

Increasing High School Financial Educators' Skills Through Distance Education

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Abstract

Educators often resist teaching financial concepts to youth because they don't have the necessary skills and self-confidence themselves. In addition, time is limited to attend face-to-face training meetings. A distance education program via WebCT® technology was created to reach educators 24 hours a day and 7 days a week. Teachers increased their own financial literacy and learned to teach the National Endowment for Financial Education High School Financial Planning Program curriculum through WebCT® activities. Educators from three states participated in the pilot study. Results revealed that educators appreciated the convenience of the WebCT® training and gained valuable insights into financial concepts for personal well-being as well as for classroom use.

Situation

Many adults struggle financially, and some ultimately succumb to bankruptcy. During the first 6 months of 2001, 767,235 bankruptcies were filed in the United States, representing a 21 percent increase compared to the same period during 2000 (Fort Collins Coloradoan August 25, 2001). Financially unaware teens often follow adults into financial crisis. In 1998, the Jump\$tart Coalition, a national partnership of nearly 50 government agencies, consumer organizations, and business groups, reported a correlation between states with high numbers of adults who declare bankruptcy and the high numbers of high school seniors who are illiterate about managing money. Dara Duguay, Jump\$tart Executive Director, summed up this situation: "Clearly, this demonstrates the need for schools to provide personal finance curricula for the nation's 50 million students in grades K-12" (Jump\$tart Coalition 1998).

When the Jump\$tart Coalition conducted a follow-up study in 2002, the students surveyed had inferior financial knowledge compared to students in 2000 and 1997 (Jump\$tart Coalition 2002). Lewis Mandell, researcher for all three studies, concludes that "highly interactive, reality-based courses in money management -- which provide intensive and applied instruction in personal finance -- are effective for developing financially savvy teens" (Mandell 2001, 5). Another nationwide survey of students found that only 40 percent understood that mortgage rates were lower than credit card rates. Sixty-eight percent stated that their parents never talked to them about financial matters (Fort Collins Coloradoan April 13, 2001).

Although U.S. teens spent approximately \$153 billion during 1999, a Youth and Money Survey revealed that 79 percent of students ages 16-22 have never taken a high school or college class in personal finance (Youth and Money Survey 1999). Two-thirds of students surveyed agreed that they needed additional money management lessons.

Despite a lack of formal training in financial planning, young adults take an active role in using credit. College students use credit cards to help fund their education. Nearly 70 percent of the students surveyed had at least one credit card. Of the students interviewed, 55 to 66 percent carry a credit card balance of more than \$2,000, and the average student debt at various universities ranges from \$12,700 to \$20,904 (Manning 1999).

Family members' influence on students is unclear. For example, Youth and Money (American Savings Education Council 1999) reported that 94 percent of students they surveyed identified their parents as their main source of money management information. However, the 2001 Parents, Youth and Money Survey (American Savings Education Council 2001) revealed that parents overestimate the influence they have on their children's knowledge of financial aspects. Many parents acknowledged that they had poor financial habits. Fewer than 40 percent of the parents reported that they paid off their credit card bills each month.

Education is one of the most effective approaches to narrowing the gap between financial ignorance and literacy. Bernheim, Garrett, and Maki (1997) found that adults who had taken financial education courses in high school were saving and accumulating at a higher level of wealth than adults who had not taken financial education courses.

A study evaluating the impact of the National Endowment for Financial Education (NEFE) High School Financial Planning Program® (HSFPP) immediately after 10 hours of classroom instruction and again 3 months later revealed that 86 percent of the students demonstrated an increase in financial knowledge or behavior when dealing with money. Three months after the class, 58 percent said they had improved their spending habits and 56 percent had improved their savings habits. Teachers who had financial training possessed higher levels of confidence toward

financial education, an attribute that translated into higher educational attainment of their students (Danes, Huddleston-Casas, and Boyce 1999).

Obstacles of face-to-face training included limited time and travel dollars. Extension educators decided to explore offering the HSFP curriculum through distance education. These efforts were an attempt to increase the financial skills of high school students by using distance education to expand teacher training.

Distance education

Land-grant institutions are traditionally known for their on-campus instruction. At the same time, land-grant presidents have urged faculty to respond to the "demands of a changing workforce for opportunities to continue their education..." (Kellogg Commission on the Future of State and Land-Grant Universities 1999). Clearly, 21st century educational practices must expand through distance education to meet the multifaceted lifestyles of the learners.

Forms of distance education range from the original low-tech correspondence method to more sophisticated forms of technology including video, audio, television, and Web-based tools. New distance education techniques provide added opportunities to increase proficiency for both professional and personal growth. On-line training has grown at an exponential rate (Walker 2001b). Benefits include convenience, ease of use, ability to have interaction with other users worldwide, and access to graphics, and hyperlinks (Walker 2001a). A United States Department of Transportation study described the effectiveness of Web-based training. Results showed that interactive programs provided users with a sense of connection with other learners and infused essential information and knowledge. The added benefit of distance education was a significantly lower cost compared to in-house face-to-face training (Walker 2001b).

WebCT® : Distance education technology

Web Course Tools (WebCT®) is a Web-based technology developed at the University of British Columbia. WebCT® was designed specifically to adapt to the philosophy and mission of institutions of learning who attract a diverse group of individuals with differing learning patterns, skills, and abilities. When educators can access education through a wide array of distance education tools, they have an opportunity to "acquire additional knowledge and skills needed to teach challenging subject matter and to use emerging new technologies" (WebCT 2001). WebCT® products and services are designed to stimulate collaboration and inquiry. A variety of tools in the on-line class facilitates distance learning.

- Conferencing system

- On-line chat
- Student progress tracking
- Group project presentation
- Student self-evaluation
- Grade maintenance and distribution
- Access control
- Navigation tools
- Timed quizzes and exams
- Electronic mail
- Automatic index generation
- Course content searches

Educators worldwide use WebCT® to extend their educational outreach. More than 2,200 institutions in 78 countries use WebCT® technology. The United States (1,569 institutions), Canada (216 institutions), and United Kingdom (103 institutions) are the leaders in distance education via WebCT® (WebCT 2001).

Distance education reaches educators

As young adults struggle with financial decisions, educators often resist teaching financial concepts because they themselves feel they are deficient in necessary skills and self-confidence. Many educators don't have the time to attend training meetings. Those in rural areas may not have access to training opportunities.

On-the-job training for high school educators is not always possible. The regimented school-day schedule and the time required for class preparation and faculty meetings leave little available time for training. Yet, economic theory supports the premise that as employees obtain training, the likelihood of job turnover decreases. Employees increase confidence in their positions and become motivated to become more productive (Dearden et al. 1997).

Funded by NEFE, faculty at a land-grant university designed a distance learning opportunity for educators. The objectives of the HSFPF teacher-training program were as follows.

1. Engage educators with current and relevant information about personal finance to expand the knowledge base of the educators.
2. Provide a compelling introduction to the HSFPF materials, learning activities, exercises, and evaluation instruments to demonstrate to teachers that the HSFPF is a comprehensive curriculum for use with their students.
3. Offer teaching ideas and curricula to help teachers provide real-life experiences and promote lifelong skills.
4. Link to educational Web sites for additional information.
5. Model how students can demonstrate and apply knowledge and skills rather than respond with memorized facts and isolated bits of information as part of the new performance-based assessments in schools.
6. Present student-oriented exercises that engage teachers and ultimately students in the challenge and discovery of how to make good decisions to manage personal finances.
7. Evaluate the impact of distance education for educators.

A WebCT® teacher-training program was designed to help teachers become familiar with money management in order to make classroom time more interesting and challenging for students. Featuring 24 hours a day and 7 days a week (24/7) availability via the Internet, educators had maximum flexibility in choosing when and where to learn financial planning concepts. Hyperlinks to additional resources were added throughout the WebCT® lessons in order to provide current information and examples for use in the classroom. A technical consultant was available 24/7 via electronic mail, telephone, and fax to assist participants in using the Web-based course.

Educators worked on case studies that met personal financial needs and they were shown references and activities that would be helpful for them and their students. Each lesson was based on a "learn-by-doing" philosophy in order to engage both the teachers and students in learning that would be retained and used throughout their lives. Activities were designed to promote learning, not teaching. Teachers were not expected to be financial experts, but rather adults who experience the same financial challenges as teens are soon to face. The role of the teacher was clearly described as a guide to help their students make effective financial decisions.

Methods

The pilot sample consisted of high school financial education teachers from Mississippi, Minnesota, and Colorado, and Cooperative Extension educators who volunteered to participate. One hundred sixty-five financial educators participated in the pilot distance education program. Of those, 26 enrolled in the program for a small fee and one continuing education unit (CEU); and 139 participated in the distance education pilot program at no cost and for no credit.

Eight lessons were developed for teachers, based on the content in the HSFPF handbook.

- Lesson I: Youth, Financial Literacy and Tools for Successful Communication
- Lesson II: Money Management
- Lesson III: Careers and Entrepreneurship
- Lesson IV: Consumer Skills
- Lesson V: Credit
- Lesson VI: Insurance
- Lesson VII: Investing and
- Lesson VIII: The HSFPF Curriculum and State Standards

Each lesson introduced participating teachers to financial concepts for personal education as well as for use in the classroom. Internet sites provided "real life" activities for teachers and students. Activities for each lesson helped educators identify their own experiences that could be shared with their students. Each lesson was designed to foster discussion with and among students, their peers, parents, and other important adults in their lives.

User reactions to the WebCT® training

The educators who completed the WebCT® training rated it positively. One participant noted, "I really liked calculating the financial statements. In fact, my husband and I sat down and put together a statement of net worth, after which we revised our household budget a bit." Another said, "The lessons are interactive. Examples are up-to-date and of interest to persons regardless of their age. The content 'talked to the reader' not 'at the reader'."

After completing the training program, 100 percent of the participants felt prepared to teach high school students money management. They also perceived themselves as being more knowledgeable in regard to their own personal level of financial understanding and practice. Ninety percent said they were "highly likely" and the other 10 percent of the participants said they were "likely" to incorporate the HSFPP material in their financial education efforts. All participants agreed that using Cooperative Extension educators, credit union representatives, and financial planners to help teach classes would be beneficial.

High school and Extension educators were pleased with the clarity of directions and ease of use of technical features. Although a number of them had trouble getting started, they mastered the technical challenges. Their questions focused primarily on how to log onto WebCT® , how to view the entire document in one section rather than in small sections, and how to print materials. The technical consultant was always available to help each participant with his or her concerns.

The amount of time reported spent on each lesson ranged from 1 minute to more than 3 hours. Some participants reported they started with a basic review of the WebCT® program and then completed the lessons at a later time. This may explain the wide time discrepancy. As participants progressed through the lessons (I through VIII), they were able to complete the lessons in less time.

Educators made numerous comments that will help the project coordinators improve the WebCT® training. Technical questions such as how to print lessons and problems such as computers freezing up and error messages can be addressed in the initial set of instructions.

Many participants mentioned that it was helpful to them to have the Instructor's Manual open as they progressed through the lessons. Ordering the free Instructor's Manual prior to the WebCT® training is strongly suggested in promotional materials for the WebCT® training.

Participants liked the links to Web-based information and applied exercises. They appreciated the hands-on approach. "I liked the Web sites for information and ideas for classroom lessons. It was also great to have sample questions for use in the classroom." They liked the on-line links to the exercises in the Instructor's Manual. They mentioned learning lots of new things to use in their classrooms. The up-to-date information was beneficial, and they appreciated topics that related to students' real-life situations and created interest for the students.

Participants reported they were empowered in the classroom. One educator said, "The problem solving angle is great." "The last three lessons especially will call for problem solving skills when looking at savings, investing, and insurance as there is quite a bit of brain challenge in these topics, even for adults." Another person said, "I have owned auto, home, and life insurance for over 30 years, but learned so much from this program because terms are explained and

everything was written in a lay person's language. The questions and answers on the Web sites were excellent!"

Distance education offers knowledge and insight to learners no matter where they are or when during the day or night they want to learn. Innovative distance education strategies accomplished a successful transfer of financial planning knowledge and effective decision-making strategies to high school teachers and Extension educators.

User suggestions for improving WebCT® training

Five questions were asked at the end of each lesson:

1. Were the directions clear?
2. What technical problems did you encounter?
3. Estimate the amount of time required for you to complete this lesson.
4. What activities were difficult for you to understand or complete?
5. How could this lesson be improved?

Participants were encouraged to write additional comments and suggestions. Revisions and improvements were made to the WebCT® program based on the following responses.

1. Were the directions clear?

With the exception of one participant, all who responded said the directions were clear and easy to understand. One participant said that the directions were "fairly clear...rather steep learning curve as *this is my first on-line course.*"

2. What technical problems did you encounter?

The level of technical difficulties among distance learners varied. Some participants completed the lessons without any problems. Others had difficulties with their computers or keyboards locking up. This part of distance education, where software is ahead of hardware, may be typical. One distance learner stated, "It took me forever to get to the program." The program designers decided to provide more detailed instructions in later editions. Educators working with distance education must be aware of potential difficulties if the age and power of their students' computer systems are highly variable. The attractive opening page created by using animated software was dropped because it caused problems for educators with older equipment.

3. Estimate the amount of time required for you to complete this lesson.

The convenience of fitting the system around users' time schedules (including time at work) was supported by comments provided by some of the distance learners. It is important to note that users' familiarity with computers in general, WebCT® in particular, and willingness to try distance learning were initially critical elements to the distance education experience. However, as teachers gained experience, their confidence increased dramatically.

4. What activities were difficult for you to understand or complete?

The majority of participants who responded to questions about the pilot did not have any difficulty with the content activities. Some comments included:

- "They were good."
- "None. I thought it was very well written and easy to understand."
- "All of these were manageable to complete since I am familiar with the NEFE program."
- "Ease of worksheets."
- "I think it's highly effective. It's interesting and easy to navigate; it's attractive."

For the most part, the participants reported they felt competent accessing the activities throughout the lessons, and those who were not, learned quickly. Because of ongoing content glitches, course designers and instructors must constantly monitor their Web sites for readability and functionality.

5. How could this lesson be improved?

Most participants who responded to the survey were satisfied with the lessons. Comments included the following:

- "Good instructions to the program."
- "I think it is very efficient. The download pages are nice to use, and I really enjoyed the other sites I could access from these pages. There is some good information that is great for class, and it was easy to find instead of searching around on my own. It is often hard to find time to do that sort of thing. Supplements or enrichments are nice to have with this kind of series."

The distance learners' prior knowledge of computers and Web-based learning may influence their perceptions of distance education. The instructor must provide clear instructions and be available to help students who are having trouble.

Changes to Web-based training

The major change after the pilot was to move the distance education training from a WebCT® format to the National Endowment for Financial Education Web site. This allows educators, credit union employees, parents, youth leaders, and others to access the training without cost and does not require technical support.

The HSFPF Instructor's Manual and Student Guide have been revised. The Web-based training was also revised to make the crosswalk from the printed curriculum materials to Web-based training easier for educators to complete.

In addition to classroom teachers and Cooperative Extension educators, Junior Reserve Officer Training Corps instructors and credit union employees are actively teaching high school students about money management. The training has been broadened to make it more user friendly to those teaching in formal and nonformal school settings.

It is now possible for educators to receive either continuing education units (CEUs) or academic credit for their individual work. Academic credit requires additional projects and papers.

Conclusions

Analysis of the pilot delivery of the WebCT® HSFPF teacher-training program for financial education teachers revealed three important points:

1. Content presented throughout the course added to the personal knowledge of the teachers.
2. Distance education is an efficient method to reach educators anywhere, anytime.
3. The opportunity to integrate educational content with "real life activities" enhances learning and makes it possible for educators and students to master the subject matter.

By increasing the level of confidence in financial planning, providing a multitude of resources including hyperlinks, and available WebCT® technology assistance to answer questions, the WebCT® HSFPF teacher-training program met its objectives.

Training available

The HSFPF Web-based training can be accessed at anytime at <http://www.nefe.org/Webtraining/index.html>. The "Student Guide" and "Instructor's Manual" are available to educators at no cost. The ordering information can be found at the NEFE Web site.

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Cite this article:

Bickle, Marianne, Judy McKenna, and Jan Carroll. 2003. Increasing high school financial educators' skills through distance education. *The Forum for Family and Consumer Issues*8(2).