Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

The primary goals for professional learning are changes in educator practice and increases in student learning. This is a process that occurs over time and requires support for implementation to embed the new learning into practices. Those responsible for professional learning apply findings from change process research to support long-term change in practice by extending learning over time. They integrate a variety of supports for individuals, teams, and schools. Finally, they integrate constructive feedback and reflection to support continuous improvement in practice that allows educators to move along a continuum from novice to expert through application of their professional learning.

Apply Change Research

Effective professional learning integrates research about individual, organization, technical, and adaptive change through supporting and sustaining implementation for long-term change. Those responsible for professional learning, whether leaders, facilitators, or participants, commit to long-term change by setting clear goals and maintaining high expectations for implementation with fidelity. Drawing from multiple bodies of research about change, leaders provide and align resources, including time, staff, materials, and technology, to initiate and sustain implementation. Individuals, peers, coaches, and leaders use tools and metrics to gather evidence to monitor and assess implementation. Leaders and coaches model salient practices and maintain a sustained focus on the goals and

strategies for achieving them. Leaders create and maintain a culture of support by encouraging stakeholders to use data to identify implementation challenges and engage them in identifying and recommending ongoing refinements to increase results. They engender community support for implementation by communicating incremental successes, reiterating goals, and honestly discussing the complexities of deep change.

Understanding how individuals and organizations respond to change and how various personal, cognitive, and work environment factors affect those experiencing change gives those leading, facilitating, or participating in professional learning the ability to differentiate support, tap educators' strengths and talents, and increase educator effectiveness and student learning.

Sustain Implementation

Professional learning produces changes in educator practice and student learning when it sustains implementation support over time. Episodic, periodic, or occasional professional learning has little effect on educator practice or student learning because it rarely includes ongoing support or opportunities for extended learning to support implementation. Formal professional learning, such as online, on-site, or hybrid workshops, conferences, or courses, is useful to develop or expand knowledge and skills, share emerging ideas, and network learners with one another. To bridge the knowing-doing gap and integrate new ideas into practice, however, educators need three to five years of ongoing implementation support that includes opportunities to deepen their understanding and address problems associated with practice.

Ongoing support for implementation of professional learning takes many forms and occurs at the implementation site. It may be formalized through ongoing workshops designed to deepen understanding and refine educator practice. It occurs through coaching, reflection, or reviewing results. It may occur individually, in pairs, or in collaborative learning teams when educators plan, implement, analyze, reflect, and evaluate the integration of their professional learning into their practice. It occurs within learning communities that meet to learn or refine instructional strategies;

plan lessons that integrate the new strategies; share experiences about implementing those lessons; analyze student work together to reflect on the results of use of the strategies; and assess their progress toward their defined goals. School- and system-based coaches provide extended learning opportunities, resources for implementation, demonstrations of the practices, and specific, personalized guidance. Peer support groups, study groups, peer observation, co-teaching, and co-planning are other examples of extended support. When educators work to resolve challenges related to integration of professional learning, they support and sustain implementation. Professional learning is a process of continuous improvement focused on achieving clearly defined student and educator learning goals rather than an event defined by a predetermined number of hours.

Provide Constructive Feedback

Constructive feedback accelerates implementation by providing formative assessment through the learning and implementation process. It provides specific information to assess practice in relationship to established expectations and to adjust practice so that it more closely aligns with those expectations. Feedback from peers, coaches, supervisors, external experts, students, self, and others offers information for educators to use as they refine practices. Reflection is another form of feedback in which a learner engages in providing constructive feedback on his or her own or others' practices.

Effective feedback is based on clearly defined expected behaviors, acknowledges progress toward expectations, and provides guidance for achieving full implementation. Giving and receiving feedback about successes and improvements require skillfulness in clear, nonjudgmental communication based on evidence, commitment to continuous improvement and shared goals, and trusting, respectful relationships between those giving and receiving feedback.

To add validity and reliability to the feedback process, educators develop and use common, clear expectations that define practice so that the feedback is focused, objective, relevant, valid, and purposeful. Educators consider and decide what evidence best demonstrates the expected practices and their results. Frequent feedback supports continuous improvement, whereas occasional feedback is often considered evaluative. Feedback about progress toward expected practices provides encouragement to sustain the desired changes over time. Tools that define expected behaviors facilitate data collection and open, honest feedback.

Related Resources

- **Bandura, A. (1986).** *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

- **Fullan, M. (2007).** *The new meaning of educational change* (4th ed.). New York: Teachers College Press.

- **Hall, G. & Hord, S. (2011).** *Implementing change: Patterns, principles, and potholes* (3rd ed.). Boston: Allyn & Bacon.

- **Huberman, M. & Miles, M.B. (1984).** *Innovation up close: How school improvement works.* New York: Plenum.

- **Supovitz, J.A. & Turner, H.M. (2000, November).** The effects of professional development on science teaching practices and classroom culture. *Journal of Research in Science Teaching, 37*(9), 963-980.