

Digging Deeper:

The Role of an Information Literacy Award as part of
an Undergraduate Research Fair to

Profile and E-evaluate Students' Information Literacy Skills at York University

May 23rd, 2014

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Agenda

- How it all started
 - The IL award
 - Undergraduate Research Fair
- The application and adjudication process
- Stats and Themes
- **Insights into students' information literacy skills & perceptions**
- Conclusion
- Questions and discussion



Genesis of the IL Award at York

- **Inspired by others' success stories**
 - Visit to Augustana in Fall 2011 - [IL Award for Students and Faculty](#)
 - [Penn State University](#) , [Oregon University Libraries](#),
- **Did our homework: Solid IL Award proposal**
 - Purpose, rationale, criteria, adjudication, potential funding sources, communication and promotion and next steps.
 - Secured Library Administration support
- **Synergies and serendipity - strength in broader context!**
 - Parallel proposal in the works for an Undergraduate Research Fair
 - Inspired by University of Victoria and UTSC
 - Joined forces!



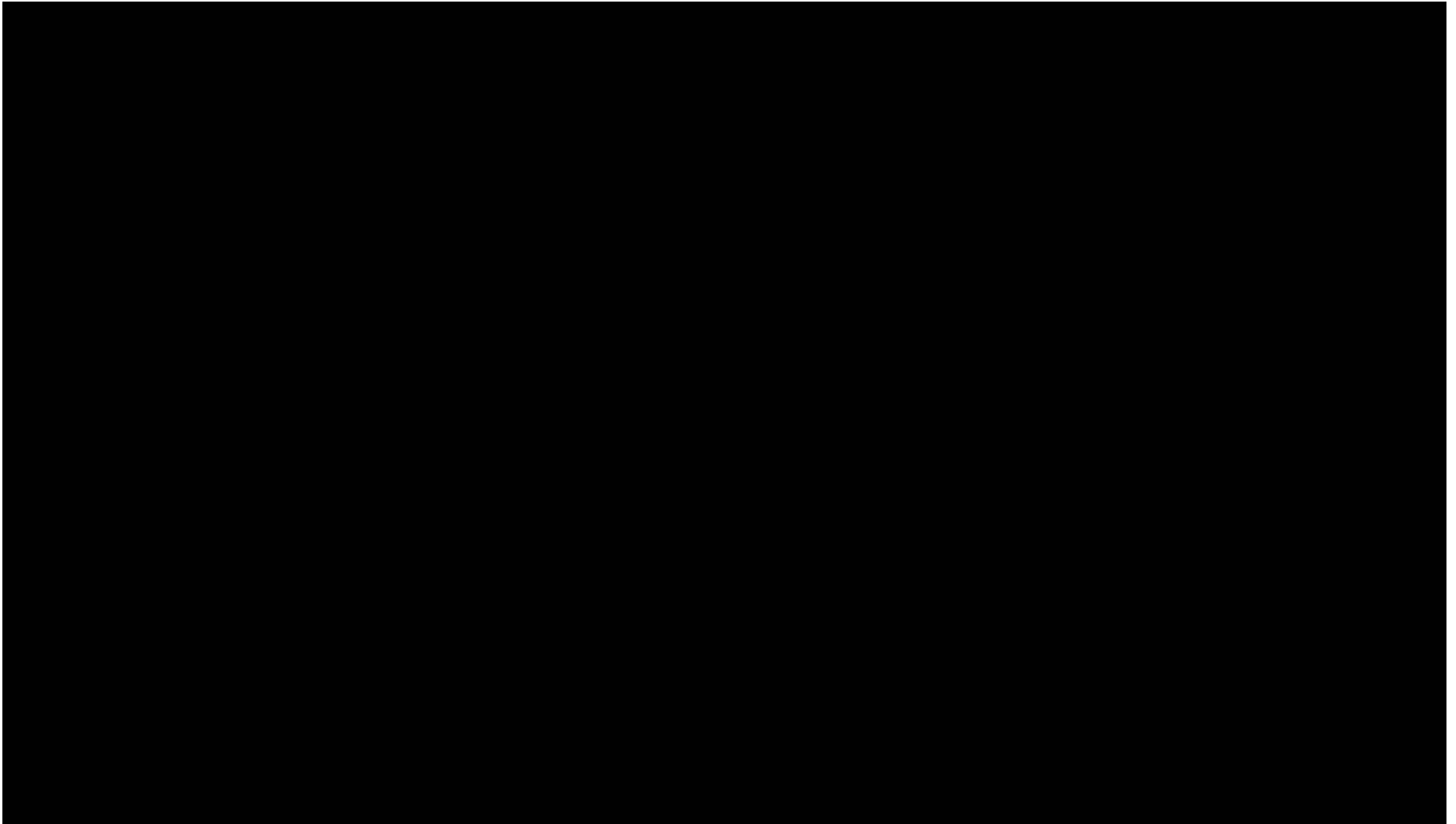
Genesis of the IL Award at York

- Transformation into the Undergraduate Research Fair
- Be strategic - university partnerships and support
 - Leveraged University strategic priority of research intensification
 - Sought champion within University Librarian's Office
 - Catherine Davidson, AUL, Collections and Research.
 - Formed allies with Office of the Vice President, Research and Innovation (VPRI) and Faculty of Liberal Arts and Professional Studies (largest Faculty on Campus)
 - Funding offered
 - Connections → Food Services; Bookstore; Printing Services



The Undergraduate Research Fair

- From proposal to Fair in 6 months!



Back to the Undergraduate Research Fair

2013	2014
IL award = \$600	IL award = \$600 + honourable mention = \$100
Best lower-year project = \$500	Best lower-year project = \$500 + honourable mention = \$100
Best upper-year project = \$500	Best upper-year project = \$500 + honourable mention = \$100
Best poster presentation = \$500	Best thesis = \$500 + honourable mention = \$100
	Best Poster Presentation = \$500 + honourable mention \$100
	Best Group project = non-monetary + honourable mention = non-monetary
	People's Choice award = non-monetary
During the adjudication process, we decided to add honourable mentions for all categories! The honourable mentions had to be non-monetary!	And then things changed.....even during the awards ceremony!

The committee and the IL Subgroup Structure

- The Committee - the importance of wide representation
 - Librarians / Library Administrators / Faculty members / Students
- Subgroup of the Undergraduate Research Fair Steering Committee
Struck specifically to draft and finalize IL Award criteria and adjudication process
 - Responsible for reviewing all IL award applications
 - Small and nimble with cross-section of disciplinary expertise (2-3 people)
 - All members were librarians
 - Sought input from other librarian colleagues on committee also
- Additional adjudication criteria for the IL application
 - Time commitment
 - Specific lens



Application Process

To submit an application to present a poster session to the Undergraduate Research Fair, please complete Part 1, below.

To be considered for the Information Literacy Award (\$600), please also complete Part 2, below.

- **Part 1**

- Demographics
- Course information and professor contact
- **ABSTRACT** (suggested limit max 250 words) - major adjudication criteria.
It is very difficult to produce an effective short summary of a paper!
- Attach the graded paper

- **Part 2: Information Literacy Award**

3 major questions with a suggested limit of 250 words each.

- Find and Identify resources
- Evaluate and Analyse resources
- Library Services used



IL Award Application - Question 1

Identifying Resources

2013

- Describe strategies that you have developed to find and identify relevant resources (keyword searches, databases, approaches to developing or refining search strategies, etc.)
-

2014

- Describe strategies that you used to search for relevant resources for **this research project**. For example, outline **why you chose specific databases** or other search tools/engines available at the library or beyond it, **provide examples of keyword searches** used, and **approaches you applied to develop or refine** your search strategies as your research progressed etc. Please be as detailed as possible.

IL Award Application- Question 2

Evaluate Resources

2013

- Describe strategies that you have used for evaluating your resources. Explain how this may have influenced your decision about what sources to use or not use (i.e., relevance, currency, authority, etc,... for print or electronic resources).
-

2014

- Describe strategies that you used to select the **relevant types of resources** for this research project and explain how this may have influenced your **decision to use them** (i.e. relevance, currency, authority, **purpose/point of view, scholarly vs. popular, peer-reviewed, primary vs. secondary sources** etc.)

IL Award Application - Question 3

Library Services

2013

- What library services and information resources have you used to complete your research process? What new services / resources have you learned about through this process? Have you used any services / resources that you were already familiar with in a new or innovative ways? (e.g., consultation with a librarian, “Ask Chat with a Librarian”, Learning Commons services, library drop-in workshops or library classes, etc.)

2014

- **How did you use library services** and/or library resources for this research project? (i.e. Did you consult with a librarian or **archivist**? Did you use the library catalogue to find your resources? Did you use **virtual library** help? Did you attend library drop-in sessions or library classes? Did you use **LibGuides/Research Guides**? What new library services and /or resources did you learn about in conducting this research project?)

IL Award Application Process

Criteria:

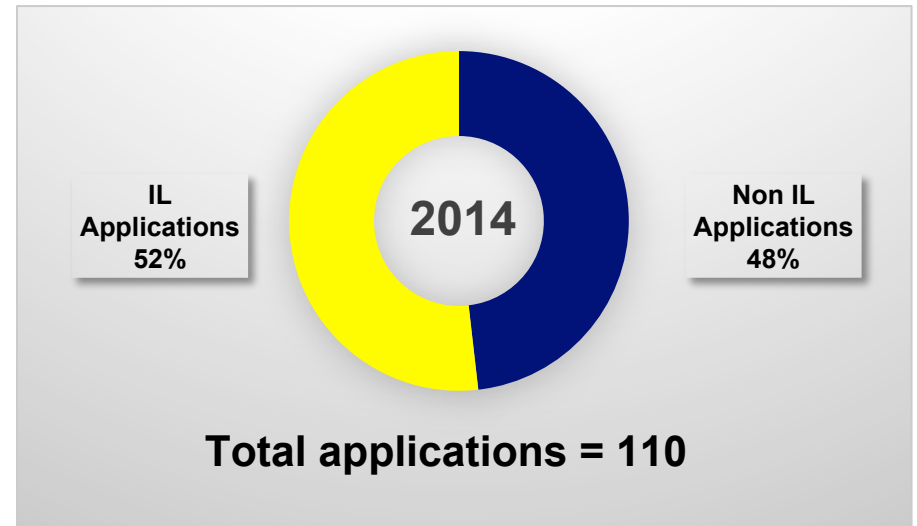
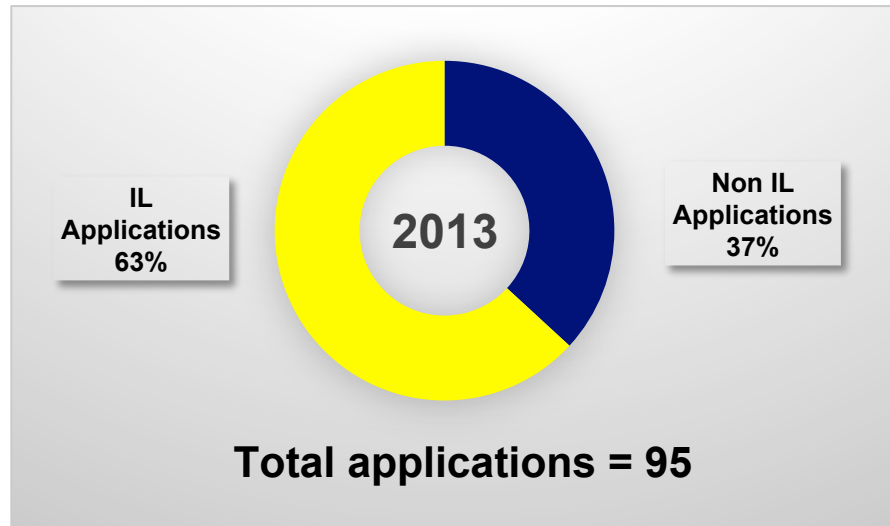
- Finding and identifying appropriate scholarly sources
- Evaluating sources
- Engaging critically with sources
- Made effective use of library services and resources.

3 Questions

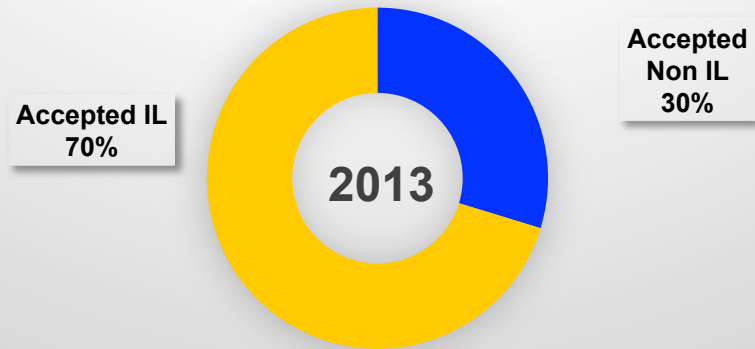
- 2013 vs. 2014

Evidence of effective strategies used in order to find and identify relevant resources (keyword searches, databases, approaches to developing or refining search strategies, etc.)
Comments:
Evidence of effective strategies used for evaluating and analysing resources (relevance, currency, authority, etc.)
Comments:
Evidence of ability to critically engage with information (sources listed in bibliography are USED in the essay, etc.)
Comments:
Evidence of effective use of library services and information resources (librarian consultation, "Ask Chat", Learning Commons services, drop-in workshops or library classes, etc.)
Comments:
Consistent use of citation conventions
Comments:
Other:

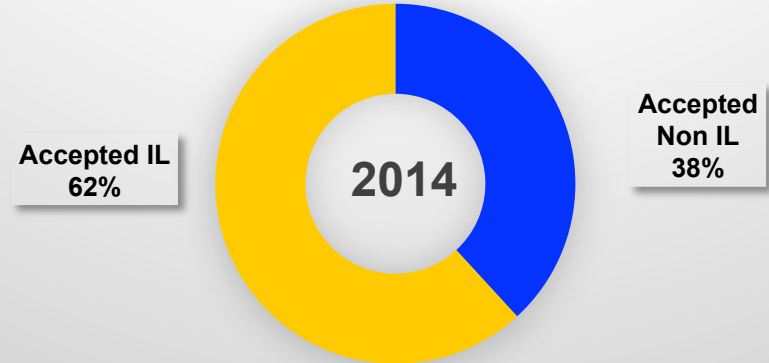
IL award statistics



IL award statistics



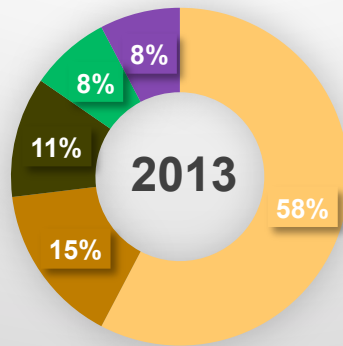
Total Accepted Participants = 37



Total Accepted Participants = 57

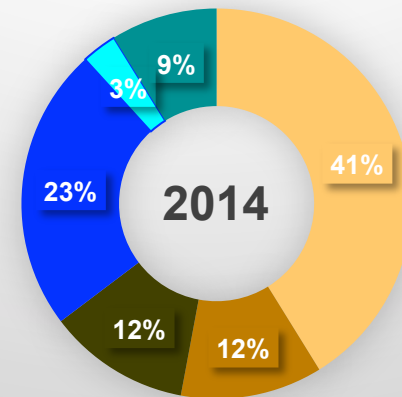
IL award statistics

....of the 70% (or 26) Accepted IL participants....



■ SOSC ■ HUMA ■ GL ■ ENVS ■ FA

....of the 62% (or 34) Accepted IL participants....



■ SOSC ■ HUMA ■ GL ■ HH ■ ED ■ SC

IL award statistics

2013 and 2014 >70% in upper- year courses



Future plans → analyze annual reports / statistics to see correlation between Fair IL participants and IL classes @ York



Feedback from students



- Application process:
96% of respondents found it excellent or good
- Communication with organizers:
100% of respondents found it excellent or good
- Workshop on poster presentation skills:
90% of respondents found it good, excellent or satisfactory
- Fair Day experience:
96% of respondents found it excellent or good
- Over-all Fair experience:
95% of respondents found it excellent or good



Insights into Students' IL Skills

- Common threads in 2013 and 2014
- Star performers



Identifying Information Sources



- **Finding:** JSTOR, Google Scholar, Proquest, and PubMed mentioned and used more frequently than subject-specific databases.



- **Implication:** IL instruction needed to help students navigate and understand value of the subject-specific databases. Use Pre-tests to determine students familiarity with common databases.



Note: some similar findings from the ERIAL Project (Duke & Asher, 2012)

Identifying Information Sources

“I chose databases and search tools and engines such as PubMed and Google Scholar, according to relevance to my topic, namely perceptual neuroscience.” (2014)

“In the first year of university, the topic of resource evaluation was introduced and it was taught that sources for academic papers must be scholarly journals. With this in mind, the first step in researching for any topic starts with searching familiar databases, such as JSTOR and ProQuest”. (2013)

Identifying Information Sources



- **Finding:** Students understand the concept of browsing by call number and of finding relevant sources using keyword searching.

Implication: More scaffolding required to foster learning about value of keywords vs. subject headings.

“Whenever I clicked on the title of the books I found the section keywords useful because it gave me other words related to my research project. This is where I usually found titles of other authors who wrote on the same subject matter as my topic” (2014)

“Whenever I found the certain book that I had searched for and needed, I began to examine the other books surrounding it on the same shelf, and on the shelves above and below it, as more often than not, those books also dealt with the same subject matter”. (2013)

Evaluating and Critical Engagement with Information Sources

“After reviewing articles from my course outline or course kit for key concepts, I would read the abstracts from each online journal, if available, to see if the argument is relevant to my topic or to the argument I proposed to make”. (2013)



“The primary strategy used was to select articles and sources from peer-reviewed journals...” (2014)

- **Finding:** Checklist approach common. Authority and currency most often mentioned but not always contextualized. Students understanding of evaluating resources quite often limited to whether sources are peer-reviewed or scholarly.
- **Implication:** Role for greater attention to critical information literacy

Evaluating and Critical Engagement with Information Sources



- **Finding:** Frequent mention of the role of instructors and some mention of peers in deciphering what is relevant and what is not. Recognize the value of lists of references in helping them find important works in the scholarly literature.



- Role of librarian recognized in identifying sources (especially where an IL class had happened) but not so much with evaluation piece.
- **Implication:** Faculty/librarian liaison plays critical role. Advocacy role for librarians.

Note: some similar findings from the ERIAL Project (Duke & Asher, 2012) and Project Information Literacy (Head, 2013)

Evaluating and Critical Engagement with Information Sources

“my professor was kind and flexible enough to incorporate readings relevant to the temporary worker phenomenon within the course.” (2014)

“...after reading a source I would always look at the footnotes and bibliography to find supplementary views and research done on the topic and would continue to assess those supplementary works.”
(2013)

“I engage in conversations with professors, Tutorial Assistants, and fellow classmates about topics that interest me and in the process find out about books, articles and authors that I find both interesting and useful to my essays” (2013)

Library Services



- **Finding:** Students took advantage of and recognized value of using a variety of services included drop-in sessions at the Learning Commons, and course specific instruction.
- **Implication:** We're doing well! Share these testimonials with faculty and administrators.

"In my first year I attended a workshop on how to navigate the online library system that I found very helpful". (2013)

"I consulted with the research desk on the second floor of the Scott library when I needed to locate primary material. This was helpful as I was unaware that there were collections of old Chatelaine magazines available in the library."

(2014)

Library Services

SPARK Student Papers & Academic Research Kit

- **Finding:** Students took advantage of a variety of services included drop-in sessions.

“The new Spark program also proved very helpful to me in organizing my time and my paper, allowing me to work to the very best of my abilities and be successful in this assignment.”
(2014)

- **Implication:** Increase academic literacies integration using SPARK into IL instruction and faculty instruction.

Library Services

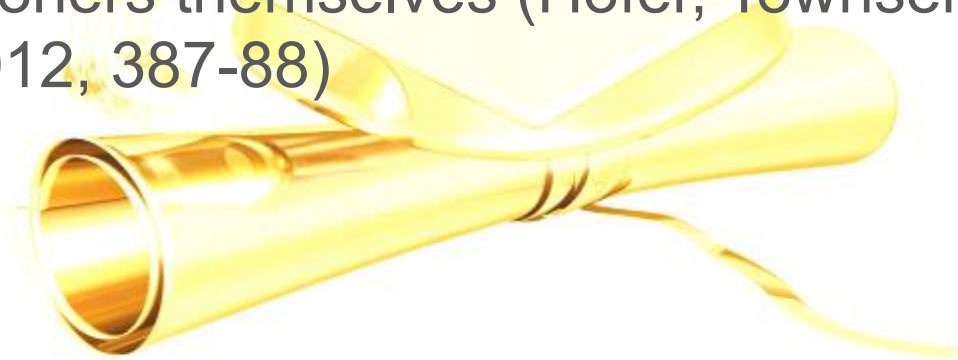


- **Finding:** Services sometimes conceptualized by students as e-resources, circulation services or spaces, instead or in addition to public service directly associated with research help.
- **Implication:** More promotion of research services of librarians needed.

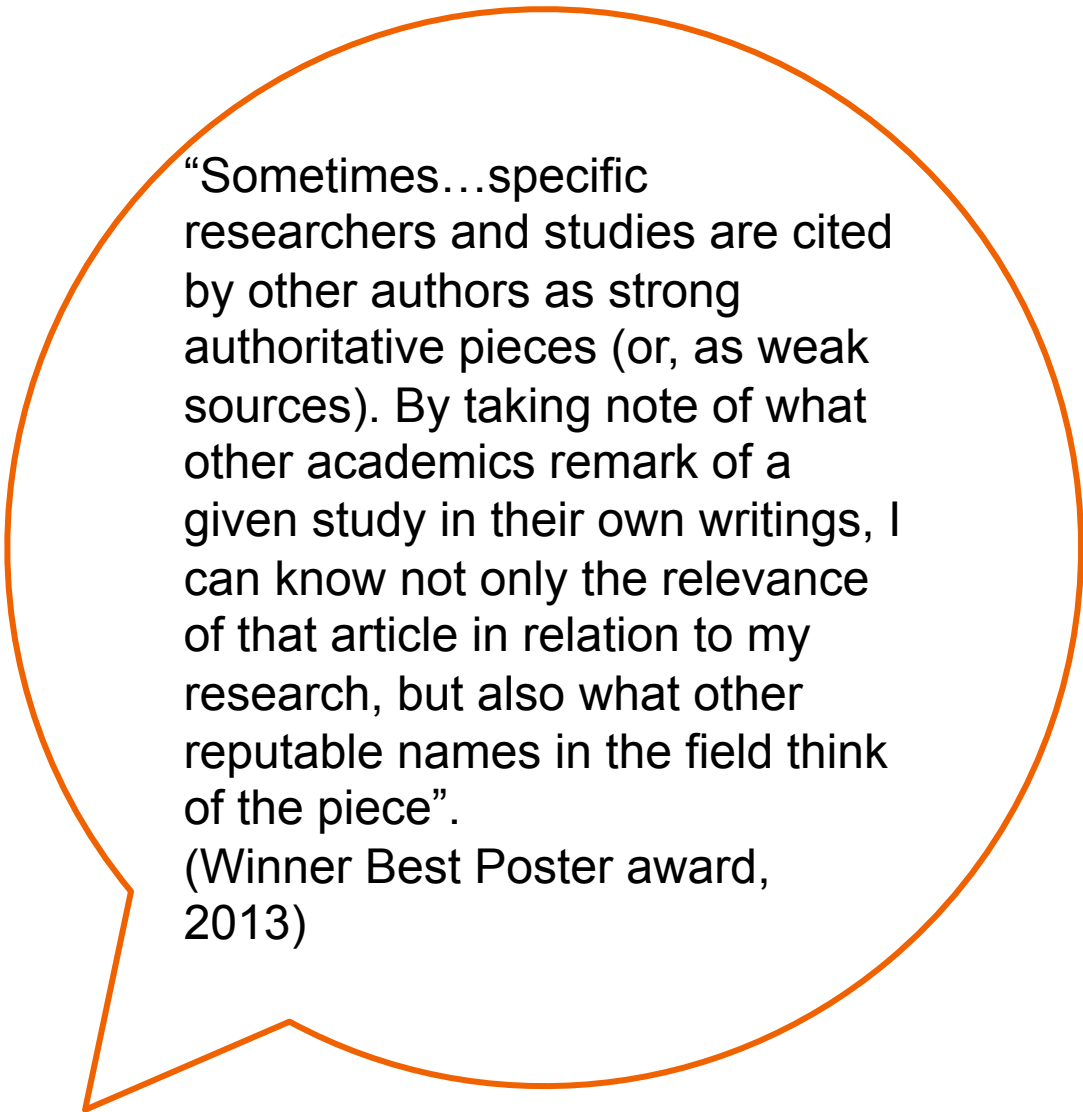
“The library information resource I took the most advantage of was borrowing Eresources”. (2013)

ACRL IL Framework: Threshold Concepts

...Threshold concepts are the core ideas and processes in any discipline that define the discipline...They are the central concepts that we want our students to understand and put into practice, that encourage them to think and act like practitioners themselves (Hofer, Townsend, and Brunetti 2012, 387-88)



IL submissions: star performers



“Sometimes...specific researchers and studies are cited by other authors as strong authoritative pieces (or, as weak sources). By taking note of what other academics remark of a given study in their own writings, I can know not only the relevance of that article in relation to my research, but also what other reputable names in the field think of the piece”.

(Winner Best Poster award, 2013)

Threshold Concept 1: Scholarship as Conversation

“Scholarship is a conversation refers to the idea of sustained discourse within a community of scholars or thinkers, with new insights and discoveries occurring over time as a result of competing perspectives and interpretations”.

Source:

[Draft Framework for Information](#)

[Literacy for Higher Education.](#)

2014.

IL submissions: star performers

“As our research continued beyond the initial phase, it became easier to find the specific types of articles we needed. Once we found review articles on the use of the ergogenic aid, we specifically searched for each trial study mentioned within. By repeating this process for multiple literature reviews, we were able to find a large number of relevant studies.”

(Winner Best Group Project 2014)

Threshold Concept 2: Research as Inquiry

“Research as Inquiry refers to an understanding that research is iterative and depends upon asking increasingly complex questions whose answers develop new questions or lines of inquiry in any field.”

Source:

[Draft Framework for Information Literacy for Higher Education.](#)
2014.

IL submissions: star performers

“This search was done... to find secondary sources. This means I went into the library to find the physical books ...I looked at each book’s table of contents, bibliographies and indexes...many of my secondary sources discussed the importance of trains in the increase of travel. Yet, many authors also mentioned important books Victorians would use when they travelled, or how many Victorians wrote adventure stories based on their travels. This intrigued me and I started looking for the actual sources mentioned by the secondary source authors.”
(Winner IL Award, 2013)

Threshold Concept 3: Format as Process

“Refers to understanding that the processes of developing information resources originate from different needs, motivations, values, conventions, and practices, and result in different formats, but the underlying questions about value of the information and its potential use are more significant than the physical packaging of the information source.”

Source:

[Draft Framework for Information Literacy for Higher Education](#). 2014.

IL submissions: star performers

“For this reason, I used participants’ data of ethnicity and country of origin for the statistical analysis. I first had to categorize their ethnicity and country of origin because the participants at the BCCHC were from 97 different countries and had a background of 52 ethnicities. To do so, I searched the websites of Statistics Canada and of the United Nations. Ultimately, I used the classification system used in the database of Statistics Canada because my project was located in Canada. I also called Statistics Canada to clarify some statistical information regarding their random rounding practice in a chart.” (Star performer, 2014)

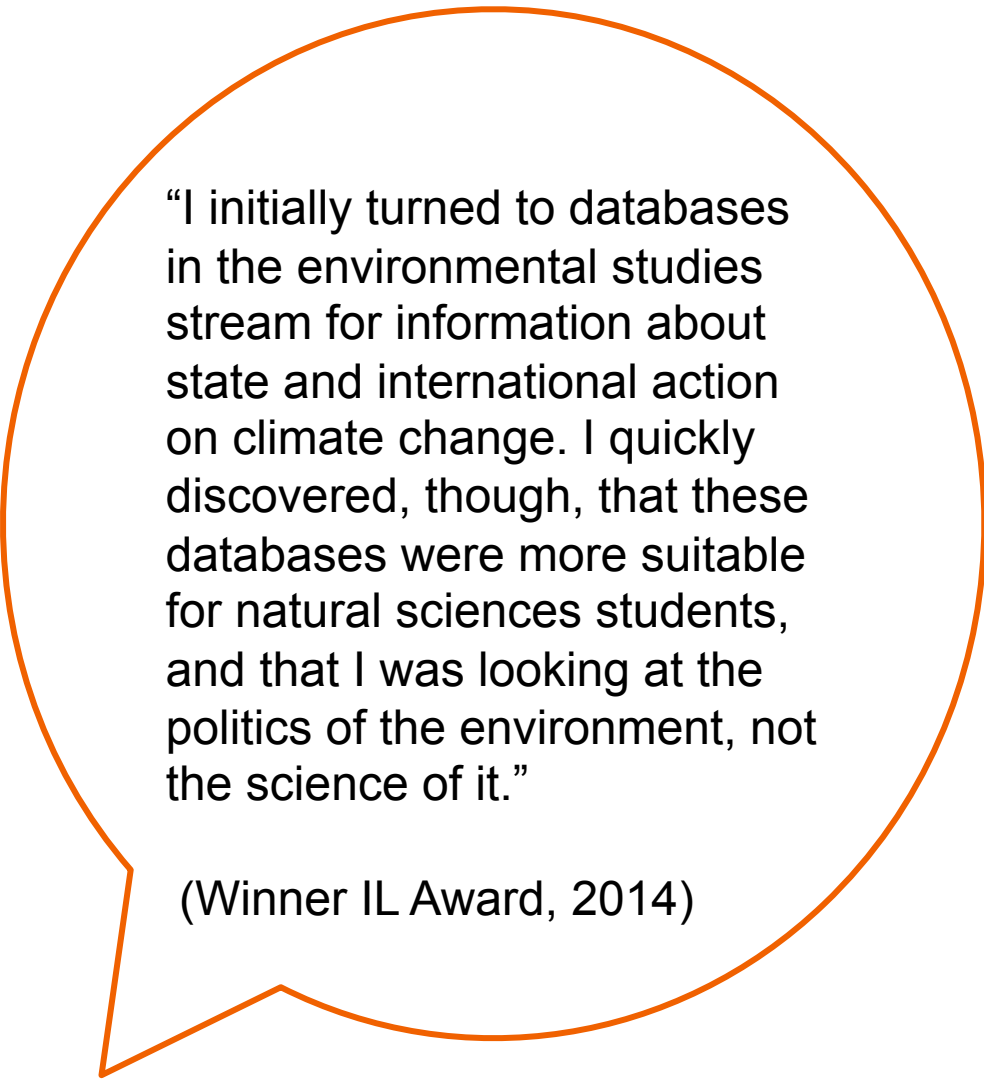
Threshold Concept 4: Authority is Contextual and Constructed

“Experienced researchers understand that the level of information quality needed for a particular purpose varies, will use various types of evaluative criteria to match that purpose, and will trust the authority of that information with an attitude of informed skepticism, remaining open to new perspectives, additional voices, and changes in schools of thought.”

Source:

[Draft Framework for Information Literacy for Higher Education](#). 2014.

IL submissions: star performers



“I initially turned to databases in the environmental studies stream for information about state and international action on climate change. I quickly discovered, though, that these databases were more suitable for natural sciences students, and that I was looking at the politics of the environment, not the science of it.”

(Winner IL Award, 2014)

Threshold Concept 5: Searching is Strategic

“Experts use an overall strategic approach in designing searches, considering and selecting a system to search, and reviewing search results”.

Source:

[Draft Framework for Information Literacy for Higher Education](#). 2014.

How Victorians Travelled



Steamboat, 1839. From Google.

The Times also estimated that there must have been almost 6 journeys in 1861 for every person in the United Kingdom by train.

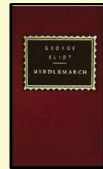
In 1862 *The Times* calculated that the number of travellers by train in 1861 was 163,435,678.



"The Great Locomotive Engine", Glasgow and Edinburgh. From Google.

Steamboats were around since 1801 and were primarily used for hauling shipments. By the 1830s, roughly 50,000 people a year embarked on a channel port. By 1913, this number rose to 660,000.

Why They Travelled



Middlemarch, 1874, by George Eliot. Characters who travelled were respected.

"Travelling was thought to enhance knowledge of human nature and, therefore, to civilize and liberalize the mind." Marjorie Morgan, *National Identities and Travel in Victorian Britain*.



Photo of Fanny Duberly, a courageous Victorian heroine who accompanied her husband on travels and into battles during the Crimean War. From Google.

Some women enjoyed experiences and liberties otherwise denied back home.



Photo from *Punch*, London 1867. The rest of the article and photo mocked the upper classes for their sense of travelling.

Victorians also used travel to enhance their character and social status. Thus, there was a clear divide between being a true "traveller" and being a "tourist".

Victorians Abroad: Travellers, Tourists, Adventurers

Emily Chicorli - emily02@yorku.ca

The Idea

With the remarkable advancements in transportation, including the introduction of the railway in 1830 and the continuous evolution of the steamboat, came the democratization of travel in Victorian Britain.



"The Railway Station", Painting by William Powell Frith 1862 London.

The Questions

How did notions of travel immerse itself within Victorian life and culture?

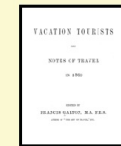
Were women involved?

What was the difference between a "traveller" and a "tourist"?

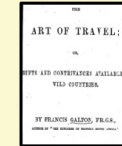
Methodology

With the idea that travel was popular amongst Victorians, newspapers, journal entries, travel guidebooks, and Marjorie Morgan's book, *National Identities and Travel in Victorian Britain* were examined to understand *how* ideas of travel filtered into Victorian culture.

Travel Handbooks & Guidebooks



Sir Francis Galton, 1860

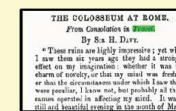


Sir Francis Galton, 1856



Sir Francis Galton, 1853

Newspapers



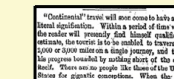
The Times, 1848



Punch, 1864



The Ladies' Cabinet of Fashions, Music and Romance, 1836.



The Times, 1849

Findings

- The democratization of travel was possible through the accessibility of resources and transportation.
- The resources available to engaged Victorians and helped Britain to become known locally and internationally as a nation of travellers.
- The resources also show historians how prominent topics of travel were discussed in Victorian culture and society, which included men *and* women from all strands of classes.
- The animosity between a traveller and a tourist stemmed from the idea of some Victorians idly following guidebooks to popular tourist destinations, and others who really wanted to immerse themselves in the cultures of other countries.

The Prevalence of MENTAL HEALTH ISSUES IN CHILDREN AND YOUTH INVOLVED WITH CHILD WELFARE SERVICES IN ONTARIO

Undergraduate Research Fair 2013

Author: Patricia Ki

Contact: ki.patricia@gmail.com

Course: SOWK3060,
Integrated Social Work Practice

Course Director: Bill Gapen



RESEARCH QUESTIONS

How prevalent is mental health issues amongst children involved in the child welfare system in Ontario?

What contributes to mental health issues in children involved in the child welfare system?

METHOD

Academic literature, agency and government reports, and newspaper articles were found through searches in social services and social work databases as well as a generic internet search engine (i.e. Google). These sources were evaluated based on their relevance to the issues of children mental health and child welfare in Ontario or Canada. Relevant course materials were also included. The articles were reviewed, analyzed, and compared to form an overview of how micro, meso, and macro level factors intertwine and contribute to the prevalence of mental health issues amongst children involved in the child welfare system in Ontario.



PREVALENCE

46% of the children and youth who are involved in substantiated maltreatment investigations across Canada are identified with mental health and developmental issues

Public Health Agency of Canada, 2010



82% of Crown wards in Ontario have complex mental health and developmental needs.

Ontario Association of Children's Aid Societies, 2010



Children served by child welfare agencies wait at least six months for treatment and support.

Ontario Association of Children's Aid Societies, 2010

CONTRIBUTING FACTORS

Micro Level:

Effects of Maltreatment

Both child welfare and children's mental health sectors are funded by the Ministry of Children and Youth Services and affected by the government's ongoing reductions in social spending and neo-conservative policies in social welfare (Wharf & McKenzie, 2009).

Children's Mental Health

On the other hand, caregivers' requests for support regarding children's difficult behaviours constitute 21% of the CAS investigations in Ontario (Ontario Association of Children's Aid Societies [OACAS], 2010).

As such, the high prevalence of mental health issues in children involved with child welfare services may also be related to the children's existing mental health concerns.

One social worker recalls a family's experience: (Hair, 2006, p. 116)

"Bradley was nine years old when he threw a knife at his younger brother narrowly missing his eye. That event prompted his mother, Susan, to call for help through a local children's mental health centre. As Susan explained to the intake worker, that episode was only one of the many concerns she had had about her son for years... Susan had previously contacted the Children's Aid for help but had been denied service because no protection concerns were identified... The intake worker explained that the family preservation program had a nine month wait list and the one residential facility in her city had a longer wait list. Susan and Bradley's first opportunity for service would be outpatient counselling in about six months."

Family Relations

It is important to note that most children are admitted to child welfare services for multiple reasons (OACAS, 2010). Children's behavioural issues, parenting stress, and strained parent-child relationship can be reciprocating factors that contribute to incidents of maltreatment.

For families who cannot afford private services, the children's mental health may continue to deteriorate while waiting for community-based programs (Children's Mental Health Ontario [CMHO], 2011), leading to increased stress in the family and crisis situations where child welfare agencies must intervene.

Meso Level:

Neo-conservative Policies

Both child welfare and children's mental health sectors are funded by the Ministry of Children and Youth Services and affected by the government's ongoing reductions in social spending and neo-conservative policies in social welfare (Wharf & McKenzie, 2009).

Only 15% of the 500,000 Ontario children and youth living with mental health issues are receiving services (CMHO, 2011).

6 months: Typical wait time for mental health services for children served by child welfare agencies (OACAS, 2010).

Child Welfare Services

The Children and Family Services Act governs child welfare services. It emphasizes child protection but does not mandate the provision of mental health services; thus, funding for children's mental health is chronically inadequate and contingent on changing political agendas. (Hair, 2006)

Under the CFSA, child welfare agencies are expected to provide counselling services for children admitted to their services (Hair, 2006). However, fiscal constraint and expansion of services due to recent reforms result in Ontario CASs being continually underfunded (OACAS, 2010).

Children's Mental Health Services

Child welfare services therefore routinely refer potential and current clients to community mental health agencies with which they are not well coordinated; many parents, caretakers, and the youth themselves express frustration in navigating a complex array of services (CMHO, 2011).

Vying for limited resources, children's mental health agencies allocate much of their already downsized staff to validate the effectiveness of their services and to fulfill extensive accountability measures, causing further decline in service capacity (CMHO, 2011).

Macro Level:

Poverty: gendered and racialized

49% of maltreatment investigations in Canada involve families with low or no reliable income

27% involves parents living with mental health issues (Public Health Agency of Canada, 2010)

Poverty-related stressors can increase the risk of developing mental health problems in parents, which in turn impacts parenting capacity and children's mental health (Westad & McConnell, 2012).

As a consequence of neo-conservative policies since the 1990s, social benefits are reduced and those at the lower end of wage spectrum are often relying on precarious employment (United Way, 2001). The need to survive economically often leads to hectic work schedules and does not allow time for parents to access services within a children's mental health system that is difficult to navigate.

39% of primary caregivers involved in child welfare services are single mothers (Strega & Carrière, 2009).

Female-headed lone-parent families are the poorest group amongst all Canadians, a reality that is largely stemmed from issues of gender inequality (Swift, 2010).

Racial minority groups also experience systemic inequities that are linked to high rates of unemployment, under-employment and poverty (United Way, 2001); at the same time, racialized children are over-represented in the child welfare system (Pennell, 2009).

Stigmatization of Mental Health Issues

Historically in Canada individuals with mental health issues were kept out of sight in asylums or at home (Lightman, 2003). This stigmatization of mental health issues continues today.

40% of Ontario parents are embarrassed to talk about their children's mental health issues (Ministry of Children and Youth Services, 2011).

Ironically, stigma may also contribute to the high number of children involved in the child welfare system being identified with mental health issues. Mental health diagnoses can be understood as social constructions that are used to categorize "normal" and "abnormal" behaviours (Healy, 2005). Individualist societies such as our own values self-reliance; as such, those who are in need of assistance, such as families requiring child welfare interventions, may be frequently categorized and diagnosed as "dysfunctional" (Healy, 2005).

Going Forward

The Ontario government has recently announced a funding increase for children's mental health (CMHO, 2012). The federal government also openly endorses the first national mental health strategy published by the Mental Health Commission of Canada (MHCC), which prioritizes children and youth services (Campion-Smith, 2012).

These supportive measures may have resulted in part from many years of lobbying and the increased media and public attention to the alarming rates of teenage suicide in Ontario (CMHO, 2011). However, media reports and the MHCC also repeatedly emphasize that mental health costs the Canadian economy \$50 billion in healthcare and lost productivity; prevention may therefore save tax dollars and increase financial gains for individuals (Campion-Smith, 2012).

Therefore, the government's support can be understood as a form of investment with the goal of regulating the behaviour of children (Healy, 2005), so that they will become productive workers, consumers, and taxpayers (Cech, 2010).

CONCLUSION

This research has found that the high prevalence of mental health issues in children and youth involved in child welfare services is not merely a result of difficulties on the levels of individual and family, but is closely related to structural issues in multiple service sectors and the broader society. Moreover, these structural issues also contribute to the lack of mental health support for children and youth involved in the child welfare system in Ontario. Despite the possible ulterior motives in the government's recent investment in children's mental health, one can only hope that it will address the structural issues behind the inadequacy of the children's mental health system and bring about substantial improvement in services that will support all children and youth to fulfill their life potentials.

For reference list please see handout.

Madeleine Lavin

Contact: mlavin@yorku.ca

ENVS 4000 – Senior Honours Work

Supervisor: Professor Rod MacRae

The Ethics of Honey Production in Canada: A political-ecological analysis

Abstract: This research paper presents a critique of conventional honey production methods used in Canada by examining how these practices contribute to four problems regarding honey bee health and to four considerations concerning the economic well-being of beekeepers (see Figures 1 & 2). Using a political-ecological approach rooted in agricultural ethics, three methods of ecological honey production are compared against conventional methods in a comparative analysis according to honey bee health and beekeeper economic considerations. Using the framework for transitioning to sustainable agriculture developed by Hill and MacRae (1995) (see Figure 3), the ecological production methods are ranked according to the three stages of production outlined in the framework: efficiency, substitution, and redesign. The paper concludes with a discussion that centres on redesign approaches, exploring the potential for improvement within this stage to address the particularities of ecological honey production in the Canadian context.

Problem: Similar to other agricultural practices, apiculture in Canada has become increasingly **industrialised**. This has led to a reduced number of beekeepers, a move to larger operations, as well as an increased reliance on chemical or other supplemental inputs.

Research Questions:
How do ecological honey production methods promote honey bee colony health?
To what extent are these production methods feasible for operators?

Methodology: A political ecological approach adapted from Robbins *et al* (2010), which focuses on the interactions between human and non-human actors within the political economy (3) and provides a bridge between environmental ethics, economics and policy with issues in Ecology (6); as well as a conception of **agricultural/animal ethics** rooted in political ecology that is concerned with the interdependence of human and non-humans within the agricultural context.

Research Methods:
An interpretative secondary research literature review employing a political ecological approach to the available literature.

Honey production methods examined in this paper:



Conventional Honey Production

- Generally, characterised by industrial practices
- Tensions arise between economic efficiency and other values
- Honey bee health may be sacrificed in favour of efficiency
- In some cases, efficiency and profits may be favoured in order to keep the operation viable



Canadian Organic Standards

- Promotes active management and preventative healthcare practices
- Encourages operators to produce products with as few contaminants and chemicals as possible
- Strict standards produce high quality product with access to niche markets and price premiums



Local Food Plus Honey Protocol

- Points based scheme allows for flexibility in adopting various ecological methods
- Operator requires 450 points for LFP certification
- The protocol aims to balance economic and environmental concerns
- Points-based system increases economic feasibility
- Access to niche markets and price premiums



Demeter Biodynamic Standards

- Most comprehensive standard examined in this paper
- Designed to build upon pre-existing, internationally recognised organic standards
- Aims to work with the bees' intrinsic nature rather than against it
- Strong spiritual aspect, sees farm as an organism
- Most difficult to implement

Analysis (Part I): A comparative analysis of the ecological production methods; wherein each method is assessed according to four issues facing honey bee health and according to four concerns regarding economic viability. (See Figures 1 & 2)

Analysis (Part II): An evaluative analysis of the three ecological production methods according to the framework for transitioning to sustainable agriculture (Hill & MacRae, 1995), where conventional methods serve as the baseline. (See Figure 3).



Figure 1: Honey Bee Health

Figure 2: Operator Economic Concerns

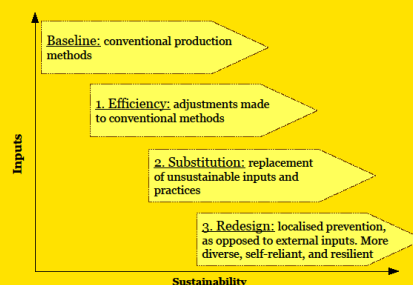


Figure 3: Framework for Transitioning to Sustainable Agriculture (adapted from Hill & MacRae, 1995)

Works Cited (on poster):

Heaf, D. (2008). Toward Sustainable Beekeeping. *The Beekeepers Quarterly* 91, 92, 93, & 94. Retrieved from <http://naturalbeekeeping.com/wp/Toward%20Sustainable%20article%20by%20D.%20Heaf.pdf>

Hill, S. & MacRae, R. (1995). Conceptual Framework for the Transition from Conventional to Sustainable Agriculture. *Journal of Sustainable Agriculture*, 7 (1), 81-97.

Robbins, et al. (2010). *Environment and Society: A critical introduction*. Chichester, UK: Wiley-Blackwell Publishing.

For a complete reference list used in this research paper, please refer to the supplemental document or the research paper provided by the author.

Figures and Images:

Figures 1 – 3 designed and created by Madeleine Lavin. (Figure 3, concept adapted from Hill & MacRae (1995))

Image 1: Google Images. Retrieved from: http://www.manufacture.com/images/hq/Leads/www.abbaa.com/0731/PETE_Bee_Bottle_for_Honey.jpg

Image 2: Retrieved from: http://www.org.ca/about_organics/organic-standards-and-regulations/

Image 3: Retrieved from: <http://www.localfoodplus.ca/>

Image 4: Retrieved from: <http://www.demeter.net/>

Honey comb motif designed and created by Madeleine Lavin

Conclusion: This research paper concludes by ranking each of the ecological methods of honey production according to the framework for transitioning from conventional to sustainable agriculture, with a focus on the redesign stage.

- (1) Efficiency stage: Local Food Plus Honey Protocol
- (2) Substitution phase: Canadian Organic Standards
- (3) Redesign approach: Demeter Biodynamic Standards

Demeter-International biodynamic apicultural methods are rarely implemented in Canada. Nevertheless, they present a strong solution to the problem associated with honey bee health. One problem with this method; however, is that it fails to offer beekeepers the flexibility to adopt or not adopt certain practices (Heaf, 2008). While the standards must be restrictive to some extent, this problem could be mitigated with the use of a points-based system, much like the LFP Honey Protocol; thus allowing operators to adopt practices to a greater or lesser degree. A points-based system would be more standardised and as a result the method would no longer have to rely as heavily on the contingencies of organic production standards in different countries. This could make Demeter standards more accessible to a greater number of producers, thus increasing the likelihood of increased adoption of sustainable methods. Overall, in Canada there is significant potential for improvement to raise the current standards of production. If baseline production standards in Canada are raised, then the redesign phase may become more economically feasible for producers, thus also increasing the potential and feasibility for producers to adopt even more ecological production methods.

Gimme Shelter!: The Cry of International Environmentalism

Sachin Persaud; AP/POLS 1000, Faculty of Liberal Arts and Professional Studies, York University

Background

• United Nations Environment Programme (UNEP) was created in 1972



• Since then, two major conferences have been held, multiple agreements have been signed and another body was conceived (the Commission on Sustainable Development)

• Notwithstanding, little of substantial positive effect has occurred

• In 1997, a proposal was submitted to the UN General Assembly that called for the establishment of a "global umbrella organization for environmental issues, with the [UNEP] as a major pillar"

• The proposal was not adopted, but the concept of a World Environment Organization (WEO) has become a contentious topic among political scientists

Purpose

• To examine the failure of current international institutions in addressing environmental concerns

• To prescribe a WEO as a normative remedy

Method

• Survey of the literature

• Literature includes

- academic articles from scholarly journals located through online databases
- books located through the Scott Library database
- media reports

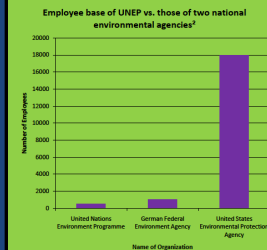
• This paper heavily relied upon the work of three authors who have conducted extensive analysis on global environmentalism: Steffen Bauer, Frank Biermann and Steve Charnovitz

• Arguments were framed within the liberal-pluralist perspective of international relations

Findings

A WEO is necessary because it would provide:

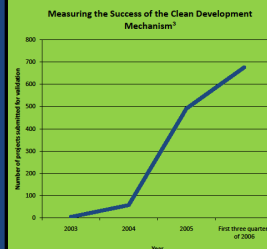
- 1) Organizational Centralization
 - Enhanced mandate
 - Bigger budget
 - More staff
 - Elimination of coordination deficit



- 2) A Counterbalance to the World Trade Organization
 - Equal powers and capabilities
 - A WEO could garner more national and civil support for itself through a greater commitment to cooperation and inclusivity than the WTO

TO CONSIDER
The WTO's rules are legally binding and it has the ability to enforce them on all environmental agreements

- 3) Greater Assistance to the Global South
 - North's moral obligation to South
 - Equal representation in decision-making
 - Encouragement of clean development mechanism



Limitations

This analysis is not designed to:

- Address some of the fundamental realist arguments for why a fully-functioning WEO is not possible
- Study specific inter-state or domestic environmental initiatives (other than those of Canada)
- Examine the role of environmental NGOs

Conclusion

• A WEO, while not sufficient to end the current ecological crisis, is a necessity

• It could provide the organizational base from which all other causes could stem

• Its expansive mandate could command respect on the world stage

• WEO could have the resources to effectively plan, implement, oversee and redress

• Harmful effects of world commerce could be curbed

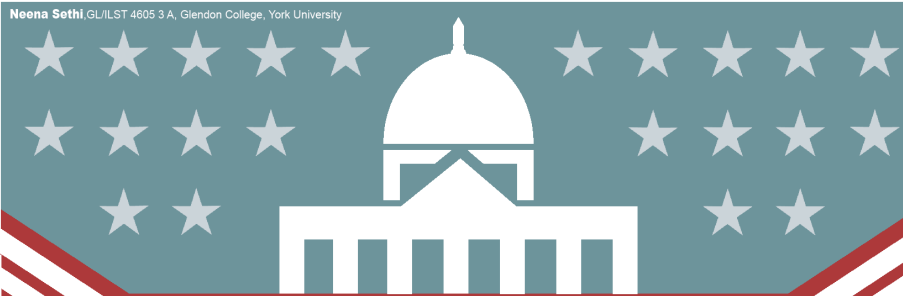
• Could lead to fairer relationship between Global North and South

• **The seeds of human preservation can be sown, but it must be done together, as united individuals and as united nations**



References

- * Bauer, Steffen and Frank Biermann. 2005. *Introduction to A World Environment Organization: Solution or Threat to Effective International Environmental Governance?*, by Frank Biermann and Steffen Bauer. Burlington, VT: Ashgate Publishing Company.
- * German Advisory Council on Global Change. 2001. *New Structures for Global Environmental Policy*. London: Earthscan.
- * Ambrosi, Philippe and Frank Lecocq. 2007. "The Clean Development Mechanism: History, Status and Prospects." *Review of Environmental Economics and Policy* 1 (Winter): 134-51.



BETWEEN EFFORT AND RESULT:

GAUGING THE ACTIVITIES OF ENVIRONMENTAL INTEREST GROUPS ON U.S. FOREIGN POLICY, A CASE STUDY OF THE NRDC

Research Question:

Do the activities of the NRDC push the U.S. government to act as a lead state in the foreign policy environment?

Hypothesis:

The activities of the NRDC do not consistently push the U.S. government to act as a lead state in the foreign policy environment.

Methodology:



Case Studies:



Results:



Case Study	International Organization	Policy Outcome	U.S. Role
1	International Whaling Commission (IWC)	Strengthen transparency and overall effectiveness of IWC	Supporting State
2	United Nations (UN)	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean	Lead State
3	United Nations Environment Program (UNEP)	Elimination of lead gasoline globally	Supporting State
4	International Maritime Organization (IMO)	Global GHG reduction regime for the shipping industry	Blocking State
5	World Bank	No funding for coal power projects	Lead State

Conclusion:

The activities of the NRDC do not consistently push the U.S. government to act as a lead state in the foreign policy environment.

**2014 honourable mention
4th year GL (ILST)**

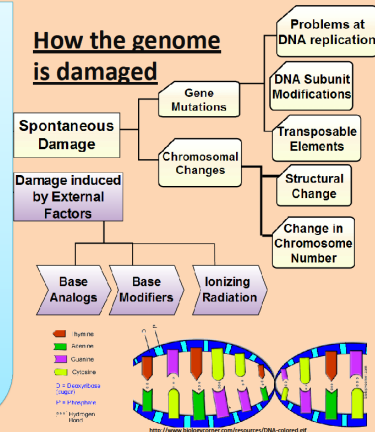
Mechanisms of DNA Repair and Human Diseases

Jay Gajiwala; York University, Faculty of Science, Department of Biology

Abstract

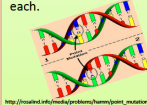
Almost all biological disorders known to us are caused by an aberrant DNA repair mechanism in our cells. Even the symptoms of aging are associated with this. For this reason, the elucidation of these mechanisms is of the utmost importance if we are going to cure these diseases. When DNA repair mechanisms are broken, defects in our body occur. These defects are known to us as inherited disorders, cancer, aging related defects and many more. All cancers disrupt the DNA repair processes; Cancer cells reduce the extent of DNA repair machinery. This allows the cancer genome to persist and cause havoc in the body. The purpose of this poster and paper is show just how important DNA repair is and to organize DNA repair mechanisms and show how they can cause human diseases. Understanding DNA repair mechanisms is crucial if we are to understand how to cure human diseases.

How the genome is damaged

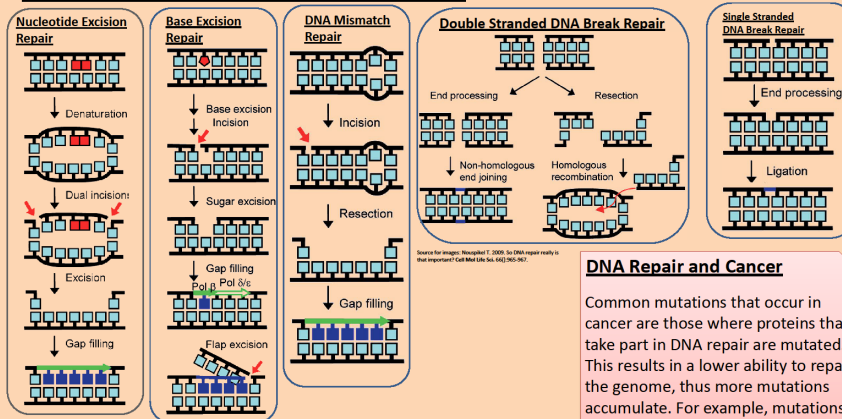


What that Damage looks like

DNA damage can exist in many forms and each one of the mechanisms on the left can cause different types of damage to occur. Possible damage types include point mutations, nucleotide substitutions, single-stranded breaks, double-stranded breaks, depurination, DNA adducts, etc. To repair each of these damages, there exists a dedicated repair machinery for each.



How Damage to the Genome is Repaired

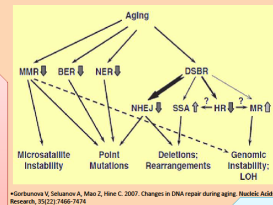


DNA Repair and Cancer

Common mutations that occur in cancer are those where proteins that take part in DNA repair are mutated. This results in a lower ability to repair the genome, thus more mutations accumulate. For example, mutations in proteins that conduct the mismatch repair causes mutation (microsatellite instability) which results in a hereditary colon cancer. Mutation in the BRCA proteins results in a higher risk for breast cancer.

DNA Repair Decline in Aging

Aging is associated with a decline in DNA repair. Researchers have found that all of the above described mechanisms decline in their activity as we age. These changes explain all the phenotypes that are associated with aging. When a cell accumulates enough mutations, it will undergo cell death.



Conclusion

Understanding DNA repair mechanisms is of the utmost importance because it is central to many of the disorders known to us. When our cells age, the decline in DNA repair has implications for the symptoms associated with it. Other inherited disorders are also the result of a failure to repair the genome. Finally, the proteins involved in DNA repair are also mutated in cancer cells, resulting in aberrant DNA repair and accumulation of these mutations. Research in unraveling the mysteries of the DNA repair pathways is key to the cure of these disorders.

Course and contact information:

This poster was made for Biol 4200, "Selected Readings in Biology" under the supervision of Dr. Arthur Hilliker.

Contact info: jay_gajiwala@hotmail.com

Increase awareness of IL on campus

- The IL award and the multidisciplinary nature set this Fair apart from others on campus

- **Deans & Administrators:**

“My office was honoured to be involved as a co-sponsor.”



“I am delighted to see the level of interest from our students - this is great leadership from the Libraries!” [email]

“What a buzz on campus!” [email]

“Congratulations on the great success of this wonderful initiative.” [email]

- **Librarians:**

“I want to congratulate all those involved in the Undergraduate Research Fair - it was a stellar success! Everyone I have spoken to from VPRI Haché, to Dean Singer, to various faculty and students, expressed that they can't wait until next year's Fair!!” [email]

“It was great -- lots of energy and creativity. I am glad I went.” [email]

“What a well-organized event!” [email]

“I was extremely impressed as well, great job. The students had so much energy and commitment to their projects, very inspiring.” [email]



Research Gala

“I guess it’s not everyday that the President gets
to hear my name!”



References

- **Students information literacy skills/behaviours: Major recent studies referenced in this presentation**

Brunetti, K., Hofer, A., Townsend, L. (2009). Through the Looking Glass: Teaching Information Literacy with Threshold Concepts. Voicethread originally presented at the WILU Conference, 2009. Available at: <http://voicethread.com/share/527453/>

Duke, L. M., & Asher, A. D. (2012). *College libraries and student culture : what we now know*. Chicago: American Library Association. (ERIAL Project)

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- **Information Literacy Awards**

Augustana Information Literacy Awards. <http://www.library.ualberta.ca/augustana/infolit/awards/>

Library Undergraduate Research Awards. University of Oregon Libraries. <http://library.uoregon.edu/general/libaward.html>

University Libraries' Award for Information Literacy. Penn State https://www.libraries.psu.edu/psul/lls/infolit_award.html

Thank you

Q&A