The Professional Teaching and Learning Cycle: Introduction

2nd Edition

The professional teaching and learning cycle (PTLC) is a professional development process in which teachers collaboratively plan and implement lessons aligned to their state standards. This process is an important part of the Working Systemically approach, designed by the Southwest Educational Development Laboratory (SEDL) to improve a school system's capacity to increase student achievement.

SEDL
4700 Mueller Blvd.
Austin, TX 78723
Phone 800-476-6861
FAX 512-476-2286
Web http://www.sedl.org/

 This publication was produced in whole or in part with funds for the Institute of Education Sciences, U.S. Department of Education, under contract number ED-01-C0-0009. The content herein does not necessarily reflect the views of the U.S. Department of Education or any other agency of the U.S. government, nor does it reflect the views of any other source.

Contents

What Is the Professional Teaching and Learning Cycle? 1

The Six Steps of the Professional Teaching and Learning Cycle 3

How to Begin 6

Leadership and Support 7

Culture 8

Summing Up 9

References 10

What Is the Professional Teaching and Learning Cycle?

The professional teaching and learning cycle (PTLC) is a professional development process in which teachers collaboratively plan and implement lessons aligned to their state standards. This process is an important part of the Working Systemically approach, designed by SEDL to improve a school system's capacity to increase student achievement. Working in partnership with the Charles A. Dana Center at the University of Texas at Austin, SEDL developed this job-embedded process that reflects the research on professional development and school improvement.

PTLC is a critical component of the Working Systemically approach that directly impacts classroom instruction and student learning. It is a vehicle for teacher collaboration and sharing, and the process improves alignment of curriculum, instruction, and assessment to the state standards.

PTLC is an ongoing, cyclic process that is designed to improve the

- quality of professional development (ongoing, job-embedded, results-driven);
- professional collaboration among staff;
- use of data to inform instructional and programmatic decisions;
- alignment of curriculum, instruction, and assessment to the state standards;
- quality and coherence of instruction across classrooms;
- monitoring of student learning; and
- leadership-support systems for continuous school improvement.

Typically, interventions aimed at improving student achievement target only individual components of school improvement and professional development. A school improvement initiative might focus on improving alignment of the curriculum or on the collection and use of data. These interventions tend to result in marginal gains in student achievement, but little evidence suggests that those gains persist beyond the time of the intervention. PTLC, on the other hand, is designed to work systemically. It addresses teacher quality and school improvement both collectively and holistically, thus increasing the likelihood that improvements will be sustained over time.

PTLC is not a simple process, nor is it a "quick fix" for school improvement. A substantial amount of commitment and work is necessary to develop the process into a meaningful instructional improvement strategy. Once established, it becomes a standard way for a district and schools to operate, providing job-embedded, ongoing professional development in a collaborative, trusting environment. Most schools and districts will need support from an external facilitator or technical assistance provider for the first few years to help develop PTLC and incorporate it into their educational system (Rust, 2001). Over time, however, the external facilitator can gradually shift responsibility for support to internal leaders, thus decreasing the school's dependence on external consultants for ongoing, sustainable improvement.

One of the key strengths of PTLC is its design as a job-embedded professional learning process that is ongoing and results driven. According to multiple correlation studies on teacher quality (Darling-Hammond, 2000; Darling-Hammond, Hightower, Husbands, LaFors, Young, & Christopher, 2003), higher levels of student achievement are associated with educators who participate in sustained professional development grounded in content-specific pedagogy. Continuous professional learning that improves teacher outcomes, in turn, impacts student outcomes. Studies indicate that when teachers improve their instructional practice, student achievement also improves (Fishman, Marx, Best, & Tal, 2003; Guskey, 2000; Kamil, 2003).

The design of professional development, therefore, is critical to school improvement. A longitudinal study conducted by the National Partnership for Excellence and Accountability in Teaching (1999) identified several characteristics that proved most effective in positively influencing teacher practice. Three of those identified characteristics that are strongly emphasized in PTLC are collective participation, active learning with opportunities for direct application, and coherence with school goals and state standards.

Convergent evidence (Fernandez, 2003; Joyce & Showers, 2002; Poglinco, Bach, Hovde, Rosenblum, Saunders, & Supovitz, 2003; Reeves, 2004; Seagall, 2004; Sparks & Hirsch, 2000; Wheelan, 2005) also suggests that professional development should

- provide opportunities for teachers to build their content and pedagogical knowledge and to examine practices;
- be research based and engage adults in the learning approaches they will use with their students;
- provide opportunities for teachers to collaborate with colleagues and other experts to improve their practices; and
- include a design—based on student learning data—that will be evaluated and improved continuously.

Substantial support from school leaders is required for implementing, supporting, and sustaining high-quality professional development (Cotton, 2003; NAESP, 2001). In addition, strong leadership is needed for fostering a culture of collaboration and problem solving (Marzano, Waters, & McNulty, 2005). Good leaders

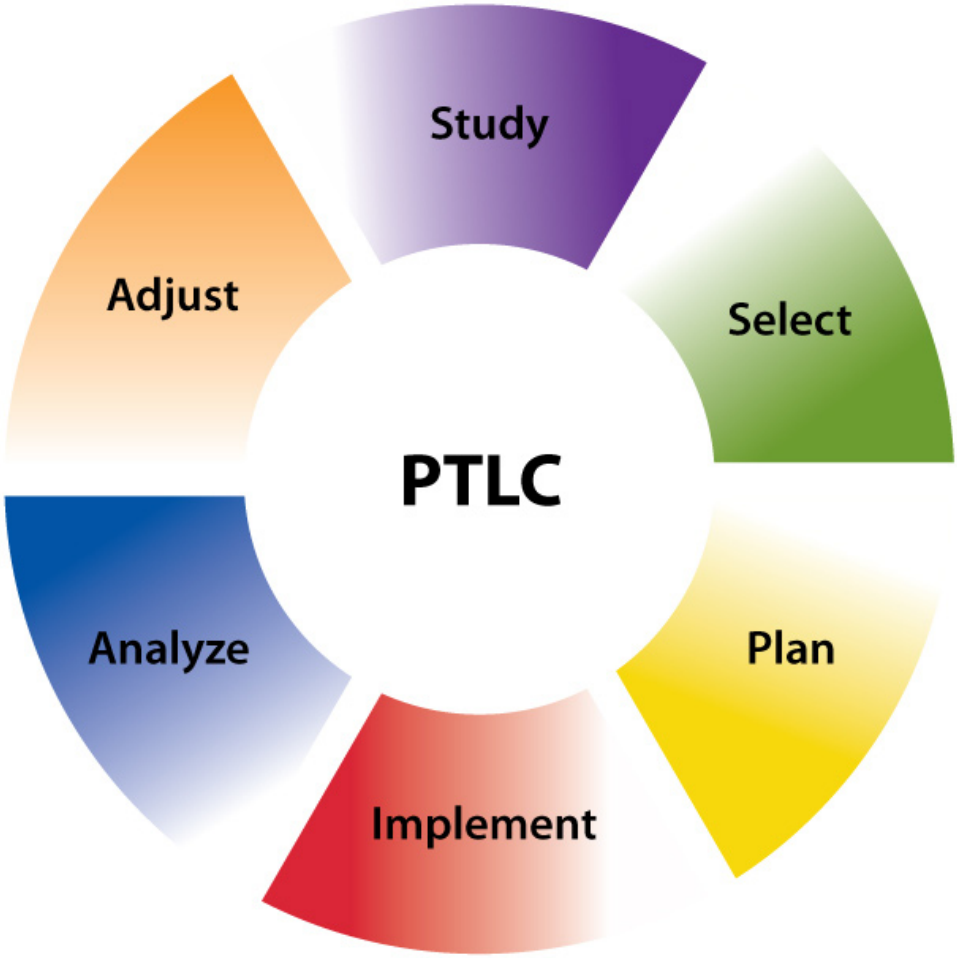
- set clear academic goals and monitor progress toward those goals (Cotton, 2003; Joyce & Showers, 2002; Marzano et al., 2005; NAESP, 2001; Reeves, 2004);
- link those goals to professional development (Joyce & Showers, 2002; Reeves, 2004); and
- monitor implementation of innovations and changes in the instructional program (Cotton, 2003; Marzano et al., 2005; NAESP, 2001).

Additionally, guidance and support from district and school leaders is critical for institutionalizing an effort of this scale and achieving the potential results such a process offers.

This publication, *The Professional Teaching and Learning Cycle: Introduction,* provides a detailed overview of the process and outlines the objectives for each of the six steps and the overall cycle. It also addresses the importance of leadership roles and the culture and conditions necessary to support PTLC. The information presented herein provides the grounding needed in order to understand and explain PTLC to teachers and leaders as they work through this process.

THE SIX STEPS OF THE PROFESSIONAL TEACHING AND LEARNING CYCLE

PTLC comprises six steps—**study, select, plan, implement, analyze,** and **adjust.** On the following pages is a description of and the goals for each step. Prior to beginning the cycle, teachers will have analyzed student achievement data to identify a specific standard or standards on which many students are not proficient.



Step 1: Study

Teachers work in collaborative planning teams (grade-level, vertical, or departmental) to examine critically and discuss the learning expectations from the selected state standards. Teachers working collaboratively develop a common understanding of

- the concepts and skills students need to know and be able to do to meet the expectations in the standards,
- how the standards for a grade or course are assessed on state and local tests, and
- how the standards fit within a scope and sequence of the district curriculum.

Step 2: Select

Collaborative planning teams research and select instructional strategies and resources for enhancing learning as described in the standards. Teachers working collaboratively

- identify effective research-based strategies and appropriate resources that will be used to support learning in the selected state standards and
- agree on appropriate assessment techniques that will be used to provide evidence of student learning.

Step 3: Plan

Planning teams, working together, formally develop a common lesson incorporating the selected strategies and agree on the type of student work each teacher will use later (in Step V: Analyze) as evidence of student learning. Teachers working collaboratively

- develop a common formal plan outlining the lesson objectives (relevant to the standards), the materials to be used, the procedures, the time frame for the lesson, and the activities in which students will be engaged and
- decide what evidence of student learning will be collected during the implementation.

Step 4: Implement

Teachers carry out the planned lesson, make note of implementation successes and challenges, and gather the agreed-upon evidence of student learning. Teachers working collaboratively

- deliver the lesson as planned within the specified time period;
- record results, especially noting where students struggled and/or where instruction did not achieve expected outcomes; and
- collect the agreed-upon evidence of student learning to take back to the collaborative planning team.

Step 5: Analyze

Teachers gather again in collaborative teams to examine student work and discuss student understanding of the standards. Teachers working collaboratively

- revisit and familiarize themselves with the standards before analyzing student work;
- analyze a sampling of student work for evidence of student learning;
- discuss whether students have met the expectations outlined in the standards and make inferences about the strengths, weaknesses, and implications of instruction; and
- identify what students know and what skills or knowledge needs to be strengthened in future lessons.

Step 6: Adjust

Collaborative teams reflect on the implications of the analysis of student work. Teachers discuss alternative instructional strategies or modifications to the original instructional strategy that may be better suited to promoting student learning. Teachers working collaboratively

- reflect on their common or disparate teaching experiences;
- consider and identify alternative instructional strategies for future instruction;
- refine and improve the lesson; and
- determine when the instructional modifications will take place, what can be built into subsequent lessons, and what needs an additional targeted lesson.

Five of these six steps are played out during two separate collaborative meetings. Groups ideally composed of two to five teachers gather to study the standards, select an effective strategy to address those standards, and plan an effective lesson using that strategy. The time required for this meeting typically takes 2 to 3 hours initially. At this point, it is important for leaders to ensure that teachers have enough content knowledge about the selected standard to carry out the next steps in the process. If they do not have a clear understanding of the standard or the content, additional professional development should be planned to increase teachers' content knowledge.

Once the teachers have selected instructional strategies and an assessment approach and have planned their lesson(s), they return to their classrooms to implement the lesson(s). This step provides an ideal opportunity for leaders to observe instruction. This communicates a message that leaders support the initiative and that the work is a priority. Peer observations can also be scheduled at this time, providing more intensive professional development, especially for new or inexperienced teachers. The participating teachers reconvene later in a second collaborative meeting to analyze student work that was generated during the lesson and to adjust their plans for future instruction, as needed, to support student achievement.

During the first year of implementation, it is recommended that collaborative teams complete at least six complete cycles of PTLC to become thoroughly familiar with the process. The first few cycles take more time because teachers are becoming versed in the process and learning their roles in each of the steps. As

teams become more familiar with PTLC, they may be able to complete the last two steps of one cycle and the first three steps of the next cycle in one meeting. Two to three hours per meeting is recommended for the first year or two of implementing PTLC.

HOW TO BEGIN

Four key roles need to be filled in order to implement PTLC successfully. The first is that of an external facilitator who can guide teachers and leaders as they become familiar with the process. The facilitator helps ensure that everyone understands the work and that the implementation of PTLC is aligned to the overall academic needs of the students.

The second—and most important—role is that of grade-level or content-area teams of teachers who work collaboratively to carry out this process. Another role in this process is that of content specialist, filled by an individual with content expertise who provides guidance as teachers design research-based lessons that are aligned to the state standards. The content specialist may be the department head, an instructional coach, or a district staff member with the necessary content knowledge. The final role is for school and district leaders who monitor PTLC implementation and ensure that teachers have the support and encouragement necessary to make the process successful.

An important function for all of these roles is to help build relationships and establish norms of talking to one another about issues critical to student achievement. If the school culture is not conducive to collaboration, it is unlikely that PTLC will be successful. Time and effort need to be allocated to build this capacity in order to function productively as a group.

To initiate the cycle, a team should be assembled, with representatives from both the campus and the district. This group will examine various sources of data and identify a priority content area (e.g., reading or mathematics). Ideally, this should occur as part of the implementation of the Working Systemically approach, a larger systemic improvement effort. Regardless, the selection of a content area needs to be data driven and should reflect the consensus of the committee. Questions that help inform this decision include the following:

- Do assessment data show areas of achievement that are lagging or disparate?
- Do teachers of certain grade levels need more support and professional learning opportunities?
- Are there shifts in student demographics that need to be addressed?

Next, within the larger content area, a more precise target should be identified (e.g., vocabulary or fluency in reading; algebra or measurement in mathematics). By focusing on a narrower learning objective, teachers can more efficiently collaborate to address a specific instructional goal and monitor the subsequent gains in student achievement. Teachers decide on a learning objective by analyzing data, examining the standards and learning expectations, and consulting with a content specialist in the selected content area.

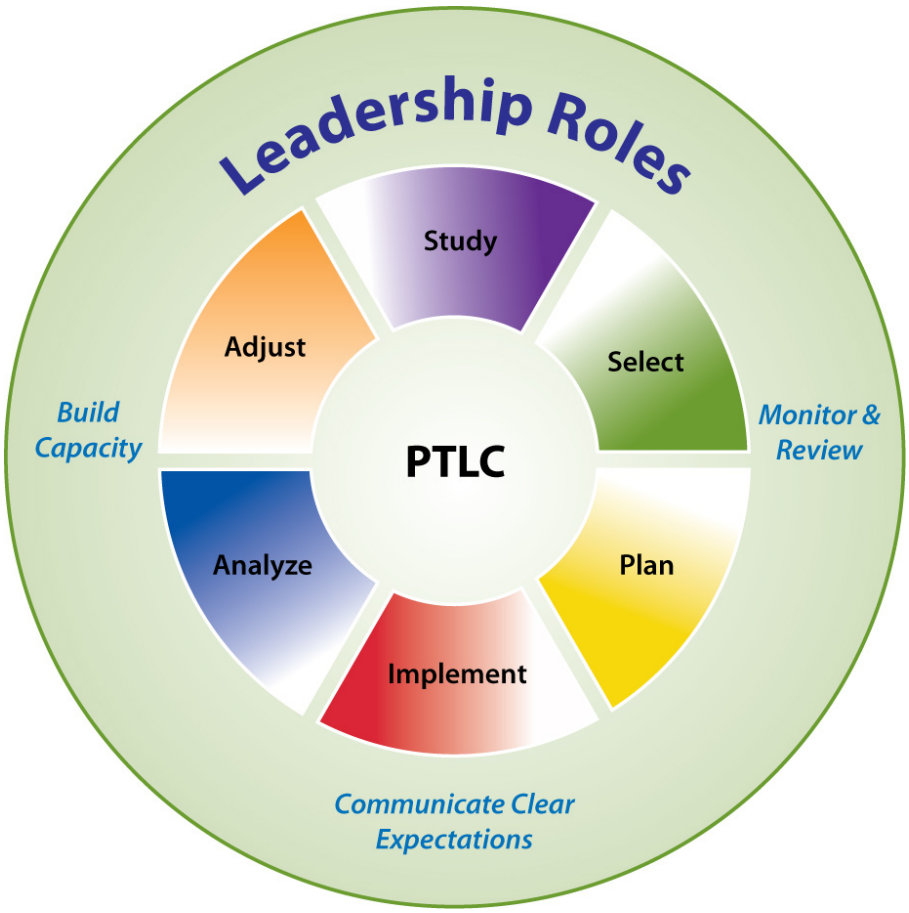
It is important to consider whether the selected learning objective is one that is a part of instruction across some or all curriculum strands (e.g., vocabulary) or is unique to a particular grade-level or range (e.g., phoneme awareness). However, this process is cyclic, and the learning objective selected at this point only sets the cycle into motion. Other specific learning objectives will be addressed in the future as PTLC unfolds and becomes a part of the ongoing work of the system.

LEADERSHIP AND SUPPORT

Organizing and facilitating collaborative meetings and providing appropriate support to the teachers throughout this process require a great deal of time, energy, and expertise. Individuals serving in two different roles usually provide the leadership required to support this effort: leaders at the school and district levels and content specialists.

It is the responsibility of school and district leaders to provide clear, ongoing support for PTLC by

- communicating clear expectations that all staff will participate,
- building the capacity of staff members who need support, and
- monitoring the implementation and impact of the process.



In implementing PTLC, facilitators have found that without express commitment from the school and district leaders, this process cannot have a significant impact on student achievement. Leaders at all levels convey support for this work by eliminating organizational barriers that might undermine the process. Key actions leaders take in providing support for this process include the following:

- Modifying teachers' instructional schedules to allow common time for collaboration and planning
- Releasing staff members from certain duties or responsibilities, as necessary, to ensure that their full attention and energy are devoted to instructional issues
- Ensuring necessary funds for the purchase of materials and resources to support instruction or professional development
- Providing full and consistent support that demonstrates a commitment to the work in both words and actions

An instructional content specialist has an important responsibility to build the capacity and expertise of teachers in the target content area. A person (or persons) needs to be designated formally to help teachers throughout each step of PTLC. The person(s) enlisted for this role could be a literacy or mathematics coach, a departmental chair, or a curriculum specialist at the district level.

As noted previously, teachers may lack the requisite content knowledge to plan effective lessons aligned to state standards. The content specialist is critical to building this content knowledge. This individual needs to have the time, expertise, and credibility among the staff as an instructional leader to help guide teams of teachers as they implement this process. The content specialist coordinates team efforts with the school leaders as he or she helps teachers and supports improvements in instruction. This assistance should be viewed as necessary support to help build the capacity of teachers. Teachers should be assured that they are not being "evaluated" by the content specialist. If an administrator serves in this role, care must be taken so that teachers feel supported, not pressured.

It may be helpful for an external facilitator to serve as an additional support for teachers and leaders as they adopt and integrate PTLC into their system. During the first few years of implementation, teachers usually need considerable support from an external facilitator—one who not only guides teachers during this process, but also provides support and guidance for leaders as they implement and monitor this process.

CULTURE

The culture of the school and district in which PTLC is being implemented is crucial.

"Improving school requires the creation of collaborative cultures. Without the collaborative skills and relationships, it is not possible to learn and to continue to learn as much as you need to know to improve." (Fullan & Hargreaves, 1991)

Throughout the PTLC process, relationships between teachers and leaders, and among teachers themselves, are established and strengthened. Leaders work to build an environment of trust and a structure conducive to collaboration, where each participant has a voice and a sense of mutual responsibility and accountability.

The frequent monitoring and appraisal of this environment throughout the work will help to ensure that, once created, the collaborative culture endures.

SUMMING UP

PTLC is a six-step cyclic process that promotes school improvement by cultivating professional growth and collaboration among teachers. The process not only serves as an on-going, job-embedded approach to professional development, it effectively aligns curriculum, instruction, and assessments to state standards, ultimately increasing student achievement. In order to be effective, PTLC must be is supported by three specific leadership roles that are critical in advancing and sustaining improvement. A systemwide culture of collaboration and support is also crucial to successful integration of the process so that it becomes a standard procedure within the educational system.

REFERENCES

Cotton, K. (2003). *Principals and student achievement: What the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.

Darling-Hammond, L. (2000, January 1). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8*(1).

Darling-Hammond, L., Hightower, A.M., Husbands, J.L., LaFors, J.R., Young, V.M., & Christopher, C. (2003). *Building instructional quality: "Inside-out" and "outside-in" perspectives on San Diego's school reform* (Document R-03-3). Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Fernandez, C., Cannon, J., Chockshi, S. (2003). A US-Japan lesson study collaboration reveals critical lenses for examining practice. *Teaching and Teacher Education, 19*(2), 171–185.

Fishman, B.J., Marx, R.W., Best, S., & Tal, R.T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education, 19*(6), 643–658.

Fullan, M. & Hargreaves, A. (1991). *What's worth fighting for in your school?* Toronto: Ontario Public School Teachers' Federation.

Garmston, R., & Wellman, B. (1999). *The adaptive school: A sourcebook for developing collaborative groups.* Norwood, MA: Christopher-Gordon Publishers, Inc.

Guskey, T.R. (2000). *Evaluating professional development.* Thousand Oaks, CA: Corwin Press.

Holcomb, E.L. (1999). *Getting excited about data: How to combine people, passion, and proof.* Thousand Oaks, CA: Corwin Press.

Joyce, B., & Showers, B. (2002). Designing training and peer coaching: Our needs for learning. In B. Joyce & B. Showers, *Student achievement through staff development* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Kamil, M.L. (2003). *Adolescents and literacy: Reading for the 21st century.* Washington, DC: Alliance for Excellent Education. Retrieved March 30, 2005, from http://www.all4ed.org.

Lortie, D. (1975). *Schoolteacher: A sociological study.* Chicago: University of Chicago Press.

Marzano, R.J., Waters, T., & McNulty, B.A. (2005). *School leadership that works: From research to results.* Alexandria, VA: Association for Supervision and Curriculum Development.

National Association of Elementary School Principals. (2001). *Leading learning communities: Standards for what principals should know and be able to do.* Alexandria, VA: Author.

National Partnership for Excellence and Accountability in Teaching. (1999). *Characteristics of effective professional development.* Washington, DC: Author.

Poglinco, S.M., Bach, A.J., Hovde, K., Rosenblum, S., Saunders, M., & Supovitz, J.A. (2003). *The heart of the matter: The coaching model in America's Choice schools.* Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education.

Reeves, D.B. (2004). *Accountability for learning: How teachers and school leaders can take charge.* Alexandria, VA: Association for Supervision and Curriculum Development.

Rust, F.O., & Freidus, H. (Eds.). (2001). *Guiding school change: The role and work of change agents.* New York: Teachers College Press.

Segall, A. (2004). Revisiting pedagogical content knowledge: The pedagogy of content/the content of pedagogy. *Teaching and Teacher Education, 20*(5), 489–504.

Sparks, D., & Hirsh, S. (2000). Strengthening professional development. *Education Week, 19*(37), 42, 45.

Wheelan, S.A. (2005). *Faculty groups.* Thousand Oaks, CA: Corwin Press.