

Research as a Way of Knowing: The Extended Essay in ToK

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CONTEXT

- Oakham School
 - Large, independent, co-educational day and boarding school
 - Celebrating 10 years of IBDP
 - IBDP and A Level qualifications
- Smallbone Library
 - Superb facility
 - Realistically funded
 - Realistically staffed
- IB Department in general and Director in particular
 - Absolutely committed to best possible provision for IBDP students

The EE at Oakham School

- What we had
 - Supervisors
 - EE seminar for students in 3 ToK lessons
 - EE week

The EE at Oakham School

- The results
 - A mixed bag in terms of quality (very supervisor led and dependent)
 - An array of “interesting” cover sheets
 - A relatively open-ended internal deadline

The EE at Oakham School

- What we changed
 - Supervisor training – first by invitation, then compulsory
 - Introduced EE timetable and deadlines
 - ICT training, Oakham APA
 - Offer of “research interviews” in the Library

EE Timetable and Deadlines 2011

Date	Task	What to do next?
10 th Jan	EE seminar in ToK lessons - introduction and the EE Oakham house style .	Read the general guidelines and EE survival guide.
Until 17 th Jan	Think about your subject area and possible topic.	Fill in supervisor application form.
17 th Jan	Hand in application form to your ToK teacher.	Start thinking about research, when you have been told who your supervisor is, make contact and arrange a meeting.
17 th Jan (SLW) 24 th Jan (AAM) 31 st Jan (AML) 7 th Feb (ARB)	EE workshops in ICT Dept. - research, sources, organisation, plagiarism, bibliographies....	Continue with research, arrange Reference Interview with Library ...if you haven't done so yet, do more research/note taking over Easter holidays. Meet your supervisor to talk about your research question!
By 14 th March	Show evidence of research to your supervisor and hand in finalised research question (progress sheet) to SLW.	Do more research, note taking in Easter holidays and half term.

EE Timetable and Deadlines 2011

Date	Task	What to do next?
6 th - 10 th June	EE week - everything you need to remember revisited!! Important, Monday, period 1, meet downstairs in the Library. <i>Refresher on formal presentation of scholarly writing.</i>	Get started! Get over the empty page...don't forget to reference every idea which is not yours!!!
8 th June	EE week - hand in first 2000 words to supervisor.	Keep going, the end is near!
13 th June	First draft to supervisors by 8.00 am and electronically to SEA2 so it can be submitted to turnitin.com.	Arrange meeting with supervisor to discuss draft before end of term.
Summer	Work on final version.	<i>Check formal presentation with Library, if necessary.</i> Finish final version!
September	Meet with your supervisor to discuss final version - make final alterations (including G4 EEs).	Get in touch with supervisor on the first day back to arrange meeting to look at final version AND arrange time for <i>viva voce!</i>
15 th - 30 th September	All changes should be made. Final meeting with supervisor and <i>viva voce.</i>	Send final electronic version to SEA2.
1 st Oct	ALL EEs to be handed in.	Hand 3 printed copies to SEA in the IB office.

Support for the EE within ToK

- Generous ToK timetable allocation
- ToK allocation allowed for EE provision
 - EE Seminar (2h00, SLW)
 - Then EE Seminar (2h00, SLW & DT)
 - Then EE Seminar (1h20, SLW & DT); ICT session (0h40, ICT)
 - Then EE Seminar (1h20, SLW & DT); ICT session (0h40, DT)
 - Now EE Seminar (1h20, SLW & DT); ICT session (1h20, DT)
- Question: ICT session within *context* of a ToK lesson?

Extended Essay: Nature

- “high-level research...
- ...major piece of formally presented, structured writing”

“EE: Assessment Objectives

1. plan and pursue a research project with intellectual initiative and insight
2. formulate a precise research question
3. gather and interpret material from sources appropriate to the research question
4. structure a reasoned argument in response to the research question on the basis of the material gathered

EE: Assessment Objectives

5. present their extended essay in a format appropriate to the subject, acknowledging sources in one of the established academic ways
6. use the terminology and language appropriate to the subject with skill and understanding
7. apply analytical and evaluative skills appropriate to the subject, with an understanding of the implications and the context of their research”

Necessity, the Mother of Invention

- Students lack experience of conducting research at this level, specifically
 - The research process
 - Locating reliable information from a variety of sources, including books, subscription databases and the Internet
 - Documenting sources to an academically recognised standard
 - ICT skills necessary for the formal presentation of scholarly writing

The IBDP Library and Librarian

- An adequately resourced school library should provide access to a sufficient range of books that are relevant and current, as well as subscription databases and Websites
- A professionally qualified school librarian is an information specialist who should be well versed in mediating access to the library's store of knowledge, as well as the documentation of the sources of that knowledge

Killing Two Birds with One Stone

- Basic ICT skills required for the formal presentation of scholarly writing; e.g.:
 - Page breaks
 - Styles, to automatically generate a ToC
- Working with other people's ideas (academic honesty)
 - Citations and References in a Bibliography

Three, No Four, Actually

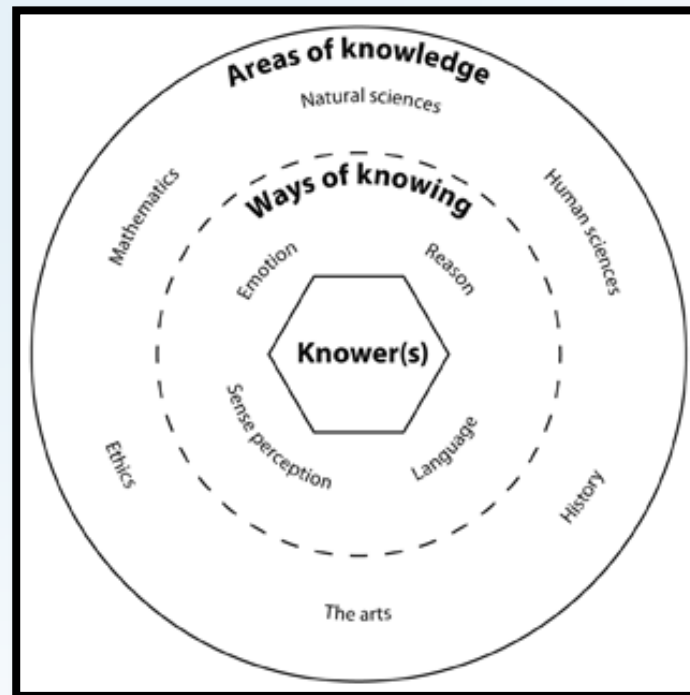
- Oakham APA: A house style for the formal presentation of scholarly writing
 - Make the formal requirements of the EE explicit
 - Provide concrete examples of those requirements
 - Show what an ‘EE’ formally presented according to Oakham APA would look like
- Convince EE Supervisors

The EE and ToK

- “Whichever subject is chosen, the extended essay shares with the theory of knowledge (TOK) course a concern with interpreting and evaluating evidence, and constructing reasoned arguments”
- A far deeper connection: research is a fundamental way of knowing

The EE in ToK?

- The traditional ToK diagram – research?



The Librarian and ToK

- “The librarian must be concerned not only with that which is known, but also with the intellectual condition of the state of knowing” (Jesse Shera)
- A long history of assembling, classifying and mediating access to human knowledge

Epistemological Assumptions

1. Everything I need to know is available on the 'Internet', for free
2. Everything I need to know I can find with Google
3. (Un)surprisingly often, Google finds everything I need to know on Wikipedia
4. Wikipedia knows everything

Default Epistemological Strategy

1. Google
2. Wikipedia

Epistemological Crisis

1. Information is not knowledge
2. Not all information is created equal
3. Not all information is visible to Google
4. Google creates an illusion of competence
5. Google is not neutral
6. Wikipedia is fundamentally unstable

Pedagogical imperative

1. What counts as knowledge
2. Research, formal and informal, primary and secondary, is a fundamental way of knowing
3. Google (*et al.*) has an agenda
4. The real problem of Wikipedia
5. More certain ways of knowing
6. Poor is the pupil who does not surpass his master (Leonardo da Vinci)

The Lesson: Oakham APA Exemplar

A HOUSE STYLE FOR THE EXTENDED ESSAY
5

A House Style for the Formal Presentation of the Extended Essay

The *Diploma Programme: Extended Essay Guide* (IBO, 2007, p. 4), hereafter referred to as the *Guide*, states clearly that the research process and its formal outcomes “are of primary importance in the extended essay”. Fundamental to the research process and its formal outcomes is the documentation of sources, which is also the foundation upon which academic honesty rests (IBO, 2009), so much so that the *Guide* states:

An extended essay must reflect intellectual honesty in research practices and provide the reader with the exact sources of quotations, ideas and points of view through accurate bibliographies and referencing, and failure to comply with this requirement will be viewed as plagiarism and will, therefore, be treated as a case of malpractice (p. 16)

The *Guide* expresses no preference when it comes to documentation style, provided that it is academically recognised and applied consistently. Given that academically recognised documentation styles generally form part of broader style guides for academic writing¹¹ and that the extended essay makes formal requirements beyond documentation style, it makes sense to include the relevant style guide in considerations of a particular documentation style.

After careful consideration, APA was chosen as the basis of a house style for

Darryl Toerien 17/4/10 09:33

Comment [11]: Heading Level 1 (Styles = Heading 1).

The introduction needs to make “clear how the research question relates to existing knowledge on the topic and [explain] how the topic chosen is significant and worthy of investigation” (IBO, 2007, p. 26).

“Because the introduction is clearly identified by its position in the manuscript, it does not carry a heading labelling it the introduction” (APA, 2010, p. 27).

The title of the essay is repeated here in full.

Darryl Toerien 8/1/11 13:58

Comment [12]: Block quotation (Styles = Quotation)

“If a quotation comprises 40 or more words, display it in a freestanding block of text and omit the quotation marks. ...At the end of a block quotation, cite the quoted source and the page or paragraph number in parentheses after the final punctuation mark” (APA, 2010, p. 171).

Darryl Toerien 17/4/10 09:33

Comment [13]: “Appendices, footnotes and endnotes are not an essential section of the extended essay and examiners are not required to read them, so care should be taken to include all information of direct relevance to the analysis and argument in the main body of the essay” (IBO, 2007, p. 18; emphasis added).

The Lesson: The EE and ToK

-----Original Message-----

From: Standard Bank [<mailto:ibsupport@standardbank.co.za>]

Sent: 02 September 2010 09:42 AM

To:

Subject: Electronic Funds Payment From...

TO WHOM IT MAY CONCERN.

Hello,

James Du Plesis made an electronic funds transfer to your account. The details of this transaction are shown below.

Amount: **R39 470.00**

Description: **PAYMENT**

Reference #: **TL55**

To view the transaction, please <https://www5.encrypt.standardbank.co.za>

If you have any questions related to this message or the funds transfer, please contact James Du Plesis.

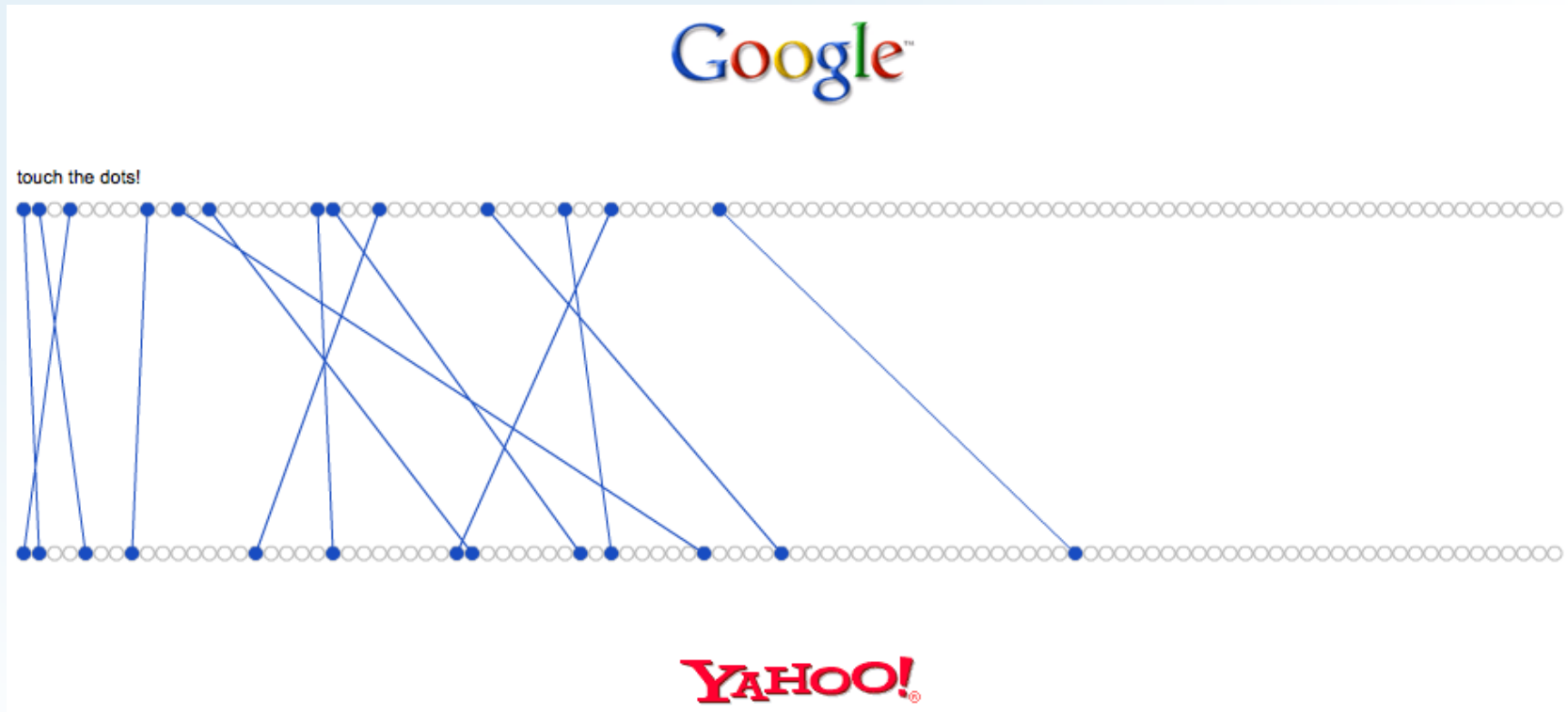
<http://minyanmaps.com/jeje/index.html>

Please do not reply to this message as your message will not go anywhere.

Sincerely,

Standard Bank

The Lesson: Google



The Lesson: Wikipedia

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The Lesson: Wikipedia

General statistics [\[show/hide\]](#)

Page title:	European Union
Total revisions:	17,404
Number of minor edits:	4,344 (24.96%)
Number of IP edits:	5,722 (32.88%)
First edit:	23 October 2001, 23:06:35 (by 137.111.13.xxx)
Most recent edit:	26 October 2011, 06:46:16
Average time between edits:	0.21 days
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Number of edits in the last day:	5
Number of edits in the last week:	18
Number of edits in the last month:	79
Number of edits in the last year:	1,217
Number of users:	5,894
Average edits per user:	2.95
Number of edits made by the top 10% of active users:	10,441 (59.99%)

The Lesson: ICT Skills

Information Obesity

Information obesity, like physical obesity, is essentially a consequence of overconsumption combined with poor diet and lack of exercise (Whitworth, 2009).

Two Common Sources of Information

Examples of which follow...

A book as a source.

According to Whitworth, “obesity is not simply the result of an overload [but] also...a decrease in quality” (2009, p. xi).

A website as a source.

In the same way as “physical obesity is not simply the result of too much food, so information obesity is caused by more than just ‘information overload’” (Whitworth, 2010).

The Lesson: ICT Skills

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A website as a source.	2
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The Lesson: ICT Skills

Bibliography

Whitworth, A. (2009). *Information Obesity*. Oxford: Chandos Publishing.

Whitworth, A. (2010). *Information Obesity: Summary and Extracts*. Retrieved January 17, 2011, from Information Obesity: The Web Site:
<http://130.88.43.233/elwww/informationobesity/summary.html>

Improvements?

- Yes: overall core points average was raised from 1.3 to 1.8
- No: not consistent

Dear Mr Toerien,

I herewith wanted to thank you for your excellent Oakham APA EE format. It has helped me a great deal with my Extended Essay: In the past, I spent up to 2 hours just editing one piece of my essays/course works and was still not content with their layout, while when writing the EE I did not have to worry about anything regarding the format, as it was miraculously "already there", and thus could fully concentrate on the essay content. It was also much more convenient to work in an essay body that is properly laid out. The Oakham APA gave me security that my layout was correct, made it easier to work on Computer and saved me a lot of time. Therefore I would like to thank you again for this truly remarkable and unique Oakham APA format! By now, I have adapted the "Oakham House Style" for all of my course works and will use them for future ones, and, if I may, hope to use it for university as well.

Kind regards,

Martin Szöke

Significant research contribution

- *The impact of Library interventions to support the IB Extended Essay at Oakham School, by Jennifer Toerien, MA PGCE*

Concluding Remarks

- The IBDP, as an inquiry-based approach to education rooted in a constructivist approach to learning (Tilke, 2011), is ideally suited to an education for the 21st century
- The core components of ToK and the EE have a value that far exceeds their combined 3 points
- There is a profound epistemological connection between ToK and the EE
- Collaboration between the IB Department, the Library and ICT can result in highly effective interventions that directly benefit IBDP students in their EE
- More broadly, these benefits extend beyond the EE to the work of the entire school in preparing students for access to and success at university

Thank you.

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