The Digital Education Revolution
Introducing Digital Literacy

Peter Gallert
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Chapter Outline

1. The world has changed!
   - Gathering Information
   - Education

2. Have We?
   - A Typical School
   - Tales From Namibia

3. Suggestions of Where to Start
   - The Digital Curriculum
   - Getting Involved
Where to go if we don’t know?

- **Old:** libraries, archives, information centres, text books, printed directories
- **New:** Google, Google, Google, Google, Google, Google
- **Old methods still useful**
  1. for selected information (topic, reliability)
  2. for primary information
  3. for anything older than 20 years
- **Old:** Altavista, Yahoo! Search, MSN Search, Google, Ask.com
- **New:** Google, Google, Google, Google, Google, Google
- **Well, not quite. A few specialised sites are:**
  1. Baidu (China)
  2. Yahoo! (USA)
  3. Bing (formerly MSN search, USA)
  4. Wolfram Alpha (AI attempt, Germany)
- but Google is by far the most important (85% market share)
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Educational Climate Change

- **Delivery**
  - Multimedia content
  - Online course material (*Example*)
  - Electronic distance learning
  - MOOC: Massive Open Online Course

- **Institutions**
  - Core business needs: Information Technology
  - Meeting culture (video conferencing)
  - Job opportunities (technocrats vs. illiterates)

- **Knowledge access**
  - Free access, e.g. at Wikipedia, OpenStreetMap, MIT OpenCourseWare, Saylor Foundation
  - CopyRight and CopyLeft, Creative Commons
  - Readership $\Rightarrow$ impact
  - Impact $\Rightarrow$ money
The world has changed!

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Peter Gallert (PoN)
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A typical school

- A typical school
  1. Creates and consumes copyrighted content
  2. Keeps student work and its assessment hidden and inaccessible
  3. ⇒ hardly gets any input from outside
  4. Adapts every few years

- A revolutionary school
  1. Shares its best content with others, uses good content from others, free of charge
  2. Makes available student work and its assessment
  3. ⇒ has a good chance of valuable input from outside
  4. Adapts every few weeks

- Which one would you have wanted to attend?
- Which one do you want to lead?
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Epukiro Post 3 JSS
Namibia today

1. Downs
   - Many teachers computer illiterate
   - Many computer instructors not teachers
   - Quite a few schools without electricity
   - Slow process of re–curriculation
   - Computer instruction only guaranteed in private schools

2. ... and Ups
   - Teachers and pupils have smartphones
   - Pupils and teachers eager to learn
   - Quite a few schools have computer labs
   - Change of teaching style ⇒ no re–curriculation
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What kids need to know

Kids need a minimum basket of knowledge and skills:

- **Content creation experience**
  1. Appreciate how easy publishing is
  2. Un–learn to believe everything that’s published
  3. Knowledge consumer ⇒ knowledge creator

- **Basic technical understanding**
  1. Detect spam and rip–off attempts
  2. Learn that the Internet doesn’t forget
  3. Apply ethical principles to electronic communication

- **Some business knowledge**
  1. Understand the meaning of capitalism
  2. Detect manipulation attempts
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What you can do

1. Embrace technology rather than evade or fight it
2. Do lobby work to people who evade or fight
3. Utilise the technology that you do have
4. Request what you don’t
5. Encourage use of ‘blended e–learning’
6. Practice what you preach:
   - Contribute to open and free knowledge
   - Make available your material, administrative and content wise
   - Travel the web with open eyes and a sharp brain
   - Teach others what you learned
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Any questions?

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