Getting Universal Primary Tobacco Use Prevention Into Priority Area Schools: A Media Literacy Approach

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The impact of any prevention intervention depends on its ability to influence health risks and behavior change and the extent to which the target audience has access to and participates in the program. In this article, the authors make the case that media literacy–based tobacco prevention education can be integrated into the middle school curriculum in a way that delivers on both counts. They describe Missouri's successful development and dissemination of the Youth Empowerment in Action! Tobacco Education, Advocacy, and Media curriculum to schools serving populations that are most vulnerable to tobacco-related health disparities. They make three recommendations to support health program developers' efforts to motivate and prepare teachers to implement and sustain universal tobacco prevention education in areas of highest need.

Keywords: *health education; school health; tobacco prevention and control; training*

Smoking continues to be the leading cause of preventable death in the United States (DiClemente, Santelli, & Crosby, 2009; Mokdad, Marks, Stroup, & Gerberding, 2004), with most tobacco use beginning during adolescence (Centers for Disease Control and Prevention, 2005; Escobedo, Marcus, Holtzman, & Giovino, 1993). Research has demonstrated a reliable relationship between media portrayals of smoking and tobacco use among adolescents (e.g., Chen, Cruz, Shuster, Unger, & Johnson, 2002; Chung, Garfield, Rathouz, & Lauderdale, 2002). However, efforts to reduce media

exposure have met with limited success. A recent, more practical, innovation in tobacco prevention efforts is the use of media literacy education. Media literacy–based interventions aim to teach young people to critique and create mediated messages about tobacco (Pinkleton, Austin, Cohen, Miller, & Fitzgerald, 2007), a strategy that has been endorsed by the American Academy of Pediatrics (Committee on Public Education, 1999), the Centers for Disease Control and Prevention (2005), and the Office of National Drug Control Policy (2001). Encouraging, albeit limited, empirical evidence indicates that awareness of the persuasive strategies found in media messages can lessen the influence of tobacco marketing (Austin et al., 2002), increase reflective thinking in decision making (Pinkleton et al., 2007), and foster community activism against tobacco use (Pinkleton et al., 2007). The U.S. Surgeon General predicts that this sort of educational training may delay or prevent smoking in 20% to 40% of adolescents in this country (U.S. Department of Health and Human Services, 2000).

Any tobacco prevention intervention with demonstrable efficacy is of interest, but media literacy education holds additional promise as a prevention tactic because it eliminates common impediments to adoption and sustained use. For example, delivering media literacy programs in schools reaches youth in a place

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where they can reliably be found. And although public schools, especially those in the high-poverty areas that suffer most from tobacco-related disparities, are under enormous pressure to concentrate their resources on improving student standardized test scores (Flay, 2009; Kaestle & Wiles, 2010), a tobacco-related media literacy curriculum is easily aligned with state academic standards, many of which already include media literacy components. Therefore, such programs have the ability to remove the *academic opportunity cost* often associated with implementing other tobacco prevention programs. The power of a media literacy–based antitobacco program lies not only in its potential to be effective but also in its ability to galvanize the support of schools in implementing it, enthusiastically and at the proper dosage.

This article briefly chronicles the development and implementation of one such media literacy program, the Youth Empowerment in Action! Tobacco Education, Advocacy, and Media (YEA!TEAM) Program, which was successfully disseminated to high-risk area schools in the state of Missouri between 2006 and 2009. After this overview, we present three lessons learned about fulfilling the potential of tobacco prevention media literacy education as a program that is feasible and well liked enough to engage nontraditional tobacco control partners in the form of students, teachers, and administrators and that can improve tobacco-related problems by engaging youth as agents of change.

▶ THE YEA!TEAM PROGRAM

YEA!TEAM is a media literacy– and advocacy-based tobacco prevention program designed for middle school students. The program is grounded in and explicitly aligned to a comprehensive theoretical framework of smoking media literacy developed by Primack, Gold, Switzer, et al. (2006) and based on their synthesis of multiple media literacy theories. Conceptualized and piloted in collaboration with and for high-poverty, high-risk schools in the greater St. Louis region, it was successfully implemented in more than 43 "priority" school districts in urban and rural Missouri between 2006 and 2009. The program includes educational and public health goals. The tobacco-specific goals of the program are to reduce student susceptibility to tobacco initiation, increase student awareness of commercial and political practices that influence individual health, and engage students in health promotion and proactive efforts to increase support for tobacco control in their homes and communities.

This is accomplished through a cross-disciplinary academic curriculum that teaches how to identify and actively process media messages about tobacco in order to understand their political, social, and economic implications and how to engage in service learning/community outreach activities, such as creation of neighborhood-based youth-produced media campaigns, in order to be an effective advocate for tobacco control. These lessons are designed to be delivered by teams of teachers, with each subject matter teacher taking responsibility for two to four lessons. Each lesson identifies the specific subject area standards and grade-level expectations in at least two content areas as well as the tobacco-related learning objective(s), so that teachers, administrators, and/or parents can easily see that students are continuing to master the designated academic competencies while engaging in interactive tobacco prevention education activities.

The YEA!TEAM curriculum is also designed to accomplish the six core principles of media literacy education as expressed by the National Association for Media Literacy Education (NAMLE): to require critical thinking, include all forms of media, build and reinforce skills, develop engaged citizens, recognize the media's role in socialization, and affirm personal interpretations of messages (NAMLE, 2007). In this sense, it demonstrates why media literacy education is thought to have promise as a prevention strategy: because of its possibility of developing cognitive skills that can be applied in a variety of contexts over time. At the same time, the YEA!TEAM program has demonstrated that media literacy education can also be feasible, appealing, and efficacious, not just a theoretically sound, prevention strategy. For example, it successfully incorporates all the components reported to hold the promise of significant long-term tobacco reduction by youth (Flay, 2009; Institute of Medicine, 2007.), delivered at the identified levels of intensity. More than 300 Missouri teachers have been trained to deliver its curriculum, it is delivered universally (i.e., to the entire grade level or cohort) in schools that serve the most vulnerable populations, and more than 5,000 Missouri students have engaged in at least the recommended 15 hours of tobacco education. Formative data collection including individual lesson reports and informal classroom observations indicate that more than 90% of the curriculum lessons were taught in their entirety. It has achieved its tobacco-related objectives, with student outcomes on pre/post-tests indicating significant gains in both general media literacy and tobacco-specific media literacy (Bier et al., 2011). Moreover, exit interviews of participants attest to the appeal of the program for both teachers and students.

We have drawn on four years of implementation of the program to develop three tips for designing, distributing, and supporting media literacy–based tobacco prevention programs in schools with maximum potential for success. They are presented here to encourage further

development and research on such programs, thereby advancing the field of school-based risk prevention.

► INCLUDE PRODUCTION

Media literacy research (Kubey & Baker, 1999) has shown that media literacy programs can improve critical thinking, overall school achievement, and motivation (Buckingham, 2003; Franks et al., 2001; Goodman, 2003; Hobbs & Frost, 2003). Mounting evidence suggests that media literacy education develops a key skill to help children self-regulate and make decisions that lead to healthy choices (Primack, Gold, Land, & Fine, 2006). Nearly all 50 states now integrate media literacy across the curriculum, which is a testament to its value in educators' minds and makes it an especially useful structure on which to build a cross-disciplinary curriculum.

Media literacy scholarship typically defines media literacy as the ability of an individual to access, analyze, evaluate, and produce media in a number of forms (Aufderheide & Firestone, 1993). Media literacy programs commonly focus on critical thinking and analysis of media messages, but they also include a production element whereby students create their own media messages. Learning about the production process is a helpful way to teach awareness of the intentional persuasion tactics at play in media messages, and it also forces students to consider what they want to say in messages they produce, thereby teaching critical thinking in the form of trying on different points of view and potentially engaging in self-persuasion (Banerjee, 2006.). Through this experience, students recognize that they can be advocates for change, disseminating policy-related information through the media to alter the public's view of an issue (Wallack & Dorfman, 1996), challenging community norms through social networks, or mobilizing collective action through community outreach. This enables them to learn that media function as agents of socialization (NAMLE, 2007).

It is for this reason that we strongly advocate an approach to media literacy that has a strong production component. Teaching awareness of and criticism of media messages is certainly a crucial part of what must be taught. With respect to tobacco, this means helping students gain awareness of techniques used in the packaging, marketing, and promotion of cigarettes; the profit motives of tobacco companies; how smoking is portrayed in movies and television; and how specific populations are targeted by tobacco companies. However, if this is all that is covered, it is possible that students will simply become cynical. By including a production component in the media literacy curriculum, this cynicism can be countered with a sense of empowerment, known to contribute to health and personal change

(Bergsma, 2004). Media production and advocacy skills facilitate students' ability to initiate and contribute to public awareness of the social determinants that produce and exacerbate health disparities.

For example, the YEA!TEAM program used lessons in civics, math, history, and language arts to enable students to systematically study tobacco issues in their own communities and analyze the relationships between health outcomes, tobacco use, marketing, and policy. Then, students used what they learned to design real-world antitobacco media and policy advocacy campaigns of their own about city and countywide smoking bans for St. Louis restaurants and bars, the common but illegal sale of individual cigarettes ("loosies"), outdoor cigarette advertising placed too close to schools and playgrounds, the dangers of secondhand and thirdhand smoke, and candy-like "dissolvable" tobacco products. These campaigns involved testifying at hearings; translating messages into Bosnian, Vietnamese, and Spanish; interviewing the Governor of Missouri; and publicizing a newscast posted on YouTube via face-to-face and virtual social networks.

Not only are these activities exciting to students, they engage them in a dynamic process of both consuming and creating knowledge. This illustrates how media literacy training fulfills the core NAMLE principle of providing experiential education (NAMLE, 2007, Principle 6)—a process through which a learner constructs knowledge, skill, and value from direct experience. Not surprisingly, in a study comparing media literacy education programs with and without production components, the program involving analysis and production was more successful than an analysis-only program and a control group (Banerjee & Greene, 2006). Media literacy must be conceived broadly and taught comprehensively, including the development of media awareness, analysis, production, distribution, and advocacy skills. When this is done, students and teachers will be trained to sustain the movement toward healthy lifestyles and communities long after the media literacy program has ended.

► ADAPT TO THE ENVIRONMENT

An advantage of media literacy–based tobacco education is pragmatism: It is a way for schools to discourage tobacco use at the same time that other academic objectives are being met. This means media literacy programs are able to garner the support of the teachers and administrators who will be crucial to their successful implementation and sustainability (Berkowitz & Bier, 2004). A program such as YEA!TEAM can help educators do the job they already need to do, but it must be designed to do so. Therefore, we strongly encourage any media

literacy–based tobacco prevention program to adapt itself to the environment in which it will be delivered. In this article, we address our experience at the middle school level.

The tobacco use prevention literature identifies early adolescence as the opportune time for concentrated tobacco prevention education, and most early adolescents in the United States today attend middle schools, unique organizational entities structured around the use of teacher teams (Main & Bryer, 2005). At a minimum, teacher teams share the same cohort of students and, to the extent possible, the same planning period. Research has shown that this organizational structure leads to an improved work climate, more frequent contact with parents, increased teacher job satisfaction, higher levels of student academic achievement, and improved attitudes toward school and learning (Erb, 1997).

It therefore makes sense to design a media literacy program around the use of teacher teams. Recruiting, training, and supporting teacher teams aligns the tobacco education program with the existing structure and best practices of middle schools. It also provides the teachers with an opportunity for professional development as well as training. This is not just a matter of semantics. When noneducators use the term *training* with educators, it may be heard as a unidirectional activity in which the expertise and experience of professional teachers is underused, undervalued, and overlooked. Senior teachers are not likely to warm to a public health professional or professor who wants to come into *their* school, use *their* time, and "train" *them* to deliver curriculum. It is true that there is some training required to implement a media literacy program; for example, teachers may need to be instructed on how to use cameras, other video editing equipment, and evaluation instruments. But in general, preparing educators to deliver a tobacco prevention program is better conceived of, designed, and presented as a time for teachers to update their existing knowledge, plan for smooth integration of the materials, share their expertise with each other, and develop as professionals.

To capitalize on these proven strategies (Thomas, Schuler-Adair, Cunningham, Celestin, & Brown, 2002), the YEA!TEAM program recruited schools and teacher teams in the spring, held 2 days of professional development retreats in the summer, and supported teacher team implementation meetings throughout the year. Middle school teams of three to seven teachers mimicked the structure of the school as a whole, and provided the opportunity for group planning that is a hallmark of this structure. It minimized the burden of the program on any one teacher or any one subject area. And it provided educators an opportunity to (a) develop a more sophisticated understanding of the individual and social determinants of tobacco use, prevalence, and consequences; (b) review samples of prior year student work; (c) experience abbreviated versions of classroom activities; and (d) make choices and plan the details of implementation in their individual schools. We strongly encourage respect for teachers and their specific educational environment in implementation of any media literacy–based tobacco education program.

▶ STAY CURRENT

Mass communication is continually and dramatically evolving, requiring those implementing media literacy–based tobacco interventions to stay up-to-date. Three distinct advantages to staying current are having the ability to teach skills that young people understand how to apply to their own media usage, building credibility and appeal in the minds of the intervention's target audience, and applying the idea of media literacy in ways that increase its utility as a tobacco prevention strategy.

Media literacy education helps inoculate young people against protobacco messages in the media by teaching them how to be mindful of their own media usage and the messages they receive (Rosenbaum, Beentjes, & Konig, 2008). An ideal age at which to teach this is around the ages of 11 to 13 years, a key time developmentally for young people deciding whether to use tobacco or not (Pechmann, Levine, Loughlin, & Leslie, 2005). Targeting this age-group is a savvy form of primary prevention before addiction takes hold, but it requires that media literacy–based interventions to discourage tobacco use are designed to be relevant to this age-group. Young people's media habits today are dramatically different from those of previous generations, in terms of both new technologies and old media used in new ways. For example, watching television no longer refers only to sitting in front of a set; this activity can now involve viewing in a car, using a PSP (Personal Playstation), making purchases from iTunes, and/or subscribing to Netflix. Staying up-to-date with the evolution of the media and young people's relationship with it requires diligence on the part of the curriculum designer and educational materials that are designed to be flexible and easily updated. To the extent possible, curriculum should encourage teachers to begin with lessons that engage the student in defining, measuring, and monitoring his or her own media environment in an open-ended process and, at the same time, bring the teacher up to speed with how and why his or her students use the media.

It is crucial that interventions that teach and develop media literacy be cutting edge (Rosenbaum et al., 2008), or students may not be able to apply what they learn

about media literacy to their own experiences. Media literacy is a skill set that empowers the individual. Those who are media literate recognize persuasion directed at them, even when it comes in novel and unexpected forms. They also have the tools to create media messages to serve their own advocacy needs. A current, street-smart curriculum—one that both incorporates and solicits information about the latest media trends—increases the likelihood that such a skill set will be developed and experiential learning will occur.

Remaining current with new technology and media habits has the added bonus of helping build credibility with the target audience, whose attitudes and behaviors the tobacco intervention is attempting to affect. Students will naturally respond better to a curriculum that represents their perspective. Although fidelity requires that programs be presented as consistently as possible, asking questions and incorporating students' answers about their habits and likes with respect to the media into discussions of media literacy enable educators to account for age-based differences and generate relevance that can increase the likelihood of media literacy–based tobacco prevention lessons resonating with students.

Research suggests that media literacy programs are also liked by students because they are rooted in popular culture (Primack, Fine, Yang, Wickett, & Zickmund, 2009), giving them great promise as a fun and engaging way to deliver a message that might not otherwise be as well received. This potential will be best fulfilled when the materials used to teach the skills reflect a current awareness of modern media and marketing techniques. For example, lessons and activities pertaining to tobacco marketing should consider not only traditional advertising but also methods such as product placement in movies and reality shows, Twitter feeds, and free promotional items placed in celebrities' gift bags at awards shows. This helps maintain interest and credibility by resonating not only with young people's own media experiences but also with what they may hear about in entertainment and celebrity news. It is here that media literacy education has the potential to shine as a tobacco prevention strategy. It represents a chance to speak to youth about the popular culture they are interested in, to make their own experiences relevant to the lessons that need to be delivered, and to avoid the negative responses that often accompany the perception that a young person is being lectured to or warned by an adult (Bergsma, 2004).

Staying current with new technologies is not simply a matter of trying to be "cool" to appeal to a young audience, however. It is also a means of fulfilling media literacy education's objective of extending literacy to new technologies (Livingstone, 2004; NAMLE, 2007; Rosenbaum

et al., 2008). Whereas mass communication was traditionally one-way communication sent from media professionals to an audience with little to no ability to provide feedback (Turow, 2008), today user-generated media content, such as blogs and YouTube videos, is also widely distributed, and audiences can now provide feedback not only to the sender of the message but also to other audience members through any number of channels. Thus, media literacy must teach how media influences users and also how users can influence the media (Rosenbaum et al., 2008). Lessons on how social norms regarding tobacco use are perpetuated through the media must now take into account the role online social networks and electronic communities play in socialization (Brown, 1998; Rosenbaum et al., 2008).

If those working to minimize tobacco use through media literacy training design and apply pedagogical materials that show the relevance of being media literate to continually evolving media, its importance as a tool for health prevention that is not only current and pragmatic but also theoretically sound will be demonstrated. As Rosenbaum et al.'s (2008) review of media literacy research and literature notes, the core concepts defining the construct of media literacy have been fairly consistent across time and discipline. Efforts to make young people critical consumers of marketing messages for tobacco that are able to demonstrate a modern understanding of the strategies being used to harness the changing regulatory, technological, and social landscape will continue to develop media literacy's value as a tobacco control strategy.

▶ CONCLUSION

The impact of any prevention intervention depends on its ability to influence health risks and/or behavior change and the extent to which the target audience has access to and participates in the program (Institute of Medicine, 2001). In this article we make the case that media literacy–based tobacco prevention education, a universal form of primary prevention, can achieve both. As a strategy for reducing tobacco use, media literacy programs such as Missouri's YEA!TEAM program are a powerful weapon. This program reaches youth at a crucial age, in an environment that cuts across socioeconomic lines. It teaches skills that extend beyond the length of the program and that take students out of the classroom and into their own communities. It provides a sense of empowerment by offering specific techniques with which health disparities can be addressed, developing critical thinking skills in the process. Media literacy remains a promising direction for tobacco prevention education.

At the same time, media literacy education holds appeal for more than just traditional stakeholders in tobacco control. School administrators are open to adopting YEA!TEAM because of its explicit alignment of each lesson with state and national academic standards. Programs can be designed for easy integration into the school curriculum, bringing educators on board with their implementation. The relevance of popular culture and modern media to the program means that students and teachers enjoy the material, increasing the likelihood of complete and sustained implementation. We are unaware of any other tobacco prevention strategy that boasts this combination of benefits. Nonetheless, there is still much to be learned about the ultimate outcomes of media literacy programs and how best to implement them. It is our hope that by describing Missouri's successful development and dissemination of one such program to schools serving populations that are most vulnerable to tobacco-related health disparities, we will support program developers' efforts to sustain and institutionalize such programs in schools.

REFERENCES

Aufderheide, P., & Firestone, C. (1993). *Media literacy: A report of the National Leadership Conference on Media Literacy*. Washington, DC: Aspen Institute.

Austin, E. W., Miller, A. C.-R., Silva, J., Guerra, P., Geisler, N., Gamboa, L., & Kuechle, B. (2002). The effects of increased cognitive development on college students' interpretations of magazine advertisements for alcohol. *Communication Research*, *29*, 155-179.

Banerjee, S. C., & Greene, K. (2006). Analysis versus production: Adolescent cognitive and attitudinal responses to anti-smoking interventions. *Journal of Communication*, *56*, 773-794.

Bergsma, L. J. (2004). Empowerment education: The link between media literacy and health promotion. *American Behavioral Scientist*, *48*, 152-164.

Berkowitz, M. W., & Bier, M. C. (2004). Research-based character education. *Annals of Political Science*, *591*, 72-85.

Bier, M. C., Schmidt, S. J., Shields, D. A., Zwarun, L., Sherblom, S. A., Primack, B., & Rucker, B. (2011). School-based smoking prevention with media literacy: A pilot study. *Journal of Media Literacy Education*, *2*, 185-198.

Buckingham, D. (2003). *Media education: Literacy, learning, and contemporary culture*. Cambridge, England: Polity Press.

Brown, J. A. (1998). Media literacy perspectives. *Journal of Communication*, *48*, 44-57.

Centers for Disease Control and Prevention. (2005). Health risk behaviors among adolescents who do and do not attend school: United States, 1992. *Morbidity and Mortality Weekly Report*, *43*, 129-132.

Chen, X., Cruz, T. B., Shuster, D. V., Unger, J. B., & Johnson, C. A. (2002). Receptivity to protobacco media and its impact on cigarette smoking among ethnic minority youth in California. *Journal of Health Communication*, *7*, 95-111.

Chung, P. J., Garfield, C. F., Rathouz, P. J., & Lauderdale, D. (2002). Youth targeting by tobacco manufacturers since the Master Settlement Agreement. *Health Affairs*, *21*, 254-263.

Committee on Public Education, American Academy of Pediatrics. (1999). Media education. *Pediatrics*, *104*, 341-343.

DiClemente, R. J., Santelli, J. S. & Crosby, R. A. (Eds.). (2009). *Adolescent health: Understanding and preventing risk behaviors*. San Francisco, CA: Jossey-Bass.

Erb, T. O. (1997). Thirty years of attempting to fathom teaming: Battling potholes and hairpin curves along the way. In T. S. Dickinson & T. O. Erb (Eds.), *We gain more than we give: Teaming in middle schools* (pp. 19-60). Columbus, OH: National Middle School Association.

Escobedo, L. G., Marcus, S., Holtzman, D., & Giovino, G. (1993). Sports participation, age at smoking initiation and the risk of smoking among U.S. high school students. *Journal of the American Medical Association*, *17*, 1391-1395.

Flay, B. R. (2009). School-based smoking prevention programs with the promise of long-term effects. *Tobacco Induced Diseases*, *5*(1), 6.

Franks, A. L., Kelder, S. H., Dino, G. A., Horn, K. A., Gortmaker, S. L., Wiecha, J. L., & Simoes, E. J. (2007). School-based programs: Lessons learned from CATCH, Planet Health, and Not-On-Tobacco. *Preventive Chronic Disease*. Retrieved from http://www.cdc.gov/pcd/issues/2007/apr/06_0105.htm

Goodman, S. (2003). *Teaching youth media*. New York, NY: Teachers College Press, Columbia University.

Hobbs, R., & Frost, R. (2003). Illuminating constructivism: Structure, discourse, and subjectivity in a middle school classroom. *Reading Research Quarterly*, *37*, 278-308.

Institute of Medicine (2007). Ending the tobacco problem: A blueprint for the nation. Washington, DC: The National Academies Press.

Institute of Medicine, U.S. Committee on Health and Behavior, Research, Practice, and Policy. (2001). *Health and behavior: The interplay of biological, behavioral, and societal influences*. Washington, DC: National Academies Press.

Kaestle, C. E., & Wiles, B. B. (2010). Targeting high-risk neighborhoods for tobacco prevention education in schools. *American Journal of Public Health*, *100*, 1708-1713.

Kubey, R., & Baker, F. B. (1999, October 27). Has media literacy found a curricular foothold? *Education Week*. Retrieved from http://www.frankwbaker.com/edweek.htm

Livingston, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, *7*, 3-14.

Main, K., & Bryer, F. (2005). What does a "good" teaching team look like in a middle school classroom? In B. Bartlett, F. Bryer, & D. Roebuck (Eds.), *Stimulating the action as participants in participatory research* (Vol. 2, pp. 196-204). Brisbane, Queensland, Australia: Griffith University, School of Cognition, Language, and Special Education.

Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *Journal of the American Medical Association*, *291*, 1238-1245.

National Association for Media Literacy Education. (2007). *Core principles of media literacy education in the United States*. Retrieved from http://namle.net/wp-content/uploads/2009/09/NAMLE-CPMLE-w-questions2.pdf

Office of National Drug Control Policy. (2001). *Helping youth navigate the media age: A new approach to drug prevention.* Washington, DC: Author.

Pechmann, C., Levine, L, Loughlin, S., & Leslie, F. (2005). Impulsive and self-conscious: Adolescents' vulnerability to advertising and promotion. *Journal of Public Policy and Marketing, 24*, 202-221.

Pinkleton, B., Austin, E. W., Cohen, M., Miller, A., & Fitzgerald, E. (2007). A statewide evaluation of the effectiveness of media literacy training to prevent tobacco use among adolescents. *Health Communication, 21*, 23-34.

Primack, B. A., Fine, D., Yang, C. K., Wickett, D., & Zickmund, S. (2009). Adolescents' impressions of antismoking media literacy education: Qualitative results from a randomized controlled trial. *Health Education Research, 24*, 608-621.

Primack, B. A., Gold, M. A., Land, S. R., & Fine, M. J. (2006). Association of cigarette smoking and media literacy about smoking among adolescents. *Journal of Adolescent Health, 39*, 465-472.

Primack, B. A., Gold, M. A., Switzer, G. E., Hobbs, R., Land, S. R., & Fine, M. J. (2006). Development and validation of a media literacy scale for adolescents. *Archives of Pediatric Medicine, 160*, 369-374.

Rosenbaum, J. E., Beentjes, J. W. J., & Konig, R. P. (2008). Mapping media literacy: Key concepts and future directions. In Beck C. (Ed.), *Communication yearbook 32* (pp. 314353-314360). New York, NY: Routledge.

Thomas, S. M., Schuler-Adair, E. B., Cunningham, S., Celestin, M., & Brown, C. (2002). Louisiana Tobacco Control: Creating momentum with limited funds. *Journal of the American Medical Association, 92*, 936-937.

Turow, J. (2008). *Media today* (3rd ed.). New York, NY: Routledge.

U.S. Department of Health and Human Services. (2000). *Reducing tobacco use: A report of the Surgeon General.* Atlanta, GA: Author.

Wallack, L., & Dorfman, L. (1996). Media advocacy: A strategy for advancing policy and promoting health. *Health Education Quarterly, 23*, 293-317.