## Has Comprehensive Sex Education in Schools been Proven Effective?

### A review of the evidence and a rebuttal to the World Health Organization

#### by The Institute for Research & Evaluation (IRE)

Presented at FWI Global Family Policy Forum, January 16, 2025

Comprehensive Sex/Sexuality Education (CSE), Sexual and Reproductive Health Education (SRH)

- A strong emphasis on condom and contraceptive use
- Some programs mention abstinence, but many define it to include "safe" sexual contact/touching
- Teen sex is okay, as long as they are "ready for it," give and get consent, and use a condom
- Newer CSE programs often include content on gender ideology, sexual orientation, and sexual rights; some also emphasize pleasure

Advocates claim that comprehensive sex education (CSE) has been "proven effective" <sup>1</sup> at reducing teen sexual risk behavior, pregnancy, and STIs

### What is an "effective" program?

CSE advocates use low standards, i.e., use dubious criteria for their definition program "effectiveness:"

- Only short-term effects (3 months)
- Only subgroups effects
- Co-occurring harmful effects are acceptable (increases in other teen risk behaviors)
- No positive effect on any key protective outcome (abstinence, condom use, pregnancy, STIs) is okay
- Evidence is from a study by the program's author/marketer

### **Example of dubious standards for program** effectiveness: F.L.A.S.H CSE Curriculum<sup>2</sup>

- No effects for the target population, even short-term, on increased condom use or reduced sexual activity
- One short-term subgroup effect (gone after 3 months)
- Did not measure pregnancy or STIs but claimed to be effective at preventing these outcomes
- FLASH was pronounced an effective CSE program by its creator (King County, WA) and the U.S. Teen Pregnancy Prevention website (TPP)<sup>3</sup>

A credible scientific definition of program effectiveness<sup>4</sup>

- Long-term effects (12 months post-program)
- Main effects (for the target population) not a subgroup
- No co-occurring harmful effects (increases in other risk behaviors)
- Shows positive impact on at least one key protective outcome (abstinence, condom use, pregnancy, STIs)
- A scientifically sound outcome study, preferably by an independent evaluator

### What does the research show when using this definition of effectiveness for CSE in schools?

### 1. Lack of evidence of effectiveness for school-based CSE at reducing teen sexual risk behavior, pregnancy, or STIS.

#### A review by The Institute for Research & Evaluation (IRE)

### "Re-Examining the Evidence for Schoolbased Comprehensive Sex Education: A Global Research Review."<sup>5</sup>

Ericksen, I.H. and Weed, S.E. (2019). Issues in Law and Medicine, 34(2):161-182.

2019 Global Research Review<sup>5</sup> by The Institute for Research & Evaluation (IRE)

- Reviewed the school-based CSE studies endorsed by the UN (UNESCO), the CDC, and the U.S. Teen Pregnancy Prevention website (TPP).
- 103 CSE outcome studies
- 30 years of research

Both U.S. and non-U.S. schools

## Only 6 out of 103 studies of school-based CSE worldwide showed evidence of CSE effectiveness:<sup>5</sup>

- a protective effect on teen abstinence, condom use, pregnancy, or STDs (the truly protective indicators)
- for the targeted teenage population, not just a subgroup
- lasting at least 12 months after the program's end
- without other negative effects (increased risk behavior)<sup>4</sup>

In addition, 17 out of 103 studies (1 in 6) found negative/harmful impacts caused by school-based CSE:<sup>5</sup>

Increased sexual activity, pregnancy, or STDs,

- Reduced condom or contraceptive use, or
- Increases in other sexual risk behaviors (e.g., paid sex)

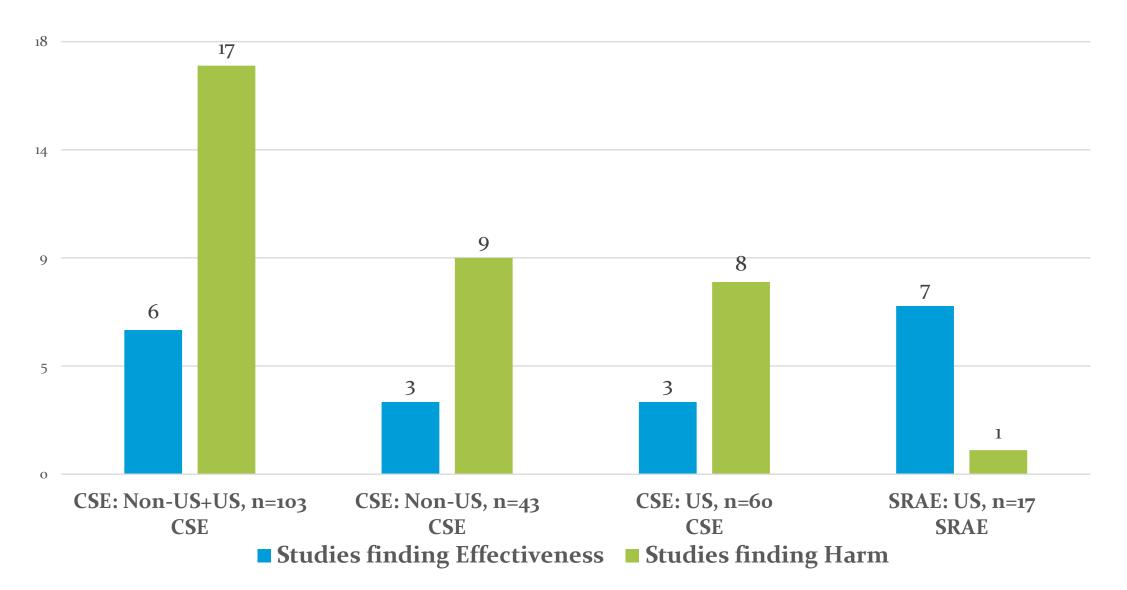
(Occurring for the target population or a major subgroup, term duration) and of short or long-

Overall, there appeared to be more evidence of harmful impact than of real effectiveness for CSE programs in schools.<sup>5</sup>

(Chi-Square = 5.92, p<.015)

In the U.S., there appeared to be better evidence of effectiveness for risk avoidance/abstinence-based programs than for CSE programs in schools.<sup>5</sup> 120 studies Comprehensive Sex Education (CSE) and

Abstinence/Sexual Risk Avoidance Education (SRAE)



### The World Health Organization (WHO) produced a critique of IRE's report, focusing on the international (non-U.S.) data<sup>6</sup>

### The WHO critique declares the IRE report to be unscientific and full of errors;

## and that it is being used at the UN to spread "misinformation."

IRE examined the WHO critique and found, to the contrary, that *it* was full of errors and misinformation.<sup>7</sup>

Here is what we found...

### 1. The high level of error in the WHO critique nullifies its credibility

#### The WHO researchers...

• Misrepresented the purpose and methods of the IRE review.

 Made many basic mistakes in the scientific interpretation of research study results—they had a 56% rate of error.<sup>7</sup>

• For example, they labeled a reduction in the number of virgin teens by a CSE program as "a positive impact."<sup>6,7</sup>

See www.institute-research.com. Rebuttal to the WHO. IRE Review of Table B1 for details on WHO's technical errors

### 2. Despite its inaccuracies, the WHO critique reported CSE outcomes similar to what IRE reported

**Both the IRE and the WHO analyses found:** 

- Only a small number of studies showed evidence of real CSE effectiveness in non-U.S. schools.
- Roughly 1 in 5 studies showed harmful CSE impact (increases in teen risk behavior).<sup>8</sup>
- There appeared to be more evidence of CSE harm than real benefit in non-U.S. schools.

**Conclusions about the WHO Critique** 

### **A.** The IRE rebuttal is robust and effectively refutes the WHO criticisms.

B. IRE stands by its original finding that school-based CSE programs show:
1) little evidence of effectiveness at reducing sexual risk behavior, and
2) too much evidence of harmful impact.

For details on IRE's rebuttal to the WHO, see: https://institute-research.com/wpcontent/uploads/2024/05/Rebuttal\_to\_WHO\_Critique\_of\_IRE\_Global\_CSE\_Review\_5-20-24.pdf 7 recent research reviews demonstrate the lack of evidence of effectiveness for school-based CSE<sup>13</sup>

- 2012 CDC-sponsored meta-analysis<sup>9</sup>
- 2018 Meta-analysis of CSE programs in U.S. schools<sup>10</sup>
- 2019 IRE analysis of 3 systematic reviews of CSE research<sup>5</sup>
- 2019 Meta-analysis of U.S. Teen Pregnancy Prevention programs (U.S. Dept of HHS)<sup>11</sup>
- 2023 IRE analysis of Goldfarb & Lieberman review<sup>12</sup>
- 2023 6-year research update by the U.S. Teen Pregnancy Prevention Evidence Review<sup>13</sup>
- 2023 IRE critique of meta-analysis of 34 prevention programs<sup>14</sup>

For example, in 2023, the U.S. Teen Pregnancy Prevention Evidence Review\* updated its survey of the most recent sex education research:

It failed to find any new studies (since 2016) that show 12-month reductions in sexual risk behavior for the targeted teen population by school-based CSE programs.<sup>13</sup>

\*U.S. Department of Health Human Services

### "Seven Recent Reviews of Research Show a Lack of Evidence of Effectiveness for Comprehensive Sex Education in Schools"

By The Institute for Research & Evaluation<sup>14</sup>

Blueprints for Healthy Youth Development is a national registry for evidence-based prevention programs that target the spectrum of youth risk behaviors (substance abuse, violence, sexual risk behavior).

As of this date, *Blueprints'* review of the current research evidence has not found any CSE programs that qualify for its label as a "Model Program," meaning a prevention program that is considered "ready for widespread use."<sup>15</sup>

# 2. Lack of Evidence for a New CSE Agenda

In the face of CSE's failure to produce scientific evidence that it has been effective at reducing teenage sexual risk behavior,

CSE advocates have looked for other positive CSE outcomes that could justify its deployment in school classrooms. This new agenda is exemplified by a recent landmark review of sex education research:

"Three Decades of Research: The Case for Comprehensive Sex Education"

by Goldfarb & Lieberman, 2021<sup>16</sup>

### "Three Decades of Research: A New Sex Ed Agenda and the Veneer of Science"

by The Institute for Research & Evaluation (IRE)<sup>12</sup>

a critique of:

### "Three Decades of Research: The Case for Comprehensive Sex Education"

by Goldfarb & Lieberman, 2021<sup>16</sup>

Two major problems with Goldfarb & Lieberman's evidence undermine their positive claims for CSE

Out of 88 sources cited as supporting evidence for positive CSE outcomes:

a. Only 16 were studies of actual CSE programs<sup>12</sup>

**b.** None of the 16 met recommended scientific standards for evidence of CSE effectiveness<sup>4,12</sup>

(See Endnote 4 for the definition of these standards of effectiveness.)

*Thus, the Goldfarb & Lieberman study does <u>not</u> show scientific evidence for their claims that CSE:* 

- Reduces dating/intimate partner violence,
- Helps prevent child sex abuse,
- Reduces negative gender stereotypes,
- Reduces homophobic bullying, or
- Should be taught to young children in the early grades.<sup>12</sup>

For example:

The Goldfarb & Lieberman study says, "school-based CSE...can reduce dating and intimate partner violence."

- But, out of the 32 studies cited to support this claim, only four were studies of CSE or any type of sexuality education program.<sup>12,16</sup>
- Of these four CSE studies, only two met scientific standards for *studies* of effectiveness,
- But these two programs' *outcomes* did not show evidence of effectiveness at reducing IPV; in fact, both programs reported other negative effects.<sup>17,18</sup>

## Rather than providing scientific evidence of CSE's benefits

Goldfarb & Lieberman's study merely provides the veneer of scientific support for a new CSE agenda that these authors support.

And their study is being used as "evidence" to justify this agenda.

### A New CSE Agenda

"Not only are younger children able to discuss sexuality-related issues but the early grades may, in fact, be the best time to introduce topics related to sexual orientation, gender identity and expression, gender equality, and social justice related to the LGBTQ community before hetero- and cis-normative values and assumptions become more deeply ingrained and less mutable."

(according to Goldfarb & Lieberman, 2021, pp.10-11<sup>16</sup>)

### A New CSE Agenda

"Children learn gender role attitudes at an early age from observing the people in their families ... it is important to introduce concepts that would disrupt stereotypical and harmful biases related to gender and sexual orientation, during this formative time."

(according to Goldfarb & Lieberman, 2021, p.11<sup>16</sup>)

# Examples of a new CSE agenda

From "The 3Rs" CSE Curriculum co-authored by Eva Goldfarb<sup>19</sup>

- For 5-year-olds, a graphic lesson on identifying the genitals that "most boys have" or "most girls have"
- For 6-year-olds, a lesson on gender nonconformity: from the book, "My Princess Boy"

Examples of a new CSE agenda

# From "The 3Rs" CSE Curriculum co-authored by Eva Goldfarb<sup>19</sup>

### For 12-year-olds:

- A lesson that describes "bathing together" and "mutual masturbation" with a boyfriend/girlfriend as "important because they can help ... build connection between people without any risk of STDs [or pregnancy]"
- Four lessons about transgenderism and homosexuality
- A lesson on how to decide "whether [you] want to be in a sexual relationship"

The Goldfarb & Lieberman study can be refuted when it is presented as evidence for CSE

• For a published critique of Goldfarb and Lieberman by The Institute for Research & Evaluation:

https://institute-research.com/pdf/Rebuttal\_to\_Goldfarb\_ and\_Lieberman\_2021\_%28IRE%209-26-22%29.pdf

• For a PowerPoint presentation of that critique: https://institute-research.com 3. The Impact of Gender Equality and Female Empowerment content in School-Based CSE Programs: Inconclusive Evidence

## Haberland, 2015, review of 10 CSE programs with content about gender and/or power<sup>20</sup>

- 8 out of 10 programs with content on "gender equality" or "female empowerment" had lower rates of teen pregnancy or STIs.<sup>20</sup>
- Concluded: "addressing gender and power should be considered a key characteristic of effective sexuality and HIV education programs."<sup>20</sup>
- However, only 2 of the 8 programs were school-based CSE programs.
- Both of these CSE programs were also found to produce other effects that were negative—*increases* in sexual risk behavior.<sup>21,22</sup>
- These negative effects were not reported by Haberland.
- 6 of the 8 were clinic, community or youth development programs: 2 had no positive effects;<sup>23</sup> the other 4 did not demonstrate that gender and power content caused reductions in teen pregnancy or STIs.<sup>20</sup>

## Levy, 2019, review of programs with content on gender equality or female empowerment<sup>24</sup>

- Identified 10 strong studies of quality programs with positive impact.
- Recommended "programmes that promote gender equality and target restrictive gender norms among young people...[challenging] the gendered systems that surround them."
- Only 2 were school-based programs that measured behavior outcomes.
- One of these was dating violence prevention plus CSE: boys but not girls had a reduction in violence; boys increased condom use but girls were reported to have decreased condom use (negative impact).<sup>25</sup>
- The other was an abstinence-type curriculum rather than CSE.<sup>26</sup> It reduced sexual activity for girls and increased condom use for boys.
- 5 of the 10 programs were community-based, for married females or families; they were not CSE for unmarried teens.

**4.** Conclusions about the Research on Comprehensive Sex Education in Schools

- Looking at outcome studies of school-based CSE, there continues to be very little evidence of program effectiveness, in both U.S. and Non-U.S. settings, when using scientifically credible criteria for effectiveness.
- CSE advocates give the mistaken message that there is strong scientific evidence supporting school-based CSE.
- It's important to be skeptical of reports about CSE research. Read the study, use scientific criteria to evaluate CSE effectiveness and don't accept the dubious standards employed by most favorable CSE reviews.

When school-based CSE outcomes are evaluated using a credible scientific definition of program effectiveness, the "evidence" for CSE disappears.

It does not support the narrative that CSE in school classrooms has been "proven effective"<sup>1</sup>

### **Endnotes**

- See, for example: Advocates for Youth. (2009). Comprehensive Sex Education: Research and Results. *The Facts, September 2009*. Retrieved from <a href="https://www.advocatesforyouth.org/wp-content/uploads/storage//advfy/documents/fscse.pdf">https://www.advocatesforyouth.org/wp-content/uploads/storage//advfy/documents/fscse.pdf</a>
- Coyle K, Anderson P, Laris BA, Barrett M, Unti T, Baumler E. (2021). A group randomized trial evaluating High School FLASH, a comprehensive sexual health curriculum. *Journal of Adolescent Health*, February 11, 2021. DOI: <u>https://doi.org/10.1016/j.jadohealth.2020.12.005</u>
- Forrester e, Manzer J, Chesnut K, Knab J, et al. (2023). Updated Findings from the HHS Teen Pregnancy Prevention Evidence Review: October 2016-May 2022. U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation, April 2023, <u>https://tppevidencereview.youth.gov/</u>
- 4. These standards or criteria for effectiveness are grounded in the work of the scientific field of prevention research, especially *The Society for Prevention Research*. The criteria are: 1) the use of a reliable study designed to test cause and effect: an experimental or quasi-experimental design study with adequate sample size and reliable measures; 2) program results that show evidence of effectiveness: significant (p<.05) long-term protective effects (for school-based programs, lasting 12 months post-program), for the intended or target population of program recipients (not just a subgroup or subsample), on an important protective outcome (indicating a reduction in sexual risk behavior), without other negative program effects occurring on important outcomes. See the work of: Flay BR, Biglan A, Boruch RF, Castro FG, Gottfredson D. (2005). Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination. *Prev Sci*, 6(3):151–175; Gottredson DC, Cook TD, Gardner FEM, Gorman-Smith D, Howe GW, Sandler IN, Zafft KM. (2015). Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation. *Prev Sci*, 16(7):893-926. doi: 10.1007/s11121-015-0555-x; Blueprints for Healthy Youth Development: Blueprints Standards. Available at: <a href="https://www.blueprintsprograms.org/blueprints-standards/">https://www.blueprintsprograms.org/blueprints-standards/</a>
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- VanTreeck K, Elnakib S, & Chandra-Mouli V. (2023) A reanalysis of the Institute for Research and Evaluation report that challenges non-US, school-based comprehensive sexuality education evidence base. *Sexual and Reproductive Health Matters*, 31:1, 2237791, DOI: 10.1080/26410397.2023.2237791, see Table B1, Merakou, 2006.
- 7. The Institute for Research & Evaluation. (2024). Rebuttal to a Critique by the World Health Organization. October 15, 2024, Revised.
- 8. The WHO reviewers reported that 7 studies showed evidence of harmful impact, but they also correctly reported a negative effect found by another study and then mislabeled it as a positive result (Merakou, 2006). Correcting for this inarguable error in labelling, the WHO reviewers actually reported 8 studies showing negative impact, one less than the 9 that IRE reported.
- Weed SE. Sex Education Programs for Schools Still in Question: A Commentary on Meta-Analysis. Am J Prev Med. 2012;42(3):313-315, doi: 10.1016/j.amepre.2011.11.004
- 10. Marseille E, et al. (2018) Effectiveness of school-based teen pregnancy prevention programs in the USA: a systematic review and meta-analysis, *Prevention Science*, 19(4):468–489
- 11. Juras R, Tanner-Smith E, Kelsey M, Lipsey M, Layzer J. Adolescent Pregnancy Prevention: Meta-Analysis of Federally Funded Program Evaluations, *American Journal of Public Health*. 2019;09(4), e1-e8
- 12. Ericksen IH and Weed SE. (2023). "Three Decades of Research:" A New Sex Ed Agenda and the Veneer of Science. *Issues in Law and Medicine*, 38(1):27-46
- Forrester e, Manzer J, Chesnut K, Knab J, et al. (2023). Updated Findings from the HHS Teen Pregnancy Prevention Evidence Review: October 2016-May 2022. U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation, April 2023, <u>https://tppevidencereview.youth.gov/</u>

### Endnotes (cont.)

- Ericksen, IH. (2024). Seven Recent Reviews of Research Show a Lack of Evidence of Effectiveness for Comprehensive Sex Education in Schools. The Institute for Research & Evaluation, October 15, 2024. Available at <a href="https://institute-research.com/wp-content/uploads/2024/07/Seven-research-reviews-show-lack-of-CSE-effectiveness-in-schools-7-24-24.pdf">https://institute-research.com/wpcontent/uploads/2024/07/Seven-research-reviews-show-lack-of-CSE-effectiveness-in-schools-7-24-24.pdf</a>; Kim, E.J.; Park, B.; Kim, S.K.; Park, M.J.; Lee, J.Y.; Jo, A.R.; Kim, M.J.; Shin, H.N. (2023). A Meta-Analysis of the Effects of Comprehensive Sexuality Education Programs on Children and Adolescents. *Healthcare*, 11, 2511. <a href="https://doi.org/10.3390/healthcare11182511">https://doi.org/10.3390/healthcare11182511</a>
- 15. See: https://www.blueprintsprograms.org/faq/
- Goldfarb E and Lieberman L. (2021). Three Decades of Research: The Case for Comprehensive Sex Education. J Adolesc Health, 68(1):13-27. doi: 10.1016/j.jadohealth.2020.07.036
- 17. One of the two CSE studies, a study of *It's Your Game... Keep It Real* (IYG) by the program's authors, found it reduced dating violence after one year. However, multiple other studies of IYG found it also *increased* teen sexual risk behavior. These negative effects rule out IYG's designation as an effective violence prevention program.(See: Peskin MF, Markham CM, Shegog R, et al. Effects of the It's Your Game...Keep It Real program on dating violence in ethnic-minority middle school youths: A group randomized trial. *Am J Public Health*. 2014;104:1471e7; Markham CM, Peskin MF, Shegog R, Baumler ER, Addy RC, Thiel M, Escobar-Chaves SL, Robin L, & Tortolero SR. Behavioral and psychosocial effects of two middle school sexual health education programs at tenth-grade follow-up. *Journal of Adolescent Health*. 2014; *54*(2), 151–159; Potter S, Coyle K, Glassman J, Kershner S, & Prince M. It's Your Game ... Keep It Real in South Carolina: A Group Randomized Trial Evaluating the Replication of an Evidence-Based Adolescent Pregnancy and Sexually Transmitted Infection Program. *American Journal of Public Health*. 2016; *106*(S1), S60–S69.

### **Endnotes** (cont.)

- 18. The other CSE study found significantly differing results for males and females (i.e., subgroup effects). The program reduced violence for boys but not girls and increased condom use for boys while girls were reported to have *reduced* condom use (OR=.76), although it was not clear whether significant at the p<.05 level. (Wolfe DA, Crooks C, Jaffe P, et al. A school-based program to prevent adolescent dating violence: A cluster randomized trial. *Arch Pediatr Adolesc Med*. 2009;163:692e9.)
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- 25. Wolfe DA, Crooks C, Jaffe P, Chiodo D, Hughes R, Ellis W, Stitt L, Donner A. A School-Based Program to Prevent Adolescent Dating Violence: A Cluster Randomized Trial. *Archives of Pediatrics & Adolescent Medicine*. 2009;163 (8): 692–699.
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#### THE INSTITUTE FOR Research & Evaluation

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- CDC-sponsored meta-analysis on sex education effectiveness
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