Downstream with Open Educational Resources and Practices

rEAPing the rewards for the development of domain-specific language collections

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http://www.flickr.com/photos/49467596@N00/327391975
Overview

• Open Educational Resources Research Hub
• Open Source Language Development
  • FLAX Language Project at Waikato University
• Open Oxford and Resource Reuse
  • The BAWE Corpus and OpenSpires
• Digital Scholarship & Open Educational Practices
  – MOOCs and Domain-Specific Linguistic Support
• Research into Open Language Collections
  • Development and Use Across Formal and Informal Education
OPEN EDUCATIONAL RESOURCES RESEARCH HUB
Current activity within open education can be characterised as having reached a beta phase of maturity. In much the same way that software progresses through a release life cycle, beta is the penultimate testing phase, after the initial alpha-testing phase, whereby the software is adopted beyond its original developer community.

Open education has now come to the attention of the mainstream press and traditional higher education, with the
OPEN SOURCE LANGUAGE DEVELOPMENT
Developing Language Collections in the Open

The open source dictum, ‘release early and release often’, in fact has morphed into an even more radical position, ‘the perpetual beta’, in which the product is developed in the open, with new features slipstreamed in on a monthly, weekly, or even daily basis. It’s no accident that services such as Gmail, Google Maps, Flickr, del.icio.us, and the like may be expected to bear a ‘Beta’ logo for years at a time. (O’Reilly, 2005)
FLAX Project at Waikato University

FLAX image by permission of non-commercial reuse by Jane Galloway
The FLAX (Flexible Language Acquisition) project aims to automate the production and delivery of practice exercises for overseas students who are learning English. Exercise material comes from digital libraries, which can supply a virtually endless supply of collaborative and competitive language activities. (All software produced by this project is open source, issued under the GNU General Public License.)
Simple FLAX Interface Designs

Virology is the study of viruses and virus-like agents: their structure, classification and evolution, their ways to infect and exploit cells for virus reproduction, the diseases they cause, the techniques to isolate and culture them, and their use in research and therapy. [Wikipedia]
The traditional text analysis software interface for working with large language collections (corpora) has been the **Key Word In Context (KWIC)** interface. Corpus linguistics researchers and developers of KWIC interfaces have claimed over the years that learners of a language can deduce language use patterns by examining KWIC lines. This method is also known as **data-driven learning**.
OPEN OXFORD AND RESOURCE REUSE
University of Oxford OER

http://openspires.oucs.ox.ac.uk/resources/index.html#posters
http://www.slideshare.net/tbirdcymru/itunes-u-corporate-channel-of-free-educational-resources
Financial Crisis Lectures

About Collection Search Browse Activities Collocations Wordlist

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1. Global Recession: How did it Happen?

Original

Linda: I'm Linda Yueh, I am a fellow in economics at St. Edmond Hall, University of Oxford. I am an economist and actually also a lawyer by training, but I teach economics at the University.

I have a couple of recent books, one of them is 'Macro Economics', an undergraduate textbook, which will soon need to be updated given the events of the past year. And another book which is coming out next year called 'The law and economics of globalization' to look at the ways in which the economy has been changed, in both economic and legal terms, over the last few years.

Jonathan: My name is Jonathan Michie, I am also an economist by training, although I am now director of Oxford University's department for continuing education, which does a range of part-time courses including online courses, and in fact our most popular online course is on the global economy by Doctor Linda Yu. I am also president of Kellogg College. My most recent book is a handbook on globalisation.

Linda: I think 2008 has been a tremendous year in terms of economic developments. One of the things that perhaps we ought to think about is how we got here, in terms of the financial crisis. So we know at some point last year, around last summer, the sub-prime mortgage crisis in the United States really began to take hold. The most obvious manifestation was of course the failure of Northern Rock, which generated the first bank run on a British bank run in about a century.

Since then of course, things have only gone from bad to worse. In March of this year we know that the failure of Bear Stearns, which was forcibly sold to JPMorgan Chase, essentially marked the start of the prospect of systemic banking sector failure, and this culminated with the collapse of Lehman Brothers and AIG.
licetne Anglice loqui?

Warning: this post include an above average number of three letter acronyms (TLA)

One of the best things about Oxford’s OER collections is that they are free to be reused in many different ways. One of the best things about Oxford University Press* aka OUP is that they lead the world in support for English language teaching (ELT). One of the best things about doing learning technology research is that we can explore the new ways in which these areas overlap (LAP).

This year we have hosted an ELT researcher to include Oxford’s OER in her work as she travels the world to work with English language teachers to promote re-use of open materials. The Oxford OER collections include Oxford-managed corpora; the British National Corpus (BNC) and the British Academic Written English corpus (BAWE) and Oxford-created OER (podcast lectures and seminars in spoken English, images, essays, ebooks).

Alannah Fitzgerald is an open education practitioner and researcher working in the area of technology.
FLAX British Academic Written English (BAWE) Collections

British Academic Written English (Life Sciences)

Search Collocations in Collection

Search Result: 20 collocation(s) matched the query.

- **solving mathematical conundrums to**
  The process by which we use our knowledge to make these inferences is known as reasoning. We use reasoning in nearly everything - from solving mathematical conundrums to finding the way to a particular destination. It is of no surprise then, that the mechanisms of reasoning are of such interest to psychologists.

- **mathematical conundrums**
  The process by which we use our knowledge to make these inferences is known as reasoning. We use reasoning in nearly everything - from solving mathematical conundrums to finding the way to a particular destination. It is of no surprise then, that the mechanisms of reasoning are of such interest to psychologists.

- **mathematical function**
  Is a right handed lady indicating that her dominant hemisphere (i.e. that which controls language and mathematical function) is on the left. From the history it appears that is suffering from a type of dysaphia.

- **number of mathematical tricks**
  The data collected during this process then undergoes post-processing such that the maximal amount of information of this processing can vary and there are a number of mathematical tricks that can sharpen resolution, eliminate double counting. However at its most basic the processing involves performing a Fourier transform on the location of this the structure of the crystal and be inferred and thus the shape of the molecule.

- **mathematical tricks**

http://www.youtube.com/watch?v=26i_Y146GOs
British Academic Written English corpus: browse by genre or discipline

**British Academic Written English (Arts and Humanities)**

- **About Collection**
- **Search**
- **Browse by Genre**
- **Browse by Discipline**
- **Collocations**
- **Wordlist**

**Browse Documents by Discipline**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology</td>
<td>What approaches have been adopted for the study of megalithic monuments in Europe? What are their strengths and weaknesses?</td>
</tr>
<tr>
<td>Classics</td>
<td>Contrast TWO absolute dating methods and discuss with reference to archaeological case-studies how they can be used for obtaining dates for artefacts or contexts.</td>
</tr>
<tr>
<td>Comparative American Studies</td>
<td>no title [Pollard on settlement in the Neolithic]</td>
</tr>
<tr>
<td>English</td>
<td>Compare and Contrast Two Towns From Different Parts of the Empire, Discussing Both Ancient and Modern Factors</td>
</tr>
<tr>
<td>History</td>
<td>Mollusc lab report</td>
</tr>
<tr>
<td>Linguistics</td>
<td>How might archaeologists demonstrate the presence of deliberate Neanderthal burials?</td>
</tr>
<tr>
<td>other</td>
<td>What are main kinds of inferences made by archaeologists from the material remains of the disposal of the dead? Illustrate your answer with a case study.</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Skeletal Report</td>
</tr>
</tbody>
</table>
BAWE sub corpus wordlists

British Academic Written English (Arts and Humanities)

About Collection    Search    Browse by Genre    Browse by Discipline    Collocations    Wordlist

sort by frequency

theory 1536  evidence 1229  create 1188  role
individual 1038  structure 1031  period 1029  process
approach 819  context 735  economic 728  feature
site 706  focus 699  concept 699  image
factor 672  conclusion 668  method 645  function
similar 616  despite 606  aspect 602  issue
cultural 586  revolution 586  identity 584  community
cultural 573  source 561  establish 559  involve
interpretation 526  status 522  element 513  require
link 498  notion 498  significant 495  style
research 466  authority 461  principle 458  define
section 434  highlight 434  demonstrate 431  achieve
theme 418  policy 409  conflict 404  maintain

111 908 727 694 630 601 584 534 504 491 457 429 404
The BAWE sub corpus text collections: POS-tagging phrases

The ion Source of referral and a summary of key information

E on the with symptoms of increasing shortness of breath. She had been feeling 'unwell' for the few days prior to presenting history of asthma; her current dyspnoea was however unresponsive to the regular inhalers and nebulisers she used. Information gathered from the patient about the presenting illness, co-existing problems, current treatment, signs and the social and family background. The patient's view of the nature of the problem and their expectations for treatment.

Worsening Complaint.

Worsening shortness of breath and wheezing in the 2-3 days prior to presentation at A+E. Dyspnoea was at its worst at A+E at 4am on the day she was gasping for breath. Dyspnoea was described as 'not being able to catch my breath' associated chest tightness. This presenting episode of dyspnoea came on suddenly on the day and has progressed in severity; i.e. 'came and went' limiting her ability to manage the single flight of stairs in her home and to generally move around. Dyspnoea was unresponsive to either her regular nebulised or inhaled medication but was said to improve following administration of atrovent 500mg and IV hydrocortisone 200g in A+E.

http://tinyurl.com/cpwyefb
The symptoms of increasing shortness of breath. She had been feeling 'unwell' for the few days prior to presentation at A+E. Dyspnoea was described as 'not being able to get tightness'. This presenting episode of dyspnoea came on suddenly on the hand and has progressive, limiting her ability to manage the single flight of stairs in her home and to generate to either her regular nebulised or inhaled medication but was said to improve following 100mg and IV hydrocortisone 200g in A+E.
Retrieve and save collocations

British Academic Written English (Life Sciences)

My Cherry Basket

- increasing shortness of
  - presented at A + E on the with symptoms of increasing shortness of breath. She had been feeling 'unwell' for the few days presentation.

- presenting illness
  - She has a longstanding history of asthma; her current dyspnoea was however unresponsive to the regular inhalers and nebulizer. She was a chronic patient. History All relevant information gathered from the patient about the presenting illness, co-existing problems, current significant past medical history and the social and family background. The patient’s view of the nature of the problem and expectations for treatment.
Collocational links to further resources

- Dyspnea (pron.: / dɪsˈpɛnə / disp·NEE·ə; also dyspnoea; Latin: dyspnoea; Greek: δυσπνοία, dýspnoia), shortness of breath (SOI

- Shortness of breath can be a worrisome symptom. Follow this chart for more information about the causes of and conditions in which it occurs.

- Read about causes of shortness of breath and the medications used in treatment. Pinpoint your symptoms and signs with MedicineNet's Checker.

- Shortness of breath after only slight exertion or while at rest; Shortness of breath that wakes you up at night or requires you to sleep pr

- breathe

- Shortness of breath causes will be from one of these four things.

- Don't just sit there scratching your head, find useful info on Shortness of Breath on eHow. Get essential tips and learn more about even

- Are the Most ...

- Difficulty in breathing (also known as shortness of breath, breathlessness, or dyspnea) is caused by various mechanisms related to diff
**Referral information** Source of referral and a summary of key information

Presented at A+E on the with <em>symptoms</em> of increasing <em>shortness of breath</em>. She had been feeling 'unwell' for the few days prior to presentation. She has a longstanding history of <em>asthma</em>; her current dyspnoea was however unresponsive to the regular inhalers and nebulisers she uses at home.

**History** All <em>relevant</em> information gathered from the <em>patient</em> about the presenting illness, co-existing problems, current treatment, significant past <em>medical history</em> and the social and family background. The patient's view of the nature of the problem and their expectations for treatment.

**Presenting Complaint.**

**History of Presenting Complaint.**

Had progressively worsening <em>shortness of breath</em> and <em>wheezing</em> in the 2-3 days prior to presentation at A+E. Dyspnoea was at its worst last night ()

She to catch my breath, I was 

Dyspnea (; also dyspnoea; Latin: dyspnoea; Greek: dyspnoia from dyspnoos), <em>shortness of breath</em> (SOB), or air hunger, is the subjective symptom of <em>breathlessness</em>. It is a normal symptom of heavy exertion but becomes pathological if it occurs in unexpected situations.

**Related topics in Wikipedia**

- Chest pain
- Chest radiograph
- Cough
- Pulmonary edema
- Tachycardia

http://tinyurl.com/cpwyefb
Referral information Source of Referral and a summary of key information

Presented at A + E on the with symptoms of increasing shortness of breath. She had been feeling 'unwell' has a longstanding history of asthma; her current dyspnoea was however unresponsive to the regular inhalers. History All relevant information gathered from the patient about the presenting illness, co-existing problems, medical History and the social and family background. The patient's view of the nature of the problem, Presenting Complaint.

History of Presenting Complaint.

Had progressively worsening shortness of breath and wheezing in the 2-3 days prior to presentation and so that by presentation at A+E at 4am on the she was gasping for breath. Dyspnoea was described as 'gasping' with associated chest tightness. This presenting episode of dyspnoea came on suddenly on the variable in nature i.e. 'came and went' limiting her ability to manage the single flight of stairs in her home. Her dyspnoea was unresponsive to either her regular nebulised or inhaled medication but was said to be salbutamol 5mg, atrovent 500mg and IV hydrocortisone 200g in A+E.
MOOCs and Educational Punditry
The end of the university as we know it

“The future looks like this: Access to college-level education will be free for everyone; the residential college campus will become largely obsolete; tens of thousands of professors will lose their jobs; the bachelor’s degree will become increasingly irrelevant; and ten years from now Harvard will enroll ten million students.” (Harden, 2013)
“Where in the stories we’re telling about the future of education are we seeing salvation? Why would we locate that in technology and not in humans, for example? Why would we locate that in markets and not in communities? What happens when we embrace a narrative about the end-times — about education crisis and education apocalypse? Who’s poised to take advantage of this crisis narrative? Why would we believe a gospel according to artificial intelligence, or according to Harvard Business School [Christensen’s Disruptive Innovation theory], or according to Techcrunch...?” (Watters, 2013)
MY COURSES

CORPUS LINGUISTICS: METHOD, ANALYSIS,...  LANCASTER UNIVERSITY

27 January

Course info  •  Leave this course

Go to course

A BEGINNERS' GUIDE TO WRITING IN...  UNIVERSITY OF READING

17 February

Go to course
DIGITAL SCHOLARSHIP AND OPEN EDUCATIONAL PRACTICES
Concerted assembly: Influenza virus particles form by budding

(Refers to Figure 13.6 of POV3rd, on the left)

So this is an example now of another way of assembly besides this sequential assembly. This is called Concerted Assembly where, things more or less tend to happen all at once, although there are obviously some precursors that have to be made. This is the formation of influenza virus, and we may have looked at a slide like this before, but now we’ll look at it in some detail. And remember, the influenza virion, the RNAs replicate in the nucleus. There they get wrapped up in the viral proteins that are eventually going to end up in the virion particles. So we have genome replication, we have mRNA synthesis. The mRNAs have to go out into the cytoplasm, get translated and then the proteins that are bound to associate.

So now we have the formation here of viral proteins. That gets shipped to the plasma membrane.

In molecular biology and genetics, translation is the third stage of protein biosynthesis (part of the overall process of expression).

Related topics in Wikipedia
- Messenger RNA
- Transfer RNA
- Genetic code
- Ribosome
Vocabulary Across Academic Disciplines

“Natural science might be characterized as a discipline of discovery, identifying and describing entities that had not been previously considered. As a result, natural science employs a large set of highly technical words, like dextrinoid, electrophoresis, and phallotoxins. Most of these words do not have commonplace synonyms, because they refer to entities, characteristics, or concepts that are not normally discussed in everyday conversation.” (Biber, 2006)
Collaboration with Subject Specialists

“In the emerging academic literacies approach involving cooperation between subject specialists and writing teachers, the aim is to help the students develop metacognitive awareness of the roles and functions of writing in that discipline, to enable them to stand back from it and observe how it functions, and then to help them gradually participate in the genres, where genre is understood as a constellation of actions rather than a list of formal features.” (Breeze, 2012)
FLAX Virology ESAP Collection

- YouTube lectures streamed
- This Week in Virology (TWiV) podcasts
- Open Access articles
- Virology Blog articles with hyperlinks to resources
- Text analysis tools for e.g. lexical bundles, collocations, word lists, part-of-speech (POS) tags, and links to Wikipedia, the British National Corpus (BNC) and the live web
- Digital library features: search, retrieve, save, interact and learn
Digital Scholarship and Open Educational Practices
RESEARCH INTO OPEN LANGUAGE COLLECTIONS
Research with Queen Mary U. of London

http://language-centre.sllf.qmul.ac.uk/home
OER Research Hypotheses

**Hypothesis A – Performance**  Use of OER leads to improvement in student performance and satisfaction.

**Hypothesis E – Reflection**  Use of OER leads to critical reflection by (language) educators, with improvement in their practice.

**Hypothesis G – Indicators**  Informal (MOOC) learners use a variety of indicators when selecting OER.

**Hypothesis H – Support**  Informal (MOOC) learners adopt a variety of techniques to compensate for the lack of formal support.

**Hypothesis I – Transition**  Open education acts as a bridge to formal education, and is complementary, not competitive, with it.

**Hypothesis K – Assessment**  Informal means of assessment (in MOOCs) are motivators to learning with OER.
References


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www.alannahfitzgerald.org TOETOE Blog
Slideshare: http://www.slideshare.net/AlannahOpenEd/