

하여 학생들이 2-3시간씩 자리를 비우지 않아 시간을 제한할 만큼 자리다툼이 일어나고 CALL 학습에 너무 많은 시간을 보내 다른 공부에는 지장을 초래하는 사례가 발생하기도 한다.

요 근래 교육부에서도 국제화 세계화에 발 맞추어 원어민 영어 보조 교사들을 초빙하여 1996년 6월부터 년 1,000 여명을 각 시-도 교육 현장에 파견하여 영어 교육 목표에 부합되는 의사소통 능력을 함양하는데 돕고자 한다. 의사소통 능력을 기르는 데 원어민의 도움도 필요하나 한국교원대 부속고의 실험 연구로 비추어 보건대 학습자들이 멀티미디어 코스웨어로 학습과 연습을 열심히 하고 원어민을 만났을 때 자신감도 갖게 되고 효과도 있게 된다. 원어민 교사의 현장 투입과 아울러 멀티미디어 어학실습실과 멀티미디어 코스웨어의 현장 활용이 병행되면 하는 바램이며, 멀티미디어 코스웨어의 활용 방안에 관한 현장 영어교사들의 연수가 필요하게 된다.

나날이 변모하고 있는 현대 사회에서 영어교사는 교육과정의 목적을 이해하고 교사가 이러한 목적을 달성하기 위해 컴퓨터가 어떻게 도와줄 수 있는가 알 필요가 있고 필요한 분야에 컴퓨터를 적절히 사용하여 그의 목적을 달성하는데 큰 도움을 받을 수 있을 것이다. 또한 영어교육자는 컴퓨터가 영어교육이라는 전체적인 시스템에서 어떻게 적절히 활용될 수 있는지 연구하고 적용해 볼 필요가 있겠다. 급속히 발전하는 멀티미디어 코스웨어를 분석하고 연구하여 한국적 상황에 맞는 코스웨어 개발이 필요하다. 이렇게 하기 위해서는 영어에 관한 지식과 능력, 영어 교수와 학습에 관한 이론, CALL에 관한 지식을 겸비한 영어교사, 영어교육 전문가, 교육공학 전문가, 컴퓨터 전문가들이 체제 접근 방식(systems approach)으로 협력하여 기존의 CALL이 갖는 문제점을 발견하고 이를 개선하고 한국인의 기호와 의식구조에 맞게 양질의 CALL 코스웨어 개발이 이루어 져야 하겠다.

멀티미디어 컴퓨터와 코스웨어는 영어교육의 모든 문제를 해결해 줄 수 있는 만병통치약의 역할은 할 수 없다. 그러나 인간이 도구와 기계의 활용으로 인간의 능력을 크게 확장시켰듯이 교육과정을 고려해 체제 접근 방식으로 개발된 멀티미디어 코스웨어는 영어교사와 영어학습자들의 의사소통 능력을 바람직한 방향으로 확대시켜줄 수 있는 현대 문명의 총아이다.

Information Literacy and Student Empowerment

Tim Newfields⁸⁾

This presentation examines the concept of “information literacy”, considers ways to promote it, and explores its role in empowering students.

Information literacy could be defined in a variety of ways. The Northeastern University Information Literacy Interest Group (1997) describes it as, “the ability to identify, obtain, process and effectively use the information necessary for ones work or education. It includes the ability to critically evaluate the quality of information, whether it is incorrect, inaccurate or incomplete.” A generation ago, information literacy implied familiarity with card catalogs and bibliographic indexes. Today it also includes proficiency with Internet search engines and online databases. A large amount of key scientific information is now on the Internet and students who aren't “net savvy” will find it increasingly hard to do some forms of research.

Computer literacy, which is a multidisciplinary set of skills involving the ability to read, type, write, assess, and manage information, is an important component of information literacy. Another important component is a capacity for “critical thinking”.

For general users, computer literacy is likely to have three components :

- (1) understanding basic computing principles,
- (2) gaining familiarity with at least one specific operating system, and
- (3) learning to use several software applications.

8) Tokai Univ. College of Marine Science Dept. of Foreign Languages

Comparing computers to automobiles can be useful in several respects. Just as automobiles need regular tune ups, oil changes, and engine checks computers, too, require periodic software and hardware maintenance. The distinction “procedural knowledge” (e.g. knowing how operate a specific software program) and “declarative knowledge” (e.g. understanding how a software program actually operates) is important. Because computers have not reached the point of “seamless” household appliances, it is necessary for many computer users to learn how to “get under the hood” and debug their computers.

How much information does an average non-computer major need to know about computers? Most users will probably need these skills :

- * Knowing how to turn a computer on and off correctly,
- * Learning how to organize, compress, backup, and protect data,
- * Understanding how to duplicate, delete, rename files,
- * Learning some files which can be modified or deleted - and which can't,
- * Understanding basic concepts about computer memory and learning some “memory management” principles
- * Discovering how to launch specific applications and transfer data across applications,
- * Becoming familiar with common keyboard/scripting shortcuts.

Information Literacy : How Should It Be Taught?

Rather than following a “technology-driven” approach to education Papert (1993) has emphasized that it is important to start with educational principles first, then consider how technology *might* be used to support those principles. The basic educational principles which I believe in are summarized in these points :

1. Students should be offered a choice in what and how they study - and also how they are evaluated.

APPLICATION : I prefer to use a student-negotiated syllabus.

2. Student should be given a chance to generate their own material, since this is often more personally meaningful and their attitude towards self-generated material tends to be more positive.

APPLICATION : The materials in my course are student-generated Web pages.

3. Teachers should avoid overly teacher-centred roles and give up the need to control everything. In many ways peer-teaching is more effective than teacher-centered models.

APPLICATION : I focus on "macro-teaching" and encourage students to "microteach" specific language/HTML skills, interceding only when they get stuck.

4. "Learner training" should be an integral part of any course. The way new information is learned is almost more important than what is learned. In my view, process "molds" content.

APPLICATION : Instead of me telling students how to learn or citing research about "good learners", I prefer to have successful students in the class tell others how they developed specific language or computer skills. (This approach is less "preachy" and perhaps more believable.)

5. Opportunities for out-of-classroom learning should be created and

homework exercises should be developed.

APPLICATION : For each hour of class time, I expect one hour of homework.

6. Attainable goals should be set and the degree of new information kept within to a point where the majority of students can master each task.

APPLICATION : [refer to Syllabus]

7. Collaborative working is valuable not only for the information shared, but for the social skills which are developed through the collaborative process.

APPLICATION : The main collaborative activity in my course was sharing email with other students. (There are many more possibilities.)

One key aspect of information literacy not discussed in depth during this presentation is critical thinking. I will emphasize that "information literacy" involves far more than the ability to use computers ; the ability to critically evaluate the information one receives online is paramount. Several classroom critical thinking resources will be briefly mentioned.

Why Use English to Teach Information Literacy?

In a pilot program at Tokai University, students used English to learn about computers - not merely using computers to learn English. The objectives of the course were threefold : to develop English skills, computer skills, and critical thinking skills.

I believe there are several compelling reasons to consider using English as a language of instruction while learning about computers. First, many computer languages are, in fact, based on English. HTML, SGML, VRML, and C++ all use English extensively. Second, the greatest volume of information about computers (and most fields of technology) is in English. Cutting edge discoveries tend to appear first in English, and later in other languages. A third reason for having English as a means of instruction is that much of the language about computers is concrete and straight-forward. By using simple metaphors creatively, key computing concepts can be understood by even lower-intermediate level EFL students. The high-frequency words used in computing are starting to change the entire English lexis. Today, whether one is a computer user or not, it is important to recognise such terms as "Web page", "bandwidth", "hack", and "OS". A final, and perhaps most compelling reason, to offer instruction in English is that students *can* grasp A LOT of English when they are interested in the topic covered. It is a shame to see how English classes in many universities do not teach a living language used for communication, merely a dead subject used for tests. Content-based instruction is an exciting field of English teaching.

Assessment Issues

In the program I taught, students spent varied degrees of time on the computer and (not surprisingly) developed varied degrees of computer proficiency. Those who did best either owned their own computers or spent lots of time in the college computer lab. One student was marginal and hardly completed any homework assignments. I found that students who had already developed typing skills and familiarity with the QWERTY keyboard had a lot easier (and more enjoyable) time when using computers than those who had to "peck" at each single key.

Assessment was based on two factors : (1) peer evaluation of student web page projects, and (2) a simple HTML quiz in which students construct a HTML page with a specific design within a one week time frame. (This presentation will mention other “information literacy tests” as well.)

Student Empowerment

The ultimate purpose of information literacy should be the empowerment of individual learners.

A lot of people feel intimidated by computers. Computers are still not perfectly “user friendly” : freezes, crashes, and other software glitches are common. Whereas novice computer users are likely to go through panic, more experienced users will probably just feel inconvenience. Most computer errors are, in fact, due to user mistakes and lack of proper safety protocols. Just as a lot of time is spent teaching students safety in the chemistry lab, we also need to teach them the principles of “computer safety” .

What makes students feel empowered? Basically, a sense of control and accomplishment. It is important for teachers to understand both how they can facilitate (and get in the way of) student empowerment. This presentation will discuss how teachers, perhaps unwittingly, “disempower” those they work with - and also mention concrete behaviours which can increase student confidence and sense of power.

Summary

Computers are becoming increasingly prevalent in classrooms, homes, and businesses. Love them or hate them - it's hard to ignore them. By becoming more literate about computers and other new educational technologies, we will be in a better position to critically evaluate them.

BIO-DATA : Tim Newfields teaches at the Tokai University College of Marine Science, 200 km. south of Tokyo. He has a M.A. degree in TESOL from the School for International Training and has served as national officer of the Japan Association for Language Teaching for several years. Currently he is editing web pages devoted to language teacher education, testing, and educational video at [http : //www2.gol.com/users/tn/](http://www2.gol.com/users/tn/).

