

# Teaching Digital Literacy

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Access to incredibly rich resources via transformational technology is empowering our students to communicate in new and powerful ways. They deserve teachers who can help them utilise this potential effectively. To enable this, it is therefore vital that teachers look beyond the technicalities of 'how to use IT' and focus their efforts on the more intellectually challenging issue of justifiable informed use. This paper (and accompanying digital video) aims to accordingly equip teachers through the provision of an informed exemplar.

情報技術 (IT) を用いることで驚くほど豊かな情報資源を入手することができる。これにより学生は新たな強力な方法で情報交換する力を与えられる。そこで、学生が技術を効果的に活用するのを手助けできる教員が当然求められる。それゆえ極めて重要なのは、教員が「ITの使い方」という技術的な事項の先を見据え、情報技術の正当な使用法や精通した使用法といった更に知的意欲をかきたてる問題に焦点を当て尽力することである。このワークショップは、詳しい例を示す実践を通して、教員がデジタル・リテラシーを教えるためのより良い準備となる。

This paper is a procedural outline of a workshop aimed to equip teachers with an example that facilitates the teaching of digital literacy. The paper needs to be read with reference to the accompanying digital video also available on this CD-ROM. Definitions of digital literacy are first presented, and then a 6 stage procedure of a task to promote the digital literacy of English language learners is explained. The application utilised in this workshop is organisational software called *Inspiration*. Some of the software's terminology utilised (e.g. Rapid Fire) is explained and exemplified on the aforementioned movie. A 30-day trial version of Inspiration is available for download from <<http://www.inspiration.com>>

## What is digital literacy?

*Literate* is an adjective that derives from the Latin word *litteratus*, which means "marked with letters" (Merriam-Webster, <<http://www.m-w.com>>). Any number of qualities could be conveyed or implied:

- educated
- cultured
- able to read and write
- versed in literature or creative writing

- polished
- possessing knowledge or competence

Warschauer (1999) usefully explains that the state of being literate is dependant upon individuals mastering processes that are context-specific. What is more, these processes are value-laden and changeable over time. In addition, the National Institute for Literacy (NIFL) is an independent federal organisation established to lead the United States to full literacy. The NIFL (<http://www.nifl.gov/nifl/faqs.html#literacy>) derives its impetus, in part, from legislation that defines literacy as,

An individual's ability to read, write, speak in English, compute and solve problems at levels of proficiency necessary to function on the job, in the family of the individual and in society.

Paul Gilster (1997), in his book entitled *Digital Literacy* claims,

Digital literacy is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. (p. 1)

Central European University, Budapest (2001) defines digital literacy as the ability to understand how information is generated and communicated in all formats together with the ability to create critical frameworks for the retrieval, organisation, evaluation, presentation and use of information.

It would therefore appear that technology and literacy are two things that have become intertwined in contemporary society, with the implication being that if a person is lacking in technology-related skills, then he or she cannot really be regarded as being equipped to function successfully in life.

The above statements therefore assist us in appreciating that digital information is not just consumed through understanding but it is also generated, processed and used for specific purposes (Towndrow & Vallance, 2004).

### A task to promote the digital literacy of English language learners

Teaching digital literacy requires students to build upon their existing world knowledge through an informed strategy of information searching, evaluating, and decision-making. In effect, students need to develop *knowledge assembly* skills such as,

- define the problem and write appropriate questions about what they need to know in order to provide a solution
- develop the ability to collect information
- interpret and evaluate that information
- provide a rationale for the use of collated information
- organise, discuss, and present.

A more detailed rationale and further examples of digital literacy development for language teachers and students may be found in Chapters 8 - *Literacy in the Digital Age* and 9 – *Production of Digital Language Learning Materials*, in Towndrow & Vallance (2004).

In order to exemplify teaching digital literacy, the following sample lesson outline guides the instructor and the students in the development of a K-W-L (Know- Want to know- Learned) table utilising Inspiration software and

the World Wide Web. The context of the information to be gathered is the development of an expository essay outline: *Do mobile phones cause cancer?* Download the fully featured, 30-day demonstration of Inspiration (Mac and PC) from their website (<http://www.inspiration.com>), and then follow the step-by-step instructions in the following lesson outline and accompanying digital video on this CD-ROM.

### Sample lesson outline

<b>Objective</b>	To write an expository essay.
<b>Title</b>	Do mobile phones cause cancer?
<b>Procedure</b>	<p>Split the class into three groups:</p> <p>A. Assume the role of journalists working for a magazine that covers environmental, social and health issues for young adults;</p> <p>B. Assume the role of concerned parents of teenagers with mobile phones;</p> <p>C. Assume the role of faithful employees of a mobile phone company.</p>
<b>Instructions</b>	<ul style="list-style-type: none"> <li>this indicates an action to be undertaken.</li> </ul>

### Stage 1: What do you KNOW?

- Open INSPIRATION software.
- The Main Idea is *Do mobile phones cause cancer?* Type this question.
- Using the Rapid Fire tool, brainstorm what you know about the topic. After selecting the Rapid Fire button, type each question followed by pressing the Enter/Return key. Symbols will be created automatically. Type at least 5 KNOW symbols. See Figure 1 below for examples inputted by students.

### Stage 2: What do you WANT to know?

- Type at least 5 questions using the Rapid Fire tool (see Figure 2 for examples).

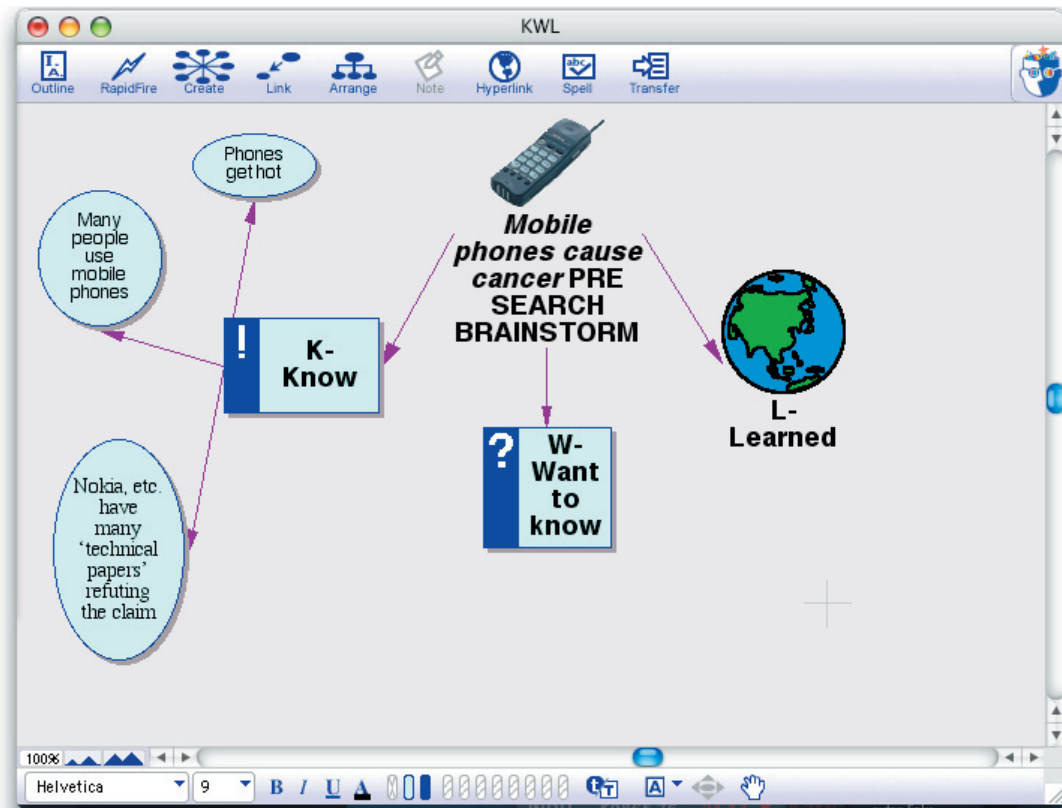


Figure 1. KWL – K- Know

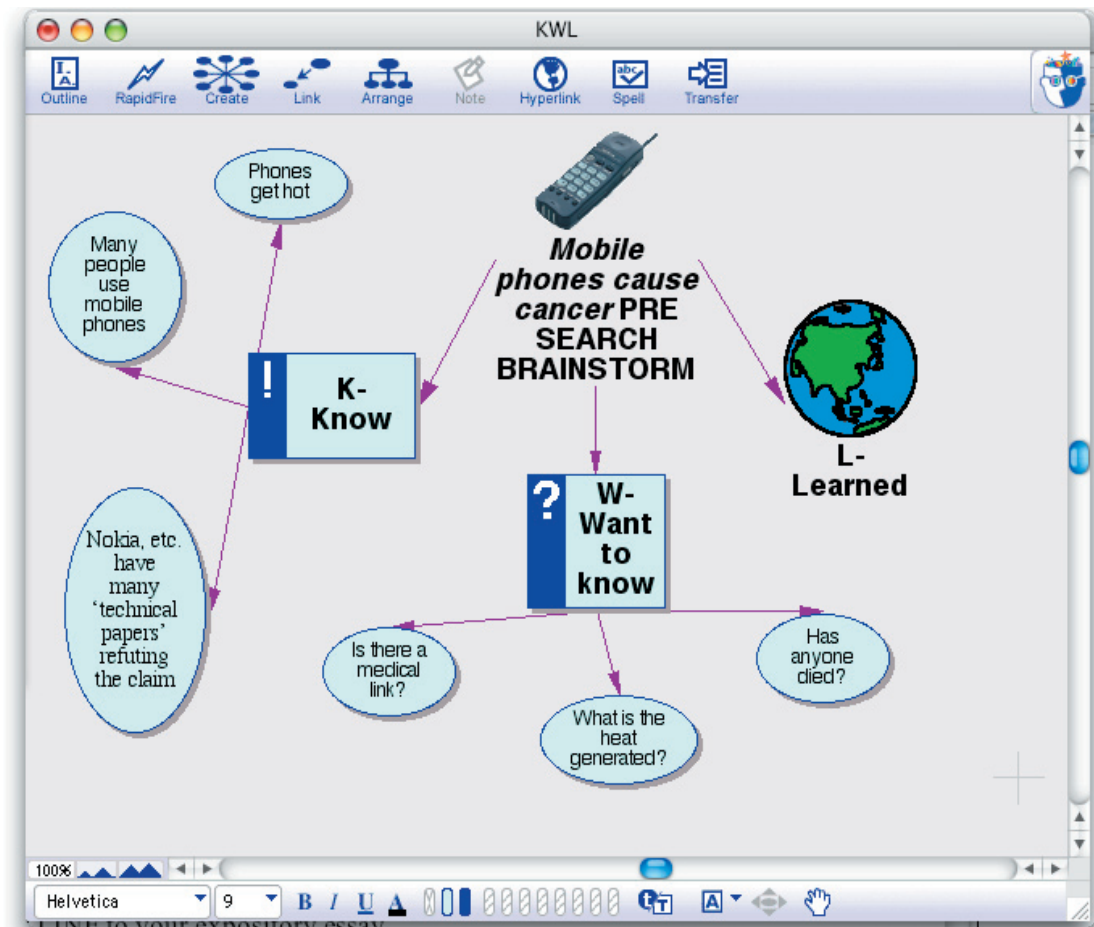


Figure 2. KWL – W- Want to know

**Stage 3: Answer the questions**

To answer these questions, let's go onto the Web. It's a CINCH

<b>C</b>	Concept mapping	we have started above
<b>I</b>	Identifying search engines	Google.com is effective Ask.com allows learners to formulate grammatically correct questions Dogpile.com is a collection of search engines For more academic information, use a library's OPAC database access
<b>N</b>	Narrow your search	Use Advanced Search tools
<b>C</b>	Credibility assessment	Use the APACT criteria (Authorship/ Purpose/ Accuracy/ Currency/ Technical). See Towndrow & Vallance (2004).
<b>H</b>	Helpful resources	CD-ROMs, BBS

**Table 1. CINCH**

Table 1 originates at Tammy Payton's Website (<http://www.tammypayton.net/courses/search/summary.shtml>). The ideas for its adaption have been taken from Towndrow & Vallance (2004).

Essentially, the **W** questions have provided you with a purpose for a focused search.

- Go online to the Google search engine.
- Select Advanced Search and use synonyms and other lexical items (e.g. cell phones, Nokia) to focus your search. Later, limit the search to .edu and English language Websites using Google's Advanced Search option.
- To locate specific words on a long Web page use the FIND tool (i.e. in a Web browser select EDIT then FIND). Skimming and scanning skills are promoted. Remember your chosen role, as this will influence the pages you actually visit and those you discard.

**Stage 4: What have you LEARNED ?**

Next, collate the new knowledge.

- Return to Inspiration KWL table and add new symbols.

These are the **L** nodes- what you have **LEARNED**.

- Hyperlink from the symbols to the specific Web pages (i.e. in Inspiration, select a symbol, then click the Hyperlink icon in the toolbar and type in a Web address).

**Stage 5: Outcome**

The development of the K-W-L table contributes to the formation of an OUTLINE to your expository essay.

- Click Outline to view text-only.
- Go to File - Print to print a copy.
- Go to File - Export then export as JPEG image for viewing on computers without Inspiration, OR
- Go to File - Transfer to Word Processor.

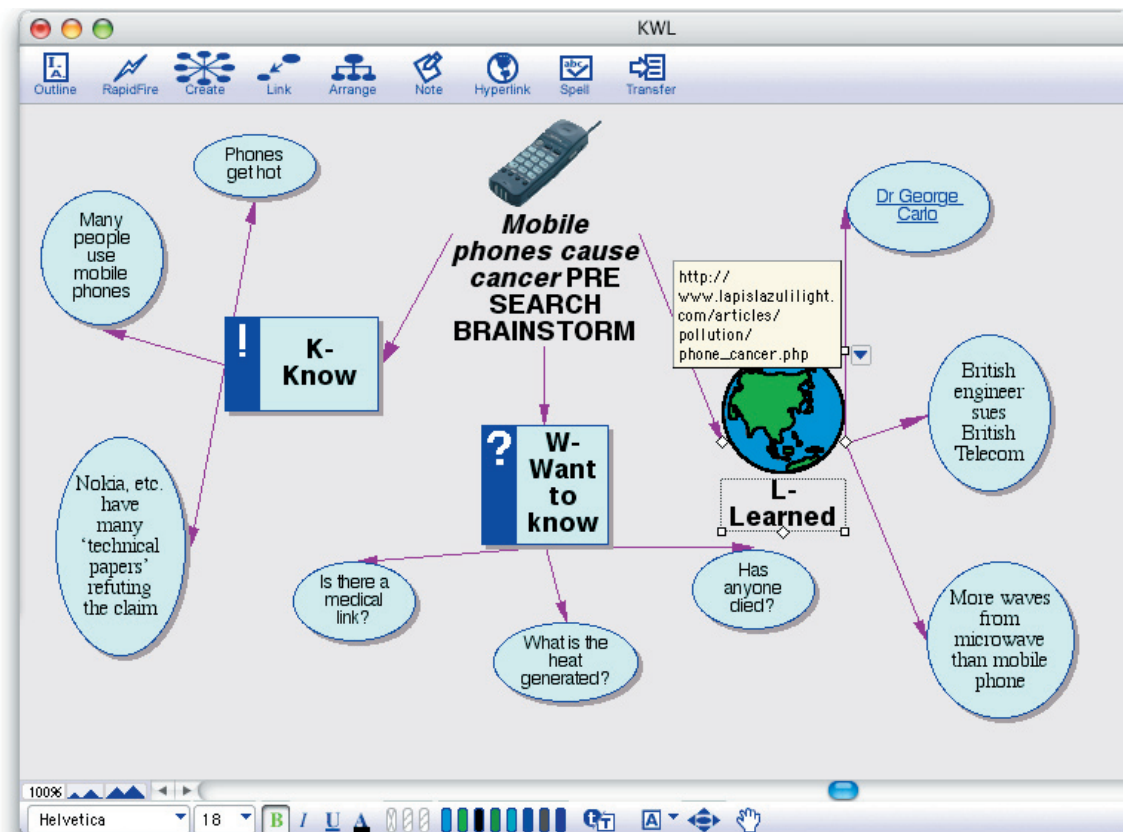


Figure 3. KWL – L - Learned



### Stage 6: Extension

This ends the sample lesson outline. In practice, it is highly recommended that the lesson be extended to promote sharing of information, peer reviewing, and reflection on learning. A suggested homework is to post the outline on the class Bulletin Board System (BBS) for other students to view and comment. A suggested activity for the next lesson is for students to bring the developed K-W-L table, look at the BBS comments, peer reviews, and personal reflection and amend the K-W-L table accordingly, if necessary. Then, plan the expository essay components and type a first draft.

### Conclusion

Teachers need to first and foremost understand that the pedagogy drives the technology. As such, the teacher-designed task needs to be evaluated; for instance, is the task CRISP?

- C lear
- R elevant
- I nteresting
- S hort
- P roductive

Towndrow & Vallance (2004)

Having considered the task, a teacher will then have to consider the IT-based materials that are either developed by the teacher or, preferably, by the students. Is the technology being used in an informed way? What activities does the

teacher expect the students to undertake to successfully accomplish the task? The development of an expository essay outline, above, facilitated by a K-W-L organiser using Inspiration software will consequently help teachers transform their language teaching to help students develop the literacy skills necessary in today's Digital Age.

### References

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