Continuous Improvement Literature Review

What is continuous improvement? How does it promote innovative thinking?

Continuous improvement (CI) is an approach to making systemic change, including understanding how each part of a system impacts the others and changing processes to improve outcomes. CI is not an innovation, but rather a method for implementing improvements in the work of educators, staff, and administrators. CI practices are tested for effectiveness on a small scale and practices that show promise can be systematically spread throughout the organization, continually updated and adapted as needed. (Baron et al., 2019).

The key characteristics of CI including: it is ongoing, integrated throughout the organization, takes place in the context of an entire system, and is an approach that involves multiple, concurrent experiments with attention to impact on outcomes as how it changes the system. (Park et al., 2013).

Continuous improvement focuses on the identification of innovations that are likely to be effective in each context and requires assessing the impact of the innovation in a rapid cycle. This is different from a yearly strategic planning process which lay out a general vision and focus on measuring long term outcomes with less scrutiny to the processes and structures needed to implement change. (Park et al., 2013).

Continuous improvement processes engage system level participants and leaders focusing on a particular problem to be solved within the system, such as a change in educational policy or practice, to test strategies and intended outcomes. (Bryk, Gomez, Grunow, & LeMahieu, 2015).

Why is continuous improvement effective?

Continuous improvement makes it possible for an organization to work on problems by trying multiple solutions at one time. "Concurrent activity across contexts puts relevant aspects of the context in sharp relief and can help each local setting see its efforts from new vantage points" (Bryk et al., 2010: 7).

Continuous improvement work is based on practices that have been shown to be effective locally. Those practices are tested in rapid cycles so they can be revised and adapted to a particular school context. Effective practices become integrated

into the systems and structures of the organization, with ownership shared by practitioners and leadership. (Cohen-Vogel et al., 2016)

How does continuous improvement work to enhance learning? What skills are needed?

The Every Student Succeeds Act promotes CI as a method for strengthening the effectiveness of ESEA investments. Steps include identifying local needs, selecting relevant, evidence-based interventions, planning for implementation by defining goals and creating timelines, implementing and gathering data about the impact, then examining data and determining whether to continue, modify, or discontinue the practice. (US Department of Education, 2016).

Continuous improvement requires data collection, analysis, and adaptation and is influenced by the context and conditions where the positive change is intended to take place. The data gathering, analysis, and adjustment is iterative and provides multiple opportunities for learning and improvement. (Bessant & Caffyn, 1997; Bhuiyan & Baghel, 2005; Langley, Moen, Nolan, Nolan, & Norman, 2009).

Iterative plan, do, study, act cycles provide opportunities to make change, build capacities among the people engaged in the change process, and prepare to spread the tested change strategies more broadly over time (Langley et al., 2009).

Effective changes are achieved when all members of the organization possess the collective habits of mind and technical skills needed to create an environment conducive to improvement based on evidence. Technical skills include the ability to conduct a root cause analysis, develop a theory of action, identify measures, design a data collection strategy, and participate in collaborative data analysis. Adaptive qualities include maintaining a culture of collaboration, reflection, inquiry and problem solving as well as supporting professional learning and systems alignment through a transparent, inclusive process. (Fabillar & Wang, 2019).

Related References:

Baron, K., Roberts, C., Shin, S. & Yang, Y. (2019).Supporting Continuous Improvement at Scale. *Policy Analysis for California Education, PACE.* https://files.eric.ed.gov/fulltext/ED600494.pdf

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Bhuiyan, N., & Baghel, A. (2005). An overview of continuous improvement: From the past to the present. *Management Decision*, *43*(5), 761–771.

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Bryk, A.S., Gomez, L. and A. Grunow. (2010). Getting ideas into action: Building networked improvement communities in education. Carnegie Foundation for the Advancement of Teaching. Stanford, CA.

Cohen-Vogel, L., Cannata, M., Rutledge, S. A. & Socol A.R. (2016). A Model of Continuous Improvement in High Schools: A Process for Research, Innovation Design, Implementation, and Scale. Teachers College Record. 118(13). https://eric.ed.gov/?q=&id=EJ1108493

Fabillar, E., Wang, A. (2019). Building a Culture of Continuous Improvement: Guidebook and Toolkit. Education Development Center. Waltham, MA.

Langley, G., Moen, R., Nolan, K., Nolan, T., & Norman, C. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd ed.). San Francisco, CA: Jossey-Bass.

Park, S., Hironaka, S., Carver, P., & Nordstrum, L. (2013). Continuous improvement in education. Palo Alto, CA: Carnegie Foundation for the Advancement of Teaching. https://www.carnegiefoundation.org/wp-content/uploads/2014/09/carnegie-foundation_continuous-improvement_2013.05.pdf

U.S. Department of Education. Non-regulatory guidance: Using evidence to strengthen education investments. (Sept. 2016). https://www2.ed.gov/policy/elsec/leg/essa/guidanceuseseinvestment.pdf

Related Links and Resources:

A Primer for Continuous Improvement in Schools and Districts (Shakman, Bailey, & Breslow, 2017)

https://www.edc.org/sites/default/files/uploads/primer_for_continuous_improvement.pdf

Building a Culture of Continuous Improvement: Guidebook and Toolkit (Wang & Fabillar, 2019)

https://www.edc.org/building-culture-continuous-improvement-guidebook-and-toolkit