

Statewide Online Tobacco Prevention and Intervention Teacher Training Project Process Evaluation 2015-16

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Executive Summary

Tobacco use ranks among the top three modifiable risk factors for chronic disease and premature death and continues to cause an enormous public health problem worldwide. School-based tobacco prevention programs have been proven to be effective in reducing smoking prevalence, smoking initiation, and intention to smoke. To prepare school education professionals for prevention of tobacco use, continuing education via the Internet had been shown effectiveness. In the 2015-2016 grant year, the Palm Beach County School District has been contracted by the Florida Department of Education to provide the *Statewide Online Tobacco Prevention and Intervention Teacher Training* (SOTPTT) using an online training program designed for educator's professional development. This report aimed to provide a process evaluation of the *SOTPT* in 2015-2016.

A CDC process evaluation model along with logic evaluation model was utilized as the framework to guide this process evaluation report. This model focuses on four areas of assessment: (1) program monitoring, (2) program improvement, (3) building effective program model, and (4) program accountability. The goal and objectives of the training program were evaluated using both quantitative and qualitative data provided by the participants and program staff.

Results of evaluation indicated that a total of 786 teachers and instructional personnel enrolled and participated in the SOTPTT in 2015-16 and 313 completed the training course and taught at least 6 lessons to their students. This output has not only satisfactorily met but also exceeded the primary goal and objectives established by the project. In addition, the secondary level objectives of reducing the number of teachers/instructional personnel who enrolled but never accessed the training program and decreasing the numbers of participants who started the course but do not get to the half-way point were also achieved satisfactorily. The secondary level objective of maintaining the number of school districts in at least 40 districts also had some success. The project has reached a total of 49 school districts this year. The evaluation results also showed the number of students who were impacted by trained teachers/instructional personnel was estimated at 22,386 students. The ratio of students impacted by each teacher/educator was 71 to 1. This evaluation also assessed the cost benefit relationship and found the training program had a strong cost benefit relationship. Based on the funding level of

the program and the number of teachers/instructional personnel participated in the training program, the cost for enrolling a teacher was \$362.50 and the cost of training a skilled teacher was \$910.50. Most significantly, the cost of educating one student and preventing tobacco use was estimated at \$12.73.

The process evaluation also concluded that resources including funding, program personnel, computing technology, and training materials (inputs) were appropriate in helping to achieve the goal and objectives of the program. Other input contents including training curriculum and number of skilled staff and their qualifications were effective and sufficient to meet the goal and objectives. Program activities including the use of support site, social media, technical support, and marketing campaign were appropriately conducted and were effective in meeting the goal and objectives of the program. To evaluate if the online program was appropriate and delivered as intended, a survey was conducted to assess participants' satisfaction after completing the program. Results of the survey showed strong support for the program. It was concluded that the online training program was designed according to the needs of the teachers/instructional personnel and delivered as intended. Overall, comments from participants strongly supported the success of the training program and indicated the program was indeed accountable for meeting the goal and objectives of the training program. The process evaluation also showed that the optional 30 units professional development program was a big factor in contributing to the success of the training program. The fact that almost one third of the participants selected this option and about 31% of the course completers were from the 30-units option is a very good indication that the program has improved and is designed based on the needs of all potential teachers/educators in the state. One other side benefits achieved by the program was that the program helped participants to develop technology skills as reflected on the results of 21% of participants used the online training program as their first ever professional development course for technology.

Many areas of strength were identified that contributed to the success of the online training program, but there are also rooms for improvement. It is recommended that optional 30-units needs to be maintained and improved in order to help reach even a broader target population in the future. For example, the course needs to be streamlined to reduce redundancy and to reduce time needed for completing the course. It is also recommended that special effort

in targeting school districts that did not have participants in the online training program from the previous years be planned and implemented. Additional personal contacts in reaching out to the professional development coordinators at various school districts could also be considered and implemented.

Introduction

Needs and Importance of Evaluation

All funded programs need to be evaluated to gain information about the implementation and effectiveness of programs for stakeholders including program developers, policy makers and funding agencies. Six specific reasons have been identified as why evaluation is needed (Capwell, Butterfoss & Francisco, 2000).

1. To determine achievement of objectives: Probably the most common reason for program evaluation is to determine if objectives of the program have been met.
2. To improve program implementation: Program evaluation can help developers and funding agencies to understand why a particular program or elements worked or did not work.
3. To provide accountability: Many stakeholders including funding agencies and policy makers are interested in the value of a program or if the program is worth its cost. An evaluation will help decision makers with the information to determine if the program funding should continue or expand.
4. To increase support: The positive results of an evaluation can help to increase target population awareness of a program as well as providing additional support in the future.
5. To contribute to the scientific base: Program evaluation can provide information to improve other existing or new programs in the field.
6. To inform policy decisions: Program evaluation can be used to impact policy within the field.

Evaluation, particular process evaluation is needed to achieve three purposes: (1) accountability, (2) program development, and (3) replication. (WHO, 2000) It is hoped this evaluation report will help to provide information for future improvement of the online tobacco prevention teacher training program.

Evaluation Framework

In general, all evaluations are guided by a framework. Many frameworks are used by evaluators and the one specific framework selected for this evaluation report is the Centers for

Disease Control and Prevention (CDC) Model (1999). The selection is based on the program goal and objectives as well as purpose of the evaluation. It is hoped that the use of this evaluation framework will help program developers and staff, decision makers, and other stakeholders understand the thinking that went into the evaluation, the type of questions asked, how the information was collected, and the type of report that can be expected. Six steps and four standards are involved in the CDC evaluation framework. (See Figure 1)

Figure 1: CDC Evaluation Framework



1. Engage stakeholders: All stakeholders are engaged to ensure their needs are met. Stakeholders include those involved in the program development and program operation, those served by the program and the primary users of the evaluation results. All these individuals will have an investment in what will be learned and what will be done with the information.
2. Describe the program: The program goals and objectives, activities and strategies used to achieve the measurable objectives and the resources available will need to be described to help understand the program.
3. Focus the evaluation design: The evaluation design needs to take into consideration the purpose of the evaluation, the stakeholders who will receive the results, and how the evaluation will be used. Evaluation design should also focus on developing answerable questions.
4. Gather credible evidence: Information or data collected need to be accurate and able to answer questions about the program, its implementation, and its effects.
5. Justify conclusion: This step involves the comparison of the data against the specific objectives of the program, interpreting the results, judging the significance of the program, and making recommendations based on the results of the evaluation.
6. Ensure use of the results and shared lessons learned: The final step focuses on the use and dissemination of the evaluation results. Evaluation focus and its limitations also need to be shared with all stakeholders who are interested in the evaluation results.

In addition to the six steps of the framework, this evaluation model also considers four standards. These standards will provide practical guidelines for the evaluator to follow when making decision among options. The four standards include (1) utility standard that ensures information needs of evaluation users are satisfied, (2) feasibility standard that ensures the evaluation is viable and pragmatic, (3) propriety standard that ensures the evaluation is ethical and conducted with regard for the right and interests of those involved and affected, and (4) accuracy standard that ensures the evaluation findings are accurate and can be used with confidence.

Description of the Program

To train teachers, instructional personnel, and other school professionals for tobacco prevention and intervention, continuing education and professional development via the Internet distance education programs had been reported to be useful and successful. The effectiveness of online prevention programs in schools had been reported in the literature. In addition, the literature also indicated that the online program could be implemented successfully in the classroom (Atkinson & O'Connor, 2007). The Florida Statewide Tobacco Prevention and Intervention Teacher Training project (FSTPITTP) was developed and found effective based on an evaluation study conducted for teachers in the state (Chen, Sheu & Weng, 2011; Chen, Sheu & Weng, 2013).

The Palm Beach County School District (PBCSD) has been a recipient of the Tobacco Prevention and Intervention Teacher Training (TPITT) project for several years and has successfully used online training for teachers in tobacco prevention with positive results (Lacey, 2008; Chen, Sheu & Weng, 2011; Chen, Sheu & Weng, 2013). Beginning in the 2010 grant year, the PBCSD has been contracted by the Florida Department of Education to provide the Statewide Online Tobacco Prevention and Intervention Teacher Training (SOTPTT), an online training program designed for teachers' continuing education and professional development. This report will focus on the process evaluation of the project during 2015-2016.

The SOTPTT project proposed to provide engaging, relevant and accurate information to educators across the state of Florida about tobacco prevention and intervention. The training is interactive and vigorous. Topic areas ranged from history of tobacco use and prevention, impact of tobacco use on academic performance, effects of tobacco use on the brain, addiction to nicotine, cultural influences, diseases caused by tobacco, tobacco chemicals, smokeless tobacco, and other effects. In addition, topics of media literacy, refusal skills, second and third-hand smoke including e-cigarettes are also covered in the online training program. A very well qualified and experienced team has been responsible for developing and conducting the training.

Furthermore, the training materials included lessons for students in kindergarten through 12th grade. Each lesson is aligned to a Florida State Standards and Next Generation Sunshine State Standard for Health. The lessons address health effects, media literacy, and refusal skills

for all age groups. In addition, second-hand and third-hand smoke is also addressed for 6-12 grade students. Either 30 or 60 in-service points may be obtained by completing the training depending on participants' professional development needs and preference. However, all participating teachers/instructional personnel must teach a minimum of six lessons to students in order to receive the in-service points. A wide ranging social media campaigns help to provide up-to-date and interactive information about the training and tobacco prevention as well as updated research about tobacco prevention and intervention.

In order to reach out to all potential target population for the online training program, marketing plans have been implemented that include mass mailings, emails, flyers, and posters sent to every school in the state as well as very well developed Facebook and Twitters are used. Additional in- person presentations across the state, at various workshops, conferences and meetings have been made to help market the training program. A variety of Newsletters also were used to spread the word about the projects.

Goal and Objectives of the Project

The goal of the program was to train a cadre of skilled tobacco prevention educators across the state who can teach prevention and intervention lessons to their students. Specifically, 600 teachers/instructional personnel in the state will enroll in the training program and a minimum of 200 will complete the training program by June 10, 2016.

The goal will be measured by the following five specific objectives:

- Objective 1: 600 teachers/instructional personnel across the state of Florida will register in the course.
- Objective 2: 200 teachers/instructional personnel across the state of Florida will complete the course. Completion entails (1) completion of all assignments including enrollment information, pre and post surveys, topic area reviews, forums and assignments, a comprehensive test, and Satisfaction and Course Feedback Surveys, (2) administering pre-surveys to students, (3) teaching at least 6 tobacco prevention lessons (five from those provided in the course and one self developed), and (4) administering post student surveys.

Objective 3: Maintain participation in at least 40 districts and increase outreach to districts that did not participate in 2012, 2013, 2014, or 2015.

Objective 4: Decrease the number of teachers/instructional personnel who enroll but never access the course as measured by comparison between teachers enrolled and teachers who complete.

Objective 5: Decrease the number of teachers/instructional personnel who start the course but do not get to the half-way point as measured by comparison between teachers who do not reach the half-way point and teachers who complete.

In summary, the primary impact of this online training program will be measured by the numbers of teachers/instructional personnel who enroll and complete the training program. In addition, participants' knowledge of tobacco prevention education and related teaching strategies about tobacco prevention and intervention will also be evaluated after completion of the project.

Evaluation Design (Methods)

There are many different strategies used for evaluation design and the emphasis of this report is on process evaluation. Process evaluation will focus on improving overall program effectiveness by monitoring the program implementation, assessing how the program can be improved to become a model program, and evaluating the accountability of the program. Used in combination with outcome evaluation, process evaluation can help program developers, funders and other stakeholders to better focus their time and resources where they will have the greatest impact. Based on the Logic Evaluation Model, six areas of evaluation are included in a logic order (Chen & Cato, 1999). These are (1) Inputs, (2) Activities, (3) Outputs, (4) Short-term Outcomes, (5) Intermediate Outcomes, and (6) Long-term Outcomes. Process evaluation focuses primarily on the first three areas of the evaluation model. The process evaluation enables the program developers and stakeholders to describe and assess program inputs, activities and outputs and to link progress to outcomes specifically related to program goals and objectives. Both qualitative and quantitative data will be collected to evaluate the program effectiveness. The evaluation design presented in this report will utilize the CDC model for collecting process evaluation data focusing on four areas: (1) Program Monitoring, (2) Program Improvement, (3)

Building Effective Program Models, and (4) Program Accountability and are described briefly below.

Program Monitoring: This is the main focus of process evaluation that will help to track, document, and summarize the inputs, activities, and outputs of the training program.

- Inputs
 1. Were the resources including funding appropriate for the intended goal and objectives of the program?
 2. Was the online training curriculum appropriate for tobacco prevention and intervention?
 3. Are the number of staff and staff skills appropriate for the training program?
- Activities
 1. What was the use of the support site and social media to promote the program?
 2. Was the technical assistance provided appropriate for the success of the training program?
 3. What marketing activities were used and were these sufficient and appropriate for recruitment of participants?
 4. Was the online training appropriate and delivered as intended?
- Outputs
 1. How many people registered for the training program? (Objective 1)
 2. How many registrants completed the training program? (Objectives 2)
 3. Was the training program able to reach majority of school districts in the state? (Objective 3)
 4. How many people enrolled but never accessed the program? (Objective 4)
 5. How many people registered but did not reach the half-way point (withdrawals)? (Objective 5)
 6. How many students were impacted by the training program?

Program Improvement: Based on the data collected on program inputs, activities, and outputs what can be improved to make the program more successful in the future?

1. What feedbacks were received regarding the technical assistance?
2. What feedbacks were received regarding program curriculum?
3. What factors were identified for the success of the training program?
4. What challenges were identified by the program staff?

Building Effective Program Models: This helps to assess how the process (inputs, activities, and outputs) is linked to outcomes to identify the most effective program models and components.

1. What were the strengths of the training program?
2. What were the weaknesses of the training program?

Program Accountability: This helps to demonstrate to funders and other stakeholders that the training program is making effective use of resources.

1. To what extent did the training program achieve the goal and objectives?
2. Have the training program inputs or resources used efficiently and accounted for the meeting of the goal and objectives?
3. What was the cost benefits of the training program?

Evaluation Findings

As indicated previously, this evaluation report focuses primarily on process evaluation. The findings are presented based on the 4 major areas of process evaluation identified in the evaluation design section.

Program Monitoring

Inputs

1. *Were the resources including funding appropriate for the intended goal and objectives of the program?*

Resources are important input factors that should be evaluated to see if they can meet the needs of the program to achieve the intended goal and objectives. Based on the information provided, it is evident that the resources including funding, staff, computing

technology, and materials provided are appropriate to help accomplish the goal and objectives set for the program.

2. *Was the online training curriculum appropriate for tobacco prevention and intervention?*

Topic areas ranged from Introduction to Tobacco Prevention and Intervention, How Big Tobacco Got Big, Tobacco and Academic Performance, Tobacco Effects on Athletics and Fine Arts Performance, The Teacher Connection in the Community, The Addiction Gateway, Chemical Designs, Diseases influenced by Tobacco, Smokeless Tobacco and Alternative Delivery System, Second-Hand and Third-Hand Smoke, Media Literacy- Marketing Recognition, Student Refusal Skills, Cultural Influences and International Problems, and Smoking Laws and Youth are all covered in the course. In addition, the new trends of e-cigarettes were also emphasized. This curriculum was developed and updated constantly by a very well qualified team with many years of online training experiences. Based on the evaluator review and participants feedback, it was evident the curriculum was appropriate and effective. Comments from participants indicated that the most meaningful lessons included the Second-hand Smoke Lesson, The Power of Addiction Lesson "Betcha' Can't Just Eat One!", Advertising deceptions and Media literacy, and Refusal Skills. Samples of comments from participants further supported that the curriculum was appropriate for tobacco prevention and intervention.

" The course was very informative, and made me realize that we still have so much to teach our kids about the harmful effects of tobacco use!"

" I learned a lot while taking the course and so did my students. I am grateful for the opportunity and the wealth of information I received. I feel I am better prepared to teach my 5th grade students how to stay away from tobacco products and how to handle negative peer pressure."

" I learned a great deal from this course and, in some cases, more than I wanted to learn. I am so much more qualified to speak to the kids with facts about the dangers of tobacco use."

"I enjoyed the course and learned things about tobacco that I did not know. I feel much more confident now about talking to my students about all aspects of tobacco and its use."

"I enjoyed learning so much about the subject of tobacco prevention and came away with a much healthier respect for the facts and understand how important it is to teach the information to students. This course provided me a knowledge base that will help me with lesson planning and teaching for years to come."

"This is a course I would recommend to other teachers (and have) because the material concentrates on a life-learning process that helps students learn about their decisions that may have consequences to their quality of health. The content thoroughly explains the history of tobacco and the dangers of tobacco use that are graphically shown along with supportive materials that provide the teacher facts and solid research to become a real advocate against the tobacco industry. Many aspects of this course can be developed into quality and appealing lessons for high school students. My students certainly got the message."

3. *Are the numbers of staff and staff skills appropriate for the training program?*

Staff skills and sufficient number of staff are important criteria to evaluate online training program. Based on the information provided, there are sufficient numbers of staff worked on the project and all have extensive experiences in curriculum design, computing technology and marketing skills for the program. It is evident that staff skills are appropriate for meeting the goal and objectives of the program. The newly appointed Director has previous experiences working in the computer related distance education program and was successful in completing all the requirements and achieving the goal and objectives established by the program. Most importantly, the Director has kept all stakeholders informed about issues and progress of the project throughout the year. Additionally, other project staff who have worked on the project previously was able to add to the success of the project.

Activities

1. *What was the frequency use of the support site and social media to promote the program?*

To help achieve the goal and objectives established for the project, a number of support activities and social media were implemented to help promote and communicate with program participants and potential participants. These social media supports included Blog Stories (353), Facebook Likes (425), Twitters (both Tweets/Retweets, 12,400 and Twitter Followers, 2,710), and YouTube Subscribers (17). In addition, the Pinterest was also used to communicate with the participants and had 72 followers. It is evident the use of these support site and social media activities have helped to promote the program and assisted in achieving the goals and objectives of the program. These activities will continue to help provide state, national and international credibility of this training program.

2. *Was the technical assistance provided appropriate for the success of the training program?*

Technical support is very important and needed for success in an online training program because some of the participants have never experienced the on-line training before. The fact that 167 out of 786 total participants (21.2%) were first time enrolled in an online program this year further stressed the importance and need for the technical assistance. Based on the technical support activities provided by the data it is evident that the technical assistance provided by the program was appropriate for the success of the program. The teachers' satisfaction survey after completing the training program revealed that 88% of the participants strongly agreed or agreed that they received information on how to get help with the technology if it is needed. In addition, personal testimonies also indicated that the technical assistance provided was excellent.

"The technical support was available immediately when needed. My comfort level with an online course has increased tremendously."

"Not being a real computer wiz was a little challenge at times when it came to submitting lessons and so forth, but staff were extremely helpful all during this time."

"The phone and e-mail support and feedback and quickness with grading/approving my lesson plan were awesome. Thank you."

"The course was self explanatory and very easy to use. My questions were always answered in timely and professional manner which was very helpful."

"The instructors were very supportive and quick to respond when needed."

3. *What marketing activities were used and were these sufficient and appropriate for recruitment of participants?*

Marketing activities were planned and carried out using multi-frequency communication campaigns to target potential participants and specific school district personnel. Primarily media activities were used to market the training program. These marketing activities included Flyers or Posters, Professional Development Web, Faculty Presentations, Emails, Conferences, Social Media, Web-based marketing, Electronic Bulletin Boards, Search Engines, and other promotional channels (e.g., memo from the Florida Department of Education, handouts in mail box). Based on the participants' survey, it was discovered the most effective ways to find out about the course were Professional Development Web (312), Colleagues(209),and Emails(128). In addition, other Web-based marketing tools including Blog posts, Twitter, YouTube, and Pinterest were used. The evidence of traffic to the resource site of the training program via social media channels indicated that social media campaigns were useful and should be continued. These activities all played a significant role in marketing the program and helped to achieve the intended goal and objectives of the program.

In addition, In-Person promotion and marketing activities were also conducted. Presentations at workshops or conferences throughout the state were conducted to further market and recruit participants for the program. Additional In-Person presentations, flyers, and posters were also available at individual school district conferences and

meetings to market the program. Overall, it is evident that all these marketing activities have contributed to the success of meeting the goal and objectives of the program.

4. *Was the online training appropriate and delivered as intended?*

The online training program consisted of 14 sections including (1) Introduction to Tobacco Prevention and Intervention, (2) Big Tobacco, (3) Tobacco and Academic Performance, (4) Tobacco Effects on Athletics and Fine Arts Performance, (5) The Teacher Connection in the community, (6) The Addiction Gateway, (7) Chemical Designs, (8) Diseases Influenced by Tobacco, (9) Smokeless Tobacco and Alternative Delivery System, (10) Second-Hand and Third-Hand Smoke, (11) Media Literacy-Marketing Recognition, (12) Student Refusal Skills, (13) Cultural Influences & International Problems, and (14) Smoking Laws and Youth.

Furthermore, individual lessons are specifically designed to fit the needs of students in grades K through 12. The instructional design also aligns the curriculum to the Next Generation Sunshine State Standards in Health and specific Content Areas. Lessons address health effects, media literacy, and refusal skills for all grade students as well as second-hand and third-hand smoke for middle and high school students.

To evaluate if the online program was appropriate and delivered as intended, a post training survey was conducted to assess participants' satisfaction after completing the program. Results of the surveys showed strong support for the program. Teacher's satisfaction was measured by a survey of 8 questions where four options (strongly disagree, disagree, agree, strongly agree) were offered to choose from. The teachers/instructional personnel who participated in the training program showed high satisfaction to the program. In the area of teacher's satisfaction on training, nearly all teachers agreed or strongly agreed that the online tobacco training session was informative (98.06%). Majority indicated that they are comfortable using computers (92.58%). A very high percentage of teachers agreed or strongly agreed that the Program was user friendly (99.02%) and they received information on how to get help with the technology if needed (88.06%). In addition, the teachers' comments indicated the assignments were reasonable and appropriate (92.58%). Perhaps the most important

accomplishments are that participants indicated that the Program increased their interest in the area of Tobacco Prevention/Intervention (95.16%) and also made them feel confident in teaching the Tobacco lessons (98.71%). Participants also felt it was a positive experience (97.10%) in completing this online course. The detailed percentage distribution is provided in the Table 1 below.

Overall, participants were very satisfied with the quality of the training program. The teachers also reported high level of comfort in using computers. In addition, after the training, almost all of the participants including teachers from different subject areas than health felt confident in teaching tobacco prevention lessons. This was a significant accomplishment and that met the online program intended objective.

Table 1 The ratings of teacher’s satisfaction about the Program after Training (N=310)

Question:		Strongly Agree	Agree	Neither	Disagree	Strongly disagree
1	The online tobacco training session was informative.	256 (82.58%)	48 (15.48%)	1 (.32)	3 (0.97%)	2 (0.65%)
2	I feel comfortable using computers.	205 (66.13%)	82 (26.45%)	12 (3.87%)	8 (2.58%)	3 (0.97%)
3	I received information on how to get help with the technology if I needed it.	206 (66.45%)	67 (21.61%)	30 (9.68)	2 (0.65%)	5 (1.61%)
4	This course was user friendly.	218 (71.01%)	86 (28.01%)	3 (0.97)	1 (.32%)	2 (.65%)
5	The assignments were reasonable and appropriate for this type of course.	154 (49.68%)	133 (42.90%)	14 (4.52)	7 (2.26%)	2 (0.65%)
6	The course increased my interest in the area of Tobacco Prevention/Intervention.	224 (72.26%)	71 (22.90%)	12 (3.87%)	0 (0)	3 (0.97%)
7	At the end of the training session I felt confident that I could teach the Tobacco Lessons.	267 (86.13%)	39 (12.58%)	2 (.65)	0 (0)	2 (0.65%)
8	This professional development experience was a positive experience for me.	220 (70.97%)	81 (26.13%)	5 (1.61%)	2 (0.65%)	2 (0.65%)

It is evident that the online program was designed according to needs of the teachers/instructional personnel. The curriculum was very appropriate and has been shown effectiveness in helping teachers/educational personnel to gain knowledge and skills needed to control and prevent tobacco use in the state. The online training program was released on August 10, 2015 and registration closed on May 6, 2016 as planned. The training program closed on June,10, 2016. It is clear the program was delivered as intended.

Outputs

1. How many people registered for the training program? (Objective 1)

A total of 786 teachers/instructional personnel registered for the online training program before the end of project year. This result has not only met the specific objective (600 teachers/educational personnel will enroll in the program) established by the program at the beginning of project year, but also exceeded the objective by 31% (131% of the Objective 1). This significant accomplishment was influenced by the optional choice of 30-units professional development need. In the previous years, only 60-units professional development course was available for teachers/educators who are interested in tobacco prevention/intervention training course. However, the vigorous course demand and time required for the course have limited some people from participating in the full training course (60-units). The fact that almost 1/3 of the participants (N=254) selected the 30-units course this year is a good indication for the need of 30-units professional development course. Therefore, it is strongly recommended that this optional 30-units professional development course be continued and promoted in the future.

2. How many registrants completed the training program?(Objective 2)

A total of 313 teachers/educational personnel have completed the training program. In addition, these participants also completed participants' satisfaction survey, students pre-survey, taught at least 6 lessons, and students post-survey. Again with the tremendous efforts made by the program staff, this output not only met the objective 2 (200

teachers/educational personnel will complete the training program), but also exceeded the objective by 56.5% (156.5% of the Objective 2).

3. *Was the training program able to reach majority of the school districts in the state? (Objective 3)*

Teachers/educational personnel from a total of 49 school districts participated in the training program. The number of districts participated in the program has increased to 49 compared to the 42 school districts last year. While the objective was achieved, but more efforts are still needed to reach more school districts as only 73% of school districts participated in the program this year. With availability of optional 30-units course, this objective could be further enhanced in the future. Additional efforts in marketing the 30-units program and personal contacts with professional development coordinators in the school districts that did not have participants previously could be helpful in reaching a broader target population in the future.

4. *How many people enrolled but never accessed the program? (Objective 4)*

There were 786 teachers/instructional personnel enrolled for the training program and only 44 (5.6%) of these individuals never accessed the program. This was a small reduction when compared with 2014 data (5.72%) . As a result, the objective of decreasing the number of teachers/instructional personnel who enroll but never access the program was achieved. This was a good achievement because the number of registration has increased significantly this year. However, more efforts are still needed to further reduce the number of people registered but never access the program

5. *How many people registered but did not reach the half-way point (withdrawals)? (Objective 5)*

A total of 104 teacher/instructional personnel enrolled and participated in the training program, but did not reach the half-way point and had to withdraw this year (13.23%). This was a significant decrease when compared with previous years of 23.05%. As a result, Objective 5 was also achieved. Further efforts in reaching out to these participants

by weekly emails or phone calls will help to further reduce and prevent the arbitration. in the future.

5. *How many students were impacted by the training program?*

A total of 56,337 students are potentially impacted by the training program (based on the number of teachers/instructional personnel registered for the program) and the actual number of students impacted was 22,386 (based on the teachers/instructional personnel who completed the program and conducted at least six lessons to their students). The ratio of students impacted by each teacher/educator was 71 to 1. There was no specific objective established by this indicator, but this should be evaluated as it is a significant indicator to assess the value of the training program.

Program Improvement

1. *What feedbacks were received regarding the technical assistance?*

Majority of the feedbacks regarding technical assistance provided by the participants were very positive. For example, participants commented that

- *"The course was very easy as far as the technical side was concerned. All steps were clearly explained and if there was an questions or issues, it was easy to contact the course administrators."*
- *"I was very impressed on how easy it was to submit the work. I even had a problem uploading a video because it was too big and I contacted the email provided. I received information within a couple of hours on what to do."*
- *"When I did encounter difficulty, I called the number at the bottom of the page and someone answered 100% of the time. That was awesome! And to top it off, I always received information that answered my questions. "*
- *"By my own admission, I am not technologically savvy, however; thanks to the expert coaching I received from Mr. Dawson and Ms. Habib, I was successful. I am grateful to them and for the opportunity to share what I learned with my students."*

These positive feedbacks were further supported by the participants' satisfactory survey after they completed the training program. A significant majority of

participants (88.06%) responded by indicating that they either strongly agree or agree on that they received information on how to get help with the technology if needed. Two areas of concern regarding technical aspect of the training program were identified by the participants and these should be noticed or corrected for future improvement. For example, *"I was challenged as it related to uploading files and the applications were not too user friendly to me, especially being technologically challenged"*. Also, some of the school districts block unauthorized videos and teachers were not able to work on the training program at work. For example, some participants indicated that *"it was very frustrating that I couldn't get certain videos to work at my school which would have enhanced my lessons. Maybe this is the schools blocking fault but even when my tech guys unblocked one site it still didn't work. And the interactive web page of venomocity didn't work either (the video parts like choose refuse) and this is made for kids. I encouraged the kids to go home and log into it and watch the videos"*.

2. *What feedbacks were received regarding program curriculum?*

Participants' survey results indicated a high level of satisfaction with the training program. Over ninety eight percent (98.06%) of participants indicated they strongly agree or agree that the online tobacco training session was informative and 99.02% participants agreed that the course was user friendly. In addition, 95.16% of the participants indicated the training course increased their interest in the area of Tobacco Prevention/Intervention and 98.71% of participants felt confident that they could teach the Tobacco Lessons at the end of the training session. Examples of comments from participants about the course and curriculum are listed below.

- *The course was very informative. I learned more then I thought I would about tobacco. It was very interesting, and the way it was put together keep me interested.*
- *I think the course is comprehensive and well planned to help teachers with the lessons about tobacco use and it's dangers to our society.*

- *I enjoyed the course and learned things about tobacco that I did not know. I feel much more confident now about talking to my students about all aspects of tobacco and its use.*
- *I thought this course was extremely informative. I did not know all the tricks in advertising that lures young people to start smoking. As well as making them the target audience for smoking companies. In doing the power point lessons, I did learn a lot and my students also enjoyed seeing all the work I did n this course. I think this is a course all teachers should take.*
- *The course contents were very informative and educational, I learned so much more different things about tobacco. I especially loved the second and third hand smoke chapter.*

2. *What factors were identified for the success of the training program?*

The training program was very well developed and delivered. The curriculum and technical support as well as marketing and communication with the participants are all important factors that contributed to the success of achieving the goal and objectives of the program. Most importantly, the immediate attention to participants' needs and weekly tracking of the program progress (weekly Monday Milestone Report) are critical in making the success of the training program. Despite the significant challenge presented by vigorous course demand and time requirement for completing the course, the availability of 30-units professional development option this year has contributed to the success of the training programs. In addition, personal contacts with PD coordinators and close tracking of the course progress of participants by emails and telephone also made it easier to accomplish the goal and objectives. These extra efforts helped to recruit more teachers/educational personnel to participate in the program and contributed to slight drop of the participants who enrolled but never accessed the training program.

3. *What challenges were identified by the program staff?*

This has been a great year that all goal and objectives have been achieved completely, but there are still rooms for improvement. One of the significant challenges this year was to reach even a greater number of school districts to participate in the tobacco prevention training program. The program has some success in increasing the number of school districts (increased from 42 to 49), but this only represented 73% of the school districts in the state. Some school districts limited their teachers to participate in the 60-units professional development course. However, this challenge can be improved with the availability of 30-units course. More efforts in marketing this shorter course to some of the school districts that did not participate in the training program previously will help to reach a greater proportion of the school districts in the state. It would also be very helpful if specific marketing activities could be targeted to these school districts by personal contacts in the future. Another challenge was how to assist and motivate teachers/instructional personnel to begin access to the training course and complete the training including teaching at least 6 lessons to their students. Close tracking of the participants by emails and personal phone calls can help to meet the challenge.

Building Effective Program Models

1. *What were the strengths of the training program?*

The optional 30-units program that allow teachers/instructional personnel choice to participate in the training course has been one of the major strengths this year. Many teachers/instructional personnel who have interests in tobacco prevention training, but did not have time to meet the vigorous demand of the full course or were limited by their school districts to participate in a full 60-units course in the past could now join other teachers to participate in the training and earn professional development credits. Also, program staff's experience and expertise in online training program as well as their attention to participants' progress and close tracking have continued to contribute to the success of the program.

Another area of strength of the program is its effectiveness in improving teachers/instructional personnel knowledge and skills in teaching tobacco prevention and intervention. A comparison of participants' knowledge and confidence (strongly agree) related to teaching tobacco prevention/intervention before and after the training program indicated significant improvements in all areas. The changes ranged from 77.30% improvement to 46.86% improvement with an overall average improvement at 57.90%. The most notable improvement of teachers' knowledge and confidence was in the area of using web to find information and resources on tobacco (77.30%). Other areas of significant improvement included "I am familiar with all different forms of tobacco and nicotine delivery system (72.65%)"; "I am familiar with and can identify tobacco industry efforts to target youth (71.37%)"; "I understand the impact of tobacco addiction on student academic performance (67.96%)"; "I understand the impact of tobacco addiction on student social performance (64.69%)"; "I have integrated tobacco prevention into lesson plans (67.717%)"; and "I am familiar with elements of effective tobacco prevention curricula (65.16%)". The least improved area was "I know my district/school's policy (46.86%)". Other least improved areas also included "I know that youth advocacy as a way to combat youth tobacco use (48.88%)"; "I can provide information or referral to tobacco cessation products and services (51.05%)"; "I can identify the benefits of quitting tobacco use (51.27%)"; "I can recognize the health consequences of tobacco use (56.27%)"; and "I am knowledgeable about risk factors for tobacco use (57.02%)". Table 2 presents the results of teacher survey before and after the program.

Table 2 Teacher Survey Responses 2015-2016

Questions	Pre-Survey Strongly Agree (%)	Post-Survey Strongly Agree (%)	Changes (%)
I can recognize the health consequences of tobacco use.	35.03	91.30	56.27
I can identify the personal costs of tobacco use.	30.05	88.71	58.66
I can identify the societal/medical costs of tobacco use.	25.93	84.52	58.59
I have integrated tobacco prevention into lesson plans.	6.48	74.19	67.71
I can identify the benefits of quitting tobacco use.	45.83	97.10	51.27
I can provide information or referral to tobacco cessation products and services.	8.95	60.00	51.05
I have used the web to find information and resources on tobacco.	11.16	88.39	77.23
I know my district's/school's tobacco policy	8.64	81.29	72.65
I am familiar with all the different forms of tobacco and nicotine delivery system	30.56	77.42	46.86
I am familiar with and can identify tobacco industry efforts to target youth.	19.60	90.97	71.37
I am knowledgeable about risk factors for tobacco use.	33.64	90.65	57.01
I am familiar with elements of effective tobacco prevention curricula.	7.10	72.26	65.16
I know that youth advocacy as a way to combat youth tobacco use.	25.00	73.88	48.88
I understand the impact of tobacco addiction on student academic performance	19.14	87.10	67.96
I understand the impact of tobacco addiction on student social performance	21.76	86.45	64.69

1. *What were the weaknesses of the training program?*

While the training course is very comprehensive, but one major complaint about the training program was too extensive and too time demanding. In addition, some participants indicated that some of the information was redundant and the videos were too long and not always available at school because it was blocked by the school. These weaknesses could be improved by streamline the course content and remove the unnecessary repetitiveness of the materials. Also, it may be helpful in reducing the time required for participants who have a better background information in tobacco prevention by allowing the option to view the videos that are not critical for the content or for testing purposes. Another weakness was difficulty in reaching out to teachers/instructional personnel in some school districts, particularly the school districts that never had any participants in the past. Comments or feedback about the benefits of the course from previous participants could be shared with future potential participants and used to promote the course to teachers in the school districts that never had any participants.

Accountability

1. *To what extent did the training program achieve the goal and objectives?*

It was evident from the evaluation of the outputs that the program made significant achievements by meeting all of the goal and objectives set up for the training program this year. The major goal of training a cadre of skilled tobacco prevention educators across the state who teach tobacco prevention lessons to their students: 600 teachers/instructional personnel will enroll in the course and a minimum of 200 will complete the course not only was not only met but also exceeded significantly. Specifically, 786 teachers/instructional personnel were enrolled in the training program (131%) and 313 completed the program (156.5%). The secondary level objectives of reducing the number of participants who enrolled in the program but never accessed the training course and decreasing the number of participants who start the course but do not get to the half-way point (withdrawals) were also achieved. There was a significant

reduction in the number of registrants who did not complete the half-way point course as compared to the previous year (13.23% vs. 23.05%). Another secondary objective of maintaining or increasing participation in over 40 school districts in the state also was successful. A total of 49 school districts participated in the training program as compared to 42 in 2014-15 school year. While this objective was achieved, but the number of school districts could be increased with additional efforts in marketing and personal contacts with school district professional development coordinators that never had any participants. Also, more efforts in marketing and promotion of optional 30 units professional development course next year may help to improve this objective.

2. *Have the training program inputs or resources used efficiently and accounted for the meeting of the goal and objectives?*

Based on the funding and program inputs available for the training program, it was evident that the resources were used efficiently and appropriately. Qualitative evaluation from program development, design, curriculum, technical support, marketing campaign, and social media and communication with participants all indicated very well implemented program. In addition, comments from participants also strongly supported the success of the program and the program was indeed accountable for meeting the goal and objectives of the training program.

3. *What were the cost benefits of the training program?*

One of the ways to evaluate the program accountability is to examine the cost benefits relationship. The cost of the program was \$285,000 and reached 786 teachers/instructional personnel of the state. This amounted to \$365.50 investment per participant. It is evident this was a very cost benefit program. Furthermore, the cost benefit analysis also indicated that it only cost \$910.5 to completely train a teacher/instructional personnel to become skilled teacher to conduct tobacco prevention and intervention in the state (313 completed the training course). Additionally, based on the data provided by the participants, the program helped them in developing technology skills as reflected by 21% of participants used this online program as their first ever

professional development course for technology. This is a very significant accomplishment. Most importantly, we know that the online program was effective in impacting students for tobacco prevention and intervention and there were 22,386 students directly impacted by these 313 teachers in the program. As a result, the cost to prevent a student from using tobacco was estimated to be lower than \$13 per student (\$12.73).

Summary and Conclusions

This report presents the results of process evaluation of the Statewide Online Tobacco Prevention and Intervention Teacher Training program (SOTPTT) developed and conducted by the Palm Beach County School District. The CDC model of process evaluation along with the logic evaluation model was utilized as a framework to evaluate the project. This model focuses on four areas of assessment: (1) program monitoring, (2) program improvement, (3) building effective program model, and (4) program accountability. The goal and objectives of the training program were evaluated using both quantitative and qualitative data provided by the participants and program staff.

- Based on the information collected, it is evident that resources including funding, program personnel, computing technology, and training materials provided are appropriate to help accomplish the goal and objectives of the training program.
- The curriculum of the training program was developed by a team of very well qualified staff and based on the evaluator review and participants' feedback, it was clear the curriculum was appropriate and effective in preparing teachers for effective tobacco prevention and intervention.
- Staff skills and number of skilled staff are important criteria to evaluate online training program. Based on the information provided, there are sufficient numbers of staff worked on the project and all have extensive experiences and expertise in curriculum design, computing technology and marketing skills for the success of the program.

- Activities used to help achieve the goal and objectives of the program included use of support site and social media, technical support, and marketing campaign. Based on the information collected, all these activities were appropriately used and had been conducted effectively in promoting the online training program. The personal contacts with professional development coordinators in school districts and close track with personal phone calls and emails were very effective in helping to reach the goal and objectives of the program.
- To evaluate if the online program was appropriate and delivered as intended, a survey was conducted to assess participants' satisfaction after completing the program. Results of the survey showed strong support for the program. It is concluded that the online training program was designed according to needs of the teachers/instructional personnel. The curriculum was very appropriate and has been shown effectiveness in helping teachers/instructional personnel to gain knowledge and skills needed to control and prevent tobacco use in the state.
- On the outputs, a total of 786 teachers/instructional personnel registered for the online training program. This output has satisfactorily met the main objective (Objective 1) established by the program at the beginning of the project year. The results exceeded the objective by 31% (131% of the Objective 1).
- One of the main objectives evaluated is the number of teachers/instructional personnel who completed the online training program and conducted at least 6 tobacco prevention lessons to their students. The data collected indicated 313 teachers/instructional personnel completed the program and this results exceeded the Objective 2 by 56.5% (156.5% of the Objective 2) .
- One area of the objectives that was achieved but could be improved was the Objective 3. At the end of the project period, 49 school districts in the state had teachers/instructional personnel participated in the training program. This was an improvement when compared to 42 school districts in the state last year. Additional efforts in targeted marketing to school districts that did not have any participants will help to improve this objective.

- There were 786 teachers/instructional personnel enrolled in the training program and only 44 of these individuals never accessed the program (5.6%). This was a slight improvement when compared to the data in 2014-15 (5.72%). As a result, the objective of decreasing the number of teachers/instructional personnel who enroll but never access the program was also met (Objective 4). Additional efforts of communicating with registrants who enrolled in the course by weekly email and phone calls may be helpful to further improve this objective in the future.
- A total of 104 teachers/instructional personnel who started the course but did not get to the half-way point (13.23%). This was a significant improvement when compared to data from 2014-15 (23.05%). As a result this secondary objective was also met (Objective 5).
- Overall, comments from participants of the training program strongly supported the success of the program and the program was indeed accountable for meeting the goal and objectives of the training program.
- One of the main accomplishments was the number of students impacted by the training program. A total of 22,386 students have been directly impacted by the program through teachers/instructional personnel who completed the training program and taught at least 6 tobacco prevention and intervention lessons. Previous study indicated students were able to improve their knowledge and attitudes toward tobacco use and their intention to not use tobacco was also improved significantly after receiving the lessons.
- Another significant impact of the online training program was the cost benefits relationship. Based on the funding level of the program and the number of teachers/instructional personnel enrolled and completed the training program, it was calculated that cost of enrolling a teacher/instructional personnel was \$362.5 and the cost of complete training was \$910.5. This was a very cost benefit program. Most importantly, the calculation indicated that the cost for preventing one student from using tobacco was estimated to be less than \$13.

- Finally, one major side benefit gained from the program was technology training for teachers/instructional personnel. The program helped participants to develop technology skills as evident by 21% of participants who have never received any formal technology training and used this program as their first ever professional development course for technology.

Recommendations

Many strengths were identified that contributed to the success of the online teacher training project, but there are also rooms for improvement. Based on the results of the process evaluation, the following recommendations have been suggested.

- The optional 30-units professional development program showed a significant impact on the success of the training program this year. The fact that almost one third of the participants selected this option and more than 30% of the completers were those selected the 30-units course is a strong indication for the need of a shorter course for some teachers in the state. As a result, it is recommended that the optional 30-units course needs to be maintained and further promoted in order to help reach even a broader target population in the future.
- Close tracking of the progress is an important evaluation tool and it is recommended that the Weekly Milestones Report should be continued and refined to monitor the progress of all goals and objectives. These reports have been very critical in keeping all stakeholders informed about the progress of the project and also help to identify areas that need to be further strengthened and improved to help achieve the goal and objectives of the project.
- In order to help improve the drop out rate and prevent participants from withdrawal before completing the course, it is recommended that the course content needs to be reviewed and streamlined to remove redundancy and reduce time needed for the course. Some of the long videos could be replaced or make it optional viewing for participants who have good background in tobacco prevention.

- In order to reach out to more teachers/educational personnel from the school districts that never have any participants in the past, it is recommended that project continues to explore opportunity to market this program, particularly the 30-units professional development course. Personal contacts with professional development coordinators or administrators in these schools can be planned at the beginning phase of the program.

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