INFORMATION LITERACY AT NMIT

A REPORT BY GEORGE ERACLIDES

2013

INTRODUCTION TO THE VATL 2013 EDITION OF THE REPORT

In 2012 NMIT undertook to review its provision of information literacy programs to students and staff. This was prompted partly by the growth in higher education courses which created a need for students to be able to conduct research at a much higher level than previously applied in VET; partly because of the growth and sophistication of information resources now requiring substantial skills from researchers.

A project coordinator was appointed, and with various library staff, conducted a review of existing practices at NMIT, discussed at length the requirements of academic staff, visited a number of comparable organisations, conducted literature reviews and produced a report to guide NMIT Library in the years to come.

The report was intended as a practical, working document. Its language is couched in the phrases necessary for staff who have to implement a series of reforms. Revamped information literacy programs in 2013 and beyond are but the most obvious changes, of what has now become, a broad strategic initiative at NMIT Library: to engage with staff and students from a position of academic credibility and capacity.

It is a matter of some satisfaction to this writer, to see the various recommendations of the report being implemented; to see staff take them in new directions and in so doing, develop further their own already substantial skills. In fact, as is the case with 'works in progress', which the report undoubtedly was, ideas were constantly communicated to the organisation, the Management of which was highly receptive to change. Some of these ideas were developed and tried even while the report was being completed.

Momentum had been established in 2012 for what has since emerged as an ambitious strategy which is already providing successes for the Library.
As mentioned, the report is intended as a practical document. Take from it what you will but remember its fundamental themes: engagement and professional capacity. What this could mean in practice, you will see from the report.

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EXECUTIVE SUMMARY

The overarching Library objective should be to become the hub of a learning community at NMIT.

For this to take place, a strategy of engagement with clients must be created and followed. The creation of learning content, a build-up of knowledge by Library staff and the development of guides, are all necessary but not sufficient by themselves in the absence of engagement: Clients knowing what you can do and wanting you to do it.

For the Library to become the hub of a learning community, it will require an expansion of services by initially using existing staff and technical resources in a variety of different ways. In time, more resources will need to become available if NMIT Library is to offer a fully fledged information literacy program embedded in the curricula and meeting NMIT Graduate Attributes, should they be developed.

A number of visits were undertaken to educational institutions of higher education (HE), mixed sector and TAFE, in order to discuss their information literacy services (information literacy). Discussions were also held with NMIT Higher Education staff regarding the role of the library in the information literacy (research skills) component of HE and other support which can be provided by the Library.

It is clear that the path to enhanced Library services in the area of information literacy requires involvement in the curriculum through some process of embedding and making use of Graduate Attributes (developed or implicit) which specify information literacy capabilities in a practical and relevant way. The Library service at NMIT needs to develop its capacity to provide information literacy programs based around research skill standards used widely by higher education institutions. This capacity must be brought to the attention of relevant stakeholders through the process of engagement.

Numerous recommendations have been made to facilitate this process. The intent has been to produce clear, practical, options which when undertaken together, will develop further Library capacity in the area of information literacy. The recommendations include substantial annotations to help explain and place them in context.

The Library is already pursuing a few of these recommendations in practice.
An extensive and annotated listing of the recommendations is in the body of the report below, as well as a number of appendices, including bibliographies to assist staff in building their knowledge base.

The best way to see the processes of organising information literacy and delivering training in a structured way, is to think of it as being like providing driving instruction: explaining each part of the driving process, the separate packets of skill, which blend together seamlessly when you are an experienced driver. **As a trainer**, you break down the components of training into packets or quanta, teach them, and eventually in a competent researcher, they will work together as a whole. **As a planner** of information literacy you break up the structure of a program into the learning outcomes, levels, knowledge, tasks etc… and all these elements are an indissoluble part of the actual program.

The recommendations are, in summary:

Engagement

E1:
Liaise closely with HE in the development of Graduate Attributes and the embedding of information literacy in the curricula.

E2:
Develop a targeted program to inform teaching staff of the Library's capacity to undertake research skills training for students and staff.

E3:
Contact departmental administration officers to obtain new staff details, especially of sessional staff. Liaise with HR in order to ensure involvement in induction process for new staff.

E4:
Create a Learning Community space online.

E5:
Adapt Library physical spaces further, to support collaborative learning.

E6:
Establish a strong Library presence on the NMIT LMS (Moodle) with links to relevant information literacy programs and learning objects.

E7:
Refer to information literacy programs and activities in formal documentation as 'information literacy' but by the term 'research skills' or similar in interaction with students.

Research and apply

R1:
The NMIT Library to undertake a selective review of curricula in order to locate their research skills components.

R2:
The Library map research skills components in different course curricula to possible Research Skills Development Framework (RSDF) categories, Graduate Attributes, and library information literacy programs which could apply to the subject areas in the courses.

R3:
Develop a Library Impact Statement for new courses and include information literacy as part of the statement.

Learning objects and training

L1:
Create a databank of templates for information literacy programs: lesson plans, learning objects, procedures, intended learning outcomes, learning and assessment tasks, and all of them related to RSDFs.

L2:
All information literacy programs must be categorized by RSDF levels and involve a task(s) linked to an intended learning outcome.

L3:
Develop a program for the teaching of referencing skills for Vocational Education and Training (VET), Higher Education (HE) undergraduates and postgraduates/researchers and staff.

L4:
All learning objects or guides must be branded as NMIT Library.

L5:
The associated learning objects of information literacy programs for HE to be mapped to the HE curriculum and based upon the relevant RSDF levels.

L6:
Prepare a set of Subject Guides (SGs) on specific topics.

L7:
Generic information literacy guides placed on the website should involve a process in their preparation which includes the creation of intended learning outcomes and RSDF levels associated with their use.

Data collection

D1:
During data collection, all queries dealt with by staff in the areas of reference, information literacy and research must include the relevant READ Scale categories.

D2:
All information literacy programs/objects online and their associated learning objects have data automatically collected and collated.

D3:
Data collected should include the opportunities available for information literacy programs online, P2P and qualitative surveys of clients who have participated in programs. The needs of students as expressed through various sources, including online contacts, should be collated and used to inform programs and learning objects.

Professional development

P1:
Using PMPD and any other opportunities, relevant Library staff must develop a knowledge base in contemporary pedagogic trends and information literacy.

P2:
With all software to be used (subject specific, social media etc…), FL/LLs should be able to explore them and gain mastery as part of PMPD.

P3:
Using PMPD and any other opportunities, FL/LL staff must know the ANZIIL inspired RSDF as well as they know other librarianship concepts. This must be the core expertise that makes them 'competent' to teach information literacy.

P4:
Using PMPD and any other opportunities, relevant Library staff must develop a knowledge base in using the READ Scale for categorizing information queries.

P5:
Using PMPD and any other opportunities, FL/LL staff must develop depth of subject knowledge in their area of liaison.

P6:
Staff conducting training should acquire over time either teaching or training equivalent qualifications.

P7:
Staff engaged in the promotion of information literacy library services to be made aware of the implications of using social media, protocols which are available and issues involving risk management.

Staffing

S1:
Staff to be delegated specific projects in current year to 1-3 year period, in order to meet the outcomes in the information literacy report recommendations.

S2:
Faculty Liaison staff adjust their staff supervision duties or campus managing roles to increase their time for greater involvement in coordinating information literacy programs.

S3:
Allocate a staff member with the responsibility for promoting library services to teaching staff and students in an ongoing, strategic way.

S4:
Future recruitment of staff that may be expected to deliver information literacy training programs should specify in the key selection criteria, either teaching/training qualifications along with those in librarianship, substantial experience in lieu of qualifications, or a willingness to undertake such study leading to the relevant qualifications.

S5:
Undertake a trial placement of a FL/LL for part of the time in the HE Department as a resource to HE.

The following are the Appendices included in the report:

1) Bibliographies of useful articles in the area of information literacy/research skills/academic skills

2) Summary of visits to other library services

3) Mapping curricula research skills to Library information literacy programs

4) RSDF and simple library tours – bringing the two together

5) Example for developing ILOs as part of an information literacy program

6) Sample Lesson Plan

7) Information literacy Data Collection Form – Example

8) Research Skills Development Framework and NMIT Library

GLOSSARY AND CONCEPT GUIDE

Academic skills:

Includes information literacy (see below) but also how to use academic language, present findings, work collaboratively, use statistics or other mathematical concepts, write reports and so on.

ANZIIL:

Australian and New Zealand Institute of Information Literacy. See: http://www.library.unisa.edu.au/learn/information literacy/Information literacy-2nd-edition.pdf. Their standards have been incorporated into the RSDF with an adaptation of Bloom Taxonomy (1956).
It is possible to continue to use the ANZIIL standards as 'competencies' for information literacy programs/learning objects (in some ways this would be easier); however, universities seem to have moved to the RSDF (see below), or something very similar, to inform their information literacy activities, using them to describe the research behavior and developmental levels reached by students who undertake programs. The learning outcomes of information literacy programs are related to the development of research skills along the RSDF spectrum.

Bloom taxonomy, see http://ace.schoolnet.org.za/cd/ukzncore1a/documents/asse.cont.bloom.htm and also useful terms to use at: http://www.teachers.ash.org.au/researchskills/dalton.htm
See also Biggs 2007, p80-81.

Current year:

Within the current operational plan year i.e. within 12 months.

1-3 Years:

Begin within the current operational plan year, extending out to a maximum limit of 3 years by completion.

Constructive Alignment:

This is about getting students to take responsibility for their own learning by involving them in undertaking activities (the learning) that align with learning outcomes and assessment tasks. It is based on the cognitive psychology of 'constructivism' whereby the learner creates their knowledge of the subject by undertaking activities rather than being a passive consumer of information (the traditional 'Lecture' and 'Tutorial' model); learning by doing. The ideas go back to Piaget (for a simple explanation see: http://ehlt.flinders.edu.au/education/DLiT/2000/Piaget/stages.htm Formal Operations stage).

FL or Faculty Librarians:

Designated professional staff providing library services to particular teaching departments within a Faculty. It implies some subject specialization. FLs may also undertake special projects in the area of information literacy. At the level of the FL there may be other library staff operating in special units e.g. a unit liaising with HE in their academic skills programs, supporting information literacy inititatives and so on.

GA or Graduate Attributes:

The important qualities a graduate will have over and above specific subject knowledge/skills. See as an example: http://www.itl.usyd.edu.au/graduateattributes/ and note the strong presence of information literacy. At best it links to the subject knowledge; at worst, it is spin. There is a possibility that GAs will pass away as yet another fad in HE. This will simplify program creation.

HE:

Higher Education; degree level courses.

HR:

Human resources (personnel departments).

ILOs:

Intended Learning Outcomes. These ought to be specific to a task.

Information literacy:

Information literacy; usually means research skills needed in order to achieve critical assessment outcomes and demonstrate graduate attributes. Increasingly embraces the concept of digital literacy. Also referred to as 'Research Skills' or more directly as 'Library Research Skills'.

Information literacy program:

All the components needed for training such as the lesson plan, subject/topic coverage (knowledge base), intended learning outcomes, tasks, assessments, RSDF categories, learning objects, etc… Most often it will mean what is to be taught (knowledge); how supported (online guides) and the RSDF levels it is informed by.

KPIs:

Key Performance Indicators.

Learning objects:

Any guides prepared electronically or in hard copy, which facilitate learning, usually about how to use a Library resource, conduct research or to be used as subject/topic gateways.

LLs or Liaison Librarians:

General professional librarians supporting teaching departments.

Lib-Guides:

A platform for preparing subject guides (gateways to trusted information; see http://libguides.com/community.php?m=i&ref=www.libguides.com).

LMS:

Learning Management System(s) e.g. Moodle.

LMT:

NMIT Library Management Team.

PD:

Professional development.

PMPD:

Personally Managed Professional Development; the staff member does it themselves with support in the workplace (time) and access to resources (databases, software, cloud-based utilities, Inter Library Loans etc…).

P2P:

Person to person.

READ Scale:

Research query statistics at some universities are collected on the basis of the 'Read Scale' (see: http://readscale.org/ especially: http://readscale.org/read-scale.html).

RSDF:

Research Skills Development Framework (see http://www.adelaide.edu.au/rsd/) used to grade the level attained by students engaged in information literacy activities. See ANZIIL above (includes Bloom Taxonomy). When using RSDF as part of a program structure, you are indicating the level(s) of skill ***development*** which completion of the program achieves or contributes to achieving. The student is operating at this descriptive level. The research skills of the student develop in the directions indicated by the RSDF and can be tested by the task assessment process. In theory, using RSDF to inform information literacy programs should lead to improved research skills and therefore better quality assignments or projects submitted as evidence of subject mastery. This quote is from the Handbook of Research Skill Development http://www.adelaide.edu.au/rsd/otherfiles/RSD_Handbook_Dec09.pdf page 5:
All associated activities which could be broadly identified as 'research' can be located on the research continuum, placing a first-year library or internet research assignment on the same continuum as PhD research: the associated set of skills are often the same, but what varies from first year to PhD is the degree of rigor, the level of specialisation and complexity of the discourse, the scope, depth and methodological framework applied to the inquiry process, and the extent of 'unknownness' of the topic under research. The fundamental facets of inquiry are identical, with common processes being acted out across all research endeavours.

The ideal graduate competent in information literacy can function at all of the levels as required; in practice students operate at each level and/or facet as needed e.g. a postgrad may be asked to begin at level 1 while a first year be asked to complete an assignment at level 4. With information literacy programs, any task you set or the learning you impart (e.g. via an online tutorial) should result in a student operating at a certain level or range once they have successfully completed the training. It is part of developing the students' capacity for doing research in a certain way, which is why the levels/facets need to be linked to specific learning activities in specific subject areas. They are not the same as ILOs (see above) but

complementary. Note: you can still use ANZIIL competencies if preferred but it is recommended to utilize the more descriptive RSDF which is used in some HE institutions.

Any teaching department (VET, HE, and including the Library in information literacy) needs to have some way in which it can describe or demonstrate student capacity to conduct research, especially as part of meeting Graduate Attribute outcomes. There needs to be some scheme with a formal structure which can be applied to develop the creation of assignments, teaching, assessments and so on. If not the RSDF, then what? Whatever scheme is adopted at NMIT it will bear a strong resemblance to the RSDF in the key areas of information literacy/research skills and will thus be used by the Library.

Please see also in Appendix: 'Research Skills Development Framework and NMIT Library'.

VET:

Vocational education and training.

INTRODUCTION

These recommendations are concerned with the substantial engagement of teaching staff and curriculum developers about Library capacity; developing Library staff subject knowledge and expertise in the standards applying to information literacy and use of various media tools; the development of templates and actual learning objects; development of an online learning commons.

The timelines are tight. They are basically from right now (November 2012) to three years out. The reason is that much ground needs to be made up to stay relevant in perilous times. The luxury of perfecting processes and templates is unavailable.

The recommendations are presented with extensive annotations to help explain their purpose and scope. They are intended to be clear and practical.

The best way to view these specific recommendations is as a series of linked projects involving one or more individuals reporting back to the LMT (or similar body) acting as a reference group for the project. A project's officers may be drawn from a range of levels. Some individuals may undertake key roles in an ongoing capacity e.g. promoting Library services or maintaining databanks; others will have tasks become part of their normal activity as a result of successful projects e.g. information literacy training courses or developing learning objects to support the curriculum.

The recommendations may be grouped in a variety of ways. This report lists them by category but linkages are noted so as to facilitate the development of projects in the future. Once some key project objectives are achieved, the techniques and results can be used for other objectives e.g. once a template has been created for an information literacy learning outcome in a specific area, it can be adapted to others.

It needs to be noted that the success of any of these projects will generate greater demands of the Library service and thus increase the need for future resourcing. Libraries are among those organizations which, the more successful they become, the more they tend to cost any budget bottom-line.

The recommendations are divided into the following categories listed by a natural flow rather than alphabetically:

Engagement
Research and apply
Learning objects and training
Data collection
Professional development
Staffing

The best way to see the process of organising information literacy and delivering training in a structured way is as though you are a driving instructor: explaining each part of the driving process, the separate packets of skill, which blend together seamlessly when you are an experienced driver. **As a trainer**, you break down the components of training into packets or quanta, teach them, and eventually in a competent researcher, they will work together as a whole. **As a planner** of information literacy you break up the structure of a program into the learning outcomes, levels, knowledge, tasks etc… and all these elements are an indissoluble part of the actual program.

Engagement

E1:

Liaise closely with HE in the development of Graduate Attributes and the embedding of information literacy in the curricula.

Approach Deputy Director Programs (HE) or other relevant position(s) about the preferred organizational mechanisms for participation and contribution, in order to develop GAs which the library is competent in handling e.g. advising about embedding in the curriculum or in providing training.

For examples of Graduate Attributes for different disciplines, see:
http://www.itl.usyd.edu.au/graduateAttributes/policy.htm Accessed 09/09/12

Suggest nominating a staff member(s) from LMT to act on behalf of Faculty Librarians in dealing with HE at the peak level.

If NMIT does not pursue the development of GAs it will still be necessary to approach HE and work towards embedding information literacy programs into the curricula. This was highlighted in the research.

See also: R1 and R2.

Current year.

E2:

Develop a targeted program to inform teaching staff of the Library's capacity to undertake research skills training for students and staff. Inform them that you have already (or can produce in relatively quick time) detailed competencies (i.e. learning outcomes, learning and assessment tasks, and lists of relevant learning objects) which would be needed to embed information literacy into their curriculum or be used to produce a program for staff.

Information literacy programs should also be aimed at teaching staff intending to undertake research activities themselves and those in VET who need to bring their skills up to date (digital literacy). These programs should also be aimed at sessional staff.

The Library will not charge the teaching departments any student contact hours in undertaking training, which can free up teachers for other activity.

A lot of these competencies will be generic in phraseology and layout although content will be subject-specific; once done for one area they can be adapted to others. They may involve specific multimedia learning objects which can also be used with social media. Significant numbers of teaching staff are not aware of the capacity of the library to provide detailed specialized assistance, training and coordination of research skills development, and the provision of various types of learning objects which support students and teachers (organized by the Library and made accessible online). Hence teachers try and do a lot of the work themselves, often lacking expertise and on occasions coming up with an inferior result (see BHI discussions below). ***The role of our FL/LLs is not as generally appreciated as one would suppose.*** This was made evident recently by some teaching staff using inferior software to create resources of limited utility and unaware they even had a Faculty Librarian. The details and expertise of FL/LLs must be part of this engagement project. The strategy is to provide an ***incentive for teaching staff*** to use

library expertise in the areas they themselves are *not fully or even partially knowledgeable*. Someone should be allocated the role of providing regular content to the staff portal and the institute social network website (Facebook) about Library services/news (see Staffing below). See also: E3, R1, R2, and S3.

1-3 Years.

E3:

Contact departmental administration officers to obtain new staff details, especially of sessional staff. Liaise with HR in order to ensure involvement in induction process for new staff.

Notes:
The Library can then approach new staff (e.g. by email), and even create password access for them to some services which include useful guides and specific multimedia learning objects created for staff (e.g. on Moodle). Social media may be used to promote this information.

HR should also be approached in order to establish a procedure whereby the Library is continually involved in induction programs. If HR does not run induction courses, then whatever alternative system is in place for induction, the Library must become a part of that system. It may be that basic guides in an online space, informing the staff member of Library service capacity, are brought to the attention of the new staff member (or a Moodle page/Lib-Guide for new staff set up by the Library). Similar to having staff sign-off on NMIT OHS or other critical policies. See also: E2, L2 and L6.

1-3 Years.

E4:

Create a Learning Community space online.

Notes:
The Library to create and manage a community of learning via a relevant portal or combination of portals (e.g. Moodle and the Library online site(s) working together or cross-linked) and integrate aspects of information literacy into the social media.

Research has shown that online learning is a major area of growth compared to traditional modes.

News and some learning objects can be made available via the social media platforms. This may be via links back to specific functioning elements such as Q & A, Facebook, bulletin boards for posting comments or questions, Twitter contact, discussions with FL/LL online and so on.

This will become a source of information regarding the needs of students (see D3 below) which the library may address with specific programs, for instance involving online tutorials (with quizzes) or learning objects.

In effect, the idea of a physical 'learning commons' can become a reality online (some would say it already has) because the technology of various functions (social media to actual learning) is linked together and accessible from one place. See the concept as developed at Deakin University: http://deakin.edu.au/itl/assets/resources/pd/new-staff/2010-documents/tl-online2010-orient.pdf (accessed August 6, 2013)

The Library online presence becomes by default the learning community or 'learning commons' because of its capacity to link to and use LMS and all the social media.

Appropriate labeling is critical e.g. NMIT Learning Commons or 'Learning Place' or whatever branding the Library chooses.

Managing the content and ***keeping it up to date and relevant*** will be of the greatest importance. The Library has to establish links to this 'learning commons' area from the course specific Student Portal and Moodle sites.

Students today have this media at their fingerprints and expect to use it or be informed through it. Recent research in the USA (as seen on TV news reporting) indicates that people are spending more time using their iPhones/smart-phones/tablets than watching TV or even using computers. Social media are a very large component of this mobile phone use as is cloud technology. FLs may need to twitter per course or create Facebook page for themselves to add to the information literacy material they provide on Moodle. Moderation (risk management) of content will be required due to the potential of students to interact with each other directly and to post information. See also: E5, all L1 to L6 and P7.

1-3 Years.

E5:

Adapt Library physical spaces further, to support collaborative learning.

Notes:
The Library is already in a major sense a physical 'Learning Commons'. In recent years, the move in academic education has been towards collaborative learning with various professionals (librarians and teacher/lecturers) working to support learners in spaces provided for this purpose in libraries.

These spaces include areas which can function as quasi classrooms (team teaching/tutorials) or where students can get together to work on their assignments (with PC or network access, whiteboards etc...) and to which a Librarian may attend to provide assistance (e.g. database use or referencing – recorded according to READ scale or more formally – RSDF, if by staff appointment). See also E4.

1-3 Years.

E6:

Establish a strong Library presence on the NMIT LMS (Moodle) with links to relevant information literacy programs and learning objects.

Notes:
This goes without saying and is already in process. A refinement would have the Library creating its own Moodle pages to cover generic information literacy (demonstration) or at least Library Guides (Lib-Guides software), including information for sessional staff, professional development and so on.

Prime real estate on the LMS should include links to Library news and social media promoting 'learning commons' services to students. See also L1 to L7 and S3.

Current year.

E7:

Refer to information literacy programs and activities in formal documentation as 'information literacy' but by the term 'research skills' or 'Library Research Skills' or similar in interaction with students and staff.

Notes:
The terms 'information literacy' or 'information literacy' are inadequate to express what the programs undertaken by libraries represent. However, the term 'research skills' can be confusing for HE because academics believe they are responsible for teaching the **professional** skills required in a particular academic discipline (such as how to do scientific research in a discipline); the term 'Academic Skills' embraces much of the basic writing and numeracy, report writing and so on, which study skills staff generally undertake.

A compromise that has been tried is to refer to 'information literacy' or even 'research information literacy' when describing the activity in formal discussion with colleagues and in reports. Graduate attributes also refer to 'information literacy'. In practice, when dealing with students and labeling online information, the term 'research skills' or 'database skills', 'how to research using a journal database', or even 'library research skills' can be used.

Professionally, this is a difficult concept to label. This is because 'information literacy' sounds very basic and limiting to students (literacy – 'how to read'; numeracy – 'how to add up') who might then ignore sophisticated research skills programs or consider them too basic for their learning level.

Current year.

E8:

The library must be represented in all relevant committees, forums, seminars, workshops and other meetings.

Notes:
Attendance is critical in order to become aware of what is planned and to which the Library can contribute its information literacy expertise. In addition, the Library will be able to promote its existing services, potential for program development, research support for staff and students and so on. The Library will also be able to report on its contributions to pedagogy and the quality of graduate outcomes by reference to its data collection. Suggest FL/LLs and other staff be scheduled to attend regularly.

Liaison with departmental administration officers (mailing lists), teaching staff and establishment of online alerts; regular monitoring of key department websites on the portal (e.g. HE) should be undertaken. Each FL/LL should be able to create a matrix of meetings/committees relevant to their area which can be attended. Special meetings can be shared.

Woody Allen has pointed out that 'Eighty percent of success is showing up' and he is right. See also E1 and S3.

Current year.

Research and apply

R1:

The NMIT Library to undertake a selective review of curricula in order to locate their research skills components.

Notes:
This is a key role for Faculty Librarians and LLs. Eventually you want to map them to programs, RSDF levels and facets and learning outcomes for this part of the curriculum (see R2). FL/LLs will need to extrapolate from curricula (not always clear and exhaustive documents) and discuss issues with teaching staff in order to clarify the meaning of curricula statements.

Begin with HE and work backwards to any other levels if needed; these other levels will benefit from work done at HE which can then be adapted to suit. Critically, see R2.

Current year.

R2:

The Library map research skills components in different course curricula to possible RSDFs, GAs, and information literacy programs which could apply to the subject areas in the courses.

Notes:
This is combined with R1, which is the first step. The aims are to:

• know which part of the curriculum covers information literacy and what it says;
• know the appropriate levels of RSDF which could apply (would be a range);
• map them to relevant GAs (or similar attributes); and
• be ready with information literacy program ideas (outlines or templates) to provide the training; these programs map (loop) back to the specific curricula.

This will not be easy because a certain amount of specificity is needed. With some curricula it will be a matter of the FL/LL being able to extrapolate the research skills that will be needed from the work the student is expected to complete, year by year; in other curricula e.g. NMIT Business Degree, the skills may be set out (BUS 100 Academic and Business Research)**. FL/LLs will probably still need to be able to extrapolate the level of competence needed, by discussing the relevant curriculum section with teaching staff.**

Once you have some clarity with regard to the research skills content, the process goes as follows: curricula/research skills/RSDF range/possible GAs/information literacy program. For each curriculum there will be a statement, table or outline, which identifies the research skills components, RSDF range, the GAs (if any or presumed), the information literacy program (e.g. what knowledge needs to be acquired) etc… See Appendices for an example. It is intended as a **simple outline** to guide later detailed programs or training sessions. These can be reported upon back to Faculties and management levels with the professional, pedagogic, details you have documented – instead of just reporting: *'We had 7 sessions on using the catalog and EBSCO database'*. Hopefully, this will eventually be as part of an embedded program(s).

Develop templates with draft spaces for later adding specific ILOs, Learning Tasks, and Assessment Tasks for Research Skills (see L1 and L2). A great deal depends on the curricula and the RSDFs may vary from year to year, from little student autonomy (first year) to complete autonomy (e.g. post-grad). It may also be that the curricula are too vague in this area and the FL/LLs will need to create a boundary RSDF (e.g. up to level 4) to cover later specific ILOs.

As a rule, it is important that the GAs reflect meaningful attributes for the subject/course area and not be merely 'generic' (too general, too much like 'spin'). The information literacy GAs may therefore differ slightly from subject to subject, although it is more likely that these components of

GAs will largely be generic in content – there are only so many ways you can say something to describe a basic process of research.

By having done R1 and R2, and being ready to provide both the training and the pedagogic context, the Library will have provided an incentive to teaching staff to embed the Library information literacy programs(research skills) in the curriculum and have the Library deliver the programs either individually or in a team-teaching mode.

In the language of traditional VET, the Library is providing the competencies and structure for this aspect of research skills competence.

Library staff proficiency in the theory and process as exists in the HE sector is covered under Professional Development.

Note: In my research, GA components are often based on existing generic standards and do not differ much from institution to institution. There are many examples to be followed, with different wording amounting to the same thing. However, Biggs believes they must be made specific to the course so as not to be merely spin (see Biggs 2007, p 65-8 and 85-7). The information literacy GA should therefore end up comprising a number of sub-attributes mapping to a subject specific program or training course. I think this is an ideal unlikely to be followed in TAFE. The information literacy GAs will still be relatively generic, which will make life simpler for Library FL/LLs.

Important note: if NMIT or the sector does not adopt GAs, the process is still the same except that there is no need to map onto GAs as well; the mapping goes curricula/research skills/RSDF/information literacy program/knowledge.

For an example of a Subject Guide using RSDF see RMIT at: http://rmit.libguides.com/edresearch The research skills RSDF facets are the ideal process whereby a student is expected to proceed on the research path; the levels are the degree of mastery/autonomy achieved. Your students should be able to: embark on a query, realise they need information, be able to find it, evaluate it, organize the findings, synthesise and apply them to the query, and be able to communicate the process and their conclusion regarding the query. In this way, the RSDF's logical structure can be seen more clearly.

See also critically E1 and R1.

Current year.

R3:

Develop a Library Impact Statement for new courses and include information literacy as part of the statement.

Notes:
Many new courses are introduced, especially in HE, without a formal process assessing the impact on the Library. The Library is generally expected to respond as best it can but without any understanding by all stakeholders of the impact and ramifications involved in any new course to be introduced.

The Library Impact Statement clearly indicates the impact on the library service of any new course being considered e.g. new journal subscriptions or DBs, information literacy sessions required, use of library spaces and technologies, staff support etc… It can include a $ cost per impact or any operational adjustments. It should be a formal document to be filled out and presented to relevant faculties and management levels (BHI had an example).

1-3 Years.

Learning objects and training

L1:

Create a databank of templates for information literacy programs: lesson plans, learning objects, procedures, intended learning outcomes, learning and assessment tasks, and all of them related to RSDFs.

Notes:
See Biggs 2007 page 81 Table 5.2, for verbs from Bloom's Taxonomy useful in creating ILOs.

For instance, for specific information literacy programs or courses there will be templates of SGs, guides to databases or FindIt, exporting data to Mendeley/Zotero/EndNote/RefWorks etc… The space for ILOs and similar elements are included because the material is to be used eventually as part of a specific information literacy program e.g. training in support of a literature review hurdle exercise in HE. The ILOs do not have to be specified although samples in phrasing will be useful (see Biggs et al 2007 and other sources) and space should be made for them in the template. Not all elements of the template will always be needed.

Note: this requires the creation of templates only, with free spaces to include content when required, such as specific learning outcomes or other tasks, and the RSDF levels. L6 refers to the creation of Subject Guides via Lib-Guides for the purpose of demonstrating the Library's capacity. Generic information literacy guides (not linked to an actual subject information literacy program) should also be included in this databank.

The databank will consist of named subfolders containing all relevant documents for each object/program; liaison will be needed with Library records management staff to establish procedures for naming and managing these records.

See also L5, L6, L7, P1 and R1.

Current year.

L2:

All information literacy programs must be categorized by RSDF levels and involve a task(s) linked to an intended learning outcome.

Notes:
Use the 'Research Skills Development Framework', http://www.adelaide.edu.au/rsd/ as a foundation to help develop learning objects and evaluate progress. The programs and associated learning objects will have as an outcome, the capacity of the student to undertake research at a given RSDF level.

1-3 Years.

L3:

Develop a program for the teaching of referencing skills for VET students and staff, HE undergraduates and postgraduates/researchers and staff.

Notes:
Market this program via FL/LLs and the Library website, as well as social media.

The program should fit the requirements of constructive alignment (see Biggs et al 2007 and literature search references). A template should be prepared, complete with lesson plan, ILOs and similar. Supporting learning objects should be created. Online training and supporting learning objects should feature strongly as options, as should a 'help desk' concept to assist clients.

Teaching referencing skills should be a core activity for the Library. It is a specialty which embraces plagiarism, academic credibility, database exporting, bibliographies and the management of research notes/citations. All key referencing styles and the theory which underpins them. It includes PD for staff and available software: Microsoft WORD, Mendeley or Zotero, and other software tools purchased for staff to use e.g. EndNote in a single PC licence; RefWorks Institute-wide licence. Note that WORD offers substantial referencing resources and may be best for non-degree courses; a learning object covering this aspect may be useful for information literacy at the VET level. See also L2 and P2.

1-3 Years.

L4:

All learning objects or guides must be branded as NMIT Library.

Notes:
It is permissible to copy ideas but actual versions must be NMIT Library's constructs. Avoid referral to products of other service providers in the NMIT competitor sector (Australia). Some products can be referred to e.g. assignment timeline software hosted on a university site e.g. LTU's assignment calculator at: http://www.lib.latrobe.edu.au/calculator/

Current year

L5:

The associated learning objects of Information literacy programs for HE to be mapped to the HE curriculum and based upon the relevant RSDF level.

Notes:
Once the curriculum has been assessed (see above E1, E2, R1 and R2) and the information literacy program actually designed and its learning objects created, they can be seen to be part of an integrated whole which meets the needs of the curriculum. ***The learning objects are not something just made up by a Librarian trying to be helpful.***

With templates designating Intended Learning Outcomes, Learning Tasks and Assessment Tasks (L1), the process of creating integrated lesson plans with programs/objects, can be streamlined as an 'on-demand' activity.

In other words: You will know which part of the curriculum features information literacy (R1 and R2); what the GAs are (E1 and E2); what program/objects will be used; and finally, how it can all be couched in the appropriate pedagogic language of outcomes/tasks and RSDF levels. See also: L1, L3, R1, R2, R6, R7 and R8.

1-3 Years.

L6:

Prepare a set of Subject Guides (SGs) on specific topics.

Notes:
To be based on liaison with relevant Faculty staff to ensure their relevance to topics students are required to research. RSS feeds may be used to update content.

These SGs to also be used to demonstrate to teaching staff the capacity of Library staff to create high quality resources used to support learning outcomes.

The use of the SGs *when part of a specific information literacy program*, must be keyed to the relevant RSDF level. Generally this will be Level 2B: *'Collect and record required information/data using a prescribed methodology from prescribed source/s in which the information is not clearly evident'* but will be higher level depending on the kind of information literacy program (see L5).

Make the SGs (if created for the subject area) the core learning object when taking classes or dealing with reference enquiries. A platform like Lib-Guides can be used to prepare and manage SGs and collect user data (http://springshare.com/libguides/ see also: http://libguides.com/community.php?m=i&ref=www.libguides.com)

See also: R1, R2, R6, R7 and R8.

1-3 Years.

L7:

Generic information literacy guides placed on the website should involve a process in their preparation which includes the creation of intended learning outcomes and RSDF levels associated with their use.

Notes:
This is in order to avoid the creation of information literacy guides and other objects free-floating with no pedagogic foundation. **The 'being helpful' syndrome**. It will be better if they can be seen to relate to the quality of educational outputs at NMIT.

See also L1.

Current year.

Data collection

D1:

During data collection, all queries dealt with by staff in the areas of reference, information literacy and research must include the relevant READ Scale categories. **Note READ scale 5 and 6**.

Notes:
In reporting this data, whenever possible, enquiries involving scale 5 and 6 should have the relevant RSDF level/facets added; with this level of substantial assistance the student/staff is assisted to function at a particular RSDF level. In this way the Library can capture more of its contributions to pedagogy and graduate outcomes. **Not easy to do but potentially very useful.**

VATL statistics collected at certain times of the year can be augmented by the categories of the READ scale.

This is to enable comparisons with information literacy programs and the ability to indicate to teaching departments and senior management what learning outcomes are being addressed whenever Library staff deal with client queries.

Too many queries dealt with by the Library, **which have important learning outcomes**, go unrecorded, or if recorded, contain inadequate information.

Library data collection methods (e.g. forms) should be amended to include these professional categories and staff trained to apply the scales. This will not be easy because of the work-flow issue with Library staff: not exclusively undertaking reference queries and time to record data.

Once sufficient data has been collected, it should be used in reports made to Faculties and other Library reporting. See Appendices for sample form. See also P3 and P4.

Current year.

D2:

All information literacy programs online and their associated learning objects have data automatically collected and collated.

Notes:
This data should be reformatted as appropriate for reporting purposes and be available at any time it is needed.

Current year.

D3:

Data collected should include the **opportunities available** for information literacy programs online, P2P and qualitative surveys of clients who have participated in programs. The needs of students, as expressed through various sources including online contacts, should be collated and used to inform programs and learning objects.

Notes:
If you have a program embedded or available with a range of learning objects on a Moodle course page, then the enrolled students are the statistic for access/use, e.g. 25 enrolled students in Bachelor of XXX have information literacy opportunity provided (you can add hit rates as well).

Follow up, can be on a selective basis, following a sufficient passage of time for students to make use of information provided during information literacy sessions. The idea is to be able to provide qualitative views of students and staff added to raw data of how many attended or had access to a course. This could be something which FL/LLs can organize with students or teachers at the time they deliver training e.g. contact details for later follow up.

Participation by students may be enhanced by offers of vouchers to the Bookshop or similar enticements.

The needs of students will generally be inferred from the curricula; however some students may have special needs (mature age, international) which require specific information literacy programs or intervention by the library.

1-3 Years.

Professional development

P1:

Using PMPD and any other opportunities, relevant Library staff must develop a knowledge base in contemporary pedagogic trends and information literacy.

Notes:
See Biggs et al 2007 'Teaching for quality learning at university' and the literature search bibliographies in Appendices.

Being able to use the professional language and concepts denoted, in a meaningful way, is important to liaison activity at a higher level and the production of quality information literacy programs and learning objects to accompany curriculum based information literacy.

Consideration should be given to PD on topics e.g. creating lesson plans incorporating ILOs, and running it jointly with other interested TAFEs in order to share costs. Collegiate activity e.g. in-services, by staff should also be encouraged as means to acquiring knowledge base.

The Library should be able to allow time for staff to PMPD.

Current year.

P2:

With all software to be used (subject specific, social media etc…), FL/LLs should be able to explore them and gain mastery as part of PMPD.

Notes:
The Library should be able to allow time for staff to PMPD. Collegiate activity e.g. in-services, by staff should also be encouraged as means to acquiring knowledge base.

Current year.

P3:

Using PMPD and any other opportunities, FL/LL staff must know the ANZIIL inspired RSDF as well as they know other librarianship concepts. This must be the core expertise that makes them 'competent' to teach information literacy.

Notes:
Collegiate activity e.g. in-services, by staff should also be encouraged as means to acquiring knowledge base.

The Library should be able to allow time for staff to PMPD.

Current year.

P4:

Using PMPD and any other opportunities, relevant Library staff must develop a knowledge base in using the READ Scale for categorizing information queries.

Notes:
Collegiate activity e.g. in-services, by staff should also be encouraged as means to acquiring knowledge base.

The Library should be able to allow time for staff to PMPD.

Current year.

P5:

Using PMPD and any other opportunities, FL/LL staff must develop depth of subject knowledge in their area of liaison.

Notes:
There is an expectation from HE that the relevant FL/LL will have deep subject specialized knowledge. While this may not be achievable in all cases due to the Library staff numbers and courses to be covered, a deeper knowledge of fundamental concepts must be acquired.

Being able to use the subject language and concepts denoted, in a meaningful way, is important to liaison activity at a higher level and the production of quality information literacy programs and learning objects to accompany curriculum based information literacy.

Library resources, online information and curriculum documents can be used to develop the knowledge base. Also look at subject gateways available online or 'review' articles published in journal databases.

1-3 Years.

P6:

Staff conducting training should acquire over time either teaching or training equivalent qualifications.

It will add credibility to the Library capacity to offer training. A variety of qualifications should be investigated including at certificate level. NMIT should support staff in a variety of ways (time, resources, course fees) to acquire these qualifications.

Note the following and refer to **QA A/PN/D/7/083**:
'At NMIT any teacher training qualification that is at least at AQF level 5 and contains supervised teaching practice and studies in teaching methodology will be regarded as at least equivalent to the Cert IV in Training and Assessment.

For the sake of clarity this includes the Diploma of Vocational Education and Training Practice. In addition any qualification acceptable as a course of teacher training to the Victorian Institute of Teaching (VIT) or the Primary, Secondary, Technical or TAFE Teacher Registration Boards that preceded the VIT will also be regarded as equivalent.'

Given that much information literacy training is similar to the competency based approach familiar to the VET sector, the above opportunities should be opened up to relevant Library staff.

Qualifications for teaching are not commonplace at university level yet staff there (deemed lecturers or readers) undertake a great deal of teaching. It may be that academic qualifications combined with a Certificate IV Workplace Training and Assessment will suffice. This has indeed become the minimum qualification required for teaching in TAFE. The lack of this qualification precludes the assessment component from their role and instead involves supervision of the individual (designated as some kind of 'guest') by a qualified teacher.

Staff should be encouraged to have and update a personal PD journal which lists with annotations not only external courses/qualifications attended but also the PMPD, in-services, collegiate and seminar-based training they have undertaken. Some other organization HR departments produce such training diaries for staff to keep as part of their annual performance reviews.

See also S4.

At least 3 Years.

P7:

Staff engaged in the promotion of information literacy library services to be made aware of the implications of using social media, protocols which are available and issues involving risk management.

Notes:
NMIT already references social media with this warning: *'Contributors to NMIT's Facebook accounts must comply with the standards of behaviour outlined in the* NMIT Rules and Policies documentation*.'* This needs to be enhanced with reference to the NMIT Intellectual Property Policy https://staff.nmit.vic.edu.au/qa/Quality%20Manual/nnm7040.pdf. Staff also need to be aware of the nature of social media – that it is basically composed of public spaces and traditional legal constraints apply (e.g. laws related to defamation). In addition, professional standards need to be maintained.

Examples of policies include the following:
DHS Social Media Policy
http://www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/social-media-policy-for-employees
Accessed 09/10/12

National Library http://www.nla.gov.au/policy-and-planning/social-media
Accessed 09/10/12

Current year.

Staffing

S1:

Staff to be delegated specific projects in current year to 1-3 year period to meet the outcomes in the information literacy recommendations, e.g. obtaining details concerning sessional staff or data collection. Reporting back to the LMT.

Notes:
This will also be useful as PD for staff.

Current to 1-3 Years.

S2:

Faculty Liaison staff adjust their staff supervision duties or campus managing roles to increase their time for greater involvement in coordinating information literacy programs.

1-3 Years

S3:

Allocate a staff member with the responsibility for promoting library services to teaching staff and students in an ongoing, strategic way.

Notes:

This may a part-time duty. All media should be used.

1-3 Years.

S4:

Future recruitment of staff that may be expected to deliver information literacy training programs should specify in the key selection criteria, either teaching/training qualifications along with those in librarianship, substantial experience in lieu of qualifications, or a willingness to undertake such study leading to the relevant qualifications.

Current year.

S5:

Undertake a trial placement of a FL/LL for part of the time in the HE Department as a resource to HE.

Notes:
This should be undertaken only in special cases where substantial liaison has occurred to ensure the useful involvement of the LL as a support to staff or students. It may initially be for once a week for a half day or during critical time of the year (e.g. to design a new course).

1-3 Years.

INFORMATION BACKGROUND

Introduction

The recommendations which have been made are based on the information gathered from a number of sources.

As part of its Operational Plan (2012), the Library at NMIT undertook to review its provision of information literacy services to clients. Developments in Higher Education at NMIT and the increasing use of virtual technologies have also added to the requirement that services be further developed.

Visits were organized to a number of educational institutions to discuss with key staff, their service models, and in particular, the information literacy programs offered to clients. RMIT University (dual sector, HE and VET), La Trobe University (single sector HE), Holmesglen (a large metropolitan TAFE), and Box Hill Institute (medium size TAFE) were visited. In addition, discussions were held with key staff coordinating the provision of HE programs at NMIT in order to determine their particular expectations from the Library service.

Finally, a literature review was undertaken to produce a series of information literacy bibliographies on current research findings.

From the various sources of information this report has been produced with some key and supplementary recommendations for the further development of the Library's information literacy services.

Visit to RMIT (http://www.rmit.edu.au/library)

At RMIT teaching and Library Liaison is divided into three 'colleges' (e.g. http://www.rmit.edu.au/dsc)

- Business Liaison Librarians
- Design and Social Context Liaison Librarians
- Science, Engineering and Health Liaison Librarians

RMIT Library has a strong presence at all relevant academic and operational levels, in particular committees of management and oversight. This ensures that they are able to report to key decision makers on their activities and the way in which the Library service contributes to the quality of learning outcomes.

Well organized and presented data is used to underscore the importance of the Library to academic performance; e.g. they are able to say for each course subject, the numbers of students who have availed themselves of the Library services, be they using learning objects, databases, subject guides, specific information literacy training and so on. The data is culled from online and P2P services, and also used to allocate resources where a need is discovered through data analysis.

When a new course is being contemplated, a detailed Library Impact Statement is completed and becomes part of the process of establishing the course. They have over time, managed to create a deeper reliance on, and appreciation of, library services. It is understood that the library is indispensable because it contributes significantly to the academic performance of staff and students.

Reference or research query statistics are collected on the basis of the 'Read Scale' (see: http://readscale.org/ esp: http://readscale.org/read-scale.html). Liaison Librarians report to their colleagues and senior staff twice a year and are encouraged to include qualitative information.

They use the 'Research Skills Development Framework', http://www.adelaide.edu.au/rsd/ as a foundation to develop learning objects and evaluate the information literacy programs. They map where they are currently engaging with students to the framework standards. This also helps Library staff determine where they need to get to; e.g. designing a new training program for a course or adding to the repository of 'learning objects' used in training (online or P2P). A lot of content which librarians have all worked on together; emphasis is on detail not mere generalities. Learning objects are held in a virtual repository for access by all staff, with changes or additions recorded (version control). Subject Guides (via Lib-Guides) are a core service and the foundation of information literacy programs; usage is very high (see example: http://rmit.libguides.com/content.php?pid=23480&search_terms=rmit)

RMIT Library uses eQuella to capture material and place it into a 'repository' or the section of student learning system (Moodle). For instance, Library staff can develop a subject guide which is 'owned' by librarian (oversight or moderation) but to which academics and other staff can contribute.

Engagement with academic staff and students is a critical strategy, both person to person and online engagement. The approach is to operate in partnerships with academics and be part of team, offering solutions. For the students, this engagement is throughout their learning cycle. Information literacy is seen as a critical part of this process. They have also tried to place LLs for part of their time (half or full day) in the academic departments which they are responsible for, with mixed success. It has been effective in some areas and the LL becomes an 'on-the-spot' support to academic staff and students, generating goodwill for the Library and contributing to academic success.

The liaison model is school-based. Desk time by LLs is limited to 4 hours a week; the rest of the time is taken up with liaison in departments (called a 'migration of services') or information literacy activities. LLs work in VET and HE but in a given subject area.

Photos of LLs feature prominently in all critical link areas. They also have their own blogs where they promote new content, topics, resources, tips and so on. All are subject focused and can be linked to from other learning objects. This humanises the library as well as providing subject specific information, is part of a student learning community and ultimately contributes to academic success. It reinforces relationships with students and staff, identifying an LL with a subject area.

Being embedded in the curriculum is very important. Although it is far from universal at RMIT it is still substantial when compared to TAFE. This allows the Library to present a more structured program of information literacy. Many academic assignments include some assessable information literacy component (hurdle or marked) using library services.

At RMIT the way of teaching is changing – teaching and learning are seen as part of the one continuum, to which the Library is a key contributor. Learning takes place outside of the classroom. The classroom is only for discussion and feedback. The library aims to be part of this collaborative world, using new approaches (social media, cloud technologies) as well as more traditional. Students are given outcomes/tasks and they pursue research themselves as a process of discovery-learning; then they come back to the classrooms (or the library) for discussion, feedback, help with further research and presentation of findings.

Preference is to employ staff with a teaching background, teaching qualification, or academic background because they then have the best chance to appreciate the language/concepts of academics/teachers and deliver effective training. PD is also provided for staff to support the development of relevant skills. LLs are expected to have or develop substantial specialist knowledge about the area in which they liaise.

HR at RMIT distributes regularly to the Library, a list of new staff joining the organisation (with full contact details – includes sessionals, contract and full tenure). This provides an opportunity to catch them and inculcate understanding of the Library by offering induction and detailing the services available.

Visit to La Trobe University (LTU) (http://www.lib.latrobe.edu.au/ and http://latrobe.libguides.com/)

Spaces for collaborative learning are a strong feature of the library. This approach to learning has been critical in changing how the library delivers services. In many courses, learning takes place outside the classroom. The classroom is for raising issues or discussion.

With regard to information literacy programs, the RSDF provides the foundations, and information literacy embedded in the curriculum. The Library works with academics in set-up, design and delivery (P2P or Online). A great deal of information literacy is done online.

This has changed the kind of KPIs that are used for information literacy. The focus now is on number of people with the *opportunity to access and undertake* information literacy training. So Library works on maximising opportunities and points to these as success indicators. The Library creates a number of learning objects and hurdles; there are so-many students who access this material each semester; therefore this becomes the most meaningful KPI. It is important to note that the Library is able to point to use of this material, because the student *must* use it.

LLs are in a structure of Faculty Teams which matches the way in which teaching is done and academics operate – they specialise to the Faculty. Faculty teams work on research assistance to staff, postgrads, and information literacy for others – creating and embedding subject specific learning objects. These Faculty teams have adapted to the new curriculum development plans for learning which involve embedded graduate capabilities. Graduate attributes are critical: the point is to be able to say to future employers that a graduate from LTU has these (listed) skills for learning (not just subject specific knowledge). Information literacy is a key component of graduate capabilities in the areas of research/enquiry, allowing the librarian to actively enter the process.

The development of graduate capabilities transformed the way the library provides information literacy and also operational services (venues).

They proceeded by mapping relevant information literacy related graduate capabilities to courses, year by year, where every student is able to achieve them. Library did the mapping to the course (curriculum); then determined what the learning outcomes would be for that graduate capability (RSDF is the foundation). There is therefore an *incentive for academics* to use library expertise in an area they are *not fully or even partially knowledgeable*. They basically needed someone to provide the detailed competencies and outcomes (and create learning objects, tasks etc….) they could use to embed in the curriculum to meet the GAs. By carefully and comprehensively mapping the information literacy skills into the curriculum, everyone knows what is going on and when something is delivered; hence they can refuse to take a session which is out of sequence and instead refer to a reference desk support or similar assistance, if needed.

They also have produced an 'Inquiry Research Toolkit' as a handout and eDoc which they distribute to cover those not yet part of the embedded curriculum approach (also encourages embedding and provides useful information).

With information literacy, they apply a Constructive Alignment approach to creating learning tasks and assessment tasks. Information literacy becomes a process of learning tasks which are assessed (or mere hurdles) in the curriculum. Delivery can be in class but often online via tasks with supporting learning objects.

Subject Guides are considered a core service and everyone values them. They collect detailed statistics on them (40,000 hits in 2011). Very popular and part of the LMS (this is critical – if they are not embedded they will not be used – must be in LMS directly as 'Subject Guides', not to be found if and when a student bothers to hit a link to the library site).

They try and get into every committee meeting, every structural element, to ensure library representation and promotion. They have a staff member dedicated to promotion of library services using all relevant media.

Visit to Box Hill Institute (BHI) (http://studentweb.bhtafe.edu.au/bhi/course/view.php?id=1013)

Embedding is patchy and depends on relations with staff. Have some penetration to particular units in the prized real-estate of Moodle. They have subscribed to Lib-Guides and use them for their subject guides which are linked to from Moodle. Lib-Guides are core – the starting points – statistics are available.
Music has information literacy tests delivered via Moodle with a 5% value towards assessment.

In general, when it is taken up, Information literacy is over 2-3 sessions in some cases. In completing assignments students are required to use certain resources – teacher provides feedback to Lib. Students not responding have to come back to the Library for catch-up.

Information literacy is generally done at start of year towards the end of first term and mid-year. More specific sessions later to fit into classes and assignments. Copyright and plagiarism is part of the Lib-Guides – new Copyright person at BHI supports libraryin doing this. HE is by far the biggest consumer of information literacy.

Nursing seem to need information literacy and use specially designed competencies. See: Royal College of Nursing - Finding, using and managing information: nursing, midwifery, health and social care information literacy competencies:
http://www.rcn.org.uk/__data/assets/pdf_file/0007/357019/003847.pdf

The Library is trying to get this department interested in broadened information literacy and/or to have the Library directly involved in some elements of the competencies.

Other units at BHI create research skills resources but they appear to be sub-standard due to lack of knowledge e.g. not including latest databases or referencing.

Library staff involved in information literacy have Certificate IV for Training Groups. The Library staff in this area value the time to reflect on their activities especially in taking classes. Some information literacy is done for teaching staff at their meetings; some individual teachers P2P; no set program.

Library is also involved in 'Summer School' sessions for international students and they work with Student Support.

Librarians do most of the training, from orientation to subject specific information literacy. Library Technicians take some orientation classes – it is also in their PD but most prefer not to do them. Consistency is an issue so perhaps it is better that it is done by librarians.

A particular staff member is promoted for the role of LL in a particular subject with pictures of staff on the lib-guides.

Promotion of information literacy activities and services is via email to Centres and teachers directly. BHI Facebook and Twitter also includes some news. Journal bulletins are forwarded to many staff and Centres. They are very much appreciated; involves value adding because Library knows subject and teacher/Centre as well as the information sources.

They do not have any referencing tools at present; used to have a subscription to RefWorks but it has lapsed. Not used by those below HE level. Staff have access to such tools e.g. via their alumni status or because studying higher degrees at universities.

A bank of resources (learning objects) exists which are shared, edited, added to by Library staff.

Conclusion: information literacy patchy and depends on historical and personal relations established by Library staff with Centres; HE is main consumer. Graduate Attributes are only just now being developed at BHI.

Visit to Holmesglen (H) (http://www.holmesglen.edu.au/services/learning_commons_library)

There are no open sessions – all information literacy sessions are booked through the LL for specific groups. Note: information literacy is not 'academic literacy' at Holmesglen. The Academic Skills Unit is not part of the same grouping at H but part of the International Centre. International Students have to enrol in a 10 weeks 'academic skills' program; for other students it is not compulsory. Cross over with Library such as in providing referencing skills and plagiarism information but Academic focus is also on literacy/numeracy, reports, and essays. Relationship with Library is not particularly close despite overlaps.

Library does information literacy for HE and VET. Ideally 3 sessions: orientation (intro to lib); catalog, Discovery layer; and class-based detailed information literacy on a teacher-set assignment. However, many classes incorporate 1 and 2 with the third class-based session optioned for later but not always taken up. Process is: lesson plan, Q&A in information literacy matters, demonstrations, activity task, quiz, evaluation. Evaluation is similar to NMIT.

No embedding of information literacy although early childhood is moving in that direction.
HE departments are also not embedding information literacy. Development of GAs not in place.

Anyone can do information literacy as a simple tour (introduction to the Library), usually lending services staff; librarians do the level 2 and 3. LL for the teaching department takes the session for the class wherever possible.
No qualifications required for information literacy training. LL skills may or may not include some teaching or Certificate 4 Workplace Training and Assessment background.

H has subscription to Lib-Guides; the LL prepares and maintains them; easy to do and produce plenty of statistics. They are liked so much by departments that some of them are using them as actual learning guides for a subject instead of using Moodle which they find too complex for their students – the Library creates all the guides, including the ones used as learning guides or more traditional subject gateways.

The Library site gets more hits than the main H website. The Library also uses the Lib-Guides as repositories of information literacy objects, templates, ideas, lesson plans, links, guides, which can be used by their staff.

The Library tweets via a generic library commons tweet – a tweet with an RSS feed. They also use yammer for internal Library staff communications (https://www.yammer.com/) about new services or learning objects on learning commons. Yammer is staff only and set up with RSS feed from various sources so that posting information from/to staff is easy; it is a kind of Facebook but for professional purposes.

HIGHER EDUCATION AT NMIT AND LIBRARY SERVICES

(https://staff.nmit.vic.edu.au/programs/he/Pages/default.aspx and
https://staff.nmit.vic.edu.au/programs/he/researchandscholarship/Pages/CurrentProjects.aspx)

Issues of concern include defining the concept of 'academic level' research suited to the NMIT context but yet measuring up to quality standards. Because over time, more and more staff will also undertake research there is a need for access to fundamental research literature in their subject area, perhaps not by a subscription to expensive journals but access in some other way. Some staff, as alumni or community borrowers of universities, use their alumni status to obtain access to journals and databases. This is not always successful (licences preclude alumni – or CAVAL – accessing all resources) and perhaps not desirable (we are using another organisation for resources). The NMIT Library should investigate what ways there are to support these staff.

The following is a summary of key points made in discussions:

Would like to see: Liaison librarians with specialist skills in their subject area; this entails a person dedicated to an area, with knowledge of the subject at a sufficient depth to allow them to understand the curriculum and the pedagogy employed. A Faculty Librarian may be too much of a generalist or may lack time to acquire subject knowledge in depth.

Would like to see: Designed and offered, a three-session introduction to the basics of learning and research built around the subject, which involves 'active learning' (Constructive Alignment). For instance, on the differences between databases and the general internet – the differences and strengths of each. The sessions must be subject specific. This may need to be designed after discussion with key lecturers (see above what is offered at RMIT and LTU; also Biggs et al, 2007)

Would like to see: Online resources catering directly to off-campus students 24/7. Support needed in this area e.g. self-learning tutorials, ask-a-librarian, and referencing assistance/training.

Would like to see: the Library recommend a standard piece of software for referencing (e.g. EndNote, RefWorks or Mendeley – Mendeley is considered quite good) and then put resources into teaching it in class, in-services to staff, and online guides. This may become something taught to post-grad students as well (Masters' programs and special degrees) e.g. Bachelor of Enterprise Learning using Mendeley to upload sites and connect to other specialists; also to manage references and create bibliographies. The librarian can work with the person putting the course together and go into class to teach segment and be a resource/presence for students. The Library is seen as the key agency in this area of referencing and bibliographies.

Would like to see: Sessions on how feeds work (RSS). Basically this is about how you stay up to date with latest research and issues – for post-grads and staff. This also linked to research management tools like Mendeley as an integrated process.

Would like to see: Information literacy programs with associated learning objects and assessment tasks to cover spectrum of research skills and using library resources. These can being taken up as hurdle assignments (this is basically a part of full embedding which will occur when GAs are eventually adopted); LLs to work with lecturers to produce these programs.

Would like to see: Planning for an intensive focus on Masters' level research skills, when Master level courses are introduced. This is considered to be of a higher-order information literacy level. Library needs to prepare for this.

Would like to see: Managing the research skills learning of students from diverse backgrounds – international, special needs, adult learners returning to study, mature-age, off-campus etc… all will need special approaches.

Would like to see: the Library develop a presence, and be the manager of, an online Learning Community as a support to subject based LMS. This involves the creation of learning spaces (physical and virtual); the library to be the focus of online or actual learning communities; the Library to manage these and link up with students' use of new technologies such as iPads and SmartPhones (and social media running on these platforms). Library to be a learning-hub. The challenge will be to create that feeling of a learning community online: course-wide communities hosted by the Library incorporating study groups, Q&A, referencing, all the tutorials, additional learning (D/Bs, Mendeley etc…), posted information, news etc… You have to go through the Library to enter these learning community spaces and the Library manages or coordinates them. They are part of a separate but supporting community to LMS like Moodle. Moodle is fine and desirable but it is subject-based design; the subject focus is critical. It is not good for creating the sense of a learning community in the widest sense.

In effect, NMIT HE are asking for a significant move towards the level of support to be found at the University level. The challenge will be to approach or reach this level with the limited resources available to NMIT.

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http://www.itl.usyd.edu.au/graduateattributes/
https://my.unsw.edu.au/student/atoz/GraduateAttributes.html
Both accessed 03/08/2012.

Information literacy, liaison and lesson plan samples (very useful site)
http://pitt.libguides.com/content.php?pid=318265&sid=2604757 Accessed 15/10/2012

Assignment calculator at La Trobe University is at: http://www.lib.latrobe.edu.au/calculator/
Accessed17/10/2012

APPENDIX 1

BIBLIOGRAPHIES OF USEFUL ARTICLES IN THE AREA OF INFORMATION LITERACY/RESEARCH SKILLS/ACADEMIC SKILLS

Introduction

I have reviewed the abstracts and, where possible, the articles themselves.
The searches were generally limited to 2010-2012 time-period, but if a useful article turned up from an earlier date, it was added to the bibliography.

In selecting items I was guided by the following criteria:

- Important theoretical knowledge – to assist library staff to build up their knowledge base;
- Important new findings;
- Presence of practical applications or useful ideas which could be adopted by librarians to create learner engaged information literacy programs.

The citations can all be traced back via the EBSCO database which was used. Please note that the items were exported into Mendeley and then the bibliography produced. This means that format is not always consistent (that's databases for you) but a prudent use of time on my part means that little if any format editing took place.

I avoided search strings that would provide articles on reference services or collection development and other aspects of librarianship, except where they turned up as part of information literacy searches. Some closely related search terms nonetheless located quite different items. Some repetition of entries was unavoidable.

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APPENDIX 2

SUMMARY OF VISITS TO OTHER LIBRARY SERVICES

DISCUSSION POINT	RMIT	LTU	BHI	HOLMES	NMIT	NOTES
Graduate attributes - informed by information literacy program?	YES	YES	NO	NO	NO	University Information literacy programs aim to produce outcomes which match the particular university's GAs
Information literacy standards - which ones and inform program?	RSDF	RSDF	NO	NO	NO	All information literacy programs, learning objects and data collection are based on RSDF http://www.adelaide.edu.au/rsd/; also READ Scale used
Information literacy program mapped to curriculum	YES	YES	NO	NO	NO	This is natural process linked to embedding
Information literacy embedded in curriculum	YES	YES	TWO COURSES ONLY	NO	NO	BHI embedding is fortuitous example based on past historical relations between library and a particular department
Needs identitified in consistent formal manner	YES	YES	INFORMAL	INFORMAL	INFORMAL	Sophistication of information literacy program and link to GAs facilitates needs evaluation
Information literacy training - who does it and is it exclusive role?	LLs	LLs	LLs NOT SOLE ROLE	LLs NOT SOLE ROLE	LLs NOT SOLE ROLE	University Liaison Librarians do not have any staff supervision with campus responsibilities; they do have collection development roles
PD for staff providing information literacy	YES	YES	SOME	SOME	SOME	The Universities have PD as critical part of LL role which includes information literacy; teaching qualifications encouraged or preferred
Public relations and promotion - dedicated position in library?	YES	YES	NO	YES - P/T	NO	The role is to promote the library and thus also the information literacy programs
Study skills - are they separate unit and/or work with library as team?	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	Close relationship most evident with Universities because of the GAs but it is still a sensitive relation due to professional differences
Level of information literacy - introductory, intermediate or advanced?	ALL	ALL	ALL - see notes	INTRODUCTORY AND INTERMEDIATE	INTRODUCTORY AND INTERMEDIATE	BHI has one subject area advanced - see above

APPENDIX 3

MAPPING CURRICULA RESEARCH SKILLS TO LIBRARY INFORMATION LITERACY PROGRAMS

A way to set out the process of mapping curricula research skills to Library information literacy programs (see R2 above in recommendations)

An initial examination of curriculum statements for a First Year in a business degree produces this:

Develop critical research and analytical skills
Computer skills to undertake online research using a variety of search engine techniques; use library website resources and available methods of obtaining articles and other documents; written assignments are to be submitted in APA format.

Following discussions with the teacher/lecturer, it is revealed that in the first year the student is expected to be competent in internet searching, capable of a basic evaluation of the quality of information so located, be able to use the library online resources to locate articles and books (including eBooks) and be able to reference/cite all sources of information using APA. Closer liaison further reveals that the student will be set assignments with specific topic questions to be researched. More independent and project work will be undertaken in second and third years, once the foundations have been established. The FL/LL takes this information, makes some interpretations and produces a table (or some such similar descriptive tool) for a program involving 4 sessions: (See below)

Course	Research Skills	Contributes to Graduate Attributes	Information literacy Program	RSDF Range	Notes
Introduction to Business – First Year	Internet online research	Conduct research using archives, libraries, the web and other sources of information. Apply research principles and methods for gathering and analysing data/information relevant to major fields of study. Employ technologies effectively in gathering information from written, oral and electronic sources. Manage, analyse, evaluate and use information efficiently and effectively	General internet use to locate and evaluate the quality of business related information; library online guides XXXX	Level 2 A-F	Using Google and/or specialised search engines, subject gateways etc... set hurdle task; one session
Introduction to Business – First Year	Library online resources to locate articles, monographs		Library FindIt i.e. databases, catalog, eBooks; focus on business databases and eBooks with library online guides/tutorials XXXX	Level 2 A-F	Two sessions; set hurdle task
Introduction to Business – First Year	Referencing using APA 6th Ed		Database exporting of data in APA format; introduction to basics of APA and library guides XXXX	Level 2 A-F	Set hurdle task; one session
Etc...					
Etc...					

Note that the fewer sessions allowed, the more light-on and brief will be the program, requiring the student to follow up with library learning objects and queries to the library staff, as

assignments are undertaken (this will be the most common result). I suggest that focus be placed on compiling a suite of tutorials and guides online of varying depth to support student learning because of insufficient allocated time.

APPENDIX 4

RSDF AND SIMPLE LIBRARY TOURS – BRINGING THE TWO TOGETHER

It would be useful for data collection purposes and as evidence of the library contribution to learning and the development of graduate attributes (generic skills a graduate of NMIT has in addition to special subject knowledge), if even the most basic of information literacy activities could be linked to the Research Skills Development Framework http://www.adelaide.edu.au/rsd/ .

The simplest tour of 'introduction to the library' can be linked to a simple task to be completed by the students after the tour. It may involve locating a number of titles or items in the library after discovering the Call Number (reference books are best for this, as always in library) and recording the titles and call number on a sheet of paper submitted to the librarian after the completion of the session.

This task (which could even be made a 'hurdle' with the agreement of the teacher) would be linked to the achievement of:
RSDF Level I Facet A-B - *Students research at the level of a **closed inquiry** and require a **high degree of structure/guidance;** Students **embark** on inquiry and so **determine a need** for knowledge/ understanding.*

In other words, at this level/facet the student is told to seek some specified information and given a lot of guidance as to how to find the information (see task suggested above). This used to be done regularly in libraries a few years ago.

Requirements:

Support from teaching staff – to allow a little extra time (maybe 15 to 20 minutes) for the task to be completed (if hurdle, it can be done outside of class). Liaise with teachers.

Staff members involved in taking tours are given guidelines/training to fulfill the creation of tasks and their assessment.

Students are allowed to help each other – collaborative learning.

Staff member creates the task, knowing exact number of students, so the subjects for items to be found can be set (should be related to their course of study) in the task sheet handed out (obviously in more sophisticated forms can be online-based).

The sheet is returned to the staff member who determines if the task has been completed successfully and informs the teacher by email; if not, the feedback is provided to the teacher with the suggestion the teacher ask the student(s) to return to the library with the task and review how to complete the activity; this ensures the learning takes place and increases the use of the library (keep statistics).

The Intended Learning Outcome: 'the student is able to locate items in a library relevant to their course of study and record basic details regarding these items.' This outcome matches the information literacy level I Facet 1 (or A).

Advantages for Library:
The Library is clearly contributing, with even the most minor of information literacy activities, to the learning process and the eventual NMIT graduate attributes; the Library is recording its data using national standards, benchmarked against sector leaders.

For data collection purposes add two columns to statistics kept: Task set YES/NO? and RSDF level/facet this task supports.

APPENDIX 5

EXAMPLE FOR DEVELOPING ILOS AS PART OF AN INFORMATION LITERACY PROGRAM

This example is for *only one information literacy understanding and related task*: using a particular database.

There are many other information literacy 'understandings' needed to produce a graduate competent in undertaking research. This model can be adapted to suit e.g. other understandings or as parts of lesson plans. Library staff can no doubt build upon the basics given below for illustrative purposes; for instance, the example may be expanded to become a set of ILOs for any and all databases. The lesson plan may require team-teaching with a subject specialist e.g. for clarifying a research topic.

First you set out the kind of knowledge the person must gain; then the content which will produce the knowledge (what you will teach); lastly come the ILOs with the relevant RSDF and GA attached.

Kind of knowledge:

- How to clarify a research topic
- How to get into the database
- How to execute a search
- How to create folders
- How to select from the results of the search
- How to export selected results for later use

Content (what you teach):

Clarifying the topic; locating the database; registering; logging in; identifying features of database and their purpose; locating thesaurii or developing relevant keywords; modification of topic if necessary; creating folders to manage research; conducting a search; criteria/guidelines for evaluating the findings; moving results into folders; exporting results for use in other media.

The Intended Learning outcomes are:

ILO 1   Able to develop and clarify a research topic within a subject area.
ILO 2   Able to locate and organise personal access to database.
ILO 3   Able to conduct a search using keywords relevant to research topic.
ILO 4   Able to evaluate and select relevant results.
ILO 5   Able to organise and manage results.
ILO 6   Able to export results for use in further research or to complete assigned work.

As you can see, the ILOs are specific but embrace a number of elements from the knowledge and content to be taught, which is why you need to first think of the knowledge or understanding you want the student to have, then list what you will teach. *The ILOs emerge from this process.* Remember to use the appropriate verbs (see also Bloom's taxonomy).

The ILOs can then be mapped to the GAs and RSDF.

The Graduate Attribute and RSDFs which the ILO will align with (*example taken from the University of Sydney Education Faculty*

(Accessed 22/08/2012):

Information Literacy. Graduates of the Faculty of Education and Social Work will be able to use information effectively in a range of contexts:

- recognise and determine information needs
- access and analyse pertinent information effectively and efficiently
- evaluate information and the credibility of its sources, and place it in context
- initiate and conduct research using relevant information sources such as archives, library databases, internet and other contemporary media sources.
- utilise retrieved information for the purposes of critical and creative thinking, and for application within professional fields
- understand the need for ethical, social, legal and cultural appropriateness of use of retrieved information
- recognise information literacy as a prerequisite for lifelong learning

The RSDF for the ILOs will be Level 4 A to D.

Level 4 states: Students research at the level of an open inquiry within structured guidelines.

For instance, Facet D states: Students organise information collected/generated and manage the research process.

The result, if only Facet D is attained, is that the student is able to:

Organise information / data using structures and processes suggested by provided guidelines.

The Learning Task

Demonstration by teacher/trainer who also explains why this knowledge is significant for the student. Students select from a range of provided topics and proceed to access database and conduct searches, set up folders etc... in a sequenced way together with a teacher (the lesson plan lists the sequence for the teacher to follow).

At the end of the session they are informed of the assessment task they have to undertake. They are invited to approach library staff for assistance in using the database if revision is needed. Collaboration is acceptable during the lesson(s). There may well be more than one class.

Assessment Task

Hurdle preliminary to more detailed assignment set in class by subject teacher/lecturer.

Students select a topic from their subject area, conduct the research on the assigned database and produce a list of resources in various sub-headings submitted to the Librarian/Teacher in electronic form to a format given to them by the Librarian/Teacher.

Therefore: Select topic, conduct search, evaluate results, export references into bibliography with the research topic and selected keywords. Submit to assessor in format approved by teaching department.

Finally:

NMIT now (2013) has on its Staff Portal (using SharePoint), a location for including all of the above in a coherent way, course by course, together with links to all uploaded files (learning tasks, lesson plans, learning object for a course or subject etc…).

It is recommended that such an integrated presentation be used as it will facilitate reporting the Library contribution to learning and graduate excellence. The point is: ***The training contributes to the students attaining a certain level of information literacy which poistively enhances their graduate outcomes and professional competence.***

APPENDIX 6

SAMPLE LESSON PLAN

[Information literacy topic] Lesson Plan

Teacher/Trainer:

[Specific name or position title e.g. Liaison Librarian]

Course Name:

[e.g. Development of Children I – research skills component – Degree in XXXX, First Year OR Library introduction to databases]

Intended Learning Outcomes:

[At the completion of this training the student will be able to: ILO 1, ILO 2, etc…]

RSDF level:

[e.g. The RSDF for this course is: Level 4/Facets A-D] *Level 4 states: Students research at the level of an open inquiry within structured guidelines; e.g. facet D itself states: Students organise information collected/generated and manage the research process. The result is that the student is able to: Organise information / data using structures and processes suggested by provided guidelines.*] **The lesson/training contributes to the students operating at this level of information literacy.**

Graduate Attribute:

[Or similar; this course supports the following Graduate Attribute: XXXX]

Prerequisites:

[There are no prerequisites OR knowledge of using information technology such as personal computers and the internet OR Introduction to research methodology in the social sciences etc…]

Links to other topics:

[This course links to – list other courses of relevance or online topics etc…]

Knowledge/understanding:

[How to X, Y, Z etc…]

Learning method:

[How the teacher will teach this subject e.g. Demonstration, discussion and practice in class]

[In this area some teachers/librarians like to place their personal teaching script]

Assessment:

[e.g. details here: by assignment to be submitted via… OR task to be completed online at www.studentsdothisnow.vic.edu.au etc…)

Review:

[How the effectiveness of the teaching will be evaluated e.g. follow up with class in term 2 Or feedback sheet handed out OR online survey]

Duration:

[Should not be more than one hour bearing in mind this effectively means 40 minutes; if more than one session is needed it is part of another lesson plan e.g. Information literacy topic, part 2]

Materials/Support:

[Computer lab, internet access, datashow, etc…

Handouts/Supporting material for student(s):

[For students in print or referred to online resources for further learning, such as guides etc…]

References:

[Curriculum documents, websites, intranet sites, journals, etc…]

Notes/Other:

[XXXX]

APPENDIX 7

INFORMATION LITERACY DATA COLLECTION FORM – EXAMPLE

It involves extra work. The question that has to be asked is: Why is the data collected?

Do you believe that Library staff undertaking reference duties are contributing significantly to the learning outcomes of the student and the quality of the NMIT graduate?

If the answer is NO, then why are they there? Surely they can be allocated to other more useful work activity.

If the answer is YES, then you need some method for capturing the data.

This is a draft form for discussion purposes. It lists only two types of enquiry – reference and information literacy. It includes the READ scale. In order to be completed the staff will need knowledge of the scales and reconstruction of details of query from memory after client has gone. Obviously while reasonably accurate as an indicator of the kinds and levels of enquiry received by reference desks, there will be some indeterminacy e.g. busy handling a lot of reference queries over a short period of time. **But, it will still be collecting important information**. The important thing to note is that it will most often be under-reporting activity rather than the other way around, due to the busy periods.

Substantial reference/information literacy enquiries will need to be referred to FL/LLs by appointment. Internal systems ('book a Librarian') may be established.

FL/LLs will need to keep records of their information literacy activities – appointments with clients or classes taken (not difficult to devise a form).

The data form itself can obviously be placed online for automated collating of information.

It is not intended to replace the quick-tick data collection but to augment it in the cases of reference and information literacy enquiries only.

Note that READ scale enquires over 4 are basically information literacy in nature but adding an RSDF level is inappropriate because they are not part of a designed course. Obviously, after the client has finished, the training received contributes to the student operating at a certain information literacy level (RSDF) but this is too hard to record from such staff-client encounters.

The form is a sample only. Work will be needed to design a final version which collects useful data and is also straightforward to use. Note that time taken to deal with clients or Library staff names are not recorded etc…

The sample form. *(This will inevitably involve under-reporting due to work flow issues)*

Date: .... **Library Campus:** ....

Query Number	Time Block	Reference	Information literacy	READ Scale	Number of students/staff	VET or HE	NOTES
1	8.30 to 9.30	Ref		2	1 Student	VET	
2	8.30 to 9.30	Ref	Information literacy	4	1 Staff	HE	Started as ref but involved showing how to use Ebsco
3	9.30 to 10.30		Information literacy	5	2 Students	HE	Demonstrated FindIt for HE students doing project Viticulture
4							
5							
6 etc...							

APPENDIX 8

RESEARCH SKILLS DEVELOPMENT FRAMEWORK AND NMIT LIBRARY

What is the RSDF?

- Derived from the Australian New Zealand Information Literacy Framework (2004) which listed the skills an 'information literate' person needs to have
- The RSDF builds on ANZILF by combining other behavioural criteria about the degree of autonomy a researcher exercises

The result is a matrix which can be used to describe the research behaviour taking place

How has it been used?

- By teaching staff to set assignments which develop research skills for a discipline – so that for instance, students can become autonomous researchers by graduation
- To support Graduate Attributes
- By Libraries to develop full spectrum Library Research Skills
- As a rubric – standards to be met, for instance in assessment (Note: it involves qualitative judgments as well as objective tick off 'met the standard' assessment)

How can NMIT Library use it?

- Never in isolation
- Used in conjunction with Intended Learning Outcomes
- Used in conjunction with Graduate Attributes
- Used for embedded Library Research Skills programs of sufficient depth
- Used to inform creation of learning/assessment tasks and learning objects
- Used in liaison with teachers/lecturers
- Part of a long term strategy (1-3 years)

Current use (May 2013)

- Use is at a simple level underutilising the capacity of RSDF
- Used in liaising with teaching staff to gauge the levels at which they expect their students to be operating
- Used to inform the learning tasks as part of any training

Future use

- Must be part of programs where information literacy is a factor – Graduate Attributes unambiguously embrace it and it is in the curricula – ***serious commitment***
- Becomes the driver of Research Skills programs or parts of programs (currently, it is not)
- Becomes part of a process whereby in collaboration with teaching/lecture staff, students develop through the RSDF spectrum to be fully competent researchers

G. Eraclides

August 6, 2013