

Alternative Food Safety and Sanitation Certification Training for Food Service Employees Using CD-ROM Educational Training

Study Investigators:

Steven Higgins, Ph.D.
Director, Heath Learning Center
The Ohio State University at Lima, Lima, Ohio

Lynn Trinko, M.Ed.
Coordinator of Educational/Media Technology
The Ohio State University at Lima, Lima, Ohio

Douglas C. Lance CHA CHE
Program Coordinator, Hospitality Management
The Ohio State University at Lima, Lima, Ohio

Study Overview:

In this descriptive study, an alternative to traditional classroom instruction in food safety and sanitation certification educational training was examined. A total of 18 participants received self-paced instruction using a CD-ROM educational training series for certification in food safety and sanitation. Upon completion of the 15 units of the CD-ROM educational training, the participants were administered the National Restaurant Association's ServSafe® Manager's Certification Examination. All participants successfully passed the examination on their first attempt.

Study Objective:

The objective of the study was to determine the average number of hours in seat time of 18 or more food service employees needed to complete a self-paced, interactive CD-ROM educational training for food safety and sanitation certification, compared to the required time of 15 hours of tradition classroom educational training for food safety and sanitation certification.

Method:

Starting in June 2002, all participants were allowed to complete the 15 units of the CD-ROM educational training at their own pace. Participants were introduced to the CD-ROM instructional materials entitled Food Service Operator's Training Achievement Program, produced by Chimera Solutions, LLC, which appears to meet the competency requirements of the Ohio Department of Health. Participants were offered a brief orientation to the computer operation before starting training. The study concluded after a minimum of 18 participants had completed the CD-ROM educational training series and were administered a nationally certified food safety and sanitation examination.

Study Participants and Setting:

All participants were recruited by advertising the CD-ROM educational training to the Lima, Ohio area food service industry. A total of 22 qualified food service employees responded to the advertisement, with 4 participants withdrawing shortly after commencing the training. The study was conducted at Heath Learning Center of The Ohio State University at Lima, Lima, Ohio. Participants used a self-guided, computer-based food safety and sanitation educational training series. The participants were required to log-in and log-out during their use of the CD-ROM educational training to record their time necessary to complete the 15 units of the training. Both the CD-ROM educational training and the national certification examination were offered free-of-charge to the participants.

Profile of the Participants:

Twenty-two participants started the CD-ROM educational training in food safety and sanitation. Four participants dropped out after starting their training. Eighteen participants successfully completed the training. All eighteen participants are involved in food service operations. Two of the participants are Registered Nurses (RN) and they were required to be certified in food safety and sanitation because they managed a food service operation in an outpatient surgical center. Twelve participants were either supervisors or managers and six participants were line-level employees. The average for the highest year of education for the 18 participants was 13 years of education. (See Study Participant Profile, Exhibit A).

Findings:

The average seat time for the eighteen participants to complete the 15 units of the CD ROM educational training in food safety and sanitation was 14 hours and 33 minutes. The average seat time of the RN/Managers was 7 hours and 36 minutes to complete the CD-ROM educational training. Excluding the RN/Managers, the average seat time for the 10 food service supervisors and managers was 15 hours and 17 minutes to complete the CD-ROM educational training. The average seat time of the six line-level employees to complete the CD-ROM educational training was greater than 17 hours. All average seat times are for the CD-ROM training and does not include the time that the participants needed to take the certification examination.

All 18 participants that completed the CD-ROM food safety and sanitation educational training successfully passed the national certification examination on the first attempt. The average score on the ServSafe® Manager's Certification Examination for the 18 participants was 84 percent. A passing score of 75 percent is required by the National Restaurant Association on the examination for certification in food safety and sanitation.

Study Completion:

The study was completed February 13, 2003.

Conclusion:

The results of this descriptive study indicate 14 hours and 33 minutes as an average seat time for completion for all study participants using the CD-ROM educational training series in food safety and sanitation certification. Moreover, the results demonstrate relatively little difference in educational training time for the self-paced CD-ROM training compared to the required 15 hours of traditional classroom educational training for certification in food safety and sanitation. This suggests that the self-paced CD-ROM instructional program, as demonstrated in the study, is a viable alternative for food safety and sanitation certification training.

March 7, 2003

EXHIBIT A

CD ROM Food Safety Study Participant Profile

ID #	Education	Company	Occupation	Time	Score	Certified
6-05 17+	years	Medical Clinic	RN/Manager	8:31	84	Yes
6-11	15 years	Medical Clinic	RN/Manager	6:40	83	Yes
7-03	12 years	Fast Food	Supervisor	12:33	90	Yes
7-04	10 years	Fast Food	Supervisor	13:26	85	Yes
7-07	13 years	Fast Food	Supervisor	13:56	76	Yes
7-12	16 years	Fast Food	Supervisor	11:10	86	Yes
9-13 14	years	Nursing Home	Food Manager	14:39	85	Yes
7-14	8 years	Fast Food	Supervisor	12:14	78	Yes
7-09	14 years	Fast Food	Supervisor	13:23	80	Yes
7-10	12 years	Fast Food	Supervisor	14:20	83	Yes
9-17 12	years	Casual Dining	Supervisor	8:48	83	Yes
9-19 13	years	Casual Dining	Supervisor	8:49	93	Yes
6-01 9	years	Nursing Home	Cook	23:21	86	Yes
6-02 12	years	Nursing C	ook	28:56	78	Yes

		Home				
6-15 12	years	Nursing Home	Cook 16:52		78	Yes
9-18 12	years	Nursing Home	Food Prep	15:32	80	Yes
6-06 13	years	Medical Clinic	Food Prep	17:29	89	Yes
12-22 17+	years	Culinary Student	Server 17:22		96	Yes
Mean	13 years			14:33	84	Yes