We hear the term “hypermedia” quite frequently in our daily lives as educators. I would venture to guess that most of us see and use hypermedia daily without giving it much thought, both professionally and personally. A Google search for that word returns “about 373,000,000” results. FDN5420 requires us to give the subject proper consideration. The Course Requirements document for FDN5420 asks students to write a position paper in which we 1. define hypermedia and 2. to discuss how can be used in a learning environment and what concerns and issues such usage creates.

Defining “hypermedia” should be a simple task. One accesses an authoritative reference source to look it up. The *Oxford English Dictionary* (online version) defines it as “a method of structuring information in different media for presentation to a single user, usu. through a computing workstation, whereby related items of information are connected in the same way as in hypertext” with the last date referencing 1990. Looking at other sources provides variations on the theme. Using Google’s define: function, one sees multiple common themes and terms in the various definition sources it provides – combinations of text, video, audio, graphics/images, hypertext, hyperlinks, multimedia, interactive, nonlinear. A University of Alberta website provides a clear, functional definition that seems to sum it up nicely: the union of multimedia (integration of media
such as text, graphics, animation, sound, and video) and **hypertext** (a nonsequential, nonlinear method of displaying text) [emphasis added].

In considering how hypermedia can be used in a learning environment, one must always keep in mind that, like all technology, hypermedia is but another tool to facilitate learning. I believe it can be an effective tool when used properly. Using the proper tool for the proper situation is the challenge to the instructor. Just as a carpenter has a workshop of tools for different jobs, an instructor must have a classroom of tools, to meet the job of teaching and learning.

It is generally accepted that different people have different styles of learning – the ways they best absorb and process information. The TIP Database, whose stated purpose is to provide “a tool intended to make learning and instructional theory more accessible to educators” and provides “brief summaries of 50 major theories”. Gardner’s Multiple Intelligences Theory is one that repeatedly cropped up in readings for this class and other research. Gardner theorizes that there are seven distinct forms of intelligence in which individuals have various degrees of proficiency: “linguistic, musical, logical-mathematical, spatial, body-kinesthetic, intrapersonal (e.g., insight, metacognition) and interpersonal (e.g., social skills)”.

He believes that teaching and learning should be geared towards the individuals’ strongest intelligence forms. There are, undoubtedly, countless more learning theories. Regardless, different people learn in different ways. Hypermedia is a tool that can work with many different ways learners learn.

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5 [http://www.quasar.ualberta.ca/edpy485/mmedia/hypmind.htm](http://www.quasar.ualberta.ca/edpy485/mmedia/hypmind.htm)

6 [http://tip.psychology.org/index.html](http://tip.psychology.org/index.html)


8 [http://ericae.net/digests/tm9601.htm](http://ericae.net/digests/tm9601.htm)

9 [http://tip.psychology.org/gardner.html](http://tip.psychology.org/gardner.html)
Using Gardner’s theory, hypermedia would be included in presenting material that appeals or addresses the various types of intelligences. One article provides the example of teaching about the Revolutionary War. The author suggest that the teacher can show students battle maps, play revolutionary war songs, organize a role play of the signing of the Declaration of Independence, and have the students read a novel about life during that period. This kind of presentation not only excites students about learning, but it also allows a teacher to reinforce the same material in a variety of ways. By activating a wide assortment of intelligences, teaching in this manner can facilitate a deeper understanding of the subject material.

Many of these activities could easily be accomplished through hypermedia tools that are already available. A quick Google search led me to a PBS site *Liberty! The American Revolution*. The site contains incredible resources for teachers and students and links to even more resources.

One problem does crop up immediately – out of date links. For example, the music section’s Teacher’s Guide references several links on 
http://www.fssd.org/PGS/PGS_Digital_Museum/ that all come back “file not found.” Backtracking to the main page for the Franklin Special School District and searching for “revolutionary war” returned zero matches, indicating that the site has been pulled. The same information is available elsewhere on the web, but it inconvenient and discouraging at best that the information isn’t up to date.

This Revolutionary War example typifies a couple of challenges or issues that the use of hypermedia presents. Since hypermedia isn’t always self-contained students can end up at a wide variety of “destinations.” This immediately can create a couple of issues. First it becomes important for students to be able to evaluate content that they encounter.

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10 http://ericae.net/digests/tm9601.htm
11 http://www.pbs.org/ktca/liberty/index.html
12 http://www.pbs.org/ktca/liberty/tguide_5.html
Putting content on the web is “is easy, cheap or free, unregulated, and unmonitored” and the burden lies on the user/reader “to establish the validity, authorship, timeliness, and integrity of what you find.”\(^{13}\)

Second, because of the potential vastness of the resources available to the student, especially when the web is brought into play, not every student has the ability/skill to cope successfully. It is easy to get sidetracked or distracted from your original purpose as the learner. As Azevedo, Winters, and Moos state in their study *Can students collaboratively use hypermedia to learn about science?: the dynamics of self- and other-regulatory processes in the classroom* “not all students have the self-regulating skills necessary to learn from these rich environments.”\(^{14}\)

Linked with the student’s ability to cope with the material is a third issue. Using hypermedia often removes the “control” from the teacher. It is not a traditional flow of information that the teacher imparts to the student in a top-down fashion. The Hypermaze B section on Consumers of Linear Media has a sign that reads “A key advantage to linear text is that leads the reader through the key concepts in a manner that, hopefully, increases understanding. The reader may "get lost" in the concepts but will know where he or she is in the text.”\(^{15}\) The same sentiment applies in using hypermedia in the classroom. The instructor can not take the learner by the hand and guide them directly. The learner chooses his path, encounters concepts, and [hopefully] synthesizes a learning experience. It just may not be the experience the teacher expected or desired. Shifting

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\(^{13}\) [http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html#Rationale](http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html#Rationale)


\(^{15}\) Author unknown. HyperMaze B. AETZone. Amy Cheney’s FDN5420 class, Spring 2007. Department Of Leadership and Educational Studies. Appalachian State University
from a teacher-centric model to a student learner centric model in the context of
MindTools was a theme that was repeatedly discussed in FDN5220 last semester.

Our world is becoming more technological. In my lifetime, a personal computer
has gone from something I had never seen, to something I only saw in my middle school,
to something that I use every day and see in most friends’ and acquaintances’ homes.
Most of my friends brag (or complain) that their kids know more about technology and
computers that they do. The miniaturization and personalization of technology can only
increase the pervasiveness of technology in our lives. I predict that students will want and
expect to incorporate technology into their educational experiences. The integration of
hypermedia technology and tools into the educational experience will become a de facto
norm. How teachers handle this student expectation/desire will determine, at least in part,
their success or failure as an instructor.