

Background

CPUT – Cape Town, 6 faculties, 10 campuses, 34 000 students

Information Literacy Policy

- Since 2009
- All academic programmes must include IL
- The responsibility part of normal academic management process

Information Literacy Committee (ILC)

- Sub-committee of Senate Teaching & Learning committee
- Monitor implementation of IL policy/strategies across university

Certificate of Information Literacy (CIL)

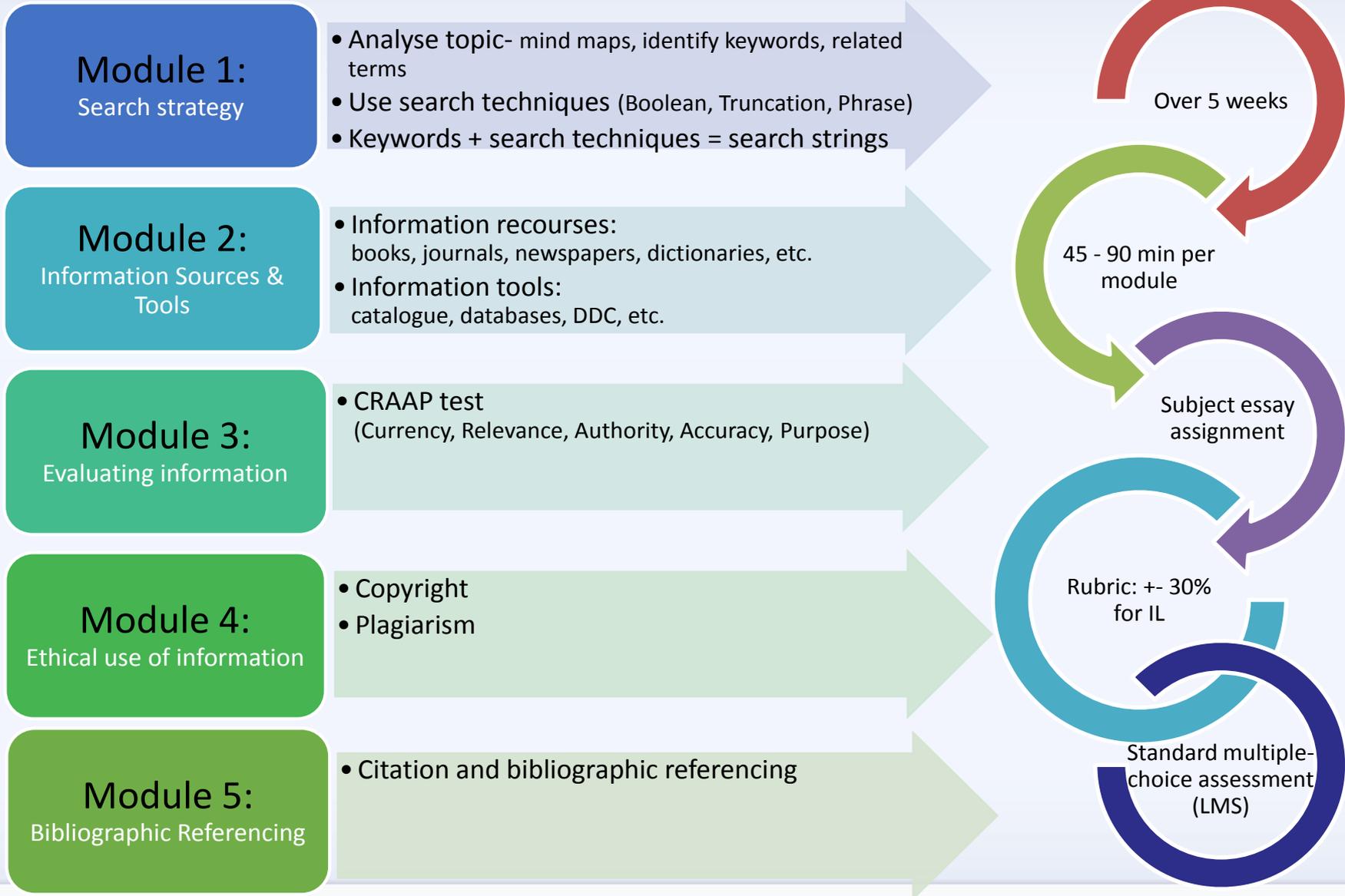
- To support faculty
- Offered mostly to 1st years and ECP students since 2013
- Lecturer book CIL with their librarian - time-tabled
- Refresher courses available
- Senate decision – way forward
2017 - onwards compulsory for all 1st years (CIL admin)
2018 - weighted component

Advanced Information Literacy programme

- For M & D students
- Implementation since 2016

Background (continue)

Certificate of Information Literacy (CIL)



Research Questions

Part 1:

Item analysis study on 2013 assessment data

- Is the assessment instrument valid and reliable?



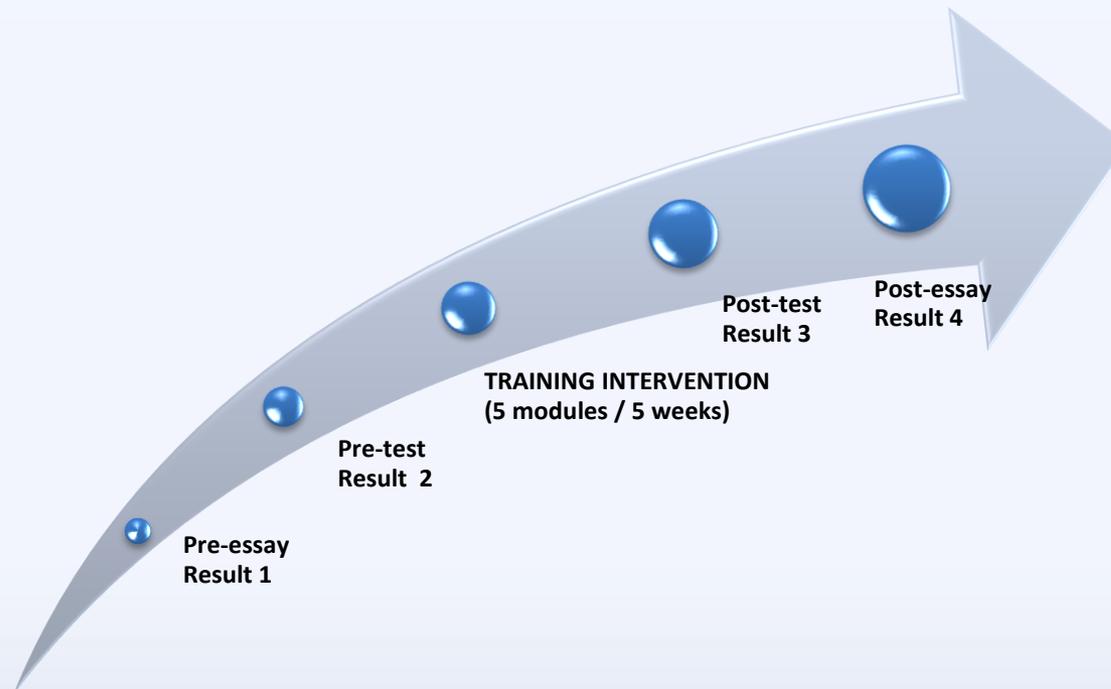
Part 2:

Measuring the application of IL skills after CIL

- Does the current IL multiple-choice summative assessment show improvement in the IL knowledge of a student?
- Are students applying their information literacy skills in essay assignments after attending an IL course?

Research Methodology

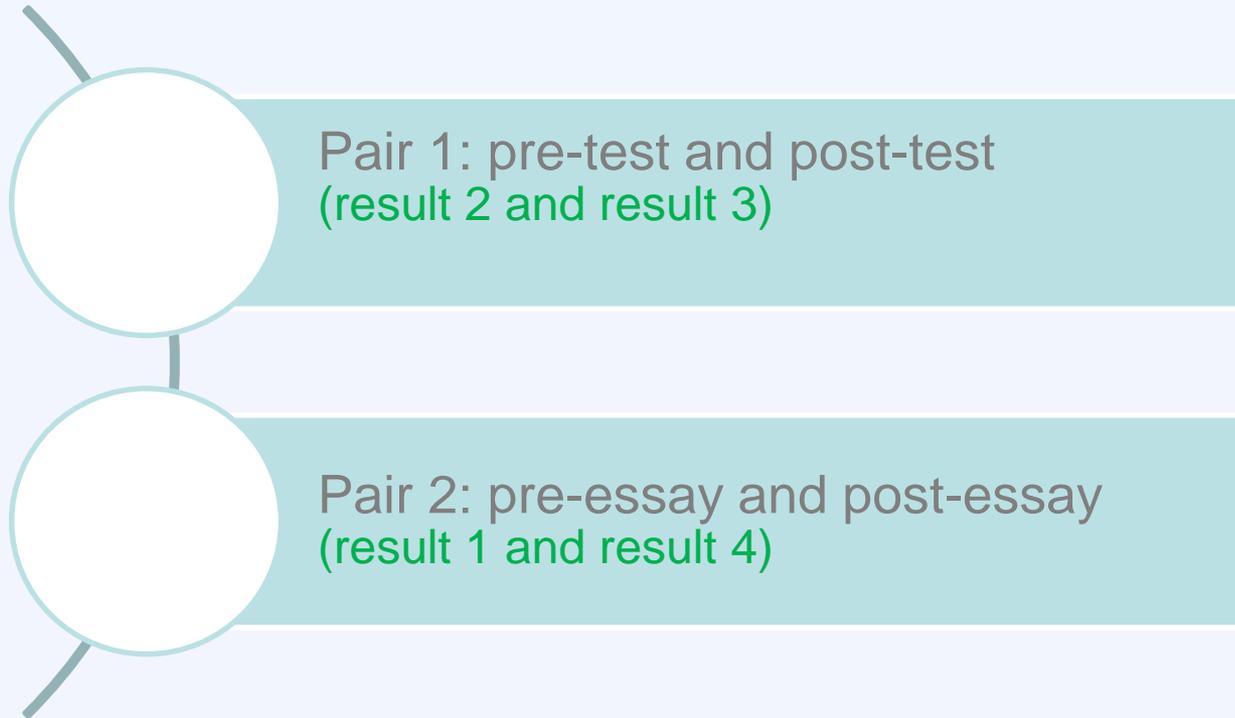
- Positivist approach and quantitative method
- 2014 First-year students, Faculty of Business and Management Sciences
- Two groups within a single class – 42 students in total
- Registered for the CIL (term 3), taught by the researcher (5 modules over 5 weeks) with subject-specific essay
- Rubric Assessment of IL Skills (RAILS) examples to lecturer for rubric
- Lecturer developed rubric, now used as example throughout CPUT



Research Methodology (continue)

- Paired sample t-tests

“Whether the means of two samples that come from the same or similar cases are significantly different from each other (Cramer & Howitt, 2004:168)



Results

- **Pair 1** (pre-test and post-test) showed an **increase of 16%** in the average. The p-value was much less than .001 and therefore **there is a statistically significant increase from the pre-test to the post-test.**
- **Pair 2** (pre-essay and post-essay) showed a **3% increase** from the pre-essay to the post-essay, even though it is a very small increase, the p-value was less than .05 and therefore **a statistically significant increase.**

Both research questions had a positive outcome:

The current IL multiple-choice summative assessment showed improvement in the IL knowledge of a student.

Students are applying their IL skills in essay assignments after attending an IL course



This posed the question about **skills transfer**, what would be a **reasonable expectation** for a student to become information literate and how could the **academic programme** address this?

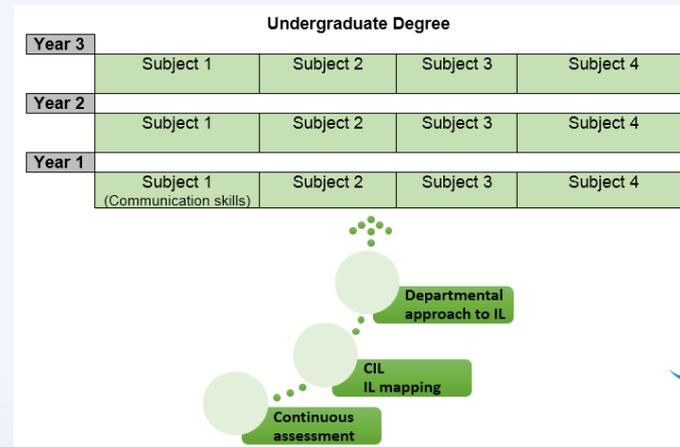
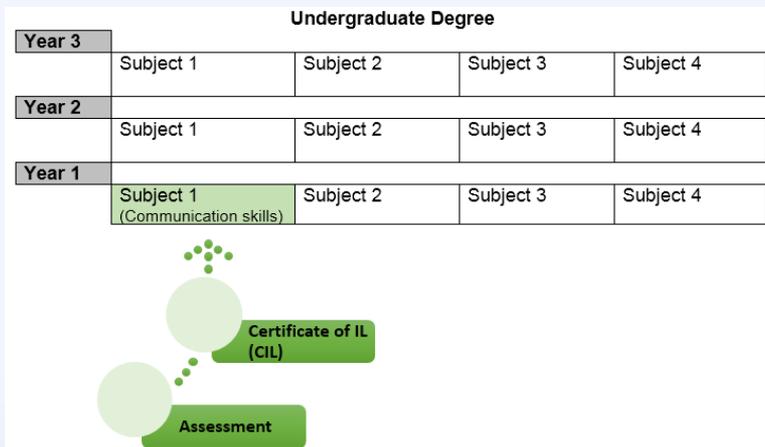


Reasonable expectation: time to become information literate?

- Define “retention” – students remembering concepts they were taught
- Define “transfer” – students use what was taught and apply in new context (Cook and Michael, 2015: 35)
- Skills transfer takes time, not immediate
- Students’ research skills improve by year of education (Dubicki, 2013: 107; Saunders, 2012: 227)

Teaching approaches short vs long-term retention

- Developing teaching skills of librarians (Train the Trainer, TDP)
- “Since transfer cannot be relied upon to happen by itself, we must teach for transfer”. (Perkins, 1986: 9)
 - Requirement for transferring of skills to a new situation is seeing a possible connection (Lappalainen and Rosqvist, 2014: 414)
 - Don’t teach with abstract topics, make it real for the students.
- Continuous development of IL across subjects and levels



Does the
academic programme at CPUT
adequately
stimulate the use of library
resources?

Why is it important

for students to engage with quality library resources?

- Students engage more with **quality resources**
- Students learn from **credible authors**
- More **exposure to academic writing** and reading
- Improved **quality in assignments**
- Improvement **in results**

A study by Jantti, M & Cox, B (2013:170) indicates that **“students who borrow Library resources do outperform students who do not”**. Such improved performance could:

- influence a student’s decision to stay at university or leave
- improve the overall quality of the learning experience
- provide the capacity to produce students who embody the University’s Graduate Qualities

Questions to think about to take IL further?

- Are assignments set-up in such a way that students will need to use **quality sources** of information?
 - Books, journal articles, dictionaries, newspapers, encyclopaedias, etc.?
- Are students required to use a **variety of sources**?
 - For example - 2 books, 1 journal article, a definition from a dictionary.....
- Do they need to **submit their search strategy** as part of their assignments?
 - Analyse their topic, identify main concepts, mind map, select appropriate keywords, use Boolean operators, Truncation, Phrase searching and form search strings?
- Did they have to indicate **which databases** they used from the library website?
- Did they apply **evaluation criteria**? (CRAAP test – currency, relevance, authority, accuracy, purpose)
- Did they **cite the sources** used in the in-text?
- Did they have to submit a **bibliography**?
- and many more

Assessment of IL

- **Multi-methods approach**
(multiple-choice, essays, analysis of bibliographies, submit search strategy and many more)
CIL = multiple-choice test and essay
- **Assessment immediately after instruction**
- short-term gains (Werking 1980:161)
- **Rubrics**
(high weightings for IL) – RAILS

The screenshot shows the RAILS website homepage. At the top, there is a green header with the RAILS logo (a gear with a green circle) and the text "rails rubric assessment of information literacy skills". To the right of the logo is a "participant login" button and a Facebook icon. Below the header is a yellow navigation bar with links: "home", "about", "updates", "publications & presentations", "press", "contact", "rubrics", "forum", "training", "results", and "closing the loop". The main content area is divided into several sections. On the left, there is a "latest" section with a pink background, featuring a "RAILS at LAC 2014" announcement. In the center, there are three white boxes with pink borders: "assess" (Waypoint Outcomes, AAC&U VALUE Rubrics), "learn" (ACRL Assessment Immersion, Library Assessment Conference), and "improve" (Closing the Loop). On the right, there is a "recent updates" section and a "The RAILS Project" section with a description of the project's goals. At the bottom right, there is a "rails email list sign up now!" button. The footer contains text about the Institute of Museum and Library Services and its mission, along with the Institute of Museum and Library Services logo.

Conclusion

- Becoming information literate – a process and **skills transfer takes time** – not immediate
- The academic programme must **stimulate the usage of library resources**
- Skills transfer will continue only if the academic programme continues to test IL skills with high weightings for IL in rubrics (**teach for transfer and long-term retention**)
- If there is no **continues academic assessment** for IL after CIL, students will lose the skill and not apply it across subjects (short-term retention)
- A **multi-method assessment approach** is needed to assess IL – not only multiple-choice assessment, but also other methods, e.g. essay assignments
- Therefore, a **departmental approach** to IL is needed:
 - All faculty (lecturers) involved in academic programme (all subjects and levels of study) to integrate assignments with high weightings for IL
 - Librarians could play an important role in beginning this conversation within an academic department

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