

Financial Literacy Teacher Training: A Multiple-Measure Evaluation

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This study evaluates a two-day train the trainer program designed to provide instructors from diverse backgrounds with the tools needed to teach financial literacy to individual debtors. Trained teachers reported satisfaction with their training and felt prepared to teach; they also provided constructive feedback. Pre- and posttest questionnaires reveal a 9% increase in financial knowledge and positive changes in attitude. Observations reveal that skills learned in training transferred to desired teaching behavior in the classroom. This paper addresses the implications of our findings for both the training literature and the implementation and operation of the recently passed 2005 bankruptcy legislation.

Keywords: *Financial Literacy, Training, Evaluation, Bankruptcy*

Introduction

The U.S. Bankruptcy Code was recently amended to provide that all individual debtors in chapter 7 and 13 cases, subject to certain very limited exceptions, must complete a financial literacy course as a condition of obtaining a bankruptcy discharge (Pub. L. No. 109-8). The Office of the United States Trustee has the primary responsibility for making this mandate operational for the roughly two million individuals who presently access the bankruptcy system on an annual basis. The Bankruptcy Code requires that the providers of the financial literacy course must be approved. Approval requires that course administrators are trained and experienced in providing “effective” education (Block-Lieb, 2004). The 2005 Amendments also provide that the approved courses must employ “teaching methodologies” that assist debtors in understanding personal financial management (Block-Lieb 2004; Block-Lieb et al. 2002, Pub. L. No. 109-8).

Instructions for those seeking approval explicitly state that the providers “must employ trained personnel with adequate experience and training in providing effective instruction and services” (Instructions, 2005). The Instructions also set forth certain minimum requirements to demonstrate their training and experience, including certification as a CPA, Accredited Financial Counselor, Certified Financial

Planner, or state teacher’s certificate in any subject (Instructions, 2005). However, the Instructions do not explicitly require that every instructor be so certified or trained; they only require that the “Provider shall employ, at a minimum, an individual who holds at least one of the [specified] certifications, or who has equivalent training or experience to supervise instructors.” The Instructions also make an important, and perhaps problematic, distinction between the training of those supervising the instructors and the actual instructors themselves suggesting that those actually teaching debtors may have none of the listed certifications. Sections 3.1, 3.2 and the accompanying Appendix A of the Application for Approval make this point; specifically, Appendix A states that there can be instructors who have only a high school education and who may be otherwise untrained to provide personal financial education. Thus, there may be untrained or uncertified individuals who can become debtor educators, so long as an individual who holds such training or certification supervises them. The US Trustee released the first list of approved providers on October 10, 2005 (U.S.Department of Justice). Criteria for providers remain unknown.

Moreover, the 2005 Amendments provide for the creation of a pilot debtor education program, which the United States Trustee is directed to develop and then

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evaluate (Pub. L. No. 109-8). Although Section 105 of the new legislation does not specifically mention teacher training programs, it does direct the United

States Trustee to consult with experts in the field, at least some of whom will likely suggest the need for teacher training in order to implement quality programming. In short, with the advent of both of these requirements, there will be a need for trained debtor educators. Additionally, there is a need to determine the best way to train individuals to deliver financial literacy courses effectively. What is not mandated is how to determine what it means to be a trained provider and what type of training is or is not effective.

Background

Commencing in 2001 and in anticipation of this now enacted mandate (which had been in the works for more than seven years), the Coalition for Consumer Bankruptcy Debtor Education, a section 501(c)(3) non-profit organization (“Coalition”), launched its own, largely grant-funded pilot debtor education project in the Eastern District of New York (Brooklyn, Long Island, Staten Island and Queens). The Coalition designed a curriculum and established a teacher training program to train individuals to teach its debtor education classes. The training was provided free of charge as long as the trainees taught a minimum of three debtor education classes. Over the course of 18 months, more than 600 individual debtors were trained using the Coalition-designed educational program called Making Sense of Cents.

At the end of a two year study, we found that the program enhanced consumer knowledge, and changed consumer attitudes and self-reported behaviors about credit, spending, and saving in a positive manner (Wiener et al., 2005; Wiener et al., 2005; Block-Lieb et al., 2004; Block-Lieb 2002). The pilot project demonstrated first through anecdote that quality educators would be an important element to the success of any quality debtor education program. Further, implementation of a nationwide mandate would result in a substantial likelihood that debtor educators would be drawn from widely differing educational and experiential backgrounds. This paper reports on our formal efforts to determine if individuals from diverse backgrounds could be trained to provide roughly equivalent training, and if they would be effective debtor educators.

We believed that if the program could be shown to be effective in educating consumer debtors and in training qualified debtor educators, our approach could be replicated with confidence of its efficacy, regardless of the background of the trained provider. For these reasons, we intentionally gathered a professionally

diverse pool of prospective debtor educators, which included a mix of lawyers, accountants, credit counselors, financial planners, educators, development leaders, social workers, and bankers. If individuals from all backgrounds can be trained to teach these materials effectively, then the delivery system will be easier to implement and the need for the designated certifications will be diminished.

The purpose of the current study is to evaluate one approach employed to prepare instructors of personal financial literacy courses for consumer debtors. To that end, we seek to assess whether the training program provides instructors with (1) adequate knowledge of financial management; and (2) teaching methodologies designed to assist debtors in understanding personal financial management. We were interested in both questions because newly enacted section 111(d) of the Bankruptcy Code expressly enumerates these factors for the United States Trustee to assess in approving educators as qualified “providers.” (11 U.S.C. § 111(d)). Our study relies on three types of program evaluation data: focus group responses, pre- and post-test knowledge and attitude surveys, and observation of trained teachers in action by trained observers to assess teacher preparation.

While there are numerous examples of financial literacy programs, there are relatively few published evaluations of either the effectiveness of these programs or the process of conducting them (Braunstein & Welch, 2002). Thus, the financial literacy-training program reported upon here was not the first attempt at either implementing or studying financial literacy (Braucher, 2001; Dolan, Stoke, Berry, & McGregor, 2000; Lyons & Hunt, 2003; Muske & Winter, 2004; Shockey & Seiling, 2004; Stokes & Polansky, 1999). Among the large number of empirical evaluations among the published studies, we could find no evaluation of teacher training programs.

The Coalition’s Financial Education Program

Train the trainer sessions In a series of five two-day train the trainer sessions, the Coalition trained volunteers to teach the Coalition’s Making Sense of Cents curriculum. Instructors for the training session included two tenured law school professors and a therapist who specialized in counseling individuals and couples with money-related problems. As noted, in exchange for attending the training session and receiving professional continuing education credit free of charge (either CLE for lawyers or CRA for bankers in the session), participants agreed to teach for the Coalition without compensation. Trained teachers displayed diverse professional and educational backgrounds. The roster of trainees included paralegals, bankers, lawyers, teachers, community

workers, social workers, financial planners, and a variety of graduate and professional students. There was no educational or professional prerequisite necessary to attend the teacher training; involvement in the bankruptcy system, certification, or teaching experience were intentionally not training prerequisites. Approximately equal numbers of men and women participated, and ages ranged from 23-60.

Goals of the training

The teacher training curriculum sought to impart substantive information about 1) consumer financial markets, including financial concepts, terminology and the legal regimes governing consumer credit; 2) adult pedagogy; and 3) the psychology of money and debt. In addition to attending core sessions on each of these three topics, trainees chose which additional breakout sessions they would attend for smaller, more interactive classes. In addition, the trainees saw aspects of the Making Sense of Cents curriculum taught by the program's instructors, and, on the second day of training, trainees chose and prepared a ten-minute portion of the Making Sense of Cents curriculum to teach as if instructing debtors. In these practice sessions, instructors and peers provided feedback about the session, emphasizing both elements that worked well and those that could be improved. The classroom strategies are informed by the substance and the psychology taught. Our view is that the tripartite approach we have adopted – substance, pedagogy and psychology – is critical to training effective debtor educators.

Curriculum

The Coalition reviewed, assessed, and compiled an array of topics to form the basis of the Making Sense of Cents financial literacy curriculum. For the purposes of the pilot project, financial literacy encompasses a basic understanding of the financial concepts required for daily living. Being financially literate includes developing an awareness of successful strategies for making more thoughtful spending, saving, and credit use decisions. The curriculum taught these concepts through five major themes: 1) encouraging debtors to examine the psychological underpinnings of spending decisions; 2) helping consumer debtors develop spending and savings plans; 3) providing information that would enable debtors to receive the maximum benefit from the bankruptcy system's fresh start; 4) making individual debtors more alert to uses and misuses of credit; and 5) providing debtors with a vocabulary so that they would be better able to make thoughtful financial decisions. The product was a seven-unit Financial Management Guide (FMG) used to train teachers and as a workbook for individual debtors during and after their class. The FMG is used

in actual debtor classes as well as in the teacher training session to train the teachers themselves.

Instructor's manual

Each trainee also received a copy of an instructor's manual, which covered in greater depth how to teach financial literacy classes. The manual prepared instructors to teach the curriculum and helped prioritize and focus the material for classes of varying length. The manual includes suggestions for section time allocation and how to begin and then structure a class. It suggests ways to arrange logistics; it provides sample in-class exercises, and it offers unit-by-unit teaching strategies.

Training Evaluation

Training is offered for many different purposes. Therefore, a well-designed training evaluation study begins with selecting evaluative criteria that match the goals of training (Goldstein & Ford, 2002; Guion, 1961; Wherry, 1957). For the current training program, the most critical component to evaluate is the efficacy of the teacher-training program. The central question of interest is: Are individuals from diverse backgrounds prepared to teach basic financial literacy to consumer debtors upon completion of systematic teacher training? We gathered data from the training sessions to answer this most basic question. We selected a methodology suited to evaluate the effectiveness of teacher training under the constraints of a real world financial literacy education program.

There are numerous ways to assess training in different settings and organizations. Some important considerations when selecting evaluation criteria are relevancy (does the evaluation component assess the training goal?) and reliability (does the evaluation component provide consistent information?) (Goldstein & Ford, 2002). The current evaluation set out to collect multiple and converging assessments to more adequately evaluate this training program. Many researchers suggest (Campbell & Tyler, 1957; Cronbach & Meehl, 1955; Cook & Campbell, 1979; Kirkpatrick, 1979) that collection and comparison of multiple sources of data provides a more robust assessment than the use of only a single source. As others have pointed out, (Wiener, Pritchard, Frauenhoffer, & Edmonds, 1993; Wiener, Wiley, Huelsman, T. & Hilgemann, 1994), utilizing divergent sources of information provides a more comprehensive story about the program under study. One specific approach that has made use of multiple measures and that has provided guidance to program evaluation for over thirty years is Kirkpatrick's (1977, 1979) approach, which identifies four levels of training criteria for evaluation. Kirkpatrick suggests four complementary levels of assessment to be used

together: reactions (feedback from trained individuals); learning (knowledge and attitude change that result from the training); behavior (transfer of training from the classroom to the task); and results (final outcome changes resulting from the training). While there have been many criticisms of Kirkpatrick's model, most of them do not challenge the fundamental necessity of relying on multiple measures with diverging sources of error to conduct evaluation studies. Supporting the need for multiple measures and methodologies is a recent meta-analysis of 34 studies, which found that the predominant criteria collected in training evaluations were trainees' perceptions of affect and utility. Affective reactions that measure how much a trainee likes a training class, sometimes referred to as "smile sheets," have only limited value in documenting the outcome of training efforts. Therefore, our approach considered additional elements that influence training outcomes and subsequent results (Brown & Sturdevant-Reed, 2002; Holton, 1996; Ruona, Leimbach, Holton & Bates, 2002). We relied upon more detailed classification schemes to more accurately explore the effects of learning. The classification schemes in the literature and in the current study include measuring learning outcomes as cognitive, skills-based, and affective components (Kraiger et al., 1993). Additionally, Warr, Allan and Birdi (1999) recommend conducting pre-test and post-test evaluations to help determine change or gain scores to provide more detailed assessment of the average shift associated with the training. We followed closely the recommendations of these researchers.

Our approach used multiple measures with different methodologies to try and find convergence among the methods of evaluation. Contradictions among data sources, such as improved performance but decreased satisfaction, provide useful information for both users and providers of training, pointing out possible areas for improvement. Multiple sources of information help reduce the bias that may result from using only a single measurement method (Campbell & Tyler, 1957; Cook & Campbell, 1979). An evaluation that considers only performance might conclude that training is uniformly effective, although trainees were not, in reality, satisfied with the course. Alternatively, an evaluation that considers only affect might conclude that training is effective because satisfied, although trainees' performance would suggest otherwise.

Using suggestions from the training evaluation literature as a guide within the constraints of the realities of applied research, we collected data on three measures to evaluate the teacher-training program (Holton, 1996; Kirkpatrick, 1979; Kraiger, et al., 1993; Warr, et al., 1999). Affect and utility reactions were measured through the use of focus groups. Learning

(changes in cognitive knowledge and attitudes) was assessed by means of a paper and pencil questionnaire. Finally, to help determine if teachers transfer the information learned to changes in their behaviors, observations of individual financial literacy teachers by trained observers were collected during actual classes. As Kraiger, et al. (1993) recommend, aspects of cognitive-based, skills-based, and affected outcomes are assessed across these three studies.

Part 1: Focus Groups

The first part of the study assessed reaction data of financial literacy teachers who were trained in one of the two-day train the trainer sessions. Reactions were collected for satisfaction and utility of the course.

Methodology

Participants Volunteer teachers from five of the Coalition's two-day training sessions were assessed in this study. All teachers who had taught at least one class were invited to participate in a focus group (n=29) to discuss the training session and their experience with teaching debtors. A total of 21 teachers participated in one of four focus groups (17 percent of total trained teachers). Teachers ranged in age from 22 through 65 years of age, and approximately 60 percent of them were female.

Procedure and setting Two sets of focus groups were conducted, during September 2002 and May 2003. Each session lasted approximately 2.5 hours, had an average of five people in each (ranging between three and seven), and were facilitated by first two authors of the current paper. The facilitators described the purpose of the session and used a pre-determined set of questions based on goals of the training curriculum to guide discussion, probing for more detail when needed. Participants were asked to give feedback about their (a) satisfaction with the training course; and (b) level of preparedness to teach a financial literacy class upon completion of the teacher training session. The facilitators recorded answers, preserving as much of the respondents' original language as possible.

Materials The participants were provided with copies of the FMG to serve as a reference and reminder of the materials they used as teachers with their debtor students. Approximately half of the questions emphasized feedback about the teachers' satisfaction with the training session itself (from registration and preparation to materials to ability to enter a classroom). Examples of three questions follow (complete materials can be obtained from the first author):

- (a) Discuss the psychology of debt that you learned about in the teacher training session. What were the strengths and weaknesses in the instruction?

- (b) Describe the course's treatment of adult learning techniques. What did you learn? Was it useful in your teaching? Why or why not?
- (c) In one part of the course, you practiced teaching part of the curriculum. Describe the experience. What did you learn? Was it useful in your teaching? Why or why not?

A second series of questions sought feedback about actual teaching experiences. Examples of these questions, which emphasized how well the training session prepared the instructors to teach financial literacy, are:

- (a) Did you use the key concepts at the end of each unit of the FMG?
- (b) Did you use the exercise differentiating needs and wants?
- (c) Did you review, discuss, and/or explain the personal spending plan?

Results

The trainees' responses from all four focus groups are summarized together. Most agreed that the package of introductory materials was sufficiently detailed to quiet concerns that prospective enrollees might have had about teaching a debtor education class. Teachers reported that the "Psychology of Debt and Money" section was very useful; however, some thought it was a difficult topic with which to begin a debtor education class. The teachers reported that "delving into the heart of personal issues is not easy to do first thing in a class." Many teachers felt that the concepts from this unit should be used throughout the book with concrete examples and direct implications rather than presented as a stand-alone topic.

With regard to the material on "adult learning styles," teachers uniformly expressed appreciation for raising their awareness about the role of individual differences in learning styles as none of the trainees had been schooled in these techniques. The teachers recognized that it is important to "get others involved in the course," and they valued this section of the training because it offered some specific suggestions on how to do that.

Teachers of diverse professional backgrounds reported various levels of knowledge about the bankruptcy process and therefore felt that the breakout sessions were especially useful for tailoring their learning experience. Some of the legally advanced trainees reported that a few sessions could have been eliminated and replaced with a good handout. Others spoke highly of the information learned in these sessions and felt prepared to provide assistance to debtors.

When asked about the mock-teaching sessions, most instructors found this component to be very useful

when preparing for their own classes, especially in recognizing the amount of time needed to teach each aspect of the curriculum. Watching others practice teaching also allowed them to acquire new tips and techniques. While many reported feeling nervous about teaching, they recognized afterwards that the practice opportunity allowed them to gain confidence in their abilities.

The final two questions in this section addressed the course materials (FMG, handouts and instructor's manual). Although the consensus was that the materials were helpful, some wished they had had more, such as handouts for all of the training break-out sessions, whether they attended a session or not. Others complained of having too many handouts. Further, the instructor's manual received mixed reviews, with some finding the manual to be helpful, in part, because it corresponded well to the FMG and other class materials. However, others complained that it should be combined with the FMG to create an integrated teachers' edition of the curriculum.

The second half of the focus group discussion focused on teachers' experiences conducting classes. This section of the evaluation was less concerned with the teacher training sessions per se. Focus group members praised the use of key concepts in each unit (each unit has a "key" point – evidenced by words and a picture), claiming that these were useful for discussion because they summarized each unit and served as markers and transition points. However, some suggested that the keys should be condensed, refined, or reworded. Almost all of the teachers used the needs and wants exercise (asking separately to list needs and wants; then discussing the difference between the two) in their classes, and all who used it found it effective and worthwhile. Similarly, most teachers used the budgeting exercise (drawing different sized circles to represent income and expenditures with the goal of having equally sized circles, or ultimately a larger circle for income), or some variation, to help debtors explore their financial values. The consensus was that if instructors can take a nonjudgmental approach, then this exercise "goes a long way" to assist debtors in taking control of their own finances. Another useful tool was the personal spending plan exercise (i.e., creating a spending plan with the class by listing weekly or monthly income and all fixed as well as variable expenses). While the teachers reported that it was difficult to get students to complete the exercise in class, many developed a sample budget in class and asked the students to complete it for themselves (for a day, week or month) at home. Several teachers used the plan to teach how to offset impulsive buying, which satisfies affective needs but deviates sharply from rational decision-making. Teachers valued their

training in the “Sales, Ads, and Scams” section, commenting that it was an easy section to teach because examples and situations are abundant. However, some teachers commented that the tone of this section was a bit “preachy” and as a result, some focused more on listening to class attendees describe their own experiences and suggestions.

Discussion

As a whole, the focus group respondents were satisfied with the training sessions and felt motivated and confident in their ability to teach. Trained teachers felt the curriculum provided insight, organization, and detailed information about how to teach adult students about financial literacy; they appreciated and learned from the mock-teaching component of the course and valued hearing about unique learning styles. Teachers provided suggestions for improvement, such as increased use of examples to clarify a point or difficult concept and increased cohesion of teaching materials.

With regard to their own teaching experiences, most teachers used some form of the exercises in the FMG, but modified the course to their own style and to meet the needs of differing groups of debtors. Teachers concluded that for the most part, their debtor students were able to work through the problems in the FMG. They considered the personal spending plan exercise to be at the heart of the financial literacy class and took considerable time to explain how spending plans can be used to gain control over spending. Overall, teachers felt that the materials provided in combination with their two-day training program were vital to their ability to train individual debtors.

Trained teachers’ reactions to the teacher training session and its materials provide unique insights into the efficacy of the training program. The comments highlight specific content and processes that need to be strengthened and also provide information about how effective the training was when the teachers actually taught individual debtors. Much of this information is not readily apparent through the two other evaluation methods.

Part 2: Learning Assessment

A second evaluation dimension assesses how much learning took place by measuring changes in knowledge and attitudes. Per suggestions by Warr, et al. (1999), pre- and post-test assessments were used to determine the overall shift in knowledge and attitudes. The current evaluation measures knowledge and attitudes with a paper and pencil survey consisting of 16 questions testing financial knowledge and 14 questions measuring respondent attitudes towards themselves as teachers.

Method

Participants Questionnaires were distributed at the two training sessions that took place in October and November of 2002, respectively. Seventy trainees attended these sessions, and 42 (63 percent) returned both pre-test and post-test questionnaires.

Procedure and setting Before training began, instructors explained that the training evaluation consisted of two separate procedures: questionnaires (before and after training) as well as observations during their teaching sessions. The consent form explained that participation was completely voluntary and that the teachers would not lose participation in class or be negatively evaluated if they did not participate. We administered identical questionnaires (approximately 20 minutes long) before the start and at the end of the two- day training session.

Knowledge measure Sixteen close-ended questions pre-tested with both college students and adults were used to measure financial knowledge. Each question asked respondents to choose the best of four possible solutions to a financial problem. Questions asked about credit, minimum payments, wise buying/spending habits, credit reports, credit scoring, pay-day loans, rent-to-own programs, and rights and responsibilities during a bankruptcy case and following the bankruptcy discharge. For example, one question reads (correct answer is bolded):

Review the following possible loan terms -- each for loans of \$6,000 --and then determine which of those loans would result in the lowest amount of total interest that would need to be paid over the term of the loan (assuming full payment and no defaults):

Lender	APR	Tern	Mon. Pay't.
Abby Asso.	14%	3 yrs.	\$205.07
Bob’s Bank	14%	4 yrs.	\$163.96
Carla’s Credit	15%	4 yrs.	\$166.98

Attitude items Trained teachers’ attitudes and beliefs about their ability to teach, their financial knowledge, and their reactions to debtors were measured. Items were developed based on the three main goals of the training session (to impart financial knowledge, to teach adult pedagogy, and to inform about the psychology of money). Participants were asked to indicate their level of agreement with selected statements on a 5-point Likert scale. For example, one question asked: “When teaching others about money, it is important to understand your own attitudes about the use of money,” with answers ranging from completely agree (5) to completely disagree (1).

Results

Knowledge Each question had four multiple-choice answers, only one of which was correct. Items answered correctly were combined to form a composite knowledge score. A total of 42 teachers were assessed for changes in knowledge. Out of 16 knowledge questions, the pre-test average was 81 percent correct, and the post-test average was 90 percent correct. This 9 percent increase in financial knowledge was significant, $t(1,41) = 4.90$, $p < .001$.

Attitudes Table 1 shows that 6 out of the 14 attitude items showed a significant change from pre- to post-test in the desired direction (increased positive attitudes or decreased negative ones).

Table 1. Teacher Attitude Before and After Training

Items that showed a significant change from pre-test to post-test	Pre-test mean	Post-test mean	t	sig.
Confidence to teach credit	3.43	4.36	5.47	***
Confidence to teach budgeting	3.79	4.52	3.89	***
Teach money as simple math is not the best	3.74	4.21	2.83	**
Healthy distrust of media is good	3.64	4.07	2.12	*
Present information not based on own learning style	3.31	3.83	2.42	*

* $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

These findings provide some evidence that the training program increased teachers' financial knowledge in a two-day training session designed for trainees with varied professional and educational backgrounds. The initial level of knowledge (81 percent) shows that not everyone entering the class has complete knowledge about financial matters (pros and cons of various buying and saving methods, basics of interest rates, or loan terminology). The end result of 90 percent correct on the financial knowledge measure and the accompanying large effect size, $\eta^2 = .37$, provide strong support for the program's efficacy in imparting basic financial knowledge to trainees.

Further, desired changes on almost one half of the attitude items indicates that teachers not only gained an understanding of what they needed to teach, but also gained the confidence to teach what many considered to be complex material. Importantly, teachers' skepticism regarding lender behavior and media messages increased. Skepticism of lender behavior and media is vital to convey when teaching debtors who may have previously fallen prey to advertising or other scams. Teachers need to develop an appreciation for the needs of their adult audiences, and our data pertaining to attitudes toward teaching styles and methods suggests that they did, in fact, do so. Other attitudes assessed in this measure that remained unchanged suggest there is room for improvement in

the teacher training sessions. For example, there was very little change in agreement rates with the statements "Debtors will not have difficulty understanding financial concepts" and "Bankruptcy filers are lazy, ignorant & irresponsible." To offset what may be a stigmatizing stereotype held by those who volunteer to teach bankruptcy debtors, future changes in the financial literacy curriculum may need to devote special attention to teachers' perceptions of people who file for bankruptcy.

One note of caution: the percentage of teachers completing the pre- and post-test questionnaires is only 63 percent. This statistic suggests that experimental mortality, or the effect due to different types of participants dropping out, may influence the results (Cook & Campbell, 1979). It is also possible that those who returned the questionnaire were more motivated to fill it out because they were excited about the class, were especially interested in the topic, had fewer responsibilities outside of class and/or greater confidence in their skills. Future evaluation data should attempt to collect information on trainee motivation to try to rule out experimental mortality as a possible explanation for the study's results.

In addition, Table 1 shows that scores on the attitude measures were often at the high end of the scale, raising the possibility that the teachers began the class scoring relatively high in the desired direction on the attitude measures. Inclusion of more sensitive items that are less susceptible to ceiling effects might produce even greater pre- to posttest changes. Finally, because there is no control group of teachers who were pre and post tested but who did not take the training the trainer course, it may be that gains in knowledge and attitudes may, in part, be explained by the effect of taking the same test twice resulting in some spurious gain scores. Once again, while a significant and moderately large training effect is present, we must await additional research before reaching a decisive conclusion on the absolute amount of change that resulted as a result of the training course itself.

Part 3 – Classroom Behavior

Following suggestions in the training evaluation literature, we examined changes in behavior after training or "transfer" of training (Kirkpatrick, 1979; Goldstein & Ford, 2002; Alliger et al. 1997). In terms of the Kraiger, et al (1993) classification, this part of the study assesses skills-based outcomes as determined by independent classroom observations of trainees' actual teaching.

Method

Participants The pool of teachers to be observed was culled from the June, October, and November 2002 training sessions, which included approximately 70

individuals who had taught no more than one class. Observations of teachers who had previously taught more than one class were excluded to control for learning from practice instead of learning that resulted from teaching experience. We therefore observed all 29 trained teachers who had only taught one prior class.

Procedure and setting Graduate and law school students were trained to observe financial literacy teachers using a checklist of teaching behaviors. The checklist was divided into several sections aligned with the content and skills taught in the train the trainer curriculum. The first section assessed whether teachers used specific techniques taught in the training class. These techniques were derived from the adult pedagogy section, which emphasized that adults learn in different ways: audio, visual, recitation, practice, etc. This section included 11 techniques that teachers learned in the teacher training session and could then use in the classroom. Another section of the checklist focused on assessing the adequacy of the financial literacy content. Observers evaluated teachers to determine if the content of their classes corresponded to the units in the FMG. The final three sections of the checklist assessed general teaching skills taught in the train the trainer session. Observers noted the behavior of teachers and their students, and the interactions between them, to determine how teachers executed these skills. The items on the checklist included yes (the behavior was observed) and no (the behavior was not observed), questions to measure the teachers' ability to engage students, to organize the class, and to communicate with proper content and rapport. Sample items include the following: Were questions posed by the teacher? Did the teacher prepare exercises for the students? Did the teacher use vocabulary that was defined in the FMG? The observation checklist was pre-tested for usability in the classroom and for clarity of definitions.

Observation training Observers learned background information about the teacher training study (approximately one hour), learned how to use the observation checklist, and practiced observing videotaped teaching sessions (approximately 15 minutes in length) in two separate training sessions. Each observer used the checklist to observe the teaching videos, followed by a discussion led by the training instructor to review the list and the behaviors that should have been noted. The group discussed questions about the checklist, and then watched a second video. Observer checklists were reviewed for

agreement, defined as: $(\# \text{ of agreements} / \# \text{ of agreements} + \# \text{ of disagreements})$. All observers obtained 80 percent agreement or better with a master training checklist before leaving the training.

Results

A total of eight observers conducted 36 observations; seven classes were observed by two individuals to determine observer reliability. There was an overall average of 86 percent agreement between observers, and more than half the checklist items had 100 percent agreement, indicating high agreement between observers as to whether the trained teachers did or did not engage in the target behaviors.

The research team created five separate scales from the observation checklist including: *Use of adult teaching techniques*, *Coverage of FMG units by teachers*, *Ability of teacher to engage students*, *Teacher organization of class*, and *Communication ability of teachers*. Each item occurrence was scored with a 1 if it was the desired behavior (e.g., the teacher used vocabulary in the FMG) or a -1 if it was an undesirable behavior (e.g., one student dominated the class). For each scale we calculated an average, which was then multiplied by 100 to obtain a percentage score. Each score measured the percent of positive teaching instances discounted by negative teaching instances on a scale that could range from -100 to +100. One hundred percent indicates that the teachers, on average, demonstrated all positive behaviors, and negative 100 percent indicates that the teachers, on average, displayed all negative behaviors. Finally, a score of zero reflects an outcome in which the teachers generally used positive and negative elements equally.

Table 2 displays the results for each identified adult teaching technique. It shows that teachers used multiple teaching techniques 61 percent of the time. From the 11 possible teaching techniques taught in the session, the percentage of use for each ranged from 19 percent for small group work to 100 percent for use of the FMG and class discussions.

Table 3 lists the overall percentages for each of the 5 observation scales collapsed across items, listed in order from least to greatest. Observations reveal that 77 percent of the teachers engaged students, as assessed by the level and quality of interactions between teachers and students. Eighty-three percent of teachers showed organized teaching styles and 95 percent of the teachers were rated as "able to communicate well."

Table 2. Use of Teacher Techniques

Use of teacher technique	Mean score (n = 32)	SD	Range
Work Book	100	0	
Handouts	47	51	29 - 65
Flip Chart/ Board	88	34	75 - 99
Markers	56	50	38 - 74
Index Cards	56	50	38 - 74
Notes for Lecture	78	42	63 - 93
Class Discussion w/ teacher	100	0	
Class Discussion w/out teacher	34	48	17 - 52
Advertisements	38	49	20 - 55
Small group work	19	40	4 - 33
Student study time	56	50	38 - 74
Average:	61		

Table 3. Percentage of Teacher Behaviors Observed

Observed teacher behavior dimensions	Percentage
Adult teaching techniques used	61
Topics in the FMG adequately covered	72
Teacher rated as engaging	77
Teachers rated as organized	83
Teachers rated as "communicates well"	95

The final section of the observation checklist measured coverage of the FMG. Three ratings levels were assessed; 1 indicated that the topic was *not covered at all*; 2 that it was *briefly too covered (defined as not enough time was spent on the topic to completely explain it)*; 3 that the topic was *adequately covered*. The checklist was divided into nine topics. Entries in the columns in Table 4 indicate the percentages of teachers who fell into each coverage level. These statistics summarize the teachers' performance for each unit in the FMG. Averaged over all teachers, 4 percent of the topics were not covered at all, 22 percent of the topics were covered briefly, and 72 percent of the topics were covered adequately.

Discussion

Observations uncovered important information about the teachers' behavior that would not have been found with either the focus groups or the attitude and belief surveys alone or together. The observations demonstrated that teachers used many of the teaching techniques discussed and taught in training; for example, 100 percent of the teachers used the FMG and engaged the class in discussion, and almost 90 percent of the teachers used a flip chart or chalkboard to provide visual aides for their adult debtor audiences.

Table 4. Coverage of Financial Content

Units in FMG	Not covered %	Covered too briefly %	Covered adequately %
Planning & Goal Setting	3.1	15.6	81.3
Create Financial Plans	0.0	3.2	96.8
Variable & Fixed Expenses	0.0	16.1	83.9
Sales, Ads, Scams & Other traps	6.5	22.6	71.0
Credit Usage, Rules & Interest Rates	0.0	18.8	81.3
Loans & Minimum Payments	3.1	21.9	75.0
Credit Reports & Scoring	9.4	25.0	65.6
Resources & References for Self Study	0.0	28.1	71.9
Average	18.8	53.1	28.1
	4	22	72

Most importantly, 77 percent of the teachers were observed to engage students in student/teacher interactions, and 95 percent of the teachers communicated well with their adult debtor students. Further, 83 percent of the teachers were highly organized. While this research design, which lacks a comparison of untrained teachers, cannot by itself demonstrate definitively that the training produced the documented successes, together with the focus groups and attitude findings, these results form a pattern that supports the efficacy of the teacher training sessions.

Finally, observers found the teachers to be very thorough. The largest percentage of teachers covered all topics adequately. Approximately 20 percent of teachers were rated as covering topics too briefly; however, it would be difficult to cover all the important topics in the short class sessions (i.e., observed classes were no longer than three hours in duration). Future training sessions may need to devote more attention to preparing teachers to deal with unexpected classroom events, including shortened classroom time. Some of the class sessions were unexpectedly shortened by competing demands for the use of the space. Four percent of teachers adapted to shortened class sessions by reducing coverage to include only five of the nine topic units. (See Table 4).

Overall, observations demonstrated that the teachers used the knowledge and skills that made up the teacher training curriculum in their own classrooms. Some evaluators would argue that this type of behavioral data shows that the teachers not only retained what they learned, but also applied newly acquired knowledge, skills and attitudes to the specific job of teaching financial literacy (Goldstein & Ford, 2002; Tannenbaum & Yukl, 1992). Future research comparing the pre and post training performance of teachers is necessary to confirm this conclusion.

General Discussion

Summary of the finding: Trained teachers were generally satisfied with the training session. They reported that the training session and curriculum helped prepare them for classes and enhanced their ability to teach consumer debtors. When teaching individual debtors, the majority of trained teachers used the materials, exercises, and handouts that they learned about in the training class.

Results from the questionnaire revealed that financial knowledge increased by 9 percent upon completion of the class. Further, almost one-half of the measured attitudes showed change in the desired direction after training. These results suggest that well designed teacher training can influence the beliefs that individuals have about themselves as teachers, as well as their comfort in working with debtors to instill new values about financial management. When our findings are considered together, several consistent patterns emerge. Trained teachers report that they are satisfied and generally feel prepared to teach. Self-reports are buttressed with measured gains in financial knowledge and more confident attitudes after training. Perhaps most importantly, classroom observations revealed that the trained teachers were organized and engaging, covering most topics adequately, and used good communication skills. The overall majority of teachers adequately covered the topics in the FMG; those who were observed as covering topics inadequately seemed to be doing so in reaction to shortened class lengths which occurred through no fault of their own. These findings converge to suggest that the training program was effective for these teachers.

Suggestions for training improvement: Several consistent patterns also emerged regarding areas for improvement for the teacher-training program. For example, teachers reported skepticism and hesitancy about teaching the psychology of money section. Indeed, observations showed that teachers most often omitted these sections when classroom time was short (the psychology unit was *not covered at all* 3.1 percent of the time, and was *covered too briefly* 15.6 percent of the time). Similarly, the teachers commented that the quality, quantity, and utility of handouts to support classroom instruction require more attention. In the focus groups, teachers requested a greater number of handouts for reference when preparing and teaching, and they requested changes in the organization of the materials (including handouts, FMG, and instructor's manual). The need for more or better handouts is somewhat reflected in the observational data; observers reported the use of handouts in only 47 percent of the financial literacy classes. Since completion of this study, adjustments have been made to the teacher-

training program and the curriculum used in financial literacy courses to correct the limitations that the evaluation data highlighted. Both the teacher training materials and the FMG have been revised since this evaluation was completed.

Nonetheless, our findings reveal that teachers were well trained to provide financial literacy classes and that they do not need prior experience with bankruptcy or financial education to qualify for this type of training program. Therefore, our results suggest that PFM instructors may not need to be CPAs, accredited financial counselors, certified financial planners, or even State certified teachers to teach effectively the principles of personal financial management (Instructions, 2005). Instead, our results show that teachers can come from many different backgrounds and that they can, with training, become quality financial literacy instructors.

Implications

This study should inform and assist others in education and/or policy evaluation of financial literacy programs. While the evaluation efforts described within this study took advanced preparation to execute, they are by no means extraordinary in terms of resources or ability. While we recognize the limitations of our study (especially the lack of comparison groups), the multi-method, multi-measure approach compensates for many of the design weaknesses in specific components of our evaluation. We also know that volunteer debtors who learned from the trained teachers garnered benefits from the class (Wiener et al., 2005; Block-Lieb et al., 2004). Our work (Wiener et al., 2005) demonstrated that well trained teachers can bring about positive change in debtors' financial knowledge and attitudes and in their spending and saving behavior. This current study provides evidence that teachers from various backgrounds can gain content knowledge in financial literacy, feel confident and prepared to teach that content, and effectively use techniques and pedagogy when teaching classes of debtors. Additionally, Wiener et al. (2005) conclude that trained debtors showed significant gains in financial knowledge compared to untrained and non-debtors as well as positive changes in attitudes and self-reported financial behavior.

This study also holds implications for the mandate in the 2005 Amendments to the Bankruptcy Code that individual debtors complete a personal financial literacy course as a prerequisite to obtaining a chapter 7 or chapter 13 bankruptcy discharge. Newly enacted section 111 of the Bankruptcy Code requires qualified and trained providers who can employ teaching methodologies designed to assist consumer debtors in learning about personal financial literacy. Our data

suggest that these mandates can be met, at least in part, if these providers attend carefully designed and continually evaluated teacher training sessions. We recognize that the Coalition's teacher training courses are not the only available methods and certainly alternative courses should be carefully examined for their efficacy. Nonetheless, this study, in conjunction with Wiener et al. (2005), demonstrates the soundness of the current approach and suggests that it should be considered for replication.

We are skeptical about the wisdom of assuming that experienced teachers, certified public accountants or financial planners are able to teach financial literacy courses without additional training because few of the proposed certifications likely enable "mock" teaching, or a practice teaching session, that is then observed and critiqued. Therefore, it is possible that the minimum statutory qualifications are insufficient unless supplemented with adequate training. The Coalition's program or a similar program could be offered to those with the identified certification to prepare them for the teaching of an approved financial literacy course. Until further research is conducted on the impact of certification for teaching financial literacy courses, prudent administrators should not assume that certification provides immediate and automatic benefits.

This study suggests that "in-house" training conducted by providers may not be sufficient unless it is empirically assessed. The law does not require providers of financial literacy programs to be non-profit organizations; they can be for-profit organizations such as banks and accounting firms and other financial providers (Pub. L. No. 109-8). This means that providers who train their own instructors must insure that their training is well constructed and empirically assessed. To date, there have been no published results of teacher training programs. "Smile" sheets to assess training programs are insufficient determiners of the programs effect and effectiveness (Alliger et al., 1997; Ruona et al., 2002).

Future research into additional training models should be considered. Since approximately two million people presently access the bankruptcy system annually, most of whom will need approved financial literacy courses, there will be a significant demand for well-trained, approved providers who meet the newly enacted standards of the Bankruptcy Code. Training the needed providers or assuring that those seeking approval are presently trained in an adequate manner is a significant task confronting the Executive Office of the United States Trustee. The EOUST should consider this and other models of training, but all approaches

should demonstrate the effectiveness of the education on consumer debtors (Wiener, et al., 2005).

The use of multiple evaluation methods for evaluating teacher training employed here addresses, then, an important issue in the 2005 Amendments, namely showing that the current financial literacy training session has the capacity to provide "personnel with adequate training" (Pub. L. No. 109-8). Based on observations, the teachers trained seem capable of using "teaching methodologies designed to assist debtors in understanding personal financial management" (Pub. L. No. 109-8) Block-Lieb et al., 2004, and Wiener et. al, (2004) show that financial literacy education effectively changes the knowledge, attitudes, and intended economic behavior of debtors and the current efforts take advantage of multiple measurement tools to show that teacher training was more than adequate within the constraints of the 2005 Amendments. Additional evaluation in the financial literacy area is certainly desirable and indeed evaluations are mandated in section 111 of the Bankruptcy Code and section 105 of Pub. L. No. 109-8. Our findings to date show how multiple measure evaluations can assist in obtaining the goals and objectives of mandated financial literacy requirement in the newly revised Bankruptcy Code.

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