Print Versus Electronic Reading Preferences in South Africa: a Case Study at Three South African Universities

ECIL 2017, Saint Malo
19 – 21 September 2017
Overview

• Background to ARFIS
• SA participants
• Presentation of selected data
  – Quantitative
    • Comparison of three universities
    • Comparison of three UP groups
  – Qualitative
    • Limited, no detailed analysis
• Conclusions
Background to ARFIS

• “Academic Reading Format International Study”
  – Started by Diane Mizrachi at UCLA in 2014
  – Current coordinators Diane Mizrachi, Joumana Boustany and Serap Kurbanoglu
  – Standardised questionnaire

• 32 countries and counting

• Details of project at [http://arfis.co/](http://arfis.co/)
  – Full list of ARFIS publications
  – Extended bibliography
Questionnaire

• Six demographic questions
• 17 Likert-style statements on academic reading behaviours and preferences
• All questions include a box for optional comments
• An open prompt for any further information
SA participants

• University of Pretoria (UP)
  – City residential university
  – 55,000 students

• University of South Africa (UNISA)
  – Distance education university
  – 450,000 students

• University of Zululand (UniZulu)
  – Rural residential university
  – 16,000 students
Respondents

• University of Pretoria
  – Three groups
    • First-year students that do a compulsory computer/information literacy module (who have only e-books as course materials)
      – 2,941 valid responses
    • Undergraduate students form the Department of Information Science (years 2 and 3)
      – 208 valid responses
    • Postgraduate – Honours (year 4), Masters and doctoral
      – 79 valid responses

• University of South Africa
  – Students doing a module on “Developing information skills for lifelong learning” (typically years 3 and 4)
    – 70 responses
    – Between 25 and 40+ years old

• University of Zululand
  – Two groups
    • Humanities undergraduate
    • DIS undergraduate and postgraduate
  – 20 responses and on-going – logistical problems
I remember information from my course readings best when I read them in print.

My preferred reading format depends on the language of the reading.

I prefer reading foreign language material in print than electronic.

I prefer to read course readings which are in my native language electronically rather than print.

I prefer to read my course readings electronically.

I can focus on the material better when I read it in print.

I usually highlight and annotate my electronic readings.

I prefer electronic textbooks over print textbooks.

I am more likely to review my course readings when they are in print.

It is more convenient to read my readings electronically than to read them in print.

I prefer to have all my course materials in print format.

If an assigned reading is 7 pages or more, I prefer to read it in print.

If an assigned reading is less than 7 pages, I prefer to read it electronically.

I prefer to print out my course readings rather than read them electronically.

I like to make digital copies of my printed course materials.

I usually highlight and notate my printed course readings.

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I prefer to read my course readings electronically.

I prefer reading foreign language material in print than electronic.

I like to make digital copies of my printed course materials.
Comparison – SA/A (1)

<table>
<thead>
<tr>
<th></th>
<th>UP</th>
<th>UNISA</th>
<th>UniZulu</th>
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<tbody>
<tr>
<td>I remember information from my course readings best when I read them in print</td>
<td>73%</td>
<td>77%</td>
<td>55%</td>
</tr>
<tr>
<td>It is more convenient to read my readings electronically than to read them in print</td>
<td>26%</td>
<td>24%</td>
<td>30%</td>
</tr>
<tr>
<td>I prefer to have all my course materials in print format</td>
<td>69%</td>
<td>71%</td>
<td>30%</td>
</tr>
<tr>
<td>If an assigned reading is 7 pages or more, I prefer to read it in print</td>
<td>70%</td>
<td>73%</td>
<td>30%</td>
</tr>
<tr>
<td>I prefer to print out my course readings rather than read them electronically</td>
<td>66%</td>
<td>69%</td>
<td>35%</td>
</tr>
<tr>
<td>I like to make digital copies of my printed course materials</td>
<td>40%</td>
<td>53%</td>
<td>45%</td>
</tr>
<tr>
<td>I usually highlight and notate my printed course readings</td>
<td>83%</td>
<td>83%</td>
<td>75%</td>
</tr>
<tr>
<td>If an assigned reading is less than 7 pages, I prefer to read it electronically</td>
<td>39%</td>
<td>37%</td>
<td>55%</td>
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</tbody>
</table>
## Comparison – SA/A (2)

<table>
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<tr>
<th></th>
<th>UP</th>
<th>UNISA</th>
<th>UniZulu</th>
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</thead>
<tbody>
<tr>
<td>I am more likely to review my course readings when they are in print</td>
<td>77%</td>
<td>81%</td>
<td>55%</td>
</tr>
<tr>
<td>I prefer electronic textbooks over print textbooks</td>
<td>14%</td>
<td>11%</td>
<td>30%</td>
</tr>
<tr>
<td>I usually highlight and annotate my electronic readings</td>
<td>28%</td>
<td>29%</td>
<td>70%</td>
</tr>
<tr>
<td>I can focus on the material better when I read it in print</td>
<td>80%</td>
<td>77%</td>
<td>55%</td>
</tr>
<tr>
<td>I prefer to read my course readings electronically</td>
<td>14%</td>
<td>16%</td>
<td>35%</td>
</tr>
<tr>
<td>I prefer to read course readings which are in my native language electronically rather than print</td>
<td>18%</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>I prefer reading foreign language material in print rather than electronically</td>
<td>46%</td>
<td>29%</td>
<td>25%</td>
</tr>
<tr>
<td>My preferred reading format depends on the language of the reading</td>
<td>23%</td>
<td>27%</td>
<td>35%</td>
</tr>
</tbody>
</table>
UP:
I remember information from my course readings best when I read them from printed pages
Pro paper

• UP
  – I can highlight, make notes on them and basically personalize to suit me.
  – I have always found studying from printed papers to deliver the best results, thus I print all online sources and notes.
  – The screen is so tiring and less flexible. On the paper I can highlight and write my own summaries, and I am able to move at a faster pace.
  – […] I can go back and forth between pages quickly, and I can make notes.
  – “LONG LIVE THE HARD-COPY!!!!!!!”

• UNISA
  – In print it is easier to highlight, mark pages, tick from pages, make notes and side-notes, add color, summarise and annotate.
  – It is less time consuming to locate information and easier to refer back and to find information in printed material.
  – It is difficult to see the structure while scrolling through the information.
  – One can access print even when there is no electricity or internet is down.
  – I cannot focus for long hours […] and it is tiring and strenuous for the eyes.

• UniZulu
  – It much easier when I read a printed format because electronic end up causing headache and eye problem.
  – I prefer reading on a printed format, for me it is easier.
Pro e

• UP
  – Printed resources do not allow me to do a quick word search on the material, and that often frustrates me when I have to re-visit particular study concepts.
  – In terms of remembrance, what aids me most are the markups and comments I write while reading along. [...] flexibility of markup and so I am able to form a mental picture of important concepts [...]. I prefer electronic due to ease of access, integration in assignments and reference management software.

• UNISA
  – One remembers and concentrates better when reading electronically.

• UniZulu
  – [...] because it saves time and effort, as long as I have access to the internet I am then able to do my work accordingly. Instead of carrying books and printed article, I simple carry my external drive.
  – [...] because I can easily access it any time and I can share it.
  – For someone who lives in this day and age, the electronic format is more ideal in most situations.
Either

• **UP**
  – It does not matter which format the information is in, as long as I understand and take notes I am bound to remember the information.
  – I personally like reading from both.
  – I remember equally well from printed and e-resources.
  – Although I remember best from printed sources, I don't mind reading electronic copies.
  – I like reading so where I read the information from really does not make a difference.

• **UNISA**
  – It makes no difference and I read print or electronically with the same ease.
  – I can relate to both formats.

• **UniZulu**
  – I prefer reading both in electronic and print format because the information is still the same no matter the format.
Summary

• Pro paper
  – Easy to remember, get mental picture etc.
  – Easier, for making notes, high-lighting etc.
  – E-reading is strenuous
  – Don’t like computers
  – Unreliable internet and electricity access

• Pro e
  – Easy to remember, get mental picture etc.
  – Additional functionalities, e.g. making notes, high-lighting, search, integration etc.
  – “In this day and age...”

• Either
  – I like reading and the format doesn’t matter
  – As long as I understand the material
UP:
It is more convenient to read my assigned readings electronically than to read them in print.

<table>
<thead>
<tr>
<th>AIM (1st y)</th>
<th>IS - undergrad</th>
<th>IS - postgrad</th>
<th>All</th>
</tr>
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</table>
UP:
I prefer to have all my course materials in print format (e.g. book, course reader, handouts)
UP:
I prefer electronic textbooks over print textbooks
I am more likely to review my course readings (after I've read them at least once) when they are in print.
I usually highlight and notate my printed course readings
UP:
I usually highlight and annotate my electronic readings

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Comments

• In general, strong preference for print
  – Correlates with most other country reports
  – UniZulu notable exception – number of respondents?
• Limited difference between junior and senior students
• Limited difference between residential and distance education students
• Preference for electronic format increases with seniority (postgraduates)
Conclusion

• First report from South Africa (and Africa?)
• More detailed analyses are required
  – All questions
  – All enriched by qualitative comments
  – Comparisons of gender and age differences, as well as gender with age
  – Addition of more data from UniZulu
• Detailed comparison with other studies is required
• To be published in 2018
Thank you!
Questions / comments?

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