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Abstract for an Invited Paper
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Gained in Translation: The Sudden Pivot Taking Physics Labs to the Cloud as a Reform Opportunity

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I will report on a positive experience with using the forced transition to online learning as an opportunity to adopt one of many best-practice examples from the world of Physics Education Research. Following the example in "Developing scientific decision making by structuring and supporting student agency" by N.G. Holmes, et al [1], (and the instructional materials shared on Physport.org), my efforts were directed toward cueing students to make decisions to design their research question during our online meetings, rather than developing materials to micro-manage their behaviors. Characteristics of the new online medium influenced instructional design and accessibility in surprising ways. The centrality of group scientific presentation to their peers prompted responses such as "for the first time, I actually cared what the answer was. Students participated in a "belonging intervention, and what was once their least-favorite class became a refuge of supportive relationships during a difficult time. How can we make that "the new normal" for physics lab?

N.G. Holmes, Benjamin Keep, and Carl E. Wieman, Phys. Rev. Phys. Educ. Res. 16, 010109 (2020)