



Original article

Institutionalizing Sex Education in Diverse U.S. School Districts

Rebekah Saul Butler, M.B.A., M.P.H.^{a,*}, Danene Sorace, M.P.P.^b, and Kathleen Hentz Beach, M.A.^c^a The Grove Foundation, Los Altos, California^b Lancaster, Pennsylvania^c San Francisco, California

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A B S T R A C T

Purpose: This paper describes the Working to Institutionalize Sex Education (WISE) Initiative, a privately funded effort to support ready public school districts to advance and sustain comprehensive sexuality programs, and examines the degree to which WISE has been successful in increasing access to sex education, removing barriers, and highlighting best practices.

Methods: The data for this study come from a set of performance indicators, guidance documents, and tools designed for the WISE Initiative to capture changes in sex education institutionalization at WISE school districts. The evaluation includes the analysis of 186 school districts across 12 states in the U.S.

Results: As a result of the WISE Initiative, 788,865 unique students received new or enhanced sex education in school classrooms and 88 school districts reached their sex education institutionalization goals. In addition to these school district successes, WISE codified the WISE Method and toolkit—a practical guide to help schools implement sex education.

Conclusions: Barriers to implementing sexuality education can be overcome with administrative support and focused technical assistance and training, resulting in significant student reach in diverse school districts nationwide.

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IMPLICATIONS AND
CONTRIBUTION

The barriers to implementing sex education are similar to barriers encountered in other school innovation efforts. The fear of controversy is, however, unique to sex education, and can be a barrier, notwithstanding widespread public support. By and large, though, with resources and technical assistance, ready school districts can and do support and sustain sex education.

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Presentations:

October 2011—WISE Up: Building the Capacity of Communities and Schools Through Sexuality Education; American School Health Association.

October 2012—A Toolkit to Institutionalize Sex Education in Schools; American School Health Association.

October 2015—Supporting Schools to Implement and Sustain Sex Education: Lessons and Tools From 5 Years of WISE; American School Health Association.

March 2012—WISE Lessons Learned: Assessing and Building Capacity of Communities and Schools to Effectively Deliver Sexuality Education; Office of Adolescent Health, Teen Pregnancy Prevention Conference “Expanding Our Experience & Expertise: Implementing Effective Teen Pregnancy Prevention Programs.”

June 2014—Maximizing Resources Through Cross-Sector Partnerships: Lessons Learned; U.S. Department of Health and Human Services, Office of Adolescent Health, Administration for Children & Families, Family & Youth Services Bureau, and Centers for Disease Control and Prevention, Division of Adolescent and School Health and Division of Reproductive Health Teen Pregnancy Prevention Grantee Conference “Bridging the Gaps: Eliminating Disparities in Teen Pregnancy and Sexual Health.”

March 2016—Breakthroughs in Sexuality Education; Grantmakers in Health 2016 Annual Conference on Health Philanthropy “Charting a New Course: Roadblocks, Breakthroughs, Discoveries.”

* Address correspondence to: Rebekah Saul Butler, M.B.A., M.P.H., PO Box 1667, Los Altos, CA 94023.

Table 1

Overview of WISE participation and state policy context (2016)

State	Lead organization(s)	Years of WISE participation	Policy context: sex education ^a	Policy context: HIV education
California	Cardea Services and ETR Associates ^b	2009–2016	Comprehensive sexual health is required; abstinence-only instruction is not permitted	Mandated; must cover abstinence and information about condoms
Colorado	Colorado Youth Matter	2009–2016	If taught voluntarily, must cover abstinence and contraception	If taught voluntarily, must stress abstinence and include information on condoms
Georgia	Georgia Campaign for Adolescent Power and Potential	2009–2016	Mandated; must stress abstinence	Mandated; must cover abstinence
Iowa	Eyes Open Iowa	2009–2016	Mandated; no state-specific content requirements	Mandated; no state-specific content requirements
Louisiana ^c	The Institute of Women and Ethnic Studies;	2014–2016	If taught voluntarily, must stress abstinence	If taught voluntarily, must stress abstinence
Mississippi	Louisiana Public Health Institute	2013–2016	Mandated; must stress abstinence	If taught voluntarily, must stress abstinence
Nebraska	Mississippi First	2013–2016	If taught voluntarily, there are no state-specific content requirements	If taught voluntarily, there are no state-specific content requirements
	Women's Fund of Omaha; Nebraska Department of Education ^d			
New York	Genesee Valley Educational Partnership, Student Support Services Center	2009–2016	If taught voluntarily, there are no state-specific content requirements	Mandated; must stress abstinence and include information on condoms
North Carolina	SHIFT NC (Sexual Health Initiatives For Teens)	2011–2016	Mandated; must stress abstinence and cover contraception	Mandated; must stress abstinence and include information on condoms
Oregon	Oregon Department of Education	2009–2014	Mandated; must stress abstinence and cover contraception	Mandated; must stress abstinence and include information on condoms
Texas	Cardea	2014–2016	If taught voluntarily, must stress abstinence	If taught voluntarily, must stress abstinence and include information on condoms
Washington	Cardea	2009–2016	If taught voluntarily, must stress abstinence and cover contraception	Mandated; must stress abstinence and include information on condoms
West Virginia	West Virginia FREE	2012–2016	Mandated; must cover abstinence and contraception	Mandated; must cover abstinence and include information on condoms

^a Sex education and HIV education policy context data from the Kaiser Family Foundation: <http://kff.org/hiv/aids/state-indicator/sexhiv-education-policy/>.

^b ETR Associates was the lead organization for California WISE until 2014.

^c Louisiana joined WISE in 2014 and had not yet begun implementation at the school district level. Therefore, data from Louisiana are not included in this report.

^d Nebraska Department of Education was funded to participate in WISE for 18 months beginning in January 2014.

There is broad-based, consistent public support for teaching sex education in schools [1–5], and, by and large, state policies have supported the teaching of HIV and sex education since the advent of the HIV epidemic in the 1980s [6]. Yet, the degree to which sex education is included in school programs and the content of such programs has been variable over time [7–9]. In 2007, The Grove Foundation, a private philanthropic foundation that has as a key objective improving adolescent health, noted that a number of states and districts had policies that supported comprehensive sexuality education; however, there was little financial support to translate new or existing policy into practice within local school districts. The Foundation began to explore—by conducting an environmental scan and a series of structured, qualitative interviews—what was needed to address this gap and move programs forward.

Based on that research and together with a consortium of funders, The Grove Foundation launched the Working to Institutionalize Sex Education (WISE) Initiative in 2009. WISE has a dual purpose of providing support to ready districts to advance comprehensive programs, and documenting *how* implementation can be advanced and institutionalized. Now in its eighth year, WISE has invested more than \$7 million in 13 states. This paper examines the degree to which WISE has been successful in increasing access to sex education, removing barriers, and highlighting best practices to date.

The WISE Initiative: History and overview

In 2008, The Grove Foundation identified 11 geographically diverse states¹ and the District of Columbia that had recently enacted a supportive law, and/or had an existing policy (law and/or standards) that, at minimum, did not preclude teaching about contraception. A request for proposals (RFP) was released with the stated goal of advancing school-based sex education by supporting targeted implementation efforts in those states. Over 65 preproposals were received. Committees of funders together with experts in adolescent sexual health and education reviewed, scored, and ranked preproposals and invited full proposals. Criteria included a track record of working on comprehensive sexuality education, capacity to work with districts to institutionalize sex education, and potential to collaborate and leverage local resources. Ultimately, eight organizations in seven states were awarded initial grants to become WISE partners. Over time, additional WISE partners were invited to join if a compelling combination of some or all of the following were present: a neutral-to-supportive state policy, a strong state-based partner, school district readiness, and funder interest.

Over 7 years, 15 organizations have been funded in 13 states. WISE partners have primarily included state-based, health-focused nonprofits or agencies. (See Table 1.) WISE partners

¹ California, Georgia, Iowa, Illinois, Massachusetts, New Mexico, New York, Pennsylvania, South Carolina, and Washington.

received funding commitments in phases, every 2 or 3 years, by a dynamic collaboration of foundations. The initial phase of WISE (2009–2011) was exploratory and focused on surfacing best practices, whereas subsequent phases (2011–2014 and 2014–2017) focused on applying best practices and achieving scale.

At the onset of WISE, a core operating assumption was that sex education can reduce sexual risk behaviors and affect associated determinants such as attitudes, beliefs, and perceived norms that contribute to adolescent health and well-being [10–12]. Thus, the research questions were not focused on whether sex education “works” but instead on *how* to expand access to it in diverse school districts and settings.

WISE partners used a variety of strategies to identify districts in their respective geographies, often reaching out to those with whom they had an existing relationship, were large, and/or had public health indicators that demonstrated need. Districts were selected to participate in WISE based on their readiness—their commitment and capacity to implement and sustain a program—as determined by an assessment tool. WISE partners worked with schools to establish an implementation agreement and then conducted a highly customized technical assistance process that typically included policy review, planning, curriculum selection, and teacher training. Best practices within this approach became known as the “WISE Method” as described below. WISE school districts varied in size from very small (one building) to very large (tens to even hundreds of buildings), and implementation plans varied in scope (from one grade level to K–12). WISE did not endorse or require a specific curriculum; rather, WISE partners worked with districts to select curricula that fit schools’ needs (i.e., grade-level focus, available time), and were, at a minimum, age-appropriate, evidence-informed, and compliant with state laws and standards. Due to the diversity of grade levels and policy contexts, a wide range of content and topics were addressed—including, for example, abstinence, puberty, healthy relationships, contraception, and STD/HIV prevention. In some cases, evidence-based interventions were utilized.

The WISE Initiative included a number of supports at the national level, such as coaching and customized technical assistance for WISE partners and a learning community featuring an annual meeting, webinars, and a collaborative Internet platform.

Methods

The WISE national evaluation

In 2009, the WISE Initiative engaged Learning for Action, an independent evaluation firm, as the national evaluator for WISE. The WISE Initiative sought to understand how, and to what degree, sex education could be institutionalized within ready school districts. Learning for Action designed the evaluation to (1) identify and capture *how* WISE partners approached sex education institutionalization with school districts; (2) track sex education institutionalization indicators; and (3) identify best practices for institutionalizing sex education within school districts. Institutional Review Board approval was not required due to the scope of the evaluation.

Evaluation strengths. The evaluation employed a mixed-methods approach using qualitative and quantitative data that tracked and assessed the successes, challenges, and lessons learned from WISE. This approach allowed the evaluators to triangulate data across

multiple sources. The evaluation emphasized partners’ self-reported data because of their on-the-ground knowledge of school districts and the sex education landscape within their regions. Further, partners worked with multiple school districts for one or more years, which allowed an assessment that compares and contrasts diverse perspectives. The WISE evaluation team and partners were also in close communication with other sites via annual learning meetings, webinars, and informal events, which allowed both the WISE evaluation and partners to position the work in relation to other WISE school districts, increasing the accuracy of claims about progress, strengths, and limitations.

Key metrics. Evaluators conducted a literature review to develop a theoretical model and to identify key metrics for data collection and analysis. This included research on sustaining and scaling innovation [13,14], effective partnership and collaboration [15,16], and models of organizational change [17]. The evaluators then developed a set of performance indicators, guidance documents, and data collection instruments to support the consistent reporting of data across WISE partner sites. The key metrics that tracked WISE school district progress included:

- Student reach: the number of students in a school district that achieved its sex education institutionalization goals as a result of WISE;
- Unique students taught: the number of unique students who directly received sex education as a result of WISE (enhanced or new sex education);
- Infrastructure barriers: the availability of sex education training, funding, and curriculum as well as the time and staffing resources to implement sex education;
- Social and community barriers: the school district climate for sex education including its level of perceived priority and parent/community and administration support, and the availability of data to demonstrate the need for sex education;
- School district policy: the enhancement of existing or development of new policies;
- Teachers trained: the number of unique teachers who received sex education training;
- School district readiness: an assessment of overall school district readiness; and
- School district institutionalization: ultimately, when sex education becomes an ongoing part of a school’s curricula.

Data collection. Evaluators created a theory of change, an institutionalization framework, site observation protocols, semistructured interview protocols, and surveys. In the initial phase of WISE (2009–2011), a team of six evaluators were paired and assigned WISE partner sites for site observation and qualitative data collection (document review, semistructured interviews); evaluators were paired differently by site to allow for diverse perspectives across the WISE Initiative and individual sites. In subsequent phases of WISE (2011–2014 and 2014–2016), after the foundation of the WISE Method was established, the evaluation shifted to focus on tracking institutionalization progress with key indicators and minor updates to the WISE Method and, therefore, less emphasis on qualitative data.

WISE partners provided data through three key methods: (1) conducting a pre- and postsurvey to track the status of sex education institutionalization metrics within a school district at the beginning of WISE work and at the end of the most recent academic year that the school district was part of WISE; (2)

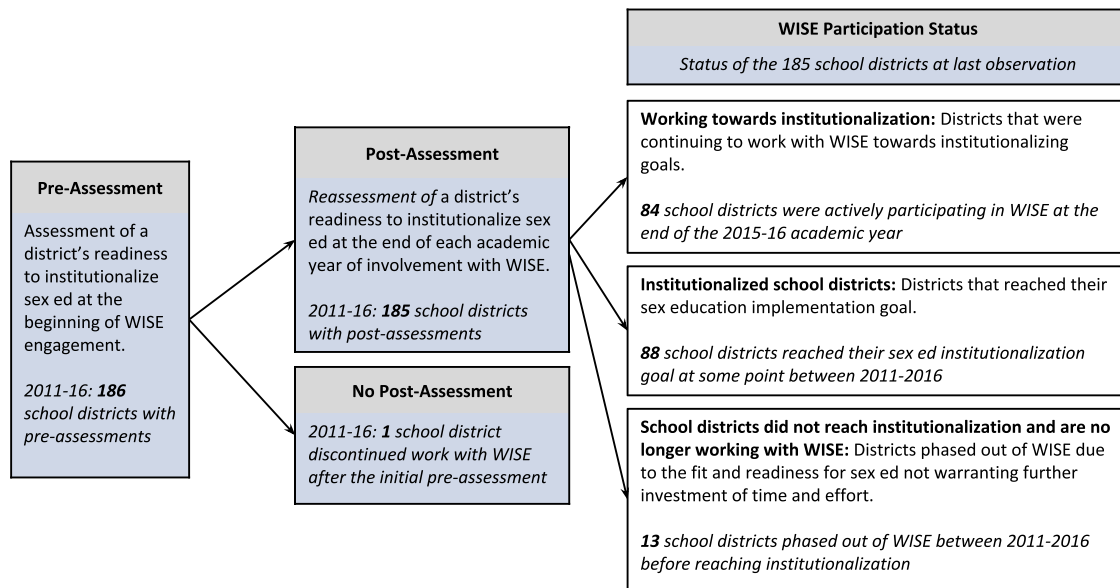


Figure 1. The flow of school districts and data collection from preassessment, to postassessment, to current school district WISE participation status.

participating in a semistructured interview to discuss overall reflections about their work; tools, processes and best practices; and the WISE Initiative overall; and (3) providing project updates throughout the year through site visits, meetings, interim reports, and final reports. School districts participated in WISE on a rolling basis. In addition, the evaluation used secondary research to gather school district enrollment and demographic data.

During the 2011–2016 school years, WISE partners conducted preassessments of 186 school districts and then conducted postassessments for 185 of those school districts (one school district did not continue WISE work after preassessment and therefore did not warrant a postassessment). Of the 185 school districts with pre- and postassessments, 84 were actively working toward sex education institutionalization, 88 reached their sex education institutionalization goals, and 13 were no longer pursuing sex education institutionalization (see Figure 1).

Analysis. Quantitative analyses were conducted using SPSS Statistics 21.0 (IBM Corp., Armonk, NY). Paired samples *t*-tests identified differences between baseline and the most recent observation available for school districts with both pre- and post-assessment data for the variable of interest. One-sample *t* tests assessed variables collected at only pre- or postassessment. The analysis used the last observation carried forward approach for missing data at the variable level. Last observation carried forward is used because the intention of the analysis is to provide an understanding of the variables of interest at the end of the school district's WISE participation and/or at the last observed moment for each variable of interest. WISE is an ongoing initiative and work with many districts continues and WISE partners plan to continue working with many of the current school districts going forward. Therefore, the analyses reflect a moment in time across all WISE school districts, including active school districts, rather than serving as a final assessment of school districts at the end of their engagement with WISE. A multidisciplinary, six-person evaluation team with graduate-level training in social science research and methodologies conducted the qualitative analyses that

led to the development of the WISE Method. Qualitative data were analyzed through open coding, in which the interview transcripts, grantee reports, and site observation notes were examined for themes, patterns, and categories [18]. Evaluators used a systematic, iterative process of making meaning of the common themes as well as unique or dissenting perspectives surfaced by the data and then considering those themes and perspectives in light of the evaluation questions. The evaluators also engaged WISE partners in consensus-building and reflection discussion to contribute to and validate the themes, drawing from elements of participatory action research [19].

Results

The WISE Initiative evaluation showed that (1) resources and expertise helps school districts advance and meet their sex education institutionalization goals, thereby increasing access to sex education; (2) barriers that impede sex education institutionalization can be mitigated, leading to increased quality and quantity of sex education in ready school districts; and (3) there are key steps and processes that support sex education institutionalization that have been codified in the WISE Method and Toolkit.

WISE increased access to sex education

As a result of WISE, 88 school districts reached their implementation goals and institutionalized sex education, representing a total district enrollment of 848,480 students.

Across all years of WISE (2009–2016), 788,865 unique students received new or improved sex education in school classrooms as a result of WISE. For some of these students, the quality of sex education improved (e.g., enhanced teacher training or more comprehensive content) and for others, sex education was offered in classrooms for the first time (e.g., new/additional grade levels or the school district offered sex education for the first time).

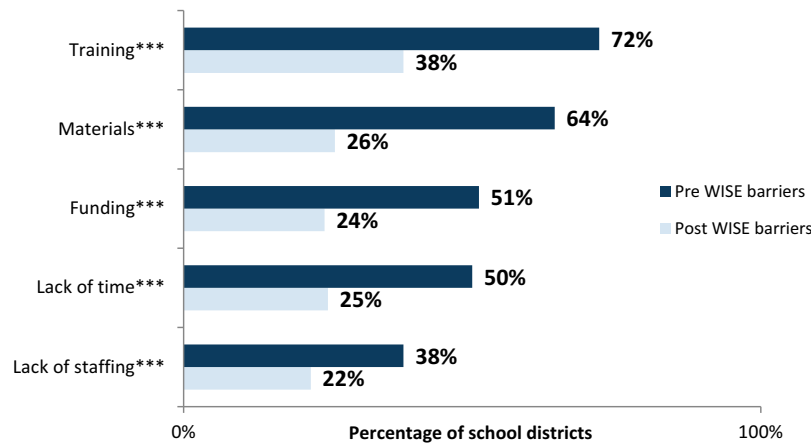


Figure 2. Sex education infrastructure barriers were significantly reduced in WISE school districts (academic years 2011–2016; matched sample, $n = 168$ school districts). This includes school districts that have a preassessment and postassessment during the 2011–2016 window; it does not mean that school districts participated in all academic years between 2011 and 2016.

***Statistically significant at $p < .001$.

WISE reduced barriers to sex education implementation

WISE efforts reduced existing barriers to sex education implementation, and the mitigation of all but one of the types of barriers tracked was statistically significant (see Figures 2, 3). School administration opposition moved in the opposite direction, but this was not statistically significant.

WISE partners identified ready school districts eager to implement sex education

Many readiness indicators were assessed to track implementation progress on a four-point scale, including dimensions of school district and community commitment, supportive policy, sex education curriculum, and time dedicated to sex education instruction. WISE partners were effective at selecting school districts willing to change how the school district addresses students' sex education needs—and significantly increased their readiness to implement. Figure 4 below shows how WISE partners

assessed the overall school district readiness at baseline (pre-WISE readiness) and at the most recent observation (post-WISE readiness).

WISE informed the field

The evaluation revealed important and consistent lessons about how to approach the work with school districts to help them achieve their goals. Ultimately, these lessons were aggregated and codified in the WISE Method and Toolkit (www.wisetoolkit.org)—an iterative, four-step approach: (1) Scan current efforts and policies to understand the sex education landscape and to inform an action plan for sex education institutionalization; (2) Engage school districts to assess school readiness and ensure ownership and active participation among key school district stakeholders; (3) Design a rollout plan to create the systems, processes, policies, and guidelines that will be the backbone of long-term sustainable sex education; and (4) Implement sex education by preparing and training for, and actually delivering, a sex

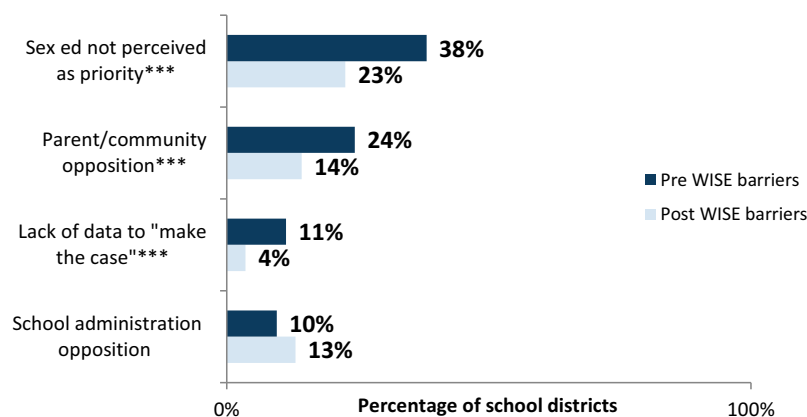


Figure 3. Sex education social and community barriers were significantly reduced in WISE school districts (academic years 2011–2016; matched sample, $n = 168$ school districts). This includes school districts that have a preassessment and postassessment during the 2011–2016 window; it does not mean that school districts participated in all academic years between 2011 and 2016.

***Statistically significant at $p < .001$.

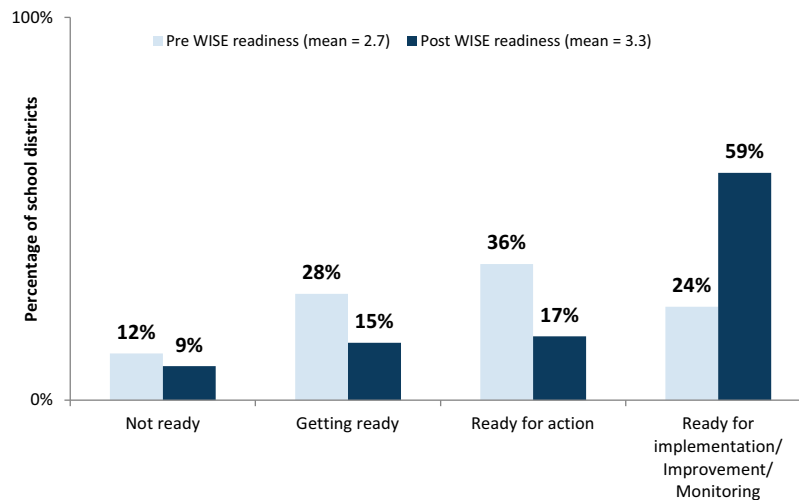


Figure 4. WISE school districts significantly increased their readiness to implement sex education (academic years 2011–2016, matched sample; $n = 180$ school districts; $p < .001$).

education program. Key to WISE partners' success is a strong client-service orientation, understanding districts' objectives, and providing customized and flexible support to guide them through the process.

Discussion

There are a number of limitations to the WISE national evaluation. Principally, relying on self-reported data from WISE partners may lead to biasing data to better position a WISE partner for future funding (or other motivators) and privileging their viewpoint. An additional limitation is that the data regarding the impact of students' access to sex education includes assumptions about sex education implementation—partners are asked to provide an informed estimate rather than provide data via strict implementation monitoring. Funders and the national evaluators have, from time to time, met with district staff and other regional partners to hear firsthand about the work of WISE. However, additional mitigations to these limitations have not been pursued in an effort to prioritize WISE Initiative resources for funding school district institutionalization, rather than evaluation efforts. Finally, the results are not intended to be generalized to all school districts. Instead, they show what is possible with ready school districts that demonstrate interest and commitment to institutionalizing sex education.

Nonetheless, a consistent, multiyear evaluation of WISE partners' efforts showed strong results in:

- Achieving significant student reach by directly working with school districts and indirectly in the field by sharing strategies and demonstrating success;
- Overcoming a range of barriers and developing tools and strategies to help districts advance programs and build capacity; and
- Surfacing a clear and consistent set of lessons about how to best support districts in practical ways and across diverse contexts.

Moreover, WISE partners uncovered significant, unmet need among school districts that are ready to advance sex education

and need support—ranging from minimal to intensive—to reach their goals. Some of this demand was met by the WISE partners or through other programs, but significant unmet need persists.

Although it has long been perceived that sex education is uniquely difficult to implement compared with other school programs, many of the barriers and facilitators that WISE partners found in schools are typical among school reform or innovation efforts in general (relating, for example, to the degree of stable, cross-functional leadership on the topic; resources for curriculum and professional development; linkages to school goals; and supportive policies, standards, and management procedures) [20], and health education in particular [21] (which is often deprioritized compared with core academic and tested subjects [22]).

WISE partners also encountered barriers that are unique to sex education. One major barrier was access to training. This barrier, perhaps ironically, was exacerbated by the simultaneous commencement of two large federal programs—the Office of Adolescent Health's Teen Pregnancy Prevention Program and the Personal Responsibility Education Program—which not only promulgated evidence-based programs but also created heightened demand for training. WISE partners gained traction as they identified affordable and accessible curricula and training (some newly developed) that aligned to state policies and met district needs. In addition, many WISE partners developed local training capacity and models that emphasize core skills teachers need to implement sex education in general (rather than only focusing on curriculum-specific training).

A second barrier unique to sex education was the fear of controversy. Among the WISE districts, this fear was not a major issue, as administrators and the school community understood the need for sex education and primarily wanted support in implementing it. In cases where the fear of controversy was a barrier, WISE partners were largely successful in overcoming it by focusing on state policy and best practices, and taking a transparent, straightforward approach to program adoption. Occasionally, WISE partners used local public opinion data to underscore public support.

Sex education in public schools bridges two distinct theoretical orientations: public health and public education. Historically,

many sex education implementation efforts involved bringing public health resources, approaches, and personnel into the school setting. The consultative approach of WISE partners, and their deep understanding of school systems and practices, coupled with a goal of building school capacity to sustain programs, led to a more education-centered approach to this work. For example, WISE partners focused more broadly on the relationships between sex education and academic success rather than on a specific behavioral outcome (such as teen pregnancy prevention). In addition, WISE partners understood and embraced sequential, multiyear approaches and academic standards as the key driver for school programs.

As WISE partners collectively iterated the WISE Method (a set of best practices and tools to remove barriers and facilitate effective implementation), they gained significant momentum in selecting, working with, and “graduating” ready school districts. The WISE Method is a flexible, responsive, asset-based, and capacity-building approach to working with schools, distinct from many federally funded approaches that require adherence to a specific, detailed process, and/or curriculum and training models. Articulating this approach improved the learning community aspects of the Initiative, increased the rate of implementation among WISE partners, shaped The Grove Foundation’s grantmaking, and helped to inform the broader field.

Additional work is needed to integrate WISE within a larger framework of health-promoting schools [23] and the Whole School, Whole Community, Whole Child Model that focuses on student health and well-being overall [24]. In addition, the experience of WISE—coupled with the increased numbers of health-related, evidence-based program options—points to an important opportunity for further research to address gaps in knowledge related to supporting the selection of programs, implementation, scaling, and sustainability within the unique context of school-based settings. Future research should continue to focus on using implementation science theories or frameworks (e.g., the Exploration-Preparation-Implementation-Sustainment model by Gregory Aarons and colleagues) [25] to further explore and explain factors associated with the phases of implementation, especially over multiple grade levels related to sex education.

Public schools continue to play a vital role in ensuring the health and well-being of elementary and secondary students, the majority of whom attend public schools for as many as 14 years [26]. Schools are able to address the physical, social, and emotional development of children, making them ideal sites for providing age- and developmentally appropriate health education interventions on a range of topics, including sexual health [27]. Although there are infrastructure and social and political barriers, these can be overcome with focused resources and a flexible approach. Changes in sex education programming appear to be able to be sustained over time, although some schools require occasional support with, for example, updating curricula and training new teachers. WISE has demonstrated that this work can be done and that limited funding can have significant reach. However, meeting schools’ needs and achieving scale will require an additional infusion of public and private investment.

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and development of the WISE Toolkit are primarily the result of WISE partners’ efforts, and their willingness to share their data, successes, challenges and resources. WISE has also benefited from the advice and assistance of countless national organizations and advisors, including from among the WISE funding community. The authors would like to extend a special thanks to Nora Gelperin for her critical contributions as a WISE technical assistance provider.

References

- [1] Bleakley A, Hennessy M, Fishbein M. Public opinion on sex education in US schools. *Arch Pediatr Adolesc Med* 2006;160:1151. doi:10.1001/archpedi.160.11.1151.
- [2] National Public Radio, Kaiser Family Foundation, Kennedy School of Government. Sex Education in America: General Public/Parents Survey, 2004.
- [3] Barr EM, Moore MJ, Johnson T, et al. New evidence: Data documenting parental support for earlier sexuality education. *J Sch Health* 2013;84:10–7. doi:10.1111/josh.12112.
- [4] Eisenberg ME, Bernat DH, Bearinger LH, Resnick MD. Support for comprehensive sexuality education: Perspectives from parents of school-age youth. *J Adolesc Health* 2008;42:352–9. doi:10.1016/j.jadohealth.2007.09.019.
- [5] Constantine NA, Jerman P, Huang AX. California parents’ preferences and beliefs regarding school-based sex education policy. *Perspect Sex Reprod Health* 2007;39:167–75. doi:10.1363/3916707.
- [6] Guttmacher Institute. Sex and HIV education. 2016. Available at: <https://www.guttmacher.org/state-policy/explore/sex-and-hiv-education>. Accessed January 4, 2016.
- [7] Landry DJ, Darroch JE, Singh S, Higgins J. Factors associated with the content of sex education in U.S. public secondary schools. *Perspect Sex Reprod Health* 2003;35:261–9. doi:10.1363/3526103.
- [8] Demissie Z, Brener ND, McManus T, et al. School Health Profiles 2014: Characteristics of health programs among secondary schools. US Department of Health and Human Services. Centers for Disease Control and Prevention; 2015.
- [9] Lindberg LD, Maddow-Zimet I, Boonstra H. Changes in adolescents’ receipt of sex education, 2006–2013. *J Adolesc Health* 2016;58:621–7. doi:10.1016/j.jadohealth.2016.02.004.
- [10] Kirby D. Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. *J Sex Res* 2002;39:51–7. doi:10.1080/00224490209552120.
- [11] Kirby DB, Laris BA, Rollieri LA. Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. *J Adolesc Health* 2007;40:206–17. doi:10.1016/j.jadohealth.2006.11.143.
- [12] Chin HB, Sipe TA, Elder R, et al. The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus, and sexually transmitted infections. *Am J Prev Med* 2012;42:272–94. doi:10.1016/j.amepre.2011.11.006.
- [13] Johnson K, Hays C, Center H, Daley C. Building capacity and sustainable prevention innovations: A sustainability planning model. *Eval Program Plann* 2004;27:135–49. www.elsevier.com/locate/evalprogplan.
- [14] Coburn CE. Rethinking scale: Moving beyond numbers to deep and lasting change. *Educ Res* 2003;32:3–12. doi:10.3102/0013189X032006003.
- [15] Frey BB, Hendrickson Lohmeier J, Lee SW, Tollefson N. Measuring collaboration among grant partners. *Am J Eval* 2006;66045:383–92.
- [16] Gajda R. Utilizing collaboration theory to evaluate strategic alliances. *Am J Eval* 2004;25:65. doi:10.1177/109821400402500105.
- [17] Prochaska J. A transtheoretical model for assessing organizational change: A study of family service agencies’ movement to time-limited therapy. *Fam Soc* 2000;81:76–84.
- [18] Charmaz K. Grounded theory: Objectivist and constructivist methods. In: Denzin NK, Lincoln YS, editors. *Handbook of qualitative research*. 2nd ed. Thousand Oaks (CA): Sage Publications; 2000. p. 509–36.
- [19] McTaggart R. Guiding principles for participatory action research. In: McTaggart R, editor. *Participatory action research: International contexts and consequences*. Albany (NY): SUNY Press; 1997. p. 1–24.
- [20] Elias MJ, Zins JE, Graczyk PA, Weissberg RP. Implementation, sustainability, and scaling up of social-emotional and academic innovations in public schools. *School Psych Rev* 2003;32:303–19.
- [21] Stolp S, Wilkins E, Raine KD. Developing and sustaining a healthy school community: Essential elements identified by school health champions. *Health Educ J* 2014;74:299–311. doi:10.1177/0017896914541818.
- [22] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Results from the School Health Policies and Practices Study 2014. Division of Adolescent and School Health,

- National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; 2015.
- [23] Simovska V, Mannix-McNamara P. editors. *Schools for health and sustainability: Theory, research and practice*. The Netherlands: Springer Verlag; 2015.
- [24] Lewallen TC, Hunt H, Potts-Datema W, et al. The whole school, whole community, whole child model: A new approach for improving educational attainment and healthy development for students. *J Sch Health* 2015;85:729–39. doi:10.1111/josh.12310.
- [25] Aarons GA, Hurlburt M, Horwitz SM. Advancing a conceptual model of evidence-based practice implementation in child welfare. *Adm Policy Ment Health* 2011;38:4–23. doi:10.1007/s10488-010-0327-7.
- [26] Institute of Medicine. *Schools and health: Our nation's investment*. Washington (DC): The National Academies Press; 1997. doi:10.17226/5153.
- [27] Smith SH. Reading sociology into scholarship on school-based sex education: Interaction and culture. *Sociol Compass* 2012;6:526–40. doi:10.1111/j.1751-9020.2012.00475.x.