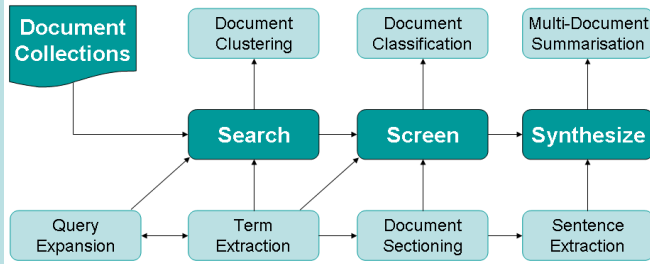


## ASSERT

The Automatic Summarisation for Systematic Reviews using Text Mining (ASSERT) project centres around providing for broader institutional involvement in text mining and related activities. As part of this we will be developing an exemplar service for the social sciences domain, looking at how text mining techniques can support the systematic reviewing process. For this we are working closely with the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), an organisation concerned with providing unbiased reviews of literature to support policy making.



**Searching:** extensive searches are carried out in order to locate as much relevant research as possible according to a query. This process is improved by using query expansion techniques based on the most important concepts (terms) and similarities among terms, in addition to ontologies and thesauri.

**Screening:** narrows the scope of search by reducing the collection to only those documents relevant to a specific review. The aim is to highlight key evidence and results that may impact on the policy.

**Synthesis:** correlates evidence from a plethora of resources and summarises the results. This process is improved by using multi-document summarisation. The ASSERT project will develop and test text mining tools to support efficient access to evidence through a web portal. Currently, access to evidence is available either through general web search engines or specialist bibliographic databases.

### Key features include:

- Interactive query expansion to maximize coverage of an unbiased search
- Document clustering and visualization to aid exploration and overview of search results
- Document classification and sectioning to find relevant information within specific types of text.
- Automatic and custom built filters to narrow the focus of the collection into a manageable size
- Extractive summarization of a document to aid in fast indicative evaluation
- Chronological informative summary from multiple documents to help develop synthesis

[www.nactem.ac.uk/assert](http://www.nactem.ac.uk/assert)

<p>Last Published: Wed Jul 25 10:55:00 BST 2007</p> <p><b>Israel hears Arab peace proposal</b></p> <p>Ministers from Egypt and Jordan are in Israel to present the Arab League's peace plan for the Middle East.</p> <p>The foreign ministers of Egypt and Jordan are in Israel to present the Arab League's Middle East peace plan.</p> <p>The two ministers are meeting Prime Minister Ehud Olmert and other Israeli officials.</p> <p>They are trying to push forward an Arab peace plan that Israel has in the past treated coolly but which correspondents say it may now be willing to discuss.</p> <p>New Middle East envoy Tony Blair said after visiting the West Bank he saw a "moment of opportunity" for peace.</p> <p>'Common ground' Egypt's Ahmed Aboul Gheit and Jordan's Abdel Ilah al-Khatib are presenting a long-standing Arab League initiative that was readopted at a meeting in Saudi Arabia recently.</p>	<p><b>Related Stories</b></p> <p>Arabs woo Israel over peace plan</p> <p>Envoy Blair heads to Middle East</p> <p>Hamas urges peace summit boycott</p> <p>Rice urges push on Mid-East peace</p> <p>Palestinian PM holds Israel talks</p> <p><b>Related Topics</b> LOW MED HIGH</p> <p>Arab League</p> <p>Middle East peace</p> <p>West Bank</p> <p>Middle East</p> <p>Arab League Secretary General Amr Moussa</p> <p>Israeli foreign ministry spokesman Mark Regav</p> <p>New Middle East envoy Tony Blair</p> <p>moribund Middle East peace process</p> <p>Former UK prime minister long-standing Arab League initiative</p> <p>Middle East peace plan</p> <p>Mr. Bush</p> <p>Palestinian state</p> <p>President George W. Bush</p>
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## ASSIST

Two new projects building upon the features developed in the ASSERT project and resulting from a community call for social science applications of text mining.

### Case Study 1:

**UK Educational Evidence Portal** This project is with the EPPI-Centre (specifically its user involvement team) to work with NaCTeM to develop and evaluate an innovative search engine — using text mining — for a portal of education evidence, relevant to education practitioners and policy-makers. This project will be a high profile exemplar of the utility of text mining in the social sciences, with application beyond the single case described here.

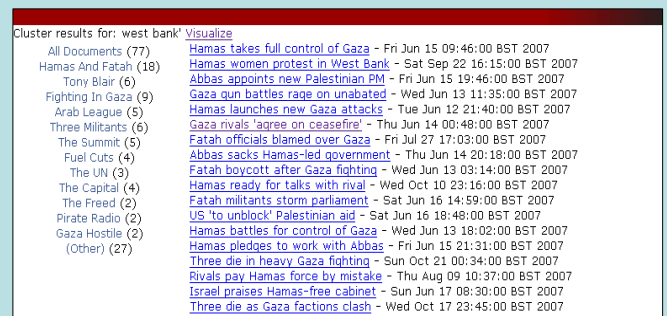
### Case Study 2:

**Frame Analysis of Media** This project is with the ESRC Centre for Research on Socio-cultural Change (CRESC) to work with NaCTeM to develop and evaluate an innovative tool for analysing news texts to investigate how they are framed to shape the perceptions or opinions of the information's recipient. An outcome of the project is an exemplar demonstrating the applicability of text mining tools for quantitative data analysis to improve qualitative analysis.

[www.nactem.ac.uk/assist](http://www.nactem.ac.uk/assist)

## BBC News Browser

The aim of this pilot project is to facilitate improved browsing and presentation of online news stories through a combination of term extraction, concept clustering and visualization techniques.

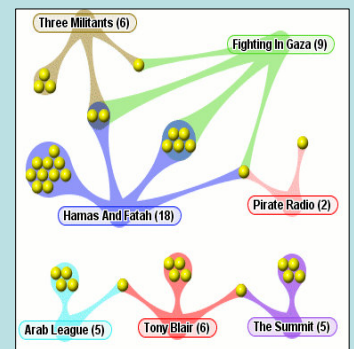


Cluster results for: west bank' Visualize

All Documents (77)	Hamas takes full control of Gaza - Fri Jun 15 09:46:00 BST 2007
Hamas And Fatah (18)	Hamas women protest in West Bank - Sat Sep 22 16:15:00 BST 2007
Tony Blair (6)	Abbas appoints new Palestinian PM - Fri Jun 15 19:46:00 BST 2007
Fighting In Gaza (9)	Gaza gun battles rage on unabated - Wed Jun 13 11:35:00 BST 2007
Arab League (5)	Hamas launches new Gaza attacks - Tue Jun 12 21:40:00 BST 2007
Three Militants (6)	Gaza rivals 'agree on ceasefire' - Thu Jun 14 00:48:00 BST 2007
The Summit (5)	Fatah officials blamed over Gaza - Fri Jul 27 17:03:00 BST 2007
Fuel Cuts (4)	Abbas sacks Hamas-led government - Thu Jun 14 20:18:00 BST 2007
The UN (3)	Fatah boycott after Gaza fighting - Wed Jun 13 03:14:00 BST 2007
The Capital (4)	Hamas ready for talks with rival - Wed Oct 10 23:16:00 BST 2007
The Freed (2)	Fatah militants storm parliament - Sat Jun 16 14:59:00 BST 2007
Pirate Radio (2)	US 'to unblock' Palestinian aid - Sat Jun 16 18:48:00 BST 2007
Gaza Hostile (2)	Hamas battles for control of Gaza - Wed Jun 13 18:02:00 BST 2007
(Other) (27)	Hamas pledges to work with Abbas - Fri Jun 15 21:31:00 BST 2007
	Three die in heavy Gaza fighting - Sun Oct 21 00:34:00 BST 2007
	Rivals pay Hamas force by mistake - Thu Aug 09 10:37:00 BST 2007
	Israel praises Hamas-free cabinet - Sun Jun 17 08:30:00 BST 2007
	Three die as Gaza factions clash - Wed Oct 17 23:45:00 BST 2007

### Key features include

- Automatic clustering of results into important topics with readable summary labels
- Dynamic document maps showing relationships between clusters in real-time
- Highlighting of significant terms for effective skimming and focused browsing
- Detection of similar documents to inform the user of the wider context of the content



The news browser system has been built using the ASSERT framework providing flexible interfaces and many options for future upgrades. To see a video demonstration of the news browser visit the NaCTeM website.

[www.nactem.ac.uk/bbc](http://www.nactem.ac.uk/bbc)