# Too Much Information



My desire to be well-informed is currently at odds with my desire to remain sane.

Session 3

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# "How to reduce the problem of information overload in online learning communities?"

# Email Overload

- filtering mechanisms
- conversational threading
- automatic filing
- marking messages for urgency
- better subject headings
- alternative methods of distributing non-urgent information

# Group Communication Overload

- ○ arises primarily for asynchronous communication
- ○ contributions can build up rapidly
- ○ difficulty in picking out useful contributions

The trick is to find a balance between avoiding overload and maintaining social cohesion.
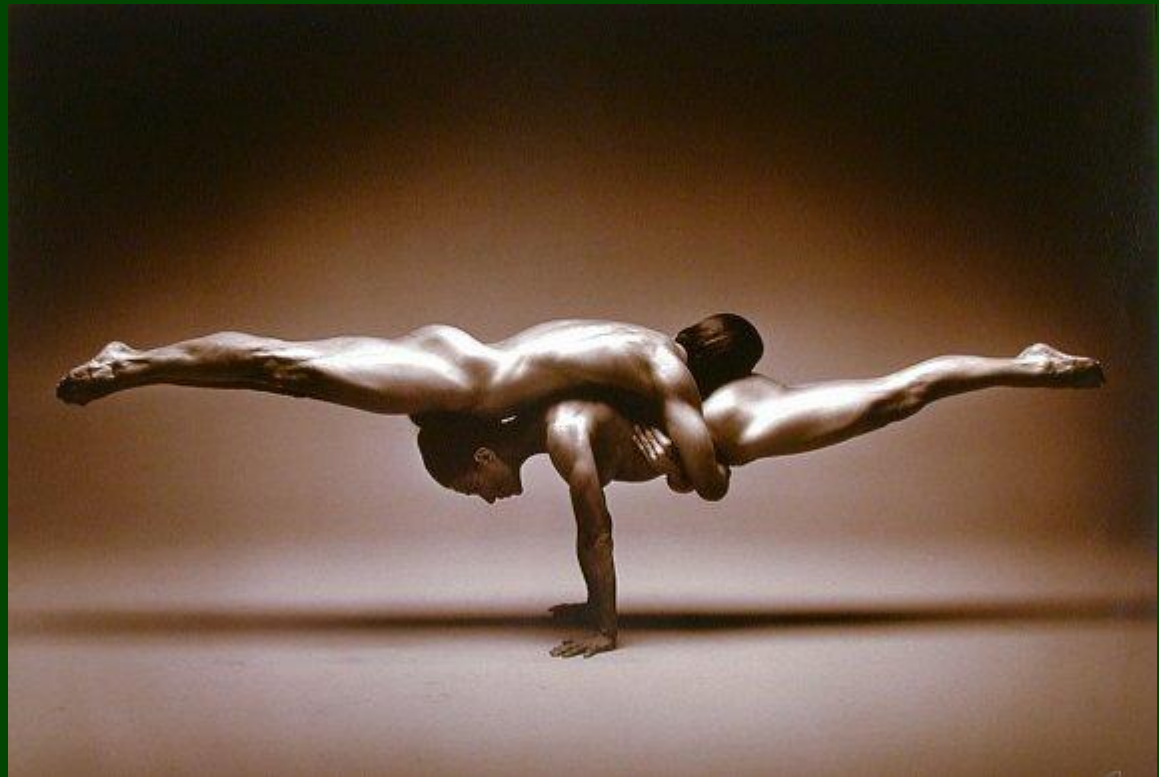
# Forum Overload

Students' Views - "takes too much time"

Tutors' Views - "takes too much time"

Software?
First Class Forum?

- searching
- sorting
- threading
- sub forums

Ain't Nobody Got
Time For That!

someecards
user card

# Following the Thread - Linear

"Poor organization of contributions … can itself contribute to a sense of overload …"(pg. 81)

Threading (linear) - chronological sequencing of messages on the same topic
- follow a 'conversation'
- organize into groups

Schwan et al. (2002) study results: "... although students can cope with disconnected messages, good threading facilities are needed to help them to engage fully and easily in in online discussions." (pgs. 82-83)

# Following the Thread - Hierarchical Approach

To add a message to a thread, the viewer must reply to a message.
"The result is a branching structure of initial messages, replies and replies-to-replies." (pg. 83)

"Students view threading … as a helpful feature.  However, … threading can become confusing"(pg. 81)

- lack of convergence
- visual separation of threads

"The best choice of threading style may depend on the purposes of the forum and the degree of experience of the learners." (pg. 85)

# Recommending and Rating

- to help identify valuable
  resources and contributions

  Follow Amazon?



- user-generated reviews and ratings
- information on users' choices are used to make
  recommendations to others

Caution: "What happens if people feel their contributions
are not valued?" (Preece, pg. 86)

# Filtering - In combination with ratings

"... separate the signal from the noise." (pg. 87)

- Highlight items with high ratings
- Remove items with low ratings
- Sort by variety of parameters (date, topic, contributor, etc.)

Caution: "If messages are filtered out, the connectivity of a thread can be disrupted." (pg. 87)



"May I suggest a wine and a filter setting?"

# Bookmarking

## Possibilities

- store bookmarks to web resources online, so they're not 'computer specific'.

- share bookmarks with others

- shareable bookmarks could form the basis for a 'social bookmarking facility within the discussion forum" (pg 88)



"Fleming, bookmark that site."

# Case Study - New Features for Discussion Forums

- UK Open University
- Study to address student overload in discussion forums
- Students used two versions of a discussion system.
- The 'enhanced' version was used in the second half of the course
- The enhanced version focused on …

- branching instead of linear threading
- a facility for recommending messages
- filtering of messages using different criteria
- a 'clipping' facility for bookmarking useful messages

# Case Study - Results - **Feelings of Overload**

- students felt overloaded, when using discussion forums, during the first half of the course, as they had in other courses.
- overload was mainly caused by seeing large numbers of unread messages
- students felt less overloaded, in second half of course, when using the enhanced version
- little difference in percentages of messages read

Note 1: Students may have become more confident anyways, as the course progressed

Note 2: Some students feel "compelled to observe all the communications … to maintain confidence that nothing relevant is being overlooked".

# Case Study - Results

## *Features for Message Threading*
- branched threading was largely preferred
- most students favoured isolating the threads visually, so only one was visible at at time

## *Recommending Messages*
- recommendation facility was used very little
- felt the value of a message was a personal choice
- felt they couldn't provide helpful recommendations

# Case Study - Results

***Filtering Messages - Students could filter by old/new, read/unread, or recommendations***

- recommendations were rarely used
- read/unread was said to be the most useful
- 'hiding' read messages seemed more effective than 'highlighting read messages

***'Clipping' Useful Messages***

- rarely used
- prefered personal computer storage
- issues with convenience (had to connect to internet)
- issues with permanency (couldn't be accessed once course was over)

# Case Study - Conclusions

*"On the range of facilities designed to reduce overload, somer were received favourable by students, whereas others were used very little"* (pg. 91)

- branched threading was largely preferred over linear
- recommended messages not successful
  - students uncomfortable with making 'judgments'
  - short course, so students did not know each other well
- students felt less overloaded in second half of course
  - students more experienced
  - new features helpful

# Online Image Sources

Dator, Joe. [Untitled cartoon of a customer and waiter]. Retrieved January 24, 2014 from http://tinyurl.com/qb4cx6b

McDonald, Quinn. [Untitled photo of woman with threads]. Retrieved January 24, 2014 from http://tinyurl.com/nvzyexf

NGenius. (2008). [Untitled cartoon of email message of lost pen]." Retrieved January 24, 2014 from http://tinyurl.com/nhbudcs

Sipress, D. (2012). [Untitled cartoon of two people walking]. Retrieved January 23, 2014 from http://tinyurl.com/m9q8lgw

[Untitled cartoon of person saying um]. Retrieved January 23, 2014 from http://tinyurl.com/kbv825p

[Untitled photo of two women balancing]. Retrieved January 24, 2014 from http://tinyurl.com/nht3zcx

[Untitled illustration of woman shaking finger].  Retrieved January 24, 2014 from  http://tinyurl.com/ol59qgy

[Untitled photo of tree with branches]. Retrieved January 24, 2014 from http://tinyurl.com/oalmvl5

# Using Information on the Web
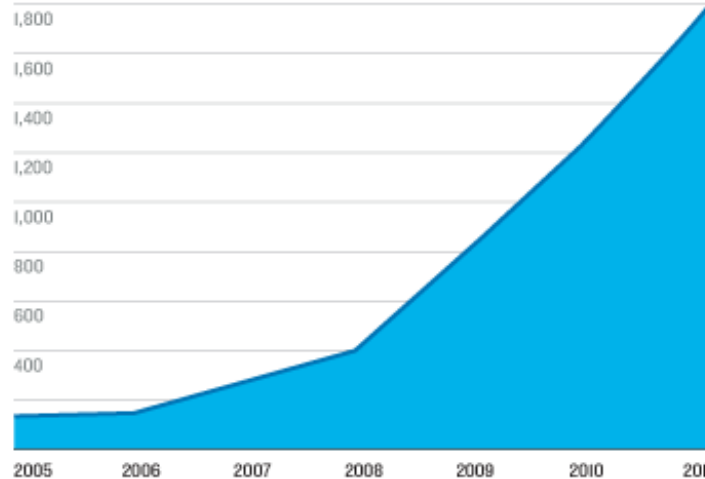
# Information Literacy

- The ability to use the internet in a productive way by finding and evaluating information, and using it effectively and appropriately



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www.glasbergen.com

"I told you we could find the answer on the Internet: The Hudson River was named after the Hudson Brothers, Bill, Mark, and Brett, a lively music-comedy-variety act from the 1970's, loosely patterned after the antics of The Beatles, Monkees, and Three Stooges."
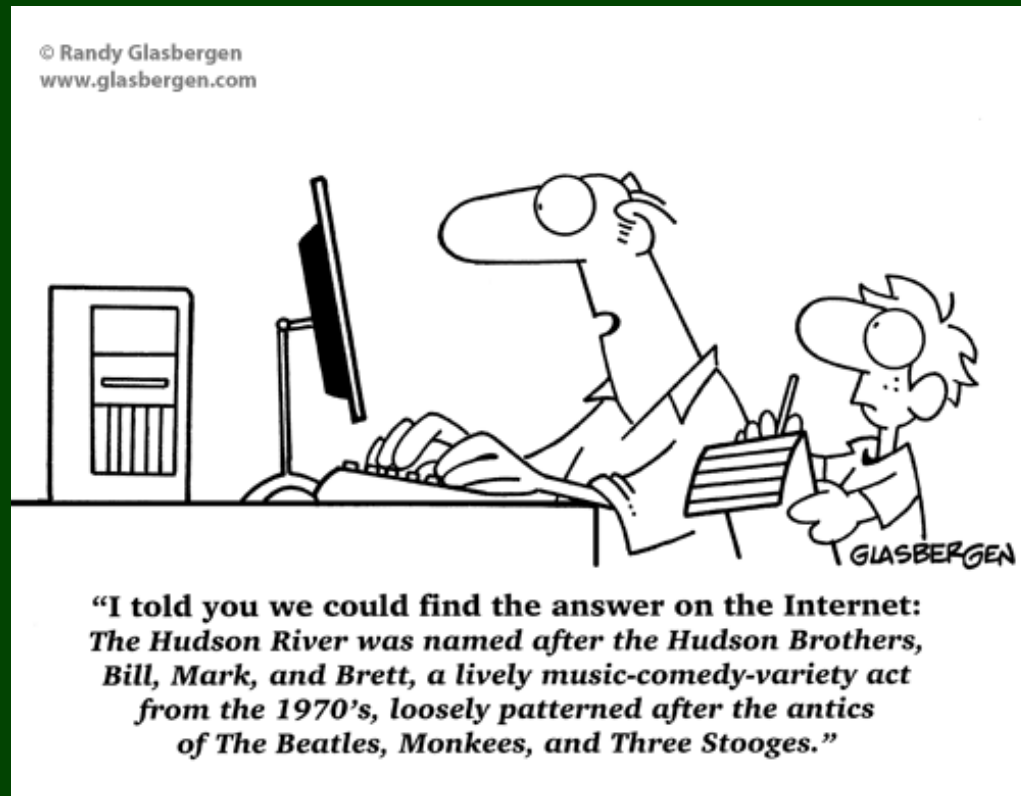
# Information Literacy Skills

Support necessary for learners in developing skills to evaluate and use web-based information

- <u>Open University Library - Safari</u>
  - Information on searching the web, using library databases, referencing sources, etc.

- RSS aggregators

- Social Bookmarking Sites
  - <u>Delicious</u>
  - <u>Digg</u>

# Social Bookmarking

★ Allows users to bookmark web resources with the links to sites stored in the users area online.

★ Large numbers of websites bookmarked so overload still a problem

★ Tagging helps reduce overload

○ Tags indicate something about the resource (content or purpose)

○ one resource can have many different tags as opposed to fitting into one category

# Social Bookmarking Disadvantages

★ Users may create different tags for same purpose

★ Users may create same tags for different purposes

★ Variations or mistakes in spelling (Purple Sharpie vs Sharpie)

# Social Bookmarking Case Study

- Dubai Men's College
- Bachelor of Applied Science in Business
  - *Monetary Theory* (final course)
- All men
- To create a community of learning using Diigo social bookmarking site
- Student Participation
  - 19 students
  - 16 registered
  - 10 active



http://imgkid.com/conversation-art.shtml

# Student Feedback

- All 19 students asked to complete online survey
- Only 10 completed survey
    - 63% helped learning a bit
    - 37% helped learning a lot
    - overall enjoyable and beneficial

# Conclusion to Case Study

- Planning, implementation and re-evaluation of learning activities and assessments necessary

- Adequate scaffolding to help develop skills necessary

# Observing how others are using bookmarks and tags can reveal patterns and connections

Harvard's H2O Playlist offers a facility for grouping and sequencing resources into shareable 'playlists'

# Survey

- **Purpose:** To collect and collate cohort ideas regarding facilitator and student role in the management of information overload.

- **Procedure:** Cohort members were contacted and their input sought on two questions.
  - *How can the facilitator reduce information overload* and,
  - *How a student in an online class can be proactive at reducing information overload*
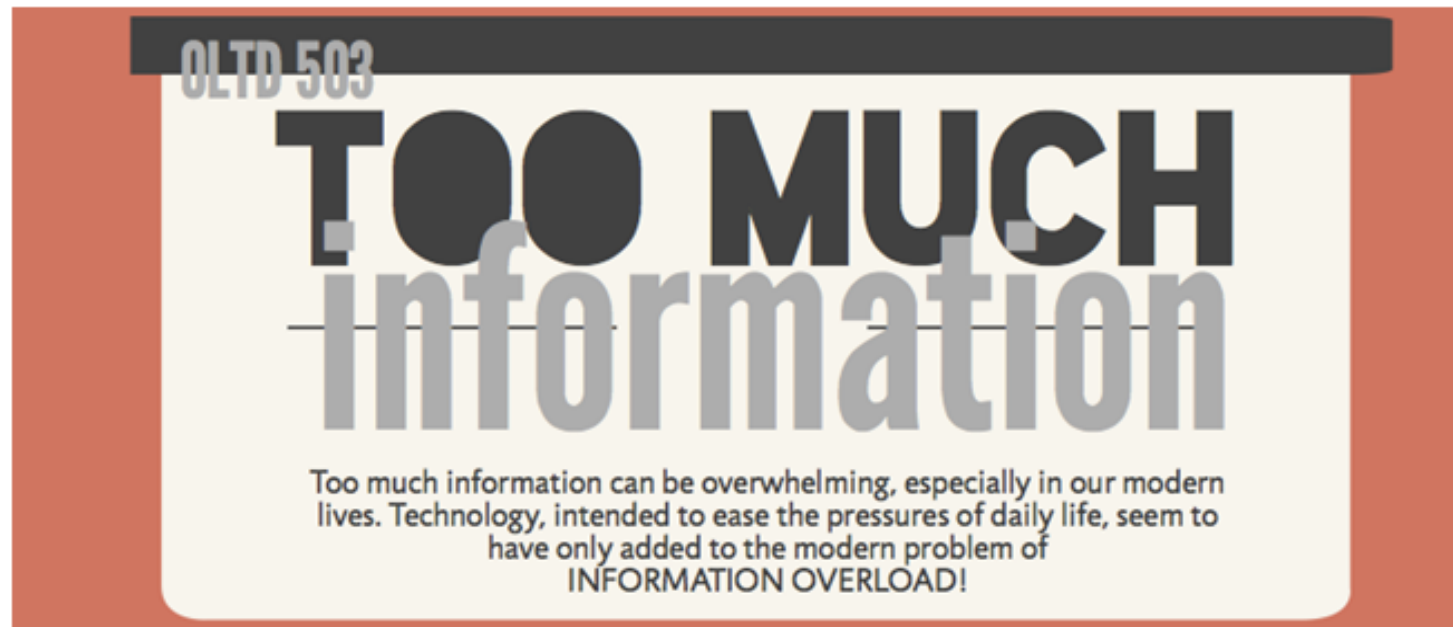  - Cohort questions were aggregated and used in the development of the survey.

# The Results

- The survey was conducted using the online survey provider Fluidsurvey.

- Once completed the report created by Fluidsurvey was analyzed.

- Results were incorporated into the infographic *Too Much Information*.

# Question: How do we as a group handle

## Too Much Information??



OLTD 503

# TOO MUCH
## information

Too much information can be overwhelming, especially in our modern lives. Technology, intended to ease the pressures of daily life, seem to have only added to the modern problem of INFORMATION OVERLOAD!

Full infographic is viewable at;
http://rahills.weebly.com/oltd-503---online-communications.html

# A little bit to consider ...

Multitasking is a relatively new concept originating from computer programing on the 60's. It is a computer based concept not a human based concept.

**In a recent poll of office workers ...**

55% experience information overload!

43% are stressed as a result!!

One third are overwhelmed!!!

The amount of scientific information discovered in the last 20 years is more than all discoveries up to that point , from the beginning of language!

Roman philosopher Seneca once said that the number of books is a distraction and recommended focusing on a limited number of good books.

A study done by Temple University concluded that as you give a person more and more information that they reach "cognitive overload".

At 23 years of age ...every 60 seconds on the internets ...

98,000 tweets

160 million emails

694,445 Google searches

So ... how do we compare?

# So how do we compare?

Do we ever feel
**overwhelmed?**
**95% YES!!**
which leads to 90% those
overwhelmed feeling
stressed.

**Leading 'stressor'?**
Too much communication
requiring immediate
attention.

Who should manage the
information overload, facilitator
or student?
**90% vs 50%**

Being a digital native is not
synonymous with being able to
manage information overload.

Learning new
technology doesn't
cause us concern.

**We think the following can help ...**

Facilitators should ...

Agree .........................Strongly agree

Use twitter
Employ multiple tools
Use email
Limit resources use

Provide clearly
defined structure
Chunk materials
Limit readings
Teach prioritization techniques

If you have any questions please do not contact me as I, like many
others, miss ONE THIRD of emails due to excessive volume!

Housekeeping tips for this week

You have a choice of 4 activities for this week
Choose **1** and please submit it in the correct location inside of Group 3's drop box by Thursday

- If you have questions or problems with the assignments that need any journal articles, please direct questions to Kym

- If you have questions about the infographic, please direct your questions to Robert

- If you have questions about the video assignment, please direct your questions to Sandra (For the video link in the PDF, please cut and paste the URL into a web browser.)

Thank you for listening and participating in our group's activities.