculum mapping at tertiary level across New Zealand.)
Module 5: Academic and literacy assessment and evaluation

Learning outcomes

- Understands assessment and how to apply assessment tools to assess student learning
- Understands evaluation and how to apply evaluation tools to evaluate AIL sessions or programme.

This module is an online module and you can access it via the link on the Cecil course site.
http://flexiblelearning.auckland.ac.nz/iltraining/