

The Impact of COVID-19 on Frontline Educational Workers

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COVID-19 has disrupted K--12 schooling in the US. Before COVID-19, delivering public education generally involved three big process decisions: (i) which students should be assigned to which schools?, (ii) how should students get to school (buses, walking, etc.)? and (iii) how should resources and materials be allocated and distributed to schools? (Keppler and Smilowitz 2020).

In the post-COVID era, decisions around how to deliver education are far more numerous, dynamic, and inter-related. Delivering education today is more complex than it has been in the past, with many decision variables that have implications for system effectiveness, efficiency, and equity. Some of the decisions that need to be made include:

- When should schools open fully to in-person instruction, stay virtual, or have a hybrid model?
- What kind of technologies (i.e., computers, tablets, apps, software, earphones) are more effective for supporting remote or hybrid learning?
- What subjects should be learned at home, and what must be learned in-person? Which grade levels of students should learn at home, and which should attend in person?
- What aspects of learning should be synchronous versus asynchronous?
- How should specialized learning services (i.e., English language support) be provided remotely?
- Who should wear masks? When should we start/stop requiring masking?
- How should schools optimally use their physical space (classrooms, gyms, etc.) to meet distancing requirements and minimize spread?
- How often should we clean school buildings and buses? Should we invest in costly new air filtration technology?

In my presentation, I do NOT attempt to answer these questions. Instead, I explore a higher-level process question: *Who should make these decisions?*

The traditional way most decisions in education have been made is at the top: by state and district leaders. This has become the default level of the COVID-19 response: states and districts are currently deciding remote vs in-person options, mask mandates, health and safety protocols, investments in education technologies, and so on. Does this make sense?

I argue that in this new era of education, it is essential that we give teachers greater voice and power in making decisions about how to provide education. I support this argument by drawing on a continuous improvement perspective from process engineering (Deming and Edwards 1982, Anderson et al. 1994). Originating in Toyota manufacturing, the theory of continuous improvement centers frontline workers as a critically important source of ideas about how to solve problems (Spear and Bowen 1999). Frontline workers know most intimately the obstacles, inefficiencies, and failures in the way things currently work, and have ideas for what types of improvements can (and cannot) help (Tucker 2007, Tucker et al. 2008, Keppler et al. 2020).

Teachers – as frontline workers – know the unique obstacles their particular students face in the wake of COVID-19 and have ideas about what to do about it. These ideas need to be heard and acted upon by the state and district leaders that have been historically making decisions unilaterally. I discuss the new and emerging data and technologies that make this possible, as well as what steps still need to be taken.

References

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