Providing Learners with Individualized Learning Strategies

by Leaundo Hemphill

Computer-based and online instruction is being touted as actively engaging the learners, allowing them to control their progress through instruction. Unfortunately, we know that not all learners use effective learning strategies for the task at hand. How can we prepare learners for learner-controlled instruction?

In a recent dissertation study, I did an extensive literature search into specific learning strategies that can improve performance in learner-controlled instruction. Based on the literature search, I developed a learning profile instrument prototype. The prototype consisted of a self-report survey and individualized learning profiles. Based on learners’ answers to the short survey and on the characteristics of the instruction, the profile offers the learners strategies for increasing their metacognitive and cognitive skills, academic motivation, required background knowledge, and self-efficacy.

The prototype was tested at three colleges. All subjects were given the learner profile survey, a pre-test, the training course, a post-test, and an exit survey. Treatment groups received individualized learning strategy profiles divided into three parts: planning before instruction, monitoring during instruction, and evaluating performance after instruction.

Results showed that statistically significant difference existed between the achievement gains in the subjects who followed the suggested strategies and the subjects who either were not given the strategies or did not use the strategies. Interestingly, the time spent in the course and the subjects’ rating of the usefulness of the training course did not vary across the groups.

As educators and developers, we need to identify the learning preferences and needs of our learners prior to instruction. Then, based on that information, we can suggest learning strategies that are directly compatible with our learners’ needs at the time of instruction and with the characteristics of the specific instruction. Finally, we need to encourage learners to use the suggested strategies.

Literature Ladders: Linking Books and Internet Resources

by Annette Lamb

Literature Learning Ladders is a project that uses books for children and young adults as the focal point for technology-rich thematic activities. Themes such as adventure, animals, family, friendship, nature, fantasy, and history serve as the ladder rungs of this exciting online learning resource. Popular literature can bring reading and the world alive for students. By adding the power of the Internet, educators can build information-rich thematic technology connections.

The conference session on Literature Learning Ladders used numerous books for children and young adults and Internet Web sites to show participants how they can identify author, illustrator, and book information. In addition, topical and content-specific Web sites produced by adults and children demonstrated how resources could be used as part of technology-rich classroom activities. All the resources discussed in the session are (Continued on page 42)
one video window box while reading what he wrote in another window box.

After the division of tasks, the meeting was finished. Smith returned to his conference and the other team members to their tasks. The meeting was successful for all participants.

**Cache High School**
Tim Smith was not the only person in Denver who needed to be in two places at once. Steve Zsiray, Executive Director of Curriculum and Instruction at the Cache County School District, teaches a weather class each Friday at Cache High School. The weather class is designed to teach weather through field experiences. Recently, the class studied valley inversions and canyon winds. Zsiray recently set up an EnVision unit between his classroom and Dr. James Hack at the National Center for Atmospheric Research, in Boulder, Colorado, to allow students to ask an expert questions about mountain and valley weather phenomena. Although Zsiray's class was scheduled for a time Zsiray would be attending the conference, the technology of EnVision allowed Zsiray to teach his weather class as if he were in the classroom. The students interacted with the teacher and the teacher interacted with the students.

The class was particularly successful in two aspects. First, a teacher hundreds of miles away provided students an interactive learning environment with voice, video, and visual aids without physically being in the classroom. Secondly, it exposed and involved students in the practical and exciting use of technology.

**Conclusion**

Being in two places at once is now an affordable reality. For Tim Smith it was being in Denver conducting a meeting to his staff in Logan, and then teaching Russian to an elementary class, also in Logan, all the while attending the conference in Denver.

The Center for the School of the Future, in partnership with Cache County School District, is currently exploring other ways to use two-way desktop video conferencing in educational settings. Following are a number of avenues they are exploring:

- Teacher-to-teacher collaboration
- School-to-career issues (coordination of apprenticeships, internships, and other related activities)
- Academic advisement
- Student teacher observation
- Professional development
- Resource sharing (between schools)
- Special course offerings to multiple schools (Russian, Japanese, Weather Class)
- Classroom-to-classroom collaboration (shared projects)
- Mentoring

The possibilities are endless. Imagine the possibilities of having a scientist from NASA coming into a classroom thousands of miles away to assist a teacher in a lesson about space, or having a major children's book author speaking to a class in a library media center. EnVision allows educators and experts to have an important impact on students who may otherwise never get a chance to interact with or ask questions of them. Thus, this new technology will not only enable people to be in two places but also share knowledge with millions more throughout the world.

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