

Evidence-Based Strategies to Engage High School Male Students in Health Careers Exploration:

- Strategies specifically aimed at engaging male students in health careers.
- Extrapolate successful strategies from female STEM (Science, Technology, Engineering, and Mathematics) fields to - male HEAL/healthcare.

Male Role Models and Mentorship	Citation
<p>Role Models and Mentorship: Having male role models and mentors in health professions can be particularly impactful. Male students often benefit from seeing successful men in these roles, which can help break down stereotypes and encourage them to pursue similar paths.</p>	<p>American Institutes for Research. (n.d.). College and career readiness. American Institutes for Research. Retrieved March 11, 2025, from https://air.org/our-work/education/college-and-career-readiness</p>
<p>Men in Nursing: Their Influence in a Female Dominated Career. This article explores the challenges men face in nursing education and how male role models can help address these barriers</p>	<p>Barrett-Landau, S., & Henle, S. (2014). Men in nursing: Their influence in a female dominated career. <i>Journal for Leadership and Instruction</i>, 13(2), 10-13.</p>
<p>Mentorship in Medicine and Other Health Professions: Published in the <i>Journal of Cancer Education</i>, this article discusses the role of mentors in shaping the careers of healthcare providers. It emphasizes that mentors, including male mentors, are crucial for guiding students' personal and professional development</p>	<p>Henry-Noel, N., Bishop, M., Gwede, C.K. et al. Mentorship in Medicine and Other Health Professions. <i>J Canc Educ</i> 34, 629–637 (2019).</p>
<p>The importance of positive male role models. This academic blog emphasizes the importance of positive male role models in developing a culture of positive masculinity. It notes that boys are more likely to adopt a role model of the same gender, which can influence their career choices, including entering health professions.</p>	<p>University of Worcester. (n.d.). The importance of positive male role models. University of Worcester. Retrieved March 11, 2025, from https://www.worc.ac.uk/about/news/academic-blog/health-and-wellbeing-blogs/the-importance-of-positive-male-role-models.aspx</p>
<p>Beyond the statistics: How positive role models can improve men's health: Deloitte Blog. This blog post discusses how promoting positive male role models is crucial to improving men's health. It suggests that role models can challenge harmful stereotypes and inspire healthier behaviors, which can include pursuing careers in health professions.</p>	<p>Deloitte. (2024, November). Beyond the statistics: How positive role models can improve men's health. Deloitte UK. Retrieved March 11, 2025, from https://blogs.deloitte.co.uk/health/2024/11/beyond-the-statistics-how-positive-role-models-can-improve-mens-health.html</p>

<p>Mentorship in Medicine and Other Health Professions. This publication emphasizes the importance of mentorship in medicine and other health professions. It describes how mentors, including male role models, play a crucial role in shaping the careers of future healthcare providers by providing guidance, support, and professional development. Gender and role model theme explored.</p>	<p>Henry-Noel, N., Bishop, M., Gwede, C. K., Petkova, E., & Szumacher, E. (2018). Mentorship in medicine and other health professions. <i>Journal of Cancer Education</i>, 33(4), 789-797. https://doi.org/10.1007/s13187-018-1360-6</p>
<p>Positive Male Role Models. This source outlines the benefits of having a mentor as a positive male role model, including providing invaluable support, guidance, and encouragement during key stages of life. The mentor-mentee relationship fosters personal growth, builds confidence, and provides a source of stability, all of which are important for emotional and professional development.</p>	<p>Ibekewe, O. (n.d.). Positive male role models. Osita Ibekewe. Retrieved March 11, 2025, from https://ositaibekwe.com/positive-male-role-models/#google_vignette</p>
<p>A study of nursing school official's perceptions of recruiting males into the nursing profession. Networking was the most important factor in recruiting male candidates to nursing programs, and networking with individuals who influenced students making career-selection decisions emerged as the major construct.</p>	<p>Anderson, D. L. (1989). A study of nursing school officials' perceptions of recruiting males into the nursing profession (Doctoral dissertation, Peabody College for Teachers of Vanderbilt University).</p> <p>https://web-p-ebSCOhost-com.ezproxy.library.wisc.edu/ehost/detail/detail?vid=0&sid=ccb43b95-a1ac-4bb1-9463-b7b2a8c614cd%40redis&bdata=JnNpdGU9ZWWhvc3QtbGl2ZSZZY29wZT1zaXRl#AN=109869189&db=rzh</p>
<p>Why America Needs More Men Working in Health Care and Education “...a powerful reminder of the feminist mantra: “you have to see it to be it.” If any particular activity, including a job, is seen as being for people of the opposite sex, it is unlikely to feature in your own aspirations. Just 26% of HEAL jobs are held by men, down from 35% in 1980.</p>	<p>America needs more men working in health care and education. TIME. https://time.com/6222798/america-needs-more-men-working-in-health-care-and-education/</p>
<p>Addressing Stereotypes and Bias to Create Supportive Learning Environments</p>	<p>Citation</p>

<p>Strategies for increasing girls' participation in STEM: Addressing Stereotypes and Bias. Actively working to dispel stereotypes and biases about gender and STEM can create a more inclusive environment. This includes training teachers to recognize and address their own biases and promoting a growth mindset among students. Creating a supportive and encouraging learning environment where female students feel safe to take risks and make mistakes is crucial. This can be achieved through positive reinforcement and collaborative learning opportunities. These strategies can help engage high school female students in STEM fields and encourage them to pursue STEM careers.</p>	<p>IDRA. (n.d.). Strategies for increasing girls' participation in STEM [Webpage]. IDRA. https://www.idra.org/resource-center/strategies-for-increasing-girls-participation-in-stem/</p>
<p>Men wanted: How master's degree programs in psychology can recruit more men. Challenging Gender Stereotypes: Actively combating the perception that psychology is a "women's field" by showcasing successful male psychologists and highlighting diverse roles within the profession can help break down these stereotypes. (This article also falls under the Salary Parity theme)</p>	<p>Fortune. (2023, March 15). Men wanted: How master's degree programs in psychology can recruit more men [Webpage]. Fortune. https://fortune.com/education/articles/men-wanted-how-masters-degree-programs-in-psychology-can-recruit-more-men/</p>
<p>Nursing students' perception of gender-defined roles in nursing: a qualitative descriptive study. Both male and female nursing students face the limits of their own gender roles, yet they are prepared to challenge these gender-based perceptions. Tackling stereotypes and raising public awareness, using gender-inclusive language and strategies for recruitment, ensuring gender diversity in nursing teams and revising the nursing curriculum where appropriate, are just some of the implications that arise to help overcome gender differences.</p>	<p>Prosen, M. Nursing students' perception of gender-defined roles in nursing: a qualitative descriptive study. <i>BMC Nurs</i> 21, 104 (2022). https://doi.org/10.1186/s12912-022-00876-4</p>
<p>Stability and Volatility of STEM Career Interest in High School: A Gender Study. In high school, gender differences in attitudes and interest in STEM are heightened. The evidence indicates involving girls in STEM activities in high school helps build their STEM interests and identities and can potentially mitigate gender differences in attitudes towards and interest in STEM.</p>	<p>Sadler, P. M., Sonnert, G., Hazari, Z., & Tai, R. (2012). Stability and volatility of STEM career interest in high school: A gender study. <i>Science Education</i>, 96(3), 411–427.</p>
<p>Evidence-based Strategies for Attracting and Retaining Girls and Women in STEM. This research brief includes evidence-based strategies for attracting and retaining girls and women in STEM.</p>	<p>Society of Women Engineers. (2021). Evidence-based strategies for attracting and retaining girls and women in STEM [PDF]. Society of Women Engineers. https://swe.org/wp-content/uploads/2021/08/Evidence-based-Strategies-for-Attracting-and-Retaining-Girls-and-Women-in-STEM.pdf</p>

<p>Breaking Down Gender Stereotypes: Traits, Roles, and Occupations. One of the most significant impacts of gender stereotypes is on the career choices that individuals make. The belief that certain jobs are more suitable for men or women can limit career opportunities and create an unequal playing field in the workplace. These stereotypes are often reinforced from a young age, with girls being encouraged to pursue nurturing or creative careers and boys being steered toward technical or leadership positions. Strategies to reduce gender stereotypes are discussed.</p>	<p>Gender Studies. (2024, February 12). Breaking down gender stereotypes: Traits, roles, and occupations. Gender Studies. https://gender.study/psychology-of-gender/breaking-gender-stereotypes-traits-roles-occupations/#impact-on-occupational-choices</p>
<p>Career and Technical Education (CTE) Programs</p>	<p>Citation</p>
<p>American Institutes for Research: CTE Programs. CTE programs that include health science pathways can provide male students with a structured and practical approach to exploring health careers. These programs often include hands-on learning and real-world applications.</p>	<p>Multiple sources/articles. American Institutes for Research. (n.d.). Search results for CTE. AIR. https://air.org/search?search=CTE</p>
<p>Male Academic Performance and the Promise of Career and Technical Education (CTE). CTE offers an avenue for young men who have fallen behind academically and economically and who may as a result suffer at many points along their life courses.</p>	<p>Salimi, S. (2024, September). Male academic performance and the promise of career and technical education. MDRC. https://www.mdrc.org/work/publications/male-academic-performance-and-promise-career-and-technical-education</p>
<p>Prescribed Pathways: P-TECH. This program establishes a clear sequence of study and requirements, with many checkpoints for student accountability. This structure may be of particular benefit to male students, who can struggle more than female students with the transition from secondary to postsecondary education and often need more direction.</p>	<p>New York State Education Department. (n.d.). Pathways in Technology (NYS P-TECH) program. NYSED. https://www.nysed.gov/postsecondary-services/pathways-technology-nys-p-tech-program</p>
<p>Career & technical education for high school completion. The document discusses the effectiveness and benefits of career and technical education (CTE) programs in improving high school completion rates, particularly for at-risk students, while also addressing potential impacts on employment and earnings. County Health Ranking and Roadmaps (source) ranks this intervention as a scientifically supported evidence-based practice.</p>	<p>County Health Rankings & Roadmaps. (n.d.). Career & technical education for high school completion. Retrieved from https://www.countyhealthrankings.org/strategies-and-solutions/what-works-for-health/strategies/career-technical-education-for-high-school-completion</p>

<p>Tailored Curriculum and Outreach</p>	<p>Citation</p>
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<p>Of Boys and Men: Why the Modern Male Is Struggling, Why It Matters, and What to Do About It. Richard Reeves proposes several solutions in "Of Boys and Men" to address the workforce participation challenges faced by boys and men:</p> <p><u>Vocational Training:</u> Increase access to vocational training and apprenticeships to provide alternative pathways to success for boys and men.</p> <p><u>Educational Reforms:</u> Start School Later: Boys should start school a year later than girls to account for differences in brain development.</p> <p><u>Extended Schooling:</u> Boys should stay in school longer to ensure they are adequately prepared for higher education and the workforce.</p>	<p>Book Reeves, R. V. (2022). Of boys and men: Why the modern male is struggling, why it matters, and what to do about it. Brookings Institution Press.</p> <p>Online Supporting Sources Whalen, E. (2025, March 11). Are men OK? The Nation. https://www.thenation.com/article/society/richard-reeves-profile/</p> <p>American Institute for Boys and Men. (n.d.). Home. AIBM. https://aibm.org/</p>
<p>The Man Cave: Programs. Developing psychology programs that incorporate topics relevant to men's experiences and engaging with male-dominated organizations to promote the field can make psychology more appealing to men.</p>	<p>The Man Cave. (n.d.). Programs. The Man Cave. https://themancave.life/programs/</p>
<p>New routes to recruiting and retaining women in STEM: Policy implications of a communal goal congruity perspective. "boys engaged more with activities that involve batteries, fuses, microscopes while girls are engaged more with planting seeds"</p>	<p>Diekman, A. B, Weisgram, E. S., & Belanger, A. L. (2015). New routes to recruiting and retaining women in STEM: Policy implications of a communal goal congruity perspective. Social Issues and Policy Review, 9(1), 52–88.</p>
<p>Evidence-based Strategies to Engage Men and Boys in Gender-integrated Health Interventions: Evidence-based Strategies to Transform Gender Norms, Roles, and Power Dynamics for Better Health. This source discusses evidence-based strategies to engage men and boys in health interventions, emphasizing the importance of understanding men's experiences and developing programs that address their specific needs.</p>	<p>Health Policy Project. (n.d.). Men and boys brief [PDF]. Health Policy Project. https://www.healthpolicyproject.com/pubs/382_MenandBoysBrief.pdf</p>
<p>Strategies for Increasing Girls' Participation in STEM: Inclusive Curriculum. To encourage more girls and girls of color to participate in STEM studies, schools can be more explicit about the range of STEM areas. Schools can also deliberately infuse stories of women's contributions in the STEM fields and how it benefits girls to pursue advanced coursework in this area. This helps students see themselves in such fields and gives them a chance to find the right fit for themselves.</p>	<p>IDRA. (n.d.). Strategies for increasing girls' participation in STEM [Webpage]. IDRA. https://www.idra.org/resource-center/strategies-for-increasing-girls-participation-in-stem/</p>

Technology Integration

Incorporating technology and innovation into health career exploration can engage male students who are interested in tech. This includes using simulations, virtual reality, and other tech-based learning tools to explore health careers. These articles support the premise of incorporating technology and innovation into health career exploration to engage male students:

Health + Tech: Career guidance apps expanding students' horizons in science: This article discusses how career-guidance apps and online platforms can expand students' understanding of diverse health science fields. These apps offer interactive modules and virtual mentorship opportunities, which can attract male students interested in technology.

Health career exploration through science, technology, engineering, and mathematics pipeline programming: This study highlights the effectiveness of using technology and innovation in health career exploration programs. It emphasizes the importance of hands-on exposure and job shadowing opportunities to increase interest in healthcare careers among diverse student populations[2].

Virtual reality simulation for facilitating critical reflection and transformative learning: This article explores the use of virtual reality (VR) as a pedagogical tool in health professions education. VR simulations provide immersive experiences that can enhance learning and engagement, making them particularly appealing to male students interested in technology[3].

Innovative, Immersive Learning: Relias Expands VR Access to Solve Healthcare Workforce Training Challenges: This resource discusses how VR training solutions are being used to improve healthcare workforce training. VR provides realistic, scenario-driven learning experiences that can attract male students by combining their interest in technology with healthcare education[4].

Jamaica Gleaner. (2024, October 6). Health tech career guidance apps expanding students' horizons in science [Webpage]. Jamaica Gleaner. <https://jamaica-gleaner.com/article/news/20241006/health-tech-career-guidance-apps-expanding-students-horizons-science>

Brew, R. L., Pokorski, E., Scheidel, T., Scherf, B., Agee, K., & DeJong, P. (2022). Health career exploration through science, technology, engineering, and mathematics pipeline programming. *Frontiers in Education*, 7, Article 757888. <https://doi.org/10.3389/feduc.2022.757888>

Soilis, N., Bhanji, F. & Kinsella, E.A. Virtual reality simulation for facilitating critical reflection and transformative learning: pedagogical, practical, and ethical considerations. *Adv Simul* 9, 49 (2024). <https://doi.org/10.1186/s41077-024-00319-x>

Relias. (2025, March 11). Innovative immersive learning: Relias expands VR access to solve healthcare workforce training challenges [Webpage]. Relias. <https://www.relias.com/press-room/innovative-immersive-learning-relias-expands-vr-access-to-solve-healthcare-workforce-training-challenges>

Competition

Sports Medicine and Athletic Training. Tying health careers to sports and physical fitness can attract male students who have an interest in athletics. Sources that support the idea that tying health careers to sports and physical fitness can attract male students who have an interest in athletics, and that programs focusing on sports medicine, physical therapy, and athletic training can be particularly appealing.

The Impact of Sports on Student Health and Academics: This article highlights how engaging in sports can significantly benefit students' physical and mental well-being, as well as their academic performance. It suggests that sports-related programs can attract students who are already interested in athletics.

Shenandoah University's Dual Degree Program: This program combines a Doctor of Physical Therapy (DPT) with a Master of Science in Athletic Training (MSAT), emphasizing the appeal of sports medicine and athletic training for students interested in both healthcare and athletics.

Purdue University's Athletic Training Programs: This source discusses the similarities between athletic training and other healthcare fields like physical therapy, highlighting how these programs can attract students interested in sports and physical fitness.

Of Boys and Men: Why the Modern Male Is Struggling, Why It Matters, and What to Do About It. Richard Reeves discusses the benefits of competition for boys and men in his book. He suggests that competition can be a valuable strategy to help boys and men thrive by providing clear goals and motivation

Platinum Valley School. (n.d.). The impact of sports on student health and academics [Webpage]. Platinum Valley School.
<https://platinumvalleyschool.com/blog/the-impact-of-sports-on-student-health-and-academics/>

Shenandoah University. (n.d.). Dual degree: Doctor of physical therapy/master of science in athletic training [Webpage]. Shenandoah University.
<https://www.su.edu/athletic-training/dual-degree-doctor-of-physical-therapymaster-of-science-in-athletic-training/>

Purdue University. (n.d.). Athletic training [PDF]. Purdue University.
<https://www.purdue.edu/preprofessional/Documents/Athletic%20Training.pdf>

Reeves, R. V. (2022). *Of boys and men: Why the modern male is struggling, why it matters, and what to do about it*. Brookings Institution Press.

<p>Hands On Learning Motivation in educational contexts: Does gender matter? Pedagogy with a Point: P-TECH offers a hands-on approach (also listed under CTE theme). Students gain technical skills for STEM occupations and professional skills for career development while engaged in project-based learning. The opportunity to apply educational concepts to real life may be particularly appealing to boys and men.</p> <p>Challenges Faced by Male Nursing Students in Obstetrics and Gynaecology Wards in Private Healthcare Settings in Malaysia. This study discusses the challenges faced by male nursing students and underscores the need for equal access to hands-on learning opportunities to enhance their clinical competence and emotional well-being.</p> <p>Medical Experience for the Development of Teens. To both promote a more diversified and representative population and combat an aging workforce, male involvement in non-physician healthcare roles must be promoted in a similar fashion to the women-into-STEM movements of recent years. To combat shortages in professional healthcare roles and provider availability in rural areas; Project MED-T exposes precollegiate students to procedures and practices found in healthcare roles to invite further interest and involvement of teens in the field of health science.</p>	<p>Butler, R. (2014). Motivation in educational contexts: Does gender matter? In L. S. Liben & R. S. Bigler (Eds.), <i>Advances in child development and behavior</i> (Vol. 47, pp. 1-41). JAI. https://doi.org/10.1016/bs.acdb.2014.05.001</p> <p>Kunjukunju, A., Sinniah, J., Abd Rahman, R., & Mohd Mustafa, N. F. (2024). Challenges faced by male nursing students in obstetrics and gynaecology wards in private healthcare settings in Malaysia. <i>International Journal of Medical and Health Sciences Research</i>, 8(5), Article 8507. http://dx.doi.org/10.51505/ijmshr.2024.8507</p> <p>Elvers, B., Musack, M., & Dhyanchand, R. J. (2024). University of Wisconsin-Platteville medical experience for the development of teens [PDF]. WCMEW Poster Presentation. University of Wisconsin-Platteville. https://www.wcmew.org/s/Men-can-HEAL-poster.pdf</p>
<p>Salary Parity for Traditionally Female Occupations</p>	<p>Citation</p>
<p>Men wanted: How master’s degree programs in psychology can recruit more men. (This article also falls under the 'Stereotypes' theme). Earning potential, too, is an issue, and neither is easy to work around. Both Stone and Levant note an increase in interest in fields like nursing in recent years among men—likely because nurses experienced a bump in earnings due to pandemic-induced staff shortages—and that could be a good sign for psychology."</p>	<p>Fortune. (2023, March 15). Men wanted: How master's degree programs in psychology can recruit more men [Webpage]. Fortune. https://fortune.com/education/articles/men-wanted-how-masters-degree-programs-in-psychology-can-recruit-more-men/</p>

Men: A growing minority?

“Another concern about fewer men in the field is salaries. Women typically get paid less than men for the same work, says Louise Douce, PhD, assistant vice president of Student Life and an adjunct professor of psychology at The Ohio State University in Columbus. So a field that becomes predominantly female runs the risk of lower salaries across the board.”

Willyard, C. (2011). Men: A growing minority? gradPSYCH Magazine, 9(1), 40.

Why America Needs More Men Working in Health Care and Education

“It is true that some HEAL jobs do not pay that well, while most STEM jobs do. Medical assistants, for example, make around \$38,000 a year. But many traditional male jobs are not highly paid either: construction workers and bus and taxi drivers both make around the same as medical assistants. And there are also plenty of HEAL jobs that offer good pay and benefits, including nurse practitioners (\$100,000), medical and health services managers (\$71,000), education and childcare administrators (\$70,000), and occupational therapists (\$72,000).”

Hinckley, S. (2022, October 11). America needs more men working in health care and education. TIME. <https://time.com/6222798/america-needs-more-men-working-in-health-care-and-education/>