

**Changing students'
perceptions of
research: A
partnership to
achieve information
literacy**



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Background

- Metaxas and Graham (2002), how do students use the internet for research?
- SUNY College of Agriculture, students accept information from the internet regardless.
- 29% said they accepted information regardless
- 34% considered additional verification important



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- Dr Henry Walker, Grinnell College, Iowa in collaboration with Kevin Engel, Science Librarian, carry out their own project
- Research Exercises: A Sequenced Approach to Just-In-Time Information Literacy Instruction (Walker and Engel, 2003) forms the basis for our assessment at WITT



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The Partnership



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Mutual goals of the collaboration (adapted from Walker and Engel, 2003)

- To integrate information literacy skills into the assessed course work
- To engage students directly through a need to find specific material
- To create an environment where information literacy is clearly relevant and helpful
- Break down barriers to library use and raise the profile of library staff
- Create an awareness of information literacy as a skill for lifelong learning applicable across disciplines
- Demonstrate the need to question information and verify sources whilst raising an awareness of information sources



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We wanted...

- To meet students where they are
- To expose deficiencies in their current knowledge through first-hand experience
- Provide information literacy instruction to address these difficulties in a practical way
- Link research strategies to ongoing needs rather than compartmentalized courses



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Resource used

- “integrates instruction in information literacy into an existing course and emphasises active learning and just-in-time tutoring” (Walker and Engel 2003).
- Series of three research exercises
- Each exercise has two questions for the students to research and answer
- In addition students have to describe the process they used to find their answers
- Questions push students to look further than the internet



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- Exercises structured and designed to begin with what the student already knows about research, and to show their strengths and weaknesses in the research process
- As each set of exercises is completed feedback is given to the students together with instruction
- Approach is highly interactive and challenging, and uses the students' curiosity to springboard onto further research



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How the assessment worked

Week one:

- Librarian introduced to students
- No instruction given on research techniques

The students are asked to:

- Use any sources deemed appropriate
- Write an answer to each question in a well written paragraph
- Cite each source used in formulating the answer to each question
- Write an additional paragraph describing the process they followed in finding the answer



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Questions for Exercise One:

- Did the 1999 Rambouillet Accords allow Nato to operate in all of Yugoslavia or only in Kosovo?
- Is filtering software (eg. NetNanny, CyberPatrol, SurfWatch) effective in restricting access to objectionable web sites to children?



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Week Two...

- Students individually report on their answers
- I do the same, taking them with me on my information journey
- I offer advice and seek clarification
- I subtly introduce other resources
- Sound information seeking advice is woven into the general chit chat
- I reinforce the need to question, question, question
- I encourage debate



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We have a bit of a laugh...

Dress code for Whitehouse tours

"Dresses: Everyone may wear dresses so long as they are women. Short dresses or mini skirts are acceptable, providing the wearer is under 28 years of age and possesses legs free of unsightly cellulite dimples and/or varicosities. Women who are heavy set, elderly, or otherwise aesthetically impaired will be required to rent floor-length floral print housecoats prior to commencing the tour"



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So...how did they do?

Eric said... "if you can't find the information here you won't find it anywhere" (talking of Google)

Quentin said..."I looked through the computer magazines but it took too long...so I went back to the internet"

Hui said..."internet is very useful...only Kosovo"

Vanessa said..."there is too much information in books, so I used the internet"



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Questions for Exercise Two

- What is the connection between Izrail' Iosifovich Agol and stepallelism?
- List three major innovations developed by Microsoft over the past 10 years



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Week Three....

- Increased library use
- The internet has not come up with the goods this time
- Relationships are being forged
- Presentations more organised
- Better use of resources (in some cases)

“from the students perspective, “what I need to know for my research” and what I need to know for the rest of my life” can now be answered by a single search box” (Campbell 2004)



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So... how did they do?

Eric said..."I would just have used the Microsoft site – but I knew Lorette wouldn't like it"

Richard said..."the internet is fastest and easiest"

Noel said..."I need to do more planning, (sideways glance at me), but I also don't think there is a definitive answer"

Quentin said..."I looked for unbiased information" "I used Google to define innovation"

Penny said..."I went to the Microsoft website because Bill Gates is reliable and popular"



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Questions for Exercise Three

- Getoutraged.com says that tobacco is responsible for 30% of all deaths in the 35-69 age group. Would you cite this information in a research paper? Explain why, or why not.
- Is the population of Lisbon Portugal over 1 million people? Yes/No? Explain your reasoning for answering yes or no.



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Week Four....

- They talked of how they had planned their research
- The resources they thought they might use
- They referred to databases by name
- They were critiquing the information they found, commenting on accuracy, reliability and timeliness
- Checked authority
- They studied other studies in the same time period for comparison
- They used a variety of resources



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So...how did they do?

- Quentin said..."I went onto PubMed through Google Scholar...I thought this would be an authoritative source"
- Penny said..."the databases are much better organised"
- Noel...had read an article from the BMJ through the PROQUEST database
- Richard...used the words, "credible", "different sources", "I was happy with this information"
- David said..."the internet is not reliable..so"
- Christian used four different websites and PROQUEST
- Vanessa used Opposing Viewpoints Database and the library



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The survey

- Questionnaire compiled from examples given in Shonrock, (1996).
- Twelve questions grouped into four areas:
 - The assignment
 - The workload
 - Attitudes to using library and doing research
 - Confidence using library and doing research

All answers required students to circle a level of agreement/disagreement

Final question was based on the Likert scale and asked for a rating of the experience



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Data Analysis

All data gathered was qualitative, that is students chose a response and circled their choice

The data gathered represented a snapshot of the situation at a single point in time



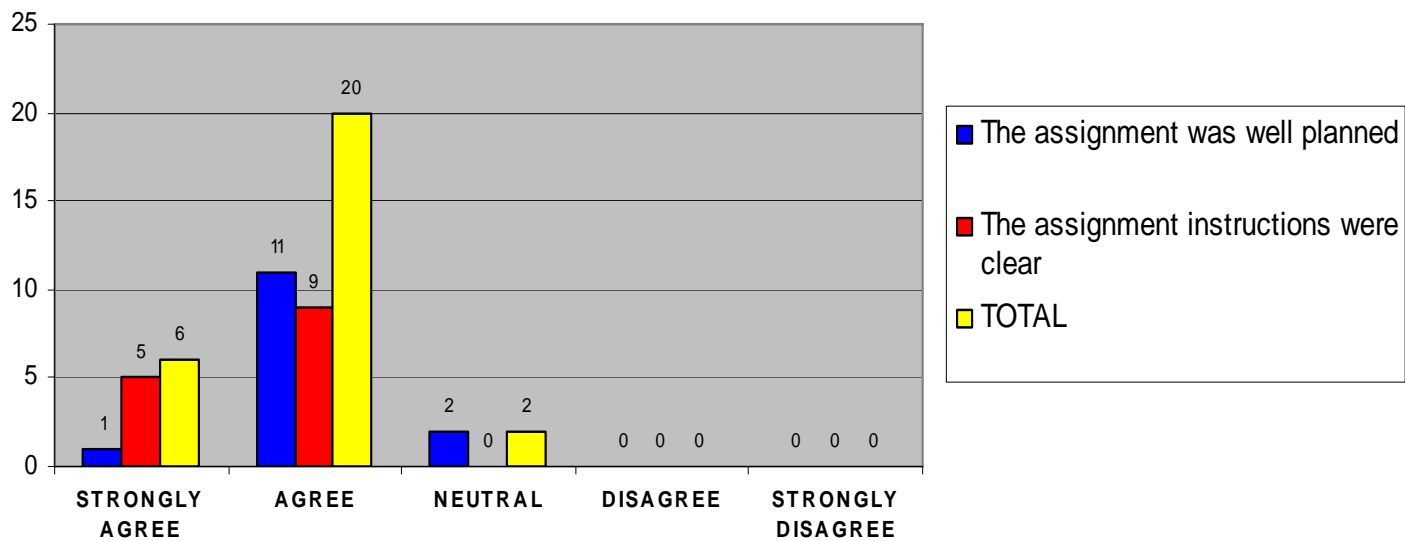
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The Assignment

THE ASSIGNMENT



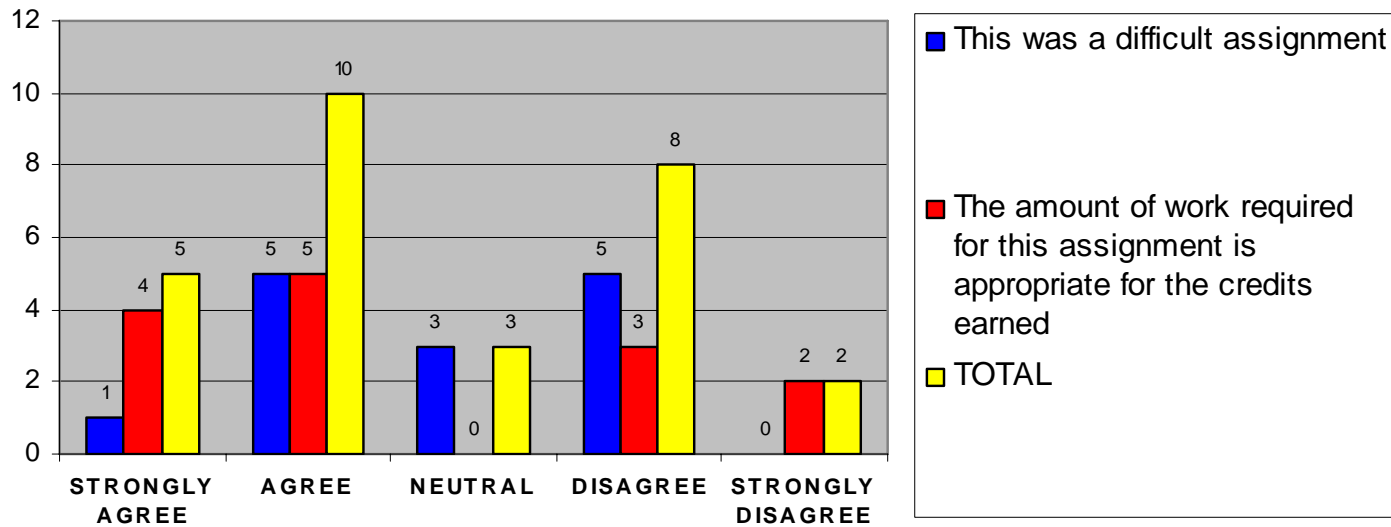
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Workload

WORKLOAD



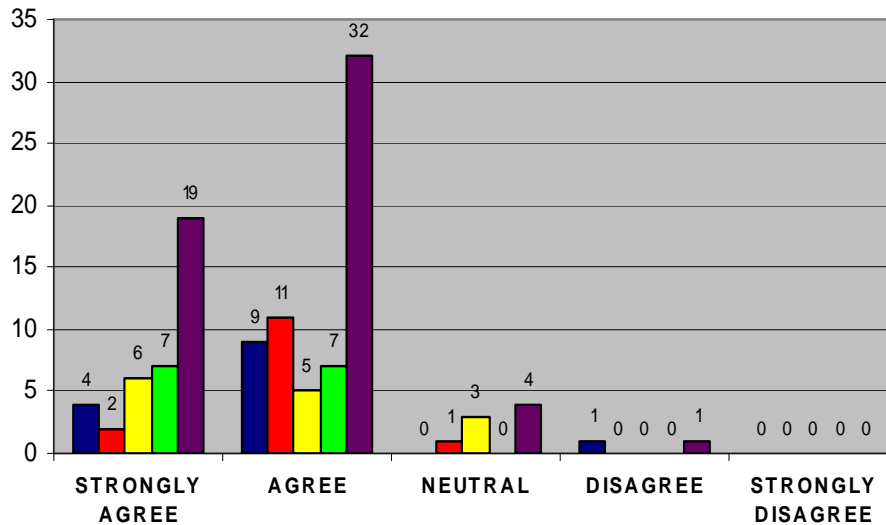
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Confidence

CONFIDENCE



- I feel more confident doing library research as a result of this assignment
- I now have a better understanding of how information is organised and how to access it
- I feel comfortable asking for help in the library
- The assignment met the goal of information sources available at the library for research
- TOTAL



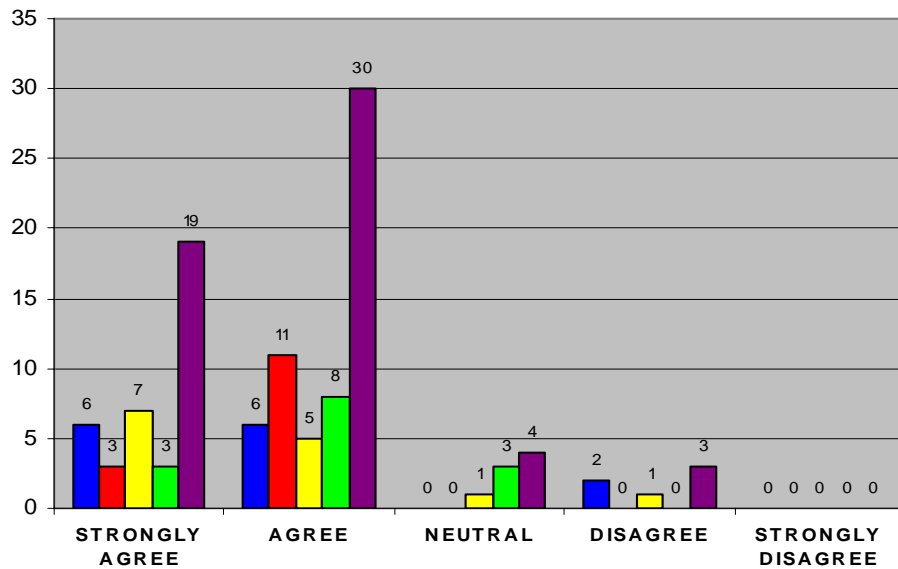
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Attitudes

ATTITUDES



■ My attitude toward using the library is more positive because of this assignment

■ I feel I have achieved the assignment objectives

■ This assignment has developed my skills in using library resources

■ This assignment has given me adequate understanding of how the library's facilities and resources are organised

■ TOTAL



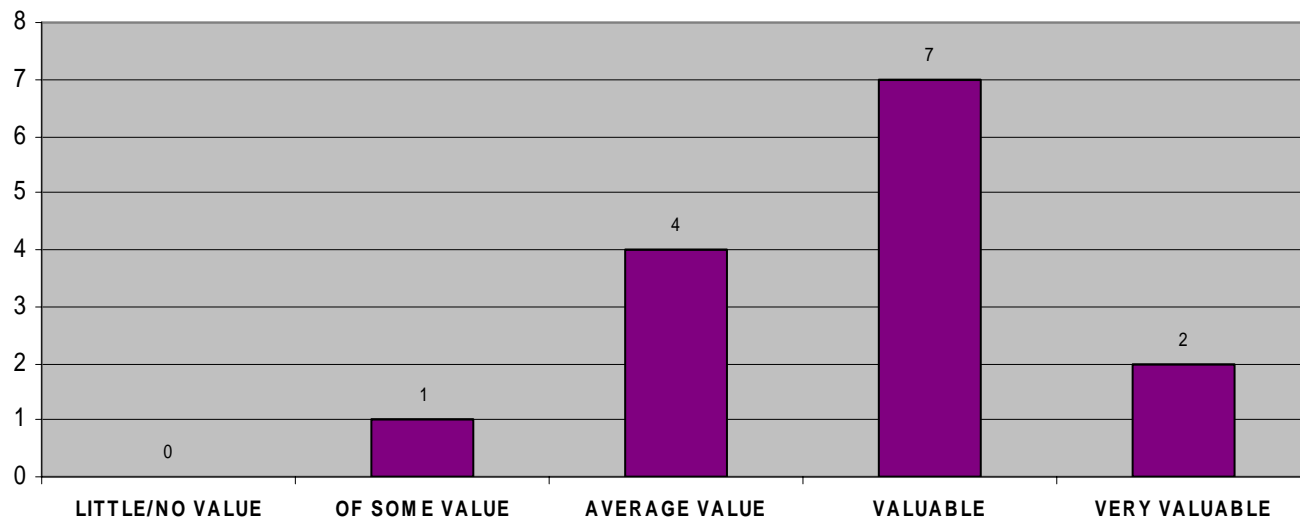
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Overall rating

MY OVERALL RATING OF THIS EXPERIENCE IS:



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Comments

- “it opened up a whole new world”
- “the use of the library and its resources has been invaluable for the future”
- “this assignment made me more aware of searching deeper and making sure the information was backed up by further research”
- “pushed (them) to look at resources other than the internet”
- “check out what you find on the internet”
- “couldn’t just rely now on the internet”



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Discussion

Limitations:

- Limited amount of data collected and a restricted amount of time spent on the study
- A comparative study with the results achieved by Walker and Engel (2003) would have been useful
- Future research may consider analysing information literacy skills of these students as they enter the second year of study to determine the extent of their use of library resources



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Discussion

Improvements:

- More specific targeting of instruction
- Use of email / discussion boards throughout the progress



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Were they engaged?

- Begin where the students are
- Reward Students
- The 'Discovery' Method
- Promote teacher-student interactions

(Motivating students to learn from principles of College teaching. Retrieved October 04, 2005, from <http://www.k-state.edu/catl/motive.htm>)



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Thanks to Dr Henry Walker and
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Thanks to my colleague and
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Thank you for listening



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