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## TESTIMONY - HB 2307

Good afternoon, my name is Marie Tyvoll and I want to thank the Committee on Education for this opportunity to provide testimony in support of HB 2307 and I applaud Oregon's commitment to ensuring the health, safety and wellbeing of our CTE students.

I worked for almost two years in the Portland Public School (PPS) District office in the role of program coordinator for the 7<sup>th</sup> Grade Career Tech Exploration program (7GCTE), a hands-on learning program held off-site for approximately 3500 7<sup>th</sup> grade students in the District. I am not an educator by training and do not have formal education, training or experience in any aspect of safety management systems and practices. I have spent the majority of my professional life designing, launching or managing programs for a variety of industries, functional areas, and types of organizations ranging from Fortune 500 companies to small nonprofits.

In my role as program coordinator for the District's 7GCTE, I had to educate myself about the risks associated with the work environments in which the 7<sup>th</sup> graders were placed while participating in the program. I had the distinct pleasure of working with many highly talented external contractors for the 7GCTE, who were committed to ensuring student safety, but, in my experience, that was not consistently a priority. As a result of my resistance to 7GCTE placements which were not safe for students, I received a lackluster response from some members of the District. I currently have a lawsuit pending against PPS as a result of the termination of my employment on Dec. 29, 2017, on charges of insubordination due to my resistance to placing the District's students in unsafe environments. My firing was based on actions I took to ensure student safety. You can read about my lawsuit and complaint in a Portland Tribune article, dated Aug. 4, 2018: <https://pamplinmedia.com/pt/9-news/402587-299348-former-pps-employee-says-she-was-fired-after-whistleblowing-on-the-rebuilding-center>

HB 2307 is a critical opportunity to begin the process of providing a safe teaching and learning environment while simultaneously preparing students to work safely and successfully in schools. A comprehensive safety program will not only support students in learning self-advocacy and problem-solving skills but will also serve them throughout their careers and life.

My understanding is that Oregon currently lacks safety guidelines for CTE and K-12 at the state level. However, many states have instituted comprehensive K-12 safety programs and therefore we have a wealth of research, benchmark data and best practices available to us. I've included a list of 30+ documents I identified in an informal search and review of safety best practices.

My recommendations today for the HB 2307 study focus on the use of a change management approach that recognizes that any successful safety program must result in a "culture of safety" or it will fail. As one research study wrote, "...when organizations invest in a safety management system approach to reducing/preventing accidents and improving safety performance, they should also be concerned about winning over the minds and hearts of their workers through human performance-based safety management systems designed to promote and enhance worker engagement."<sup>1</sup>

My recommendations include the following:

1. HB 2307 must specify that the study will be conducted by a highly qualified external contractor: For any study to be perceived as credible by all stakeholders, it must be conducted by a neutral vendor with a long track record of evaluating and implementing safety management systems and practices for a combination of K-12, industry and/or post-secondary institutions. A competent vendor will bring expertise in change management and research-based frameworks that will ensure a robust approach that is critical for success.

2. This initiative must involve the active participation by all relevant stakeholder groups: We know from decades of research in organization development that when we invite people to participate in the decision-making process for changes that will impact them, they are more likely to be committed to making those changes. This initiative must be driven by representatives of all stakeholder groups including students, educators, parents, contractors, partners and a variety of safety experts from industry, government, unions, and post-secondary institutions, to name only a few.
3. The study must include middle schools, middle and high school makerspaces and **all external contractor partner “spaces” where students are receiving instruction either in schools or in off-site locations:** In other words, the study must include spaces at any and all locations where middle or high school students are participating in hands-on learning activities. For example, in the 2016/17 school year, many children who participated in the 7GCTE used welding and metal grinding equipment, band saws, nail guns, scroll saws and drill presses in their learning experiences, all in off-site locations (i.e. non-PPS spaces) and were instructed by external contractors. The 7GCTE program is taking place this year and many students are still using some of these tools today. In addition, many PPS middle schools were inspired to start makerspaces as a result of the 7GCTE. As many of you know, makerspaces offer a variety of tools and equipment for students to use to create and build in open-ended hands-on learning - and this study may also determine that they need additional safety practices. As you can imagine, even a tool as simple as a glue gun can cause serious injury if used without appropriate safety practices.
4. The study must result in a recommendation for a confidential, non-retaliatory complaint process: A highly responsive complaint process administered by a neutral third party must ensure that all stakeholders feel free to express their concerns about student safety without fear of retaliation. All complaints must be thoroughly investigated by qualified external safety experts. The complaint process and contact information must be promoted with a professional marketing and communications campaign so that it becomes an integral element of each school’s safety culture.
5. The study must include a review of safety accommodations and instructional strategies for special needs and ESL students and any student who is identified by an educator who may require additional oversight or support. For example, I was surprised to learn from a long-time former PPS employee that some 7th graders from schools with high numbers of underserved students cannot read at grade level - but didn’t admit that while participating in the 7GCTE - and those students were unable to complete the written safety tests. (After I learned this I specified that all contractors must read the safety tests out loud to students.)
6. The study must address the overall lack of funding for schools and the barriers this presents to building a culture of safety, including large classroom sizes. As one administrator I spoke with said, “back in the day we had a limit of 20 students in a class” and that “no principal wants to build a schedule with 45 students in a shop class.”
7. The study must examine all organizational elements that contribute to building a culture of safety: These include human resource strategies and processes that district’s use to ensure that they “hire for safety” in regards to the qualifications of district employee’s and external contractors. Also critically important is a district’s procurement process which must include a comprehensive evaluation of vendor safety management systems and practices before awarding contracts.
8. The study must include a system and processes for ensuring accountability and compliance: A robust compliance system should include a continuous improvement program with elements such as regular audits, performance measures, and appropriate levels of management oversight. As I understand the current process, districts self-report their compliance with Division 22 standards, which in 2017 included the category “Emergency Plans and Safety Programs,” #1420. In 2017, the year I was terminated, PPS indicated with a checkmark in the Yes column that they were in compliance with 1420.

9. For all the right reasons, the study should be completed with the collaboration and active participation of industry partners such that any safety initiative is also designed to increase awareness and interest among students and parents about the many viable career pathways available, especially in the trades, which as you know in many cases are desperate for qualified employees.
10. There must be adequate funding for any and all training required as per the study's recommendations: In my conversations with educators and administrators, there is very little trust that adequate funding will be provided for skills assessment and effective training in instructional strategies and safety management systems and practices.

Thank you again for your time today and I'm happy to answer any questions.

## REFERENCES

1. Wachter, Jan and Yorio L. Patrick. *A system of safety management practices and worker engagement for reducing and preventing accidents: An empirical and theoretical investigation*, Science Direct, Accident Analysis & Prevention, V 68, July 2014, Pages 117-130.  
<https://www.sciencedirect.com/science/article/pii/S0001457513002972>

## SAFETY RESOURCES

1. CTE: YOUR CONSTRUCTION SAFETY PROGRAM: SAFE STUDENTS, SAFE WORKERS;  
[https://www.cpwr.com/sites/default/files/publications/LOHP\\_toolkit\\_final-12-4-17.pdf](https://www.cpwr.com/sites/default/files/publications/LOHP_toolkit_final-12-4-17.pdf)
2. Safety Guide for Career and Technical Education; <https://www.cdc.gov/niosh/docs/2004-101/pdfs/safe.pdf>
3. Integrating Occupational Safety and Health Training into Career Technical Education in Construction;  
[https://www.cpwr.com/sites/default/files/publications/Integrating\\_SandH\\_in\\_CTE\\_Training\\_Bush\\_2013.pdf](https://www.cpwr.com/sites/default/files/publications/Integrating_SandH_in_CTE_Training_Bush_2013.pdf)
4. Risk Managers are from Mars, EHS Professionals are from Venus - The EHS Professionals' Role in ERM;  
[https://www.calstate.edu/risk\\_management/conferences/FTPT/documents/Risk\\_Managers\\_Are\\_From\\_Mars.pdf](https://www.calstate.edu/risk_management/conferences/FTPT/documents/Risk_Managers_Are_From_Mars.pdf)
5. A system of safety management practices and worker engagement for reducing and preventing accidents: An empirical and theoretical investigation;  
<https://www.sciencedirect.com/science/article/pii/S0001457513002972>
6. Employers' Behavioural Safety Compliance Factors toward Occupational, Safety and Health Improvement in the Construction Industry;  
<https://www.sciencedirect.com/science/article/pii/S1877042812005484>
7. Creating a Culture of Prevention in Occupational Safety and Health Practice;  
<https://www.sciencedirect.com/science/article/pii/S2093791116000093>
8. Improving safety culture through the health and safety organization: A case study;  
<https://www.sciencedirect.com/science/article/pii/S0022437513001552>
9. Recommended Practices for Safety & Health Programs in Construction;  
[https://www.osha.gov/shpguidelines/docs/8524\\_OSHA\\_Construction\\_Guidelines\\_R4.pdf](https://www.osha.gov/shpguidelines/docs/8524_OSHA_Construction_Guidelines_R4.pdf)
10. What are the Differences Between the OSHA 10 and 30 Hour Courses?  
<https://simplifiedsafety.com/blog/what-are-the-differences-between-the-osha-10-and-30-hour-courses/>
11. CTE\_ Staying Safe in the Workplace; <http://www.k12.wa.us/careertech/Safety.aspx>
12. Guide for Protecting Workers from Woodworking Hazards;  
[https://www.osha.gov/Publications/woodworking\\_hazards/osha3157.html](https://www.osha.gov/Publications/woodworking_hazards/osha3157.html)
13. A Nonprofit's Guide to OSHA; <https://www.probonopartner.org/wp-content/uploads/2016/07/OSHAGuide.pdf>
14. Take Safety To The Next Level; <https://www.nsc.org/work-safety/tools-resources/safety-for-business/ask-us>

15. Risk Management vs. Safety Management: Can't we all just get along?  
<https://www.onepetro.org/conference-paper/ASSE-07-0897>
16. Definition, Risk Management; <https://www.irmi.com/term/insurance-definitions/risk-management>
17. Recommended Guidelines for a Safe Shop Environment;  
<https://www2.dpsk12.org/manila/departments/riskmanagement/IndTechHndbk11041.pdf>
18. 6 elements of an effective safety management system; <https://www.healthandsafetyhandbook.com.au/6-elements-of-an-effective-safety-management-system/>
19. WORKPLACE HEALTH AND SAFETY (WHS) IMPROVEMENT PLAN;  
[https://services.anu.edu.au/files/review/2015\\_workplace\\_health\\_and\\_safety\\_improvement\\_plan\\_final.pdf](https://services.anu.edu.au/files/review/2015_workplace_health_and_safety_improvement_plan_final.pdf)
20. Miami University, Department of Architecture and Interior Design, Workshop Safety Manual;  
[https://miamioh.edu/cca\\_files/archid/documents/ShopManual\\_2009Accessible.pdf](https://miamioh.edu/cca_files/archid/documents/ShopManual_2009Accessible.pdf)
21. How to Create a Safe, Secure and Successful Makerspace; <https://edventures.com/blogs/stempower/the-chemistry-of-a-safe-makerspace>
22. Safety Manual, Hillsborough County Public Schools; <https://www.sdhc.k12.fl.us/doc/1403/safetymanual-doc>
23. Site Safety Monitors Handbook, Hillsborough County Public Schools;  
<https://www.sdhc.k12.fl.us/doc/582/safetymonitor-resource>
24. Providing a Safe Teaching and Learning Environment: A Health and Safety Resource for Pennsylvania Career and Technical Educators; <https://www.education.pa.gov/Documents/K-12/Career%20and%20Technical%20Education/Teacher%20Resources/Health%20and%20Safety%20Resource/PDESafetyGuide.pdf>
25. Career & Technical Education Laboratory Safety Manual Colorado;  
[https://www.sd27j.org/cms/lib8/CO01900701/Centricity/Domain/1739/Colorado\\_Lab\\_Safety\\_Manual.pdf](https://www.sd27j.org/cms/lib8/CO01900701/Centricity/Domain/1739/Colorado_Lab_Safety_Manual.pdf)
26. Guide for Developing a School District Safety and Health Plan for Career and Technical Education Programs and Courses; <https://www.nj.gov/education/cte/toolbox/healthplanguide.pdf>
27. Shop and Maker Space Safety; <https://www.ehs.washington.edu/workplace/shop-and-maker-space-safety>
28. Woodshop Safety Manual; <https://sli.oregonstate.edu/craft/woodworking/safetymanual>
29. Emerging Health and Safety Issues in Makerspaces;  
<https://seas.yale.edu/sites/default/files/imce/other/ISAM%20Makerspace%20Emerging%20Safety%20Items.pdf>
30. A Control Banding Approach for Safety in Shops and Makerspaces;  
<https://seas.yale.edu/sites/default/files/imce/other/ISAM%20Safety%20Control%20Banding.pdf>
31. Occupational Safety and Health: A View of Current Practices in Agricultural Education;  
<https://files.eric.ed.gov/fulltext/EJ1085016.pdf>