



Wednesday, April 20, 2011, 3.50pm-4.35pm
Sheik Zayed Theatre, London School of Economics



Information Literacy of Health Students: Assessment and Interventions

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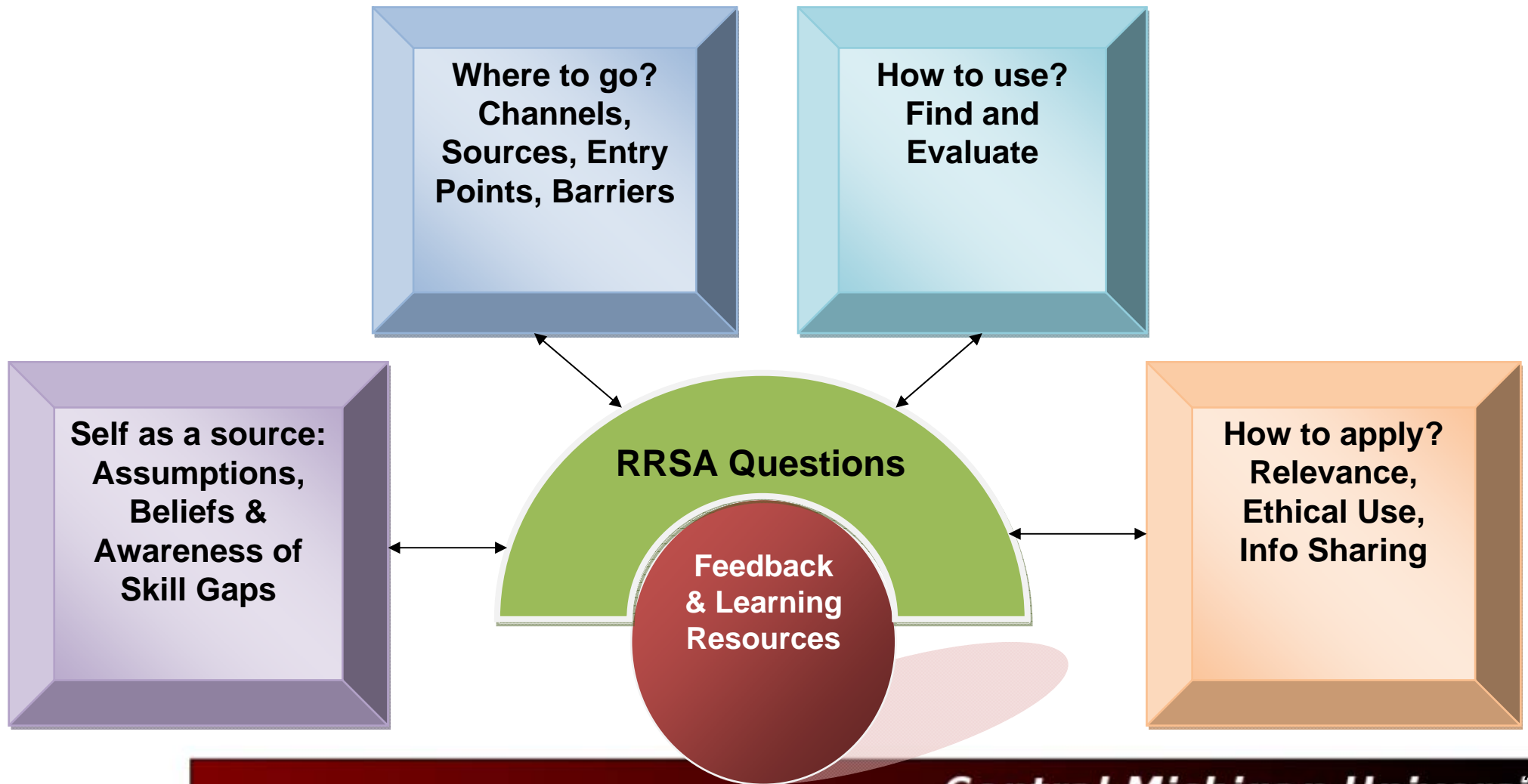
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Our Model: Health Information Competencies





Research Readiness Self-Assessment (RRSA)

Developed since 1998 by Lana V. Ivanitskaya, Ph.D. and Anne M. Casey, A.M.L.S.

- Administered online
- Two types of questions: survey and test
- Individual feedback is provided to each RRSA taker

An annotated bibliography of RRSA findings is at <http://rrsa.cmich.edu/twiki/bin/view/RRSA/Publications>

Future plans: Apply lessons learned from 12 years of research to create a new *Ready:Set* assessment that is an adaptive test



RRSA Feedback Impacts Students' Perceptions of Their Skills

1. What, if anything, did you learn by completing RRSA?

[Create Chart](#) [Download](#)

		Response Percent	Response Count
I thought that my information skills were GOOD but RRSA taught me that I need to improve them.		73.5%	219
I thought that my information skills were BAD but RRSA taught me that my skills are good.		5.4%	16
I thought that my information skills were GOOD and RRSA confirmed that.		9.7%	29
I thought that my information skills were BAD and RRSA confirmed that.		11.4%	34
		answered question	298
		skipped question	2



Research Questions

Are there differences...

1....between students and experts?

2....across academic disciplines?

3....between computer skills and information literacy skills?

How can educators increase the quality of references cited in student papers?



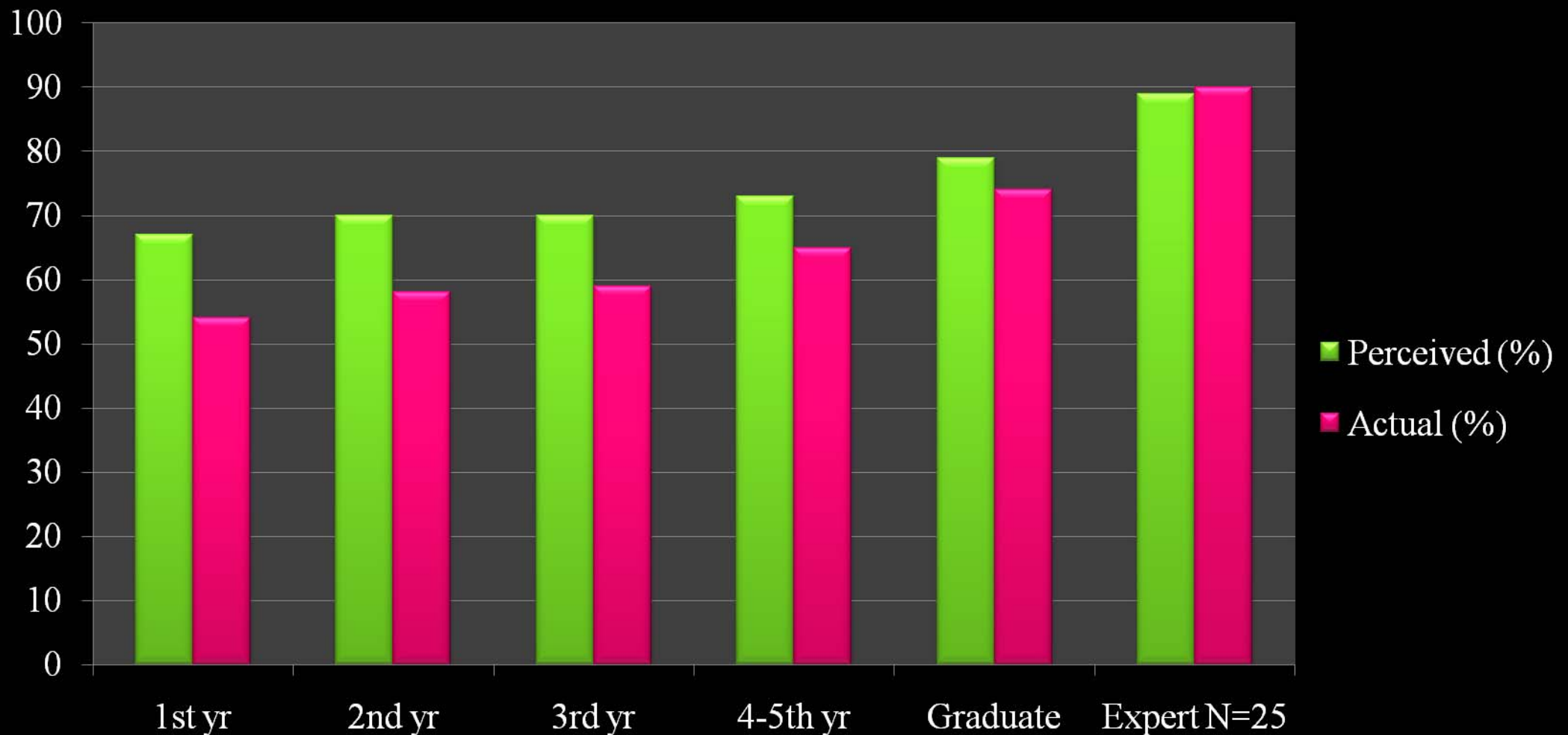
Are there Differences between Students and Experts? Past research

- Experts score higher than novice users
- Experienced web users' skills are not up to the standards of professionals

Lazonder, A. W., Biemans, H. J. A., & Wopereis, I. G. J. H. (2000). Differences between novice and experienced users in searching information on the world wide web. *Journal for the American Society of Information Science*, 51(6), 576-581.



Are there Differences between Students and Experts? Our findings





Are there Differences across Academic Disciplines? Past research

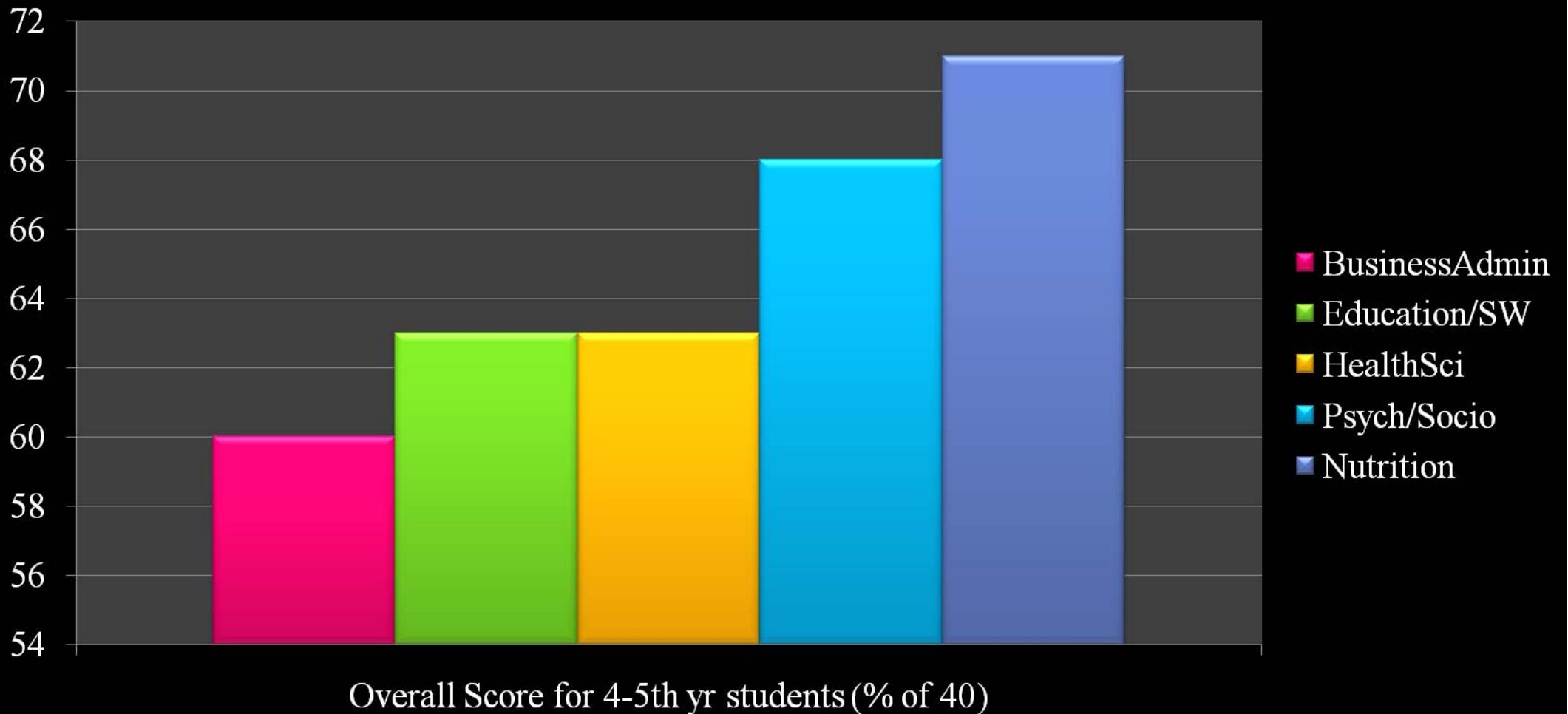
There are differences across academic disciplines.

Academic Disciplines	PERCEPTION	REALITY
Political Science (n=104)	96%	23%
Sociology (n=70)	93%	19%
History (n=110)	100%	58%

Maughan, P. D. (2001). Assessing information literacy among undergraduates: A discussion of the literature and the university of California-Berkley assessment experience. *College and Research Libraries*, 62(1), 71-85.



Are there Differences across Academic Disciplines? Our findings





Do Computer Skills Differ from Information Literacy Skills?

Past research, 1 of 3

- Today's students don't know how to properly conduct research in a library (Jenson, 2004).
 - Students don't know the difference between journal articles and magazines
- The basics of research have been neglected to be taught today (Jenson, 2004).
- The basics are what is needed for online researching to become easier (Jenson, 2004).



Do Computer Skills Differ from Information Literacy Skills?

Past research, 2 of 3

- Information technology skills: used with computers, software applications, databases (ACRL, 2000)
- Information literacy skills: higher order thinking skills (Pask & Saunders, 2004)
- Information literacy is related to information technology skills (ACRL, 2000)
- To be information literate people must be technology literate as well (Brandt, 2001)
- The understanding of technology is a basic for finding, using, and evaluating info successfully (Brandt, 2001)



Do Computer Skills Differ from Information Literacy Skills?

Past research, 3 of 3

Association of College and Research Libraries. (2000). *Information Literacy Competency Standards for Higher Education*. Chicago: Association of College and Research Libraries, American Library Association.

ACRL. (2001). Objectives for information literacy instruction: a model statement for academic librarians. *College and Research Libraries News*, 62, 416-428.

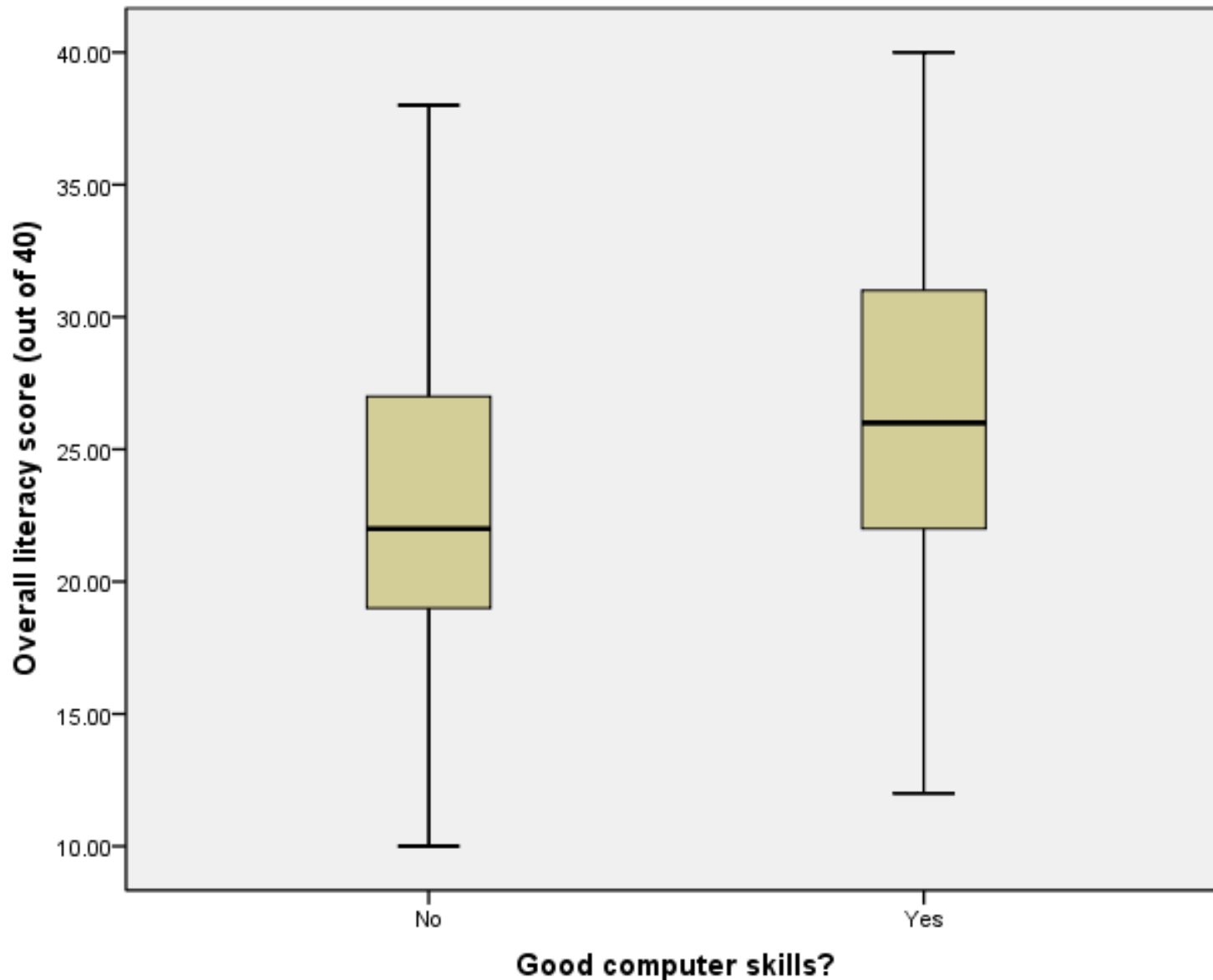
Brandt, D.S. (2001). Information technology literacy: task knowledge and mental models. *Library Trends*, 50, 73-86.

Jenson, J. D. (2004). It's the Information Age, so Where's the Information? Why Our Students Can't Find It and What We Can Do to Help. *College Teaching*, 52(3), 107.

Pask, J.M., & Saunders, E.S. (2004). Differentiating information skills and computer skills: a factor analytic approach. *Libraries Research Publications*, 4, 61-73.



Do Computer Skills Differ from Information Literacy Skills? Our findings



Computer skills

Did you ever use...

1. PDF (89%)
2. Advanced search (86%)
3. Download (82%)
4. Refresh (80%)
5. MP3 (75%)
6. Upload (71%)
7. Preference setting (52%)
8. Newsgroup (19%)

Good skills: Used at least 6 of the above



How Can Educators Increase the Quality of References Cited in Student Papers?

Past research, 1 of 2

- Evaluations of student portfolios are common
- Done by academic programs, without involving librarians
- When librarians are involved, there is little systematic evaluation of how that impacts references in student papers.

Briller, V., Elliot, N., Huey, H., Joshi, K., & Scharf, D. (2007). Direct assessment of information literacy using writing portfolios. *Journal of Academic Librarianship*, 33, 462-478.



How Can Educators Increase the Quality of References Cited in Student Papers?

Past research, 2 of 2

- Annotated bibliographies as assessment baseline
- Intervention was library instruction
 - Skills evaluated: presence/absence of plagiarism, appropriate source type use, and annotation quality.
- Decreased plagiarism from highest point at 64% to 0%
- Increased number of sources from peer-reviewed journals by 5%.

Flaspohler, M. R., Rux, E. M., & Flaspohler, J. A. (2007). The annotated bibliography and citation behavior: enhancing student scholarship in an undergraduate biology course. *The American Society for Cell Biology*, 6, 350-360.



How Can Educators Increase the Quality of References Cited in Student Papers?

Our findings

1. Use library instruction (18% of variance in citations)
2. Combine library instruction and assessment with feedback
 - Students who did both library instruction and RRSA cited significantly better and more numerous sources than those who did one or none.
 - RRSA completion explained 6% of additional variance not explained by library instruction alone.



Questions?



Central Michigan University



Useful Links

<http://rrsa.cmich.edu/cgi-bin/rrsah.cgi/>

<http://www.wordle.net/show/wrdl/3442764/second>