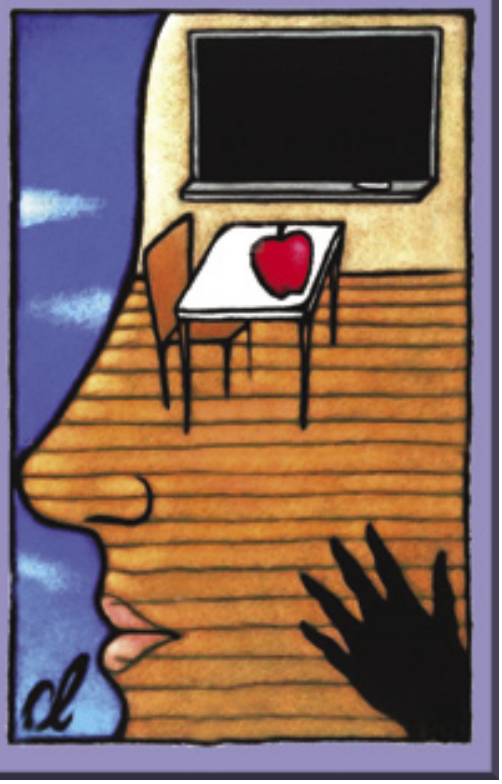
Education Without Borders



The Distance Learning Advantage

by Ben Reynolds

Distance education is often defined as learning anywhere, anytime. In distance education, teachers and students almost never meet face to face. It doesn't matter if the teacher works at 8 a.m. and the student works at 7 p.m. Although distance education has been around since respected Roman writers exchanged scrolls with wanna-be writers, offering encouragement and advice, distance education really took off in the last ten years with the advent of e-mail, the Internet, and the Web.

I've been working in distance education for more than 20 years. In that time, I've seen vast improvements in the way material is presented, in the quality of interaction between tutors and students, and in the lives of thousands of students who have participated in CTY's distance programs.

Why Distance Ed?

Electronic advances have done away with the long delays in correspondence courses. When CTY's distance writing program was founded in 1983, students waited three to four weeks for their instructor's responses to an assignment. While it is still possible to take courses by snail mail, the vast majority of gifted students work via e-mail and the Web. These Netcentric formats allow much more interaction. For example, a student can query an instructor via e-mail or Web-based classroom at 7 p.m., and the instructor can respond whenever she pleases, as long as the response is waiting for the student when he is ready to sit down and work the next night.

Distance education is important for gifted students because they are a small population dispersed about the globe. While a school district may be unable to provide an Advanced Placement Psychology instructor for one or two students, distance education can provide an instructor for 15 or 20 students worldwide. Many schools use distance education to provide advanced math courses to gifted students. Due to scheduling or personnel issues, a school may not be able to provide Algebra at an elementary school or Calculus in a middle school. But a student in an elementary school computer lab can pop an Algebra CD-ROM into the machine, do the day's reading, then take the online quiz via the Web and know the results before she leaves the lab for gym class.

In many cases, as the student is receiving the results of the quiz, those same results are being tallied on a server. Later, those results, along with results from other students' quizzes and tests, are downloaded to the Algebra instructor. The instructor reviews the results and responds to the student via e-mail or a message in a Web-based classroom. Those comments can be waiting for the student the next time she does Algebra.

Real-Time Distance Ed

Most of what I've described so far is called asynchronous communication,

meaning that the student and teacher do not have to be connected at the same time. In contrast, synchronous communication happens in real time. The instructor and the student don't have to be in the same room, but they have to be connected at the same time. Synchronous communication has some restrictions; for example, it can be difficult for a kid in Hong Kong to meet with an instructor in Baltimore because of the 12-hour time difference.

However, some situations work best in real time. For example, it's very difficult to make certain math symbols in e-mail or in a Web-based classroom. But electronic whiteboards can make those symbols. And, because users can write on those whiteboards, they can show their calculations. Plus, with increased use of high-bandwidth Internet connections such as cable and DSL, it becomes possible to add voice to the whiteboard. The whiteboard ends the need to be a fast keyboardist and lets the hands write math equations.

Is Distance Ed for You?

Not all gifted students belong in distance education. Some students need the structure of a face-to-face class. In order to get work done thoroughly and on time, they need to know they'll be seeing the teacher every day. Distance courses work best when students are interested in the topic and are motivated to work independently.

Students should also consider the larger educational context when deciding whether to take accelerative courses. For example, if you have to take Algebra I next year, taking Algebra I this year via distance education is a very bad idea. Repeating what you've already learned creates boredom. Idle hands are the assistant principal's disciplinary playground.

Similarly, if you've got a full school day, play an instrument daily, plan to be in the school play, are on a sports team, and your school isn't going to give you release time for distance education, you don't need distance education. You need sleep. But seriously, students with a very full daily schedule should not participate in distance education unless they are going to drop something or get release time during school. Netcentric distance education courses are especially time-consuming on a nearly daily basis.

For example, during a two-week stretch in the academic year, students in CTY's distance writing Level 3 course must read a series of exercises from a CD-ROM, write several exercises, participate in an online writers' (peer review) workshop, query their instructor as needed, and compose a final writing assignment. All this interaction creates a very high-quality, student-centered course—students complete the equivalent of a college-level composition course—but it adds six hours of work to those two weeks, and the work needs to be done almost daily.

Enrichment courses, which are designed to broaden rather than accelerate your education, offer a variety of possibilities. For example, a math course might sharpen investigative skills, broaden mathematical understanding of concepts, and enhance reasoning skills. Designed around performance objectives that reflect national and state mathematical standards, the course might demonstrate how mathematical issues arise out of real-life situations. Writing courses, being distinct from the typical literary analysis of a regular school English class, can be similarly classified as enrichment, even though the challenge level is college.

Whether you take a course for acceleration or enrichment, distance education can give you more quality time with an instructor. Computers can grade quizzes,

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The Great Exchange

Here is one example of correspondence between a student and her tutor (text has been abridged for space limitations). For more examples, see *www.cty.jhu.edu/writing/samples/sampewt.html*

Dear Tutor,

I hope this is what you mean by a piece of persuasion. If you think I got carried away with my strawberry/whipped cream simile (metaphor?), I can see that. I couldn't look up anything in Strunk and White (that might show) because I'm on vacation across the country in Washington. I know my last essay could have used some work, but I'm not going to say anything about my reasons that could be held against me. Anyhow, hope this one's better.

See you soon,
Student

Dear Student,

Here are my comments on your last essay. Yes, I think you worked the strawberries and whipped cream metaphor a bit hard. At first, I thought you were going to argue/persuade by use of analogy, which logicians will tell you is a no-no, but you didn't. You really use the metaphor for comparison and for explanation, a good move....

Your points are well made. The comparison within your metaphor is familiar, so we understand the whole metaphor's application right from the start. (Note my check marks in the margin: especially good stuff there.) Don't forget that to persuade, you need examples to support your generalizations. See the readings I sent on generalizations and specific evidence. Thus, the 4th paragraph wants an example of the "stirred up thoughts." ...

As you know, conscious artistry is how one becomes good. Athletes worry about where they place their feet, how they bend their elbows, which muscles flex when. Plumbers worry about how to get the solder smoothly all the way around a pipe joint. They THINK about what they're doing, just as writers do. Actually, we think about what we're doing until, like typing, it becomes so second nature that we don't think about it. Your point about why you write the way you write is well made, important, worth remembering. The conclusion is nice. The clash of metaphors (ship & cream) is strained but not unsightly. It edges toward cute without crossing the border. It has the virtue of reprising the original comparison (and just a bit earlier, "enriched" harkens back to the richness of strawberries and whipped cream).

This is good work, especially considering that you were on vacation at the time. I think you write very well; you show great promise.

Thanks,
Your Tutor

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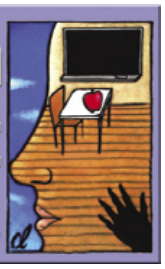

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freeing the instructor to comment on or analyze the results. The computer can also provide the equivalent of a face-to-face lecture about anything from parallel structures in writing to the Pythagorean Theorem in math to approach-avoidance conflict in psychology. When instructors no longer have to lecture from the book or do quiz/test record keeping, their time can be better spent. Thus, you're more likely to get an individualized comment about where and why your parallelism doesn't work, what you don't understand about the Pythagorean Theorem, or how approach-avoidance conflict works in the mind of skydivers.

Distance education can expose you to course work you might not find in the regular classroom. It can provide you with feedback faster than you may get in a face-to-face class. And the feedback is likely to be much more extensive than the standard "Great Work! A+." Best of all, you can do it all from home. You don't have to travel. You don't have to go to college early. You just need an Internet connection and a computer. ■

Ben Reynolds started CTY's writing program in 1979, wrote a book on teaching writing the CTY way in 1983, and was principle author of the CD-ROM version of CTY Distance Education's most popular course, Crafting the Essay. But he is most proud of his two fine sons.

Selected Distance Education Programs

The following programs vary widely in their course offerings and formats. Visit the sites of the programs that interest you to learn how course materials are delivered, how much time you will have to complete the courses you register for, and whether qualifying test scores or prerequisites are required.

Some of these programs award high school and/or college credit. If you are taking distance education courses to accelerate your placement in school, we strongly encourage you to discuss your options with school administrators before selecting your courses. Not all schools will offer placement based on courses you've taken or accept credit earned in these programs.

PROGRAM	GRADE LEVELS OFFERED	SUBJECT AREAS	NOTES
CTD LearningLinks www.ctd.northwestern.edu/learning/courses.html	K–AP (varies by subject)	CS/H/M/S/SS	Offers honors & AP coursework; math courses offered through EPGY.
CTY'S Distance Learning Programs http://cty.jhu.edu/math and http://cty.jhu.edu/writing	K–AP (varies by subject)	M/H/S	Offers both accelerative and enrichment courses.
Gelfand Correspondence Program in Mathematics http://gcpm.rutgers.edu	n/a	M	Correspondence course via surface mail.
Indiana University High School http://scs.indiana.edu	9–college	A/CS/H/L/M/S/SS/O	Offers high school diploma.
***Merlyn's Pen* Mentors in Writing** www.merlynspen.org/contentmgr/showdetails.php/id/1763		H	Correspondence course via surface mail.
Oklahoma State University Concurrent Enrollment http://k12.okstate.edu/concurrent_enrollment.html	AP–college	H/M/SS	Open only to students in grades 11 & 12.
Stanford Education Program for Gifted Youth (EPGY) http://epgy.stanford.edu	K–college (varies by subject)	CS/H/M/S	
Texas Tech Extended Studies www.dce.ttu.edu	K–college	A/H/M/S/SS	Offers high school diploma.
University of Missouri-Columbia High School http://cdis.missouri.edu	3–college	A/H/L/M/S/	Offers college-prep and general-ed diploma tracks.
University of Missouri Gifted Online Accelerated Learning http://cdis.missouri.edu/GOAL	9–12	A/H/L/M/S/SS	Open to gifted students in grades 4–8.
University of Nebraska-Lincoln Independent Study High School http://nebraskahs.unl.edu	9–12	A/H/L/M/S/SS A/H/L/M/S	Open to gifted students in grades 4–8. Offers high school diploma.
University of Oklahoma Independent Learning High School http://ouilhs.ou.edu	9–college	A/CS/H/L/M/S/SS/O	Offers high school diploma.
University of Pennsylvania Advance Online Learning www.sas.upenn.edu/CGS/pennadvance	College	H/M/S/SS	Open only to students in grades 11 & 12.
University of Texas K-12 Solutions www.utexas.edu/cee/dec/k12	9–college	H/L/M/S	
University of Wisconsin–Extension Independent Learning http://learn.wisconsin.edu/il	9–college	A/H/L/M/S/O	
Virtual High School www.govhs.org	8–college	A/H/L/M/S/SS/O	Despite its name, does not award high school diplomas.
Virtual School for the Gifted www.vsg.edu.au	n/a	CS/H/M/S/SS	Note that this school is based in Australia.

Key to Subject Areas: Art/Fine Arts (A); Computer Science (CS); Humanities (H); Languages (L); Mathematics (M); Science (S); Social Sciences (SS); Other (O)