

Training students in underserved high schools along the US-Mexico border to implement Project Students are Sun Safe (SASS)



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Introduction

- Skin cancer is a major public health issue in the US and Arizona. Ultraviolet radiation (UVR) overexposure is a known cause. Most people living near the rural Arizona-Mexico border are Hispanic; skin cancer incidence is rising within that population.
- Youth are prone to UVR overexposure, yet few skin cancer prevention programs target rural and underserved youth. Schools are ideal intervention settings, but teachers in border high schools have limited time and resources for skin cancer prevention education.
- Project Students are Sun Safe (SASS) has been successfully implemented in urban schools. In the current model, UA health sciences students (peer leaders) take a one-semester academic course containing online modules on skin cancer epidemiology, types, prevention and communication, followed by in-person skills evaluation. Trained peer leaders implement, a brief SASS lesson in community middle and high school classrooms, consisting of a PowerPoint presentation (basic epidemiology, skin structure, skin cancer, UVR and protection strategies, and tanning consequences), reinforced by three interactive activities.
- Adapting this model for high school students allows for dissemination and implementation of SASS to rural and underserved schools.



Results

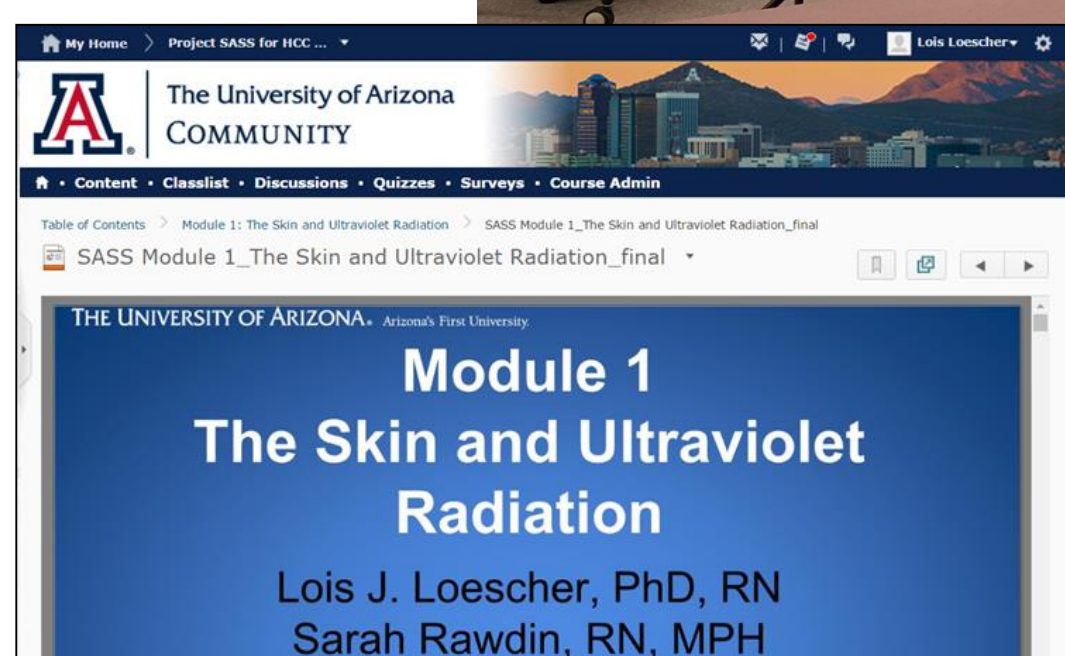
- Process to adapt online training
 - Required 4 months, including finding culturally appropriate images and examples.
 - Content in 5 original modules reduced to 3 modules; all module available through Community D2L.
 - The students had not previously participated in online learning, which required adjustments to training instructions.
- Strategies to engage students in training
 - Online training introduces students to future similar college training.
 - All-expenses paid trip to the UA (60 to 150 miles in distance).
 - Talks by UA dermatologist, visits to cancer center laboratories.
 - Letters of reference by project principal investigator.
 - Authorship on posters to rural health meetings.
- Training effectiveness (pretest to 3-week posttest)
 - Majority of trainees were female (67%), Hispanic/Latino (94%), and had skin cancer risk factors:
 - 83.3% were raised in Arizona; 22% had a family history of skin cancer; 53% reported skin susceptible to sunburn; 82% reported >2 sunburns the past year.
 - 3 weeks post-training:
 - Sun-safety knowledge mean scores improved ($p = .002$).
 - Perceived skin cancer seriousness ($p = .000$) and perceived risk ($p = .02$) were more favorable.
 - Self-reported sun safety behaviors improved ($p < .005$).
- Training feasibility (Table 1):

	Disagree	Neutral	Agree	Strongly Agree
Learned more than I knew before about sun safety	5.6%	X	5.6%	94.4%
Trusted the information I received from the training	X	X	X	100%
Received the right amount of training	5.6%	X	22.2%	72.4%
Content of the training was useful for daily life	X	X	16.7%	83.3%
Felt prepared to present Project SASS to my fellow students	X	X	16.7%	83.3%
Training helped build my self-confidence	X	11.1%	38.9%	50%
Training helped me move forward with my education goals	X	X	22.2%	77.8%

Purpose

To report preliminary findings on the training of Arizona-Mexico border-area high school students to deliver Project SASS to their peers, specifically :

- adaptation of the college course;
- strategies to engage the students in training; and
- evaluation of the training feasibility and effectiveness.



Methods

- Using a CBPR framework, our UA research team partnered with a community agency (Southeastern Arizona Area Health Education Center) to adapt the SASS training modules for delivery by the Desire-2-Learn (D2L) community platform through the UA.
- 18 students from 3 border-area high schools (Bisbee, Douglas, Nogales AZ) took the online training over 2 weeks. They completed the online pretest and a posttest 3 weeks after training completion.
- Online surveys assessed sample characteristics and measured skin cancer prevention knowledge, attitudes, and behaviors.

Conclusion

- We successfully adapted SASS sun-safety training to youth living along the Arizona-Mexico border.
- In March 2017, student participants will take a final posttest four months post-training to assess longer-term efficacy of training.
- In January 2017, 6 trained peer educators from each high school began delivering SASS to classes in their schools.

References

Loescher LJ, Rawdin S, Machain, T, Emrick G, & Spartonos D. (2017, in review). Feasibility of training rural and underserved students to implement Project Students are Sun Safe (SASS) in Arizona high schools adjacent to the Arizona-Mexico border. *Journal of Cancer Education*.