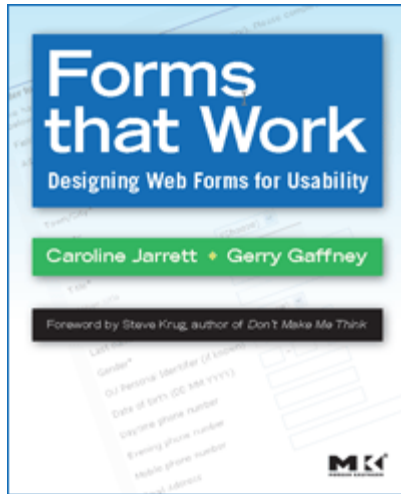


Search is now normal behaviour

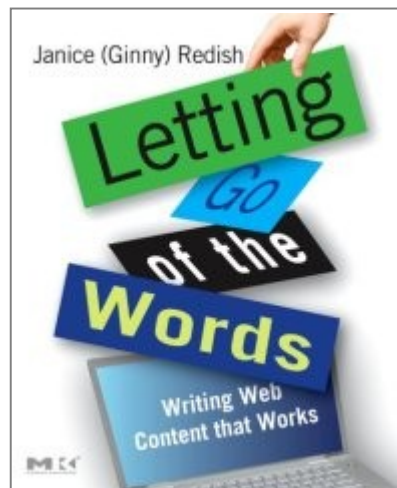
What do we do about that?

Caroline Jarrett

A word from my publisher



Jarrett and Gaffney (2008)
“Forms that work: Designing
web forms for usability”
Morgan Kaufmann



Redish (2007)
“Letting go of the words:
writing web content that works”
Morgan Kaufmann

Acknowledgements

- Ian Roddis, Head of Online Services, Open University
- Viki Stirling, Open University
- Sarah Allen, Open University
- Whitney Quesenbery, Whitney Interactive Design

Outline

Background to this work

What information do visitors search for?

What are “good” search results?

What are the differences between internal search and external?

How do users interact with the Google results page?

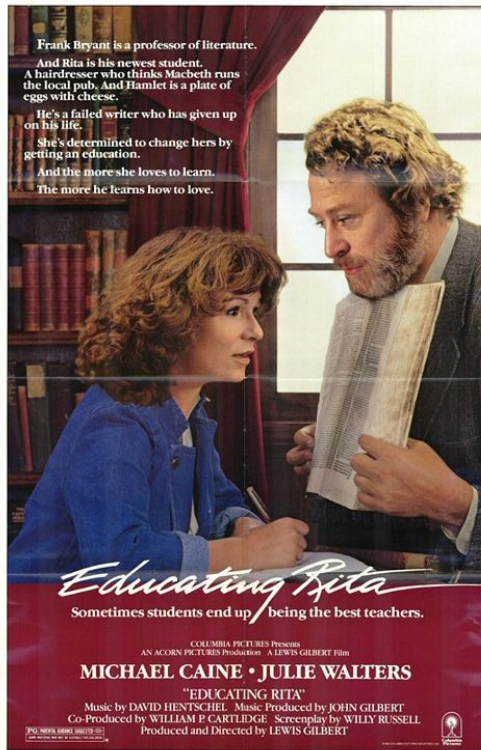
The Open University

First successful distance university

Invented open admissions

Most students also work full time

- 200,000+ students
 - 10,000+ students with disabilities
- 50 million pages viewed per month
- 2000+ websites



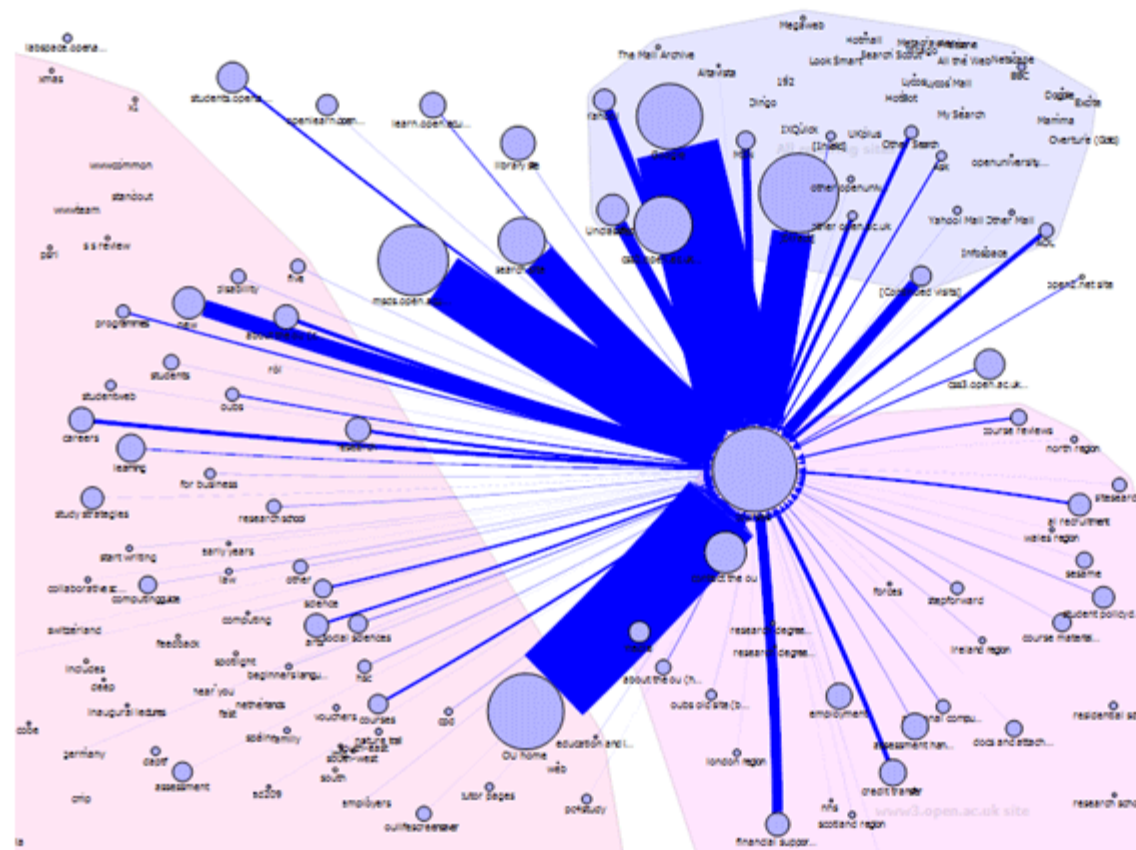
We use many sources of data to inform design

- Search log analyses:
 - 2004, 2006, 2008
- Site tracking, continually
- Expert inspections of search results:
 - 2007, 2008, 2009
- Usability testing
 - Face-to-face, often
 - Face-to-face with eye-tracking, occasionally
 - Remote with people with disabilities, occasionally

Site tracking showed high levels of traffic from search engines: 15% internal, 49% external

Basic Statistics

Number of Visitors	Number of Visits	Registering Visits	Conversion Rate	Repeat factor	Dwell Time	Funnel factor
437,100	670,300	17585	4.0%	0.53	6m 14secs	n/a



The top referring sites to Study are...

	% of Visitors
External Referrers	
Google	35%
Direct	17%
AOL	6%
Yahoo	4%
MSN	4%
Internal referrers	
OU Home	35%
msds (SAMS etc)	23%
Search	15%
css3 (etma)	13%
css2 (brochures / registration)	9%
New	7%

Outline

Background to this work

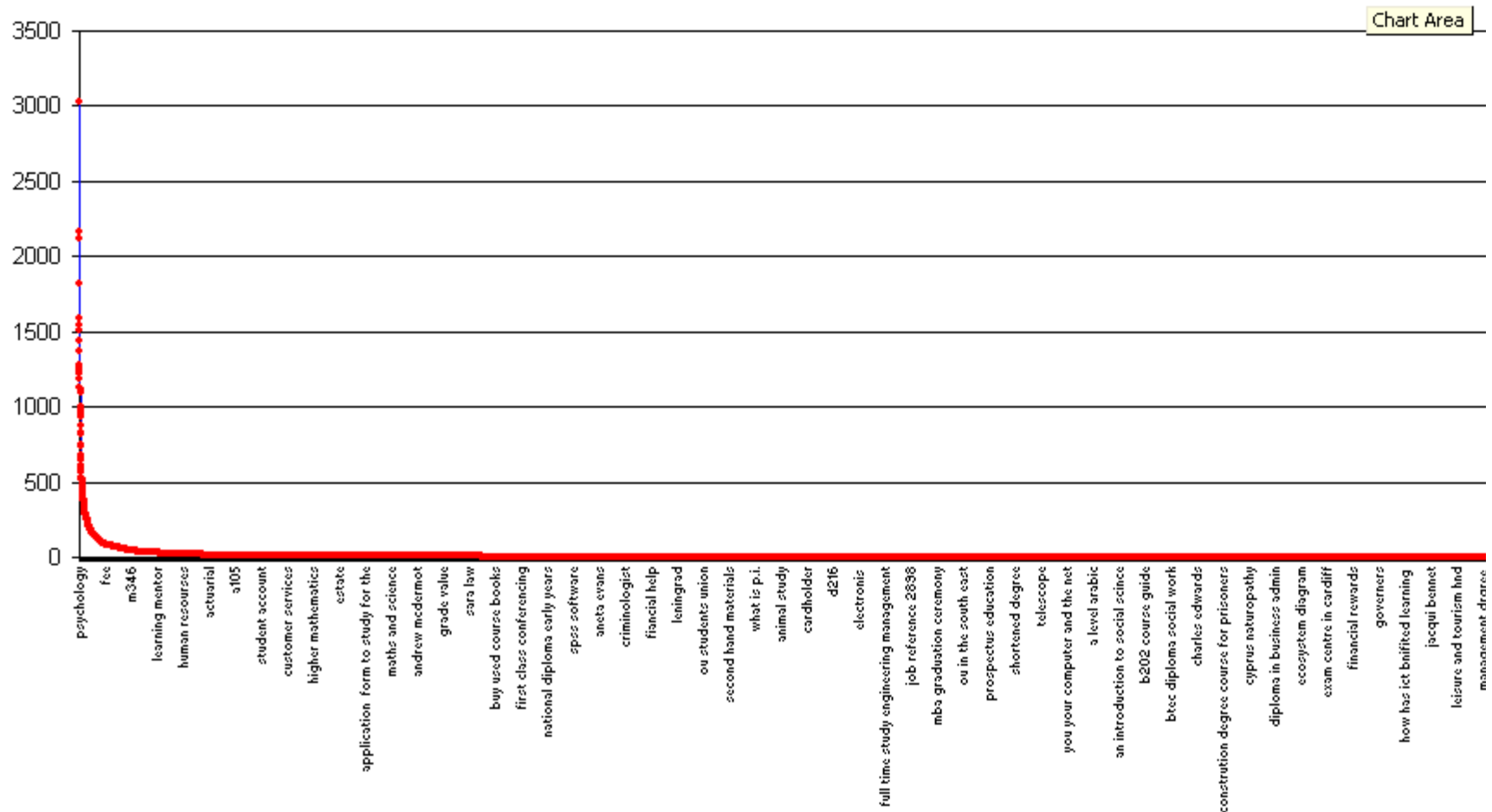
What information do visitors search for?

What are “good” search results?

What are the differences between internal search and external?

How do users interact with the Google results page?

The OU search logs show the typical “sharp peak” / “long tail” pattern



Data from October 2006; consistent pattern in each review

Top themes persist from month to month and year to year

May-04		Jan-05		Oct-06		Feb-08	
Term	Rank	Term	Rank	Term	Rank	Term	Rank
psychology	1	psychology	4	psychology	1	psychology	1
law	7	law	6	law	7	law	5
social work	10	social work	8	social work	10	social work	14
teaching	12	teaching	7	teaching	18	teaching	7
counselling	13	counselling	15	counselling	14	counselling	6
pgce	14	pgce	12	pgce	19	pgce	4
mba	16	mba	19	mba	9	mba	8
photography	19	photography	24	photography	6	photography	2
history	20	history	13	history	17	history	10

There are some seasonal variations

May-04		Feb-08	
Term	Rank	Term	Rank
past exam papers	15	past exam papers	129
exam results	Not in top 12,000	exam results	1285

The sharp peak / long tail / persistent themes pattern recurs often

- Across audiences
- When narrowed by theme: for example, within a particular subject
- Over time: themes persist from month to month
- Across internal and external search engines

Even small groups of terms show this pattern – and also “persistent themes”

classics	187
classical studies	81
classical history	34
classical	19
classics department	16
classical physics of matter	15
classical civilization	7
classical studies noticeboard	6
classical studies start date	6
classical civilisation	5
classical greek	5
classical latin	5
classical studies prospectus	3
classical studies web site	3
classical website	3
classics course	3
classical civilizations	2
classics dept	2
classical controls	1
classical day in the british museum	1
classical management control	1
classical music	1
classical studies courses	1
classical studies department	1
classical studies presentation	1
classical theatre	1
classical theory of labor market	1
classication	1
classicla studies	1
classics degree	1
classics faculty	1
classics fees	1
classics greek	1
classics ma	1

95% of these search terms are within the theme of classical studies

Internal search
March 2008

Designing for
the top 10
terms deals
with 98% of
the searches
in this sample

classics	187
classical studies	81
classical history	34
classical	19
classics department	16
classical physics of matter	15
classical civilization	7
classical studies noticeboard	6
classical studies start date	6
classical civilisation	5
classical greek	5
classical latin	5
classical studies prospectus	3
classical studies web site	3
classical website	3
classics course	3
classical civilizations	2
classics dept	2
classical controls	1
classical day in the british museum	1
classical management control	1
classical music	1
classical studies courses	1
classical studies department	1
classical studies presentation	1
classical theatre	1
classical theory of labor market	1
classification	1
classicla studies	1
classics degree	1
classics faculty	1
classics fees	1
classics greek	1
classics ma	1

Persistent themes allow you to concentrate on the top terms with confidence

- Top 10 terms are crucial
- Top 100 terms are important
- After top 1000, you can stop worrying
 - Until you're convinced that the top 1000 are working really well

Outline

Background to this work

What information do visitors search for?





What are “good” search results?

What are the differences between internal search and external?

How do users interact with the Google results page?

We wanted to know how different search engines compared on our top terms

- We ran a heuristic review of 4 different search configurations
- Searched on each for the top 25 terms
- Graded the results on a +3 to -3 scale
- Added up the scores

Overall Success Scores		
Search 1	(+31)	
Search 2	(+1)	
Search 3		 (-8)
Search 4		 (-17)

Good search results showed the breadth and depth of the OU content

- A high-quality result at the top
- All links on the first page are appropriate results
- Alternative meanings of the search term
- Linking to more than one OU site (when appropriate)
- For subjects: at least one course and one qualification

Good results: an excellent first click and then variety within the theme

Your search for **library** produced the following results:

All OU content (13157)

All

Results 1 - 10 of 13157 items found

Result Page: 1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)

[Library and Learning Resources Centre at the OU](#)

The Open University - **Library** and Learning Resources Centre
<http://library.open.ac.uk/>

[Library and support services to partner institutions](#)

Links to Open University services and freely available resources for partner institutions
<http://library.open.ac.uk/libpartnerships/>

[FSRG: Library - Social Sciences - The Open University](#)

Friendly Societies Research Group - **Library**
<http://www.open.ac.uk/socialsciences/friendly-societies-research-group/library.php>

[Using other libraries](#)

Information literacy refers to the set of skills required to locate, evaluate and use information effectively.
<http://www.open.ac.uk/iltoolkit/pages/using-other-libraries.php>

[Open Library at a glance tour](#)

Information literacy refers to the set of skills required to locate, evaluate and use information effectively.
<http://www.open.ac.uk/iltoolkit/pages/open-library-at-a-glance-tour.php>

[Library - Alumni - The Open University](#)

Poor results exposed technical gaps

- Repetition of links for the same information
- A link that required a sign-in (especially for the public collections)
- Links that seemed to have no relevance
- Links with poor titles or descriptions
- Links to technical content such as RSS feeds

Poor results: appears to be no variety

Your search for **french** produced the following results:

All OU content (2247)

All OU con...

Results 1 - 10 of 2247 items found

Result Page: 1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#)

[Bon Départ: Beginners' **French** - Open University course](#)

The Open University online prospectus; Courses & Qualifications - LZX192 Bon Départ: Beginners' **French**, Bon départ is course in the University's ..

<http://www3.open.ac.uk/courses/bin/p12.dll?C01LZX192> - 28.5K

[Bon Départ: Beginners' **French** - Open University course](#)

The Open University online prospectus; Courses & Qualifications - L192 Bon Départ: Beginners' **French**, Bon départ is the in the University's ..

<http://www3.open.ac.uk/courses/bin/p12.dll?C02L192> - 29.3K

[Ouverture - A Fresh Start in **French** - Open University course](#)

The Open University online prospectus; Courses & Qualifications - LZX120 Ouverture - A Fresh Start in **French**, Ouverture from L192/LZX192 Bon ..

<http://www3.open.ac.uk/courses/bin/p12.dll?C01LZX120> - 28.5K

[Ouverture: A Fresh Start in **French** - Open University course](#)

The Open University online prospectus; Courses & Qualifications - L120 Ouverture: A Fresh Start in **French**, Ouverture fol from L192/LZX192 Bon départ ...

<http://www3.open.ac.uk/courses/bin/p12.dll?C01L120> - 32.2K

[Nouvelles Mises au Point - Open University course](#)

Change the internal search engine

[Search](#) [Advanced se...](#)

Search Results

Results **1-10** of about **66,339** for **french**

Sort by relevance - [Sort by date](#) - [Sort by size](#)

[French Studies | Undergraduate Courses, Degrees, Diplomas, ...](#)

The Open University offers a range of **French** Studies Qualifications including degrees, ... Undergraduate **French** On this page Where to start Degrees Diplomas ...
www3.open.ac.uk/study/undergraduate/languages/french/index.htm - 10 Nov 2009 - 20k - [More results from this site »](#)

[LXR122 - Action in French \(French summer school\) - Open ...](#)

Develop your basic **French** language skills – speaking and writing – and understanding of France and its ... in **French** (**French** summer school) On this page ...
www3.open.ac.uk/study/undergraduate/course/lxr122.htm - 11 Nov 2009 - 29k - [More results from this site »](#)

[C33 - Certificate in French - Open University](#)

Learn to read, write and speak in **French**, building your knowledge of grammar and vocabulary, ... in **French** On this page Planning your studies Courses ...
www3.open.ac.uk/study/undergraduate/qualification/c33.htm - 11 Nov 2009 - 16k - [More results from this site »](#)

[Home - Action In French - The Faculty of Education and Language ...](#)

Register Online Action in **French** (LXR122) Introduction Action in **French** is a week-long residential course ... 's other **French** courses, and it is open to those ...
www.open.ac.uk/action-in-french/index.shtml - 10 Nov 2009 - 14k - [More results from this site »](#)

[The OU: Beginners' Languages](#)

This page contains details the Open University's Beginners Languages courses in **French**, ... Beginners' Languages courses in **French**, German and Spanish.
www.open.ac.uk/beginners-languages/index.cfm - 10 Nov 2009 - 24k - [More results from this site »](#)

[Open Research Online - Innovative practices in French ...](#)

Innovative practices in **French** monolingual learners' dictionaries as compared with their English ... Innovative practices in **French** monolingual learners' ...
oro.open.ac.uk/721/ - 10 Nov 2009 - 15k - [More results from this site »](#)

Create pages
that can be
found by the
search engine

[Search](#)[Advanced](#)[Search Results](#)Results **1-10** of about **447** for **exam results**[Sort by relevance](#) - [Sort by date](#) - [Sort by size](#)

[Exam results: summaries](#)

Notes from – Keynote Address Source: Stephen Twigg MP, Parliamentary Under-Secretary of State for Schools ... Keynote address at GA Annual Conference, from ...

labspace.open.ac.uk/file.php/2660/geog_sk6_02t_4.pdf - 30 Jul 2008 - 57k - [More results from this site »](#)

[Exam results: summaries](#)

Notes from – Keynote Address Source: Stephen Twigg MP, Parliamentary Under-Secretary of State for Schools ... Keynote address at GA Annual Conference, from ...

openlearn.open.ac.uk/file.php/2471/geog_sk6_02t_4.pdf - 30 Jul 2008 - 57k - [More results from this site »](#)

[Latest Sesame out with course results and Andrew Marr interview ...](#)

Site tools FAQs Submit content OU news Latest Sesame out with course **results** and Andrew Marr ... It takes a while for **exam results** to be collated and analysed.

www.open.ac.uk/platform/news/ou-news/latest-sesame-out-course-results-and-andrew-marr-interview - 13 Nov 2009 - 17k - [More results from this site »](#)

[Open Research Online - Post-graduate Forensic Engineering at The ...](#)

In: Proceedings of the International Conference on Innovation, ... students per year, and has a high retention record as well as excellent **exam results**.

oro.open.ac.uk/12221/ - 10 Nov 2009 - 14k - [More results from this site »](#)

[OU computer use](#)

Online forums offer a way to contact other students and ... collect your assignment and **exam results**, or to write notes and assessments using word processing.

www.open.ac.uk/pc4study/ou-computer-use/index.php - 10 Nov 2009 - 7k - [More results from this site »](#)

[Course reviews: Sociology and society \(DD201\)](#)

place and I was rewarded with **exam results** that were above average for the course this year. ... And don't walk out of the **exam** early - keep going!

www3.open.ac.uk/coursereviews/course.aspx?course=DD201 - 01 Nov 2009 - 25k - [More results from this site »](#)

Outline

Background to this work

What information do visitors search for?

What are “good” search results?

What are the differences between
internal search and external?

How do users interact with the Google
results page?

External search creates a lot of traffic

In a typical month (October 2006)

396,000 visitors via search

120,000 unique search terms

5.5 million clicks

The top 20 search terms from Google show a major theme

Search Term	18-Jul-08	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	Total
open university	3455	2039	2538	4162	4154	3777	3355	23480
ou	1308	761	733	1472	1468	1347	1313	8402
open uni	402	230	249	409	423	441	449	2603
open	197	163	141	225	195	196	196	1313
the open university	193	115	132	208	218	221	222	1309
open university uk	115	81	74	130	127	169	175	871
open.ac.uk	101	64	76	116	153	116	99	725
www.open.ac.uk/students	65	43	49	62	85	54	73	431
distance learning	73	32	47	66	77	65	49	409
open university	57	42	46	60	62	70	54	391
www.open.ac.uk	57	28	32	68	51	61	54	351
openuniversity	49	26	36	59	47	62	54	333
open university student home	38	18	25	39	39	53	44	256
open university milton keynes	35	12	24	40	38	29	36	214
open university london	26	11	29	26	49	39	28	208
linking words	24	20	22	23	42	38	38	207
open university courses	32	7	22	45	33	36	26	201
application letter	15	5	6	42	50	49	25	192
the open	69	64	47	6	1			187
home learning	22	6	16	32	38	25	20	159
open learning	17	21	22	27	24	28	18	157

I did a detailed analysis of a month's searches, looking at terms with two or more hits

A brand marker only
"Open Uni" 86%

A brand marker plus another term
"open university course" 7%

A general term only
"creative writing" 7%

Term	Searches	Type of search
open university	2,901,569	pure marker
<u>ou</u>	479,707	pure marker
open <u>uni</u>	159,927	pure marker
the open university	95,090	pure marker
open university <u>uk</u>	87,359	pure marker
open university courses	51,485	marker + term "courses"
www.open.ac.uk	49,400	pure marker

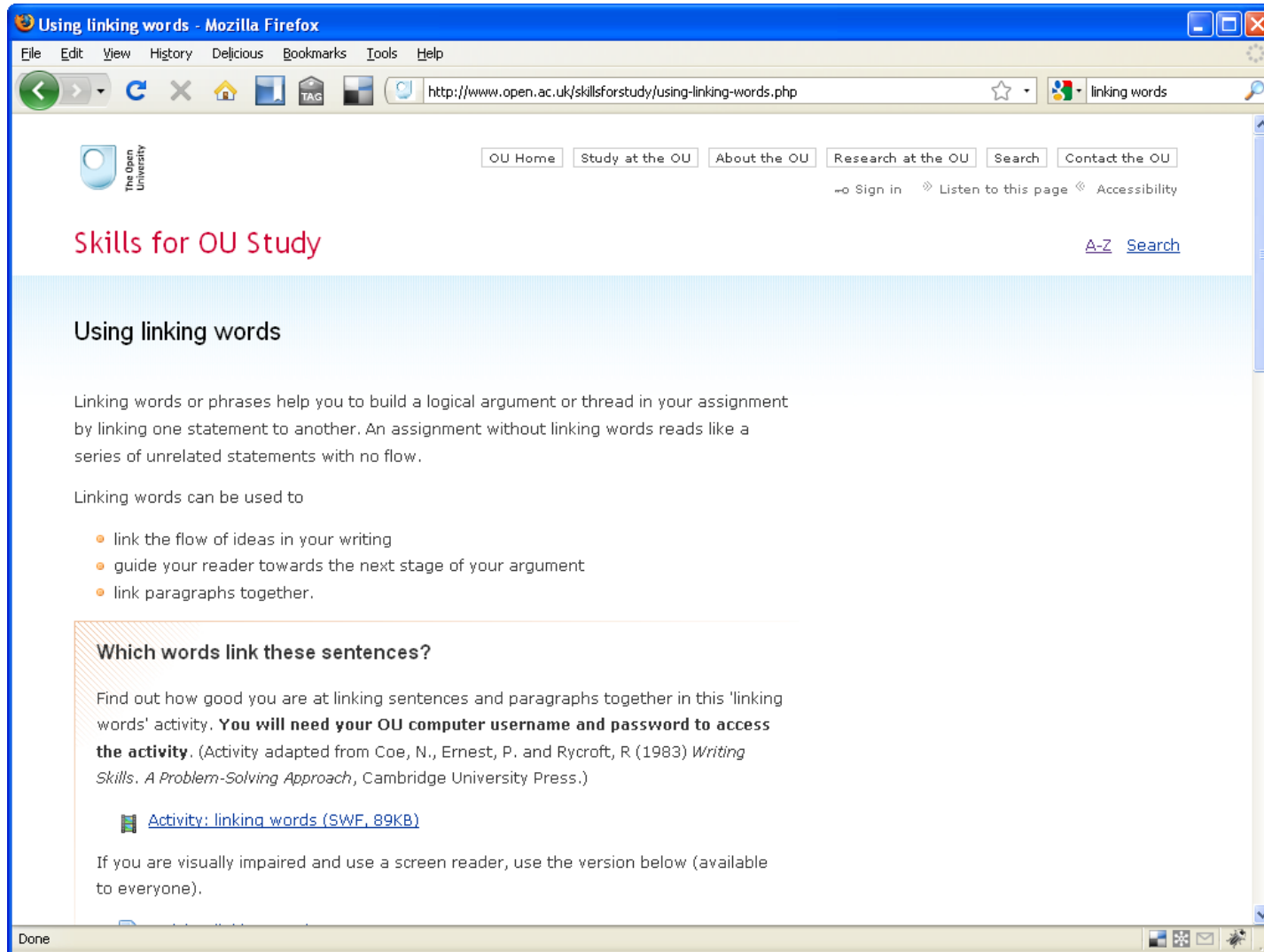
Removing pure markers from the top 20

Search Term	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	Total
open university	3455	2039	2538	4162	4154	3777	3355	23480
ou	1308	761	733	1472	1468	1347	1313	8402
open uni	402	230	249	409	423	441	449	2603
open	197	163	141	225	195	196	196	1313
the open university	193	115	132	208	218	221	222	1309
open university uk	115	81	74	130	127	169	175	871
open.ac.uk	101	64	76	116	153	116	99	725
www.open.ac.uk/students	65	43	49	62	85	54	73	431
distance learning	73	32	47	66	77	65	49	409
open university	57	42	46	60	62	70	54	391
www.open.ac.uk	57	28	32	68	51	61	54	351
openuniversity	49	26	36	59	47	62	54	333
open university student home	38	18	25	39	39	53	44	256
open university milton keynes	35	12	24	40	38	29	36	214
open university london	26	11	29	26	49	39	28	208
linking words	24	20	22	23	42	38	38	207
open university courses	32	7	22	45	33	36	26	201
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the open	69	64	47	6	1			187
home learning	22	6	16	32	38	25	20	159
open learning	17	21	22	27	24	28	18	157

“Golden pages” are grabbing new audiences for you

- Pages with high search rank and no brand marker are “golden”
- Useful pages found through high Google search rank
- Hidden branding – terms that people now associate with your site
- A chance to “show off” by making connections from these pages to other parts of your site

A minimum: enforce branding and standard headers



Outline

Background to this work

What information do visitors search for?

What are “good” search results?

What are the differences between
internal search and external?

How do users interact with the Google
results page?

The crucial results page is the one for your main marker

Web [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Google Mail](#) [more ▼](#)

[Search settings](#)



open university

Search

[Advanced Search](#)

Search: ☐ the web ☒ pages from the UK

Web [+ Show options...](#)

Results 1 - 10 of about 13,700,000 for open university. (0.29 s)

[Open University](#)

www.open.ac.uk Visit the **Open University** online to find out more about our courses.

[University Open Courses](#)

HomeLearningCollege.com/OPEN Wide Range of Home Learning Courses from Home Learning College

[Distance Learning Courses and Adult Education - The Open University](#)

The **Open University's** official website; Part-time higher education, supported distance and **open** learning for undergraduate and postgraduate qualifications.

www.open.ac.uk/ - [Cached](#) - [Similar](#)

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[StudentHome](#)

[Jobs](#)

[Contact the OU](#)

[Financial support](#)

[Library Homepage](#)

[Openlearn](#)

[OU 18to24](#)

[Open Learning - Openlearn - The Open University](#)

The **Open University's** openlearn website - free **open** learning educational resources for learners and educators.

www.open.ac.uk/openlearn/home.php - [Similar](#)

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Official UK qualifications.

Open.HomeLearningCourses.com/

[Open University](#)

Open University of Catalonia

Award winning Online **University**

www.uoc.edu

[See your ad here »](#)

Looking for courses, users click on “the first result”

Never click on right-hand sponsored links

Web [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Google Mail](#) [more ▼](#)

[Search settings](#)



open university

Search

[Advanced Search](#)

Search: ☐ the web ☒ pages from the UK

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[University Open Courses](#)

HomeLearningCollege.com/OPEN

Wide Range of Home Learning Courses from Home Learning College

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Official UK qualifications.

Open.HomeLearningCourses.com/

[Open University](#)

Open University of Catalonia

Award winning Online **University**

www.uoc.edu

[See your ad here »](#)

In 2008, I found negligible use of the 'site search' box

[Distance Learning Courses and Adult Education - The Open University](#)

The **Open University's** official website; Part-time higher education, supported distance and **open** learning for undergraduate and postgraduate qualifications.

www.open.ac.uk/ - [Cached](#) - [Similar](#)

[Study at the OU](#)

[StudentHome](#)

[Jobs](#)

[Contact the OU](#)

[Financial support](#)

[Library Homepage](#)

[Openlearn](#)

[OU 18to24](#)

Search open.ac.uk

	February 2008	March 2008	July 2008
site:www.open.ac.uk	2	4	7
site:open.ac.uk	23	19	40
Total visits	155,257	104,258	104,695

A final thought:

Search is
now normal
behaviour:
design it to be
part of your site

Understand, and design for, popular searches

Make search results more useful

- Use targeted metadata to support topical searches
- Improve the “searchability” of content pages

Expose connections between related areas of the site

.

Their sites have search engines.
Ours has a find engine.

Coilcraft Inductor Finder

File Edit View Favorites Tools Help

Coilcraft

Inductor Finder Results

Sort results 1) DCR 2) - 3) - Sort

Part number	Mounting	Other *	L (μH)	DCR (Ohms)	I sat (A)	I rms (A)	SL (mm)	W (mm)	H (mm)	Price @ 1,000
SER1360-182	SM	S	1.8	0.0024	18.0	13.0	50	12.90	5.80	\$0.67
LPS6015-182	SM	S	1.8	0.0750	2.9	2.15	12	5.00	1.50	\$0.38
LPS4414-182	SM	S	1.8	0.0870	2.9	1.9	13	4.30	1.40	\$0.38
1008PS-182	SM	S	1.8	0.0900	2.1	1.9	22	3.81	2.74	\$0.64
LPS3015-182	SM	S	1.8	0.1000	2.1	1.4	13	3.00	1.50	\$0.38
LPS3010-182	SM	S	1.8	0.1500	1.3	1.4	150.0	3.00	1.00	\$0.38
0603PS-182	SM	S	1.8	0.5400	0.39	0.7	155.0	2.59	2.08	\$0.51
1008LS-182	SM		1.8	0.8400		0.6	170.0	2.92	2.79	\$0.30
0603LS-182	SM		1.8	1.1000		0.35	80.0	1.80	1.27	\$0.41
0606LS-182	SM		1.8	1.1500		0.41	245.0	2.29	1.91	\$0.41

On most inductor web sites, their search engine results in more aggravation than answers.

But Coilcraft's web site is different.

In seconds, our Inductor Finder will show you all the parts that meet your electrical and size requirements. You can sort the results by your most important parameters. Compare

pricing. Even analyze the core and winding losses of up to four different power inductors!

You'll find lots of other design tools to help you choose the perfect part. And then request free samples with just a few clicks.

So quit searching for magnetics and start finding them at www.coilcraft.com!

Question time

Caroline Jarrett

carolinej@effortmark.co.uk

+44 1525 370379

I'm a consultant, hire me:

Consultancy: www.effortmark.co.uk

Training: www.usabilitythatworks.com

Free stuff:

Forms advice: www.formsthatwork.com

Editing: www.editingthatworks.com

Columns: www.usabilitynews.com

“Caroline’s Corner”



Caroline Jarrett

Effortmark

caroline.jarrett@effortmark.co.uk

www.effortmark.co.uk

Caroline Jarrett is an independent usability consultant. After 13 years as a project manager of computer systems integration projects, she founded Effortmark Limited in order to concentrate on 'what systems are for' instead of 'how the system is put together'.

Her work with government and non-profit organizations led to a fascination with the usability of forms, both paper and web, and with the information-rich web sites that contain them.

She is co-author of
'User Interface Design and Evaluation'
(Morgan Kaufmann, 2005)

and

'Forms that work: designing web forms for usability'
(Morgan Kaufmann, 2008).