

# Institutional Level Assessment of Student Information Literacy Competencies using the RRSA

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# Overview of the RRSA

- The Research Readiness Self-Assessment (RRSA) was developed by researchers at Central Michigan University.
- The assessment aims to measure student performance in the knowledge and skill areas identified in ACRL's *Information Literacy Competency Standards for Higher Education*
- The RRSA is a **self-assessment** of students' information literacy level in the following areas:
  - skills in doing research and using library resources
  - critical thinking regarding the use of information resources
  - self-perceived research skills

# Overview of the RRSA (Con't)

- HKBU Library adopted the RRSA in summer 2011, and the Lingnan University Library started the assessment in summer 2012.
  - For HKBU, the Library administered the assessment to the new students during the "U-Life Library Orientation sessions"
  - For Lingnan, the Library administered the assessment to the new students during the New Student Orientation
- Self-enrollment questionnaire through the RRSA website, with registration guidelines provided by the staff administering the assessment
- Students receive a personalized individual report right after they have completed the test that includes:
  - the score of each category of the test
  - description of each category
  - suggestions on how they can improve their information literacy skills

# 6 categories of RRSA

A total of 41 questions (excluding the demographic questions) in the following areas:

## Area 1: Objective Measurements

1. Obtaining Information
2. Understanding Plagiarism
3. Evaluating Information

## Area 2: Subjective Beliefs and Past Experiences

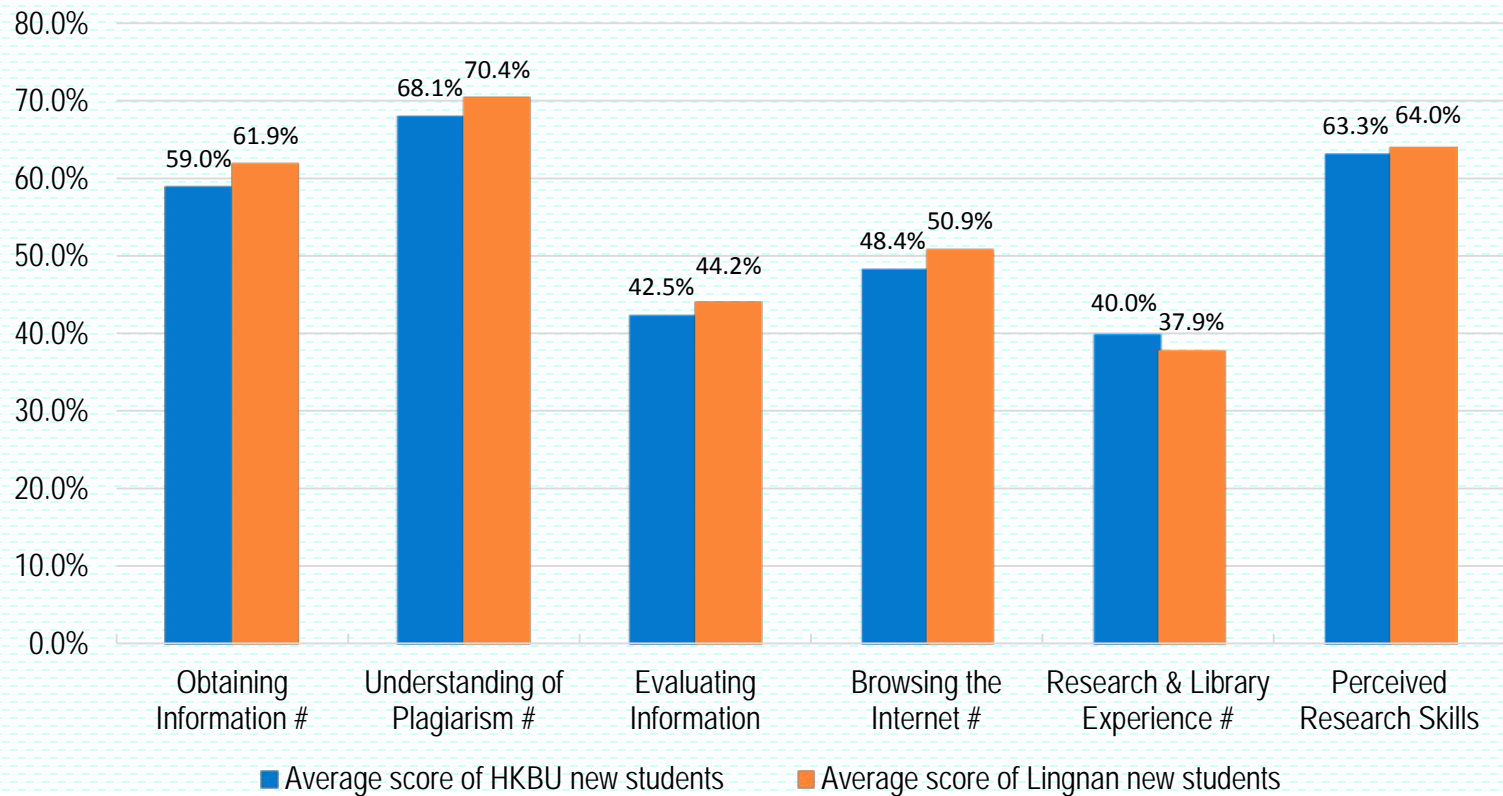
4. Browsing the Internet
5. Research and Library Experience
6. Perceived Research Skills

Students normally spend about 25-30 minutes to complete the assessment

# Focuses of this Analysis

- Comparison of student self-belief in their research ability and the actual research skills of new students from both universities
- Highlighting of specific IL strengths and weaknesses by analyzing the answers to individual questions of the assessment
- Comparison of freshman performance to representative sample of senior year undergraduates (HKBU Library only)

# Comparative RRSA Performance of HKBU and Lingnan Freshmen



\*For the category "Browsing the Internet", the higher score indicating the **stronger tendency** to rely on popular search engine for academic research

# the differences on the average scores between the 2 groups of new students are statistically significant

# Findings

- When compared to the new students' performance of Lingnan and HKBU, significant differences in the average scores can be found in "Obtaining Information" and "Understanding Plagiarism" between the 2 groups of new students
- Meanwhile, Lingnan new students tend to rely the general search engines more than the HKBU new students, and they report they have less actual experience in research and using libraries, as statistically significant differences are found in the average scores of "Browsing the Internet" and "Research and Library Experience"
- No statistically significant difference between the 2 groups of new students can be found in the average scores of "Evaluating Information" and "Perceived Research Skills"



# 1. Obtaining Information

- New students do not have a thorough understanding on the use of scholarly journal

Questions	% of HKBU respondents with correct answer (N=1336)	% of Lingnan respondents with correct answer (N=528)
What is the most authoritative source of current scholarly (analytical) information on a narrowly specialized topic?  <u>Correct Answer: Journal</u>	29.0%	25.8%
When quoting information about the impact of vehicle emissions on air quality, it is best to use...  <u>Correct Answer: a peer-reviewed journal article</u>	23.9%	17.4%

# 2. Understanding Plagiarism

- New students cannot clearly identify plagiarism examples

Question / Options	% of HKBU respondents with correct answer (N=1336)	% of Lingnan respondents with correct answer (N=528)
<b>Which of the following are examples of plagiarism (copying the work of others and presenting it as your own)? Check all that apply.</b>		
Reproducing a sentence without citing its source if I paraphrase the sentence (express the same meaning using different words)	47.0%	43.9%
Copying from the source word-for-word without quotation marks if I provide a citation (reference)	47.5%	47.9%
Copying a sentence from the Internet without citing its source if this sentence appears on multiple web sites	72.3%	75.0%

# 3. Evaluating Information

- New students are not strong in evaluating website information

Questions <i>This part of the test requires students firstly to glance through the content of the website and then to answer the following questions</i>	% of HKBU respondents with correct answer (N=1336)	% of Lingnan respondents with correct answer (N=528)
What is the most likely purpose of the <u>vescorogenic (gustatogenic) aids</u> web site?  Correct Answer: To sell John Goode's services and vescorogenic (gustatogenic) aids  Link: <a href="http://rrsa.cmich.edu/rrsaweb/vescorogenic_gustatogenic_aids.html">http://rrsa.cmich.edu/rrsaweb/vescorogenic_gustatogenic_aids.html</a>	20.8%	25.9%

# 4. Browsing the Internet\*

- New students tend to believe it is reliable to solely use a search engine like Google or Yahoo for academic research.
- On the other hand, they understand that the information quality retrieved from the search engine is lower than that collected from library databases

Questions [All questions are on a scale of 0 (Strongly disagree) to 10 (Strongly agree)]	HKBU respondents average self-perceived score (N=1336)	Lingnan respondents average self-perceived score (N=528)
When searching for resources for most of my academic research projects, it is very helpful to exclusively use a search engine like Google or Yahoo.	6.48	6.97
When researching scholarly topics, the quality of information found through web search engines, such as Google or Yahoo, is usually higher than information in journal articles in library databases.	3.36	3.68

\*For the category "Browsing the Internet", the higher score indicates the stronger tendency to rely on popular search engine for academic research

# 5. Research and Library Experience

- New students also do not have much experience in using library resources and in doing research in the past year

Questions/Option	% of HKBU respondents with positive response (N=1336)	% of Lingnan respondents with positive response (N=528)
<b>How often did you use libraries during the past year? Include library visits, online access to library resources, contacts with library staff members, etc.</b>		
• Once a month	23.3%	25.4%
• Less than once a month	23.2%	26.5%

<b>During the past year, the new students...:</b>		
• Talked to a library staff member about my research topic	13.4%	9.3%
• Evaluated the quality of literature cited by the author	26.4%	22.0%
• Authored a paper that put together ideas from multiple sources	28.0%	27.6%

# 6. Perceived Research Skills

- New students generally think themselves have some research skills (average scores over 6 marks out of 10)

Question [on a scale of 0 (Very poor) to 10 (Excellent)]	HKBU respondents average self-perceived score (N=1336)	Lingnan respondents average self-perceived score (N=528)
How do you rate your research skills overall?	6.46	6.57
How do you rate your ability to judge the quality of information from print or electronic sources?	6.68	6.61
How do you rate your skills in finding high quality information on narrow topics?	6.07	6.22
How do you rate your skills in conducting library research at your present academic level?	6.08	6.18

# Summary of the Findings

- New students lack the knowledge on the usage of journal
- New students have basic understanding on plagiarism, while do not have much awareness on the copyright issues
- New students are weak in evaluating online information
- New students perceive themselves as relatively good researchers, despite their lack of actual research and library experience
- New students believe that popular search engines are helpful research tools, even though they know the information retrieved may not be reliable

# HKBU Library

## Comparative performance of freshman and senior undergraduates (2013)

	2011 1 <sup>st</sup> Year UG (n=1,170)	2013 2 <sup>nd</sup> and 3 <sup>rd</sup> Year UG (n=388)	% of Change
RRSA Category	Average Percentage Score	Average Percentage Score	(+ / -)
Area 1: Objective Measurements			
Obtaining Information #	58.57%	70.37%	+11.8%
Understanding Plagiarism	66.71%	72.14%	+5.43%
Evaluating Information #	42.50%	60.33%	+17.83%
Area 2: Subjective Beliefs and Past Experience			
Browsing the Internet *	53.74%	48.92%	-4.82%
Research and Library Experience #	36.97%	50.15%	+13.18%
Perceived Research Skills #	62.68%	63.60%	+0.92%

*\*For the category "Browsing the Internet", the higher score indicates the stronger tendency to rely on popular search engine for academic research*

*#Indicates that the results are statistically significant*



# HKBU Library

## Comparative performance of freshman and senior undergraduates (2014)

	2012 1 <sup>st</sup> Year UG (n=2,614)	2014 2 <sup>nd</sup> and 3 <sup>rd</sup> Year UG (n=693)	% of Change
RRSA Category	Average Percentage Score	Average Percentage Score	(+ / -)
Area 1: Objective Measurements			
Obtaining Information	57.40%	66.70%	+9.3%
Understanding Plagiarism	67.86%	75%	+7.14%
Evaluating Information	41%	50.67%	+9.67%
Area 2: Subjective Beliefs and Past Experience			
Browsing the Internet *	52.62%	52.70%	+0.08%
Research and Library Experience	37.21%	48.70%	+11.49%
Perceived Research Skills	61.52%	64.50%	+2.98%

*\*For the category "Browsing the Internet", the higher score indicates the stronger tendency to rely on popular search engine for academic research*

# Interpretations

- Improvement can be found in almost all the categories of the assessment from the senior undergraduates of both 2013 and 2014 cohorts
- According to the 2013 comparison, statistically significant improvement can be found in the categories “Obtaining Information”, “Evaluating Information” , “Research and Library Experience” as well as “Perceived Research Skills”

# Future Actions

- Produce a localized RRSA (RRSA-HK version) as part of the JULAC information literacy project, to have a more precise and appropriate tool to measure information literacy level of the local university students
- Actively use the results of the RRSA to inform the development of our information literacy (IL) programmes and other library services by identifying areas of particular weakness
- Encourage collaboration between faculty and librarians by providing evidence of the need for IL instruction

- THANK YOU -