

Research on Teaching and Learning

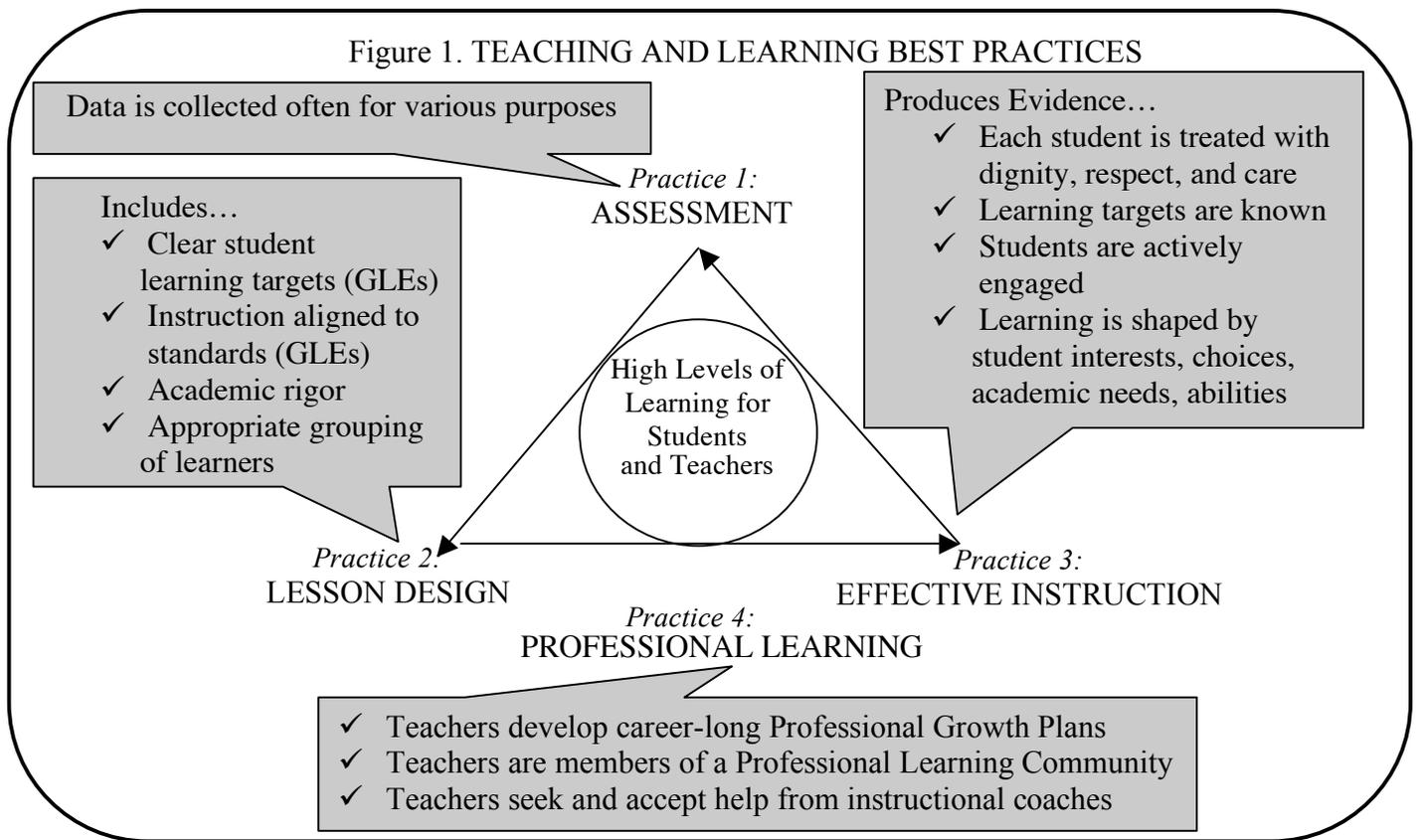
Educational research consistently recommends a few basic practices for improving instruction and student learning. In the fall of 2007, Washougal School District leveraged one of those best practices, time for teachers to work together using Richard DuFour’s Professional Learning Community (PLC) model, as the foundation for improving instruction and achievement.

Professional Learning Community collaboration harnesses the best thinking of a team teachers into a unified, powerful effort to raise the achievement of a collective group of students. The success of the PLC effort depends less on the model and more on the commitment of teachers working together with a focus on student learning.

The *Teaching and Learning Best Practices* diagram (Figure 1) captures the four key research recommendations for improving teaching and learning, which includes the Professional Learning Community model. The four key recommended practices that positively impact student learning, as well as the learning of teachers through career-long professional growth include:

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| Practice 1: Assessment | Practice 2: Lesson Design |
| Practice 3: Effective Instruction | Practice 4: Professional Learning |

The diagram of *Teaching and Learning Best Practices* is followed by a summary of the research.



PRACTICE 1: ASSESSMENT

The brief overview of assessment summarized below is derived from the research and writings of Dr. Richard J. Stiggins including an article in the *Kappan Professional Journal (Phi Delta Kappan, June 6, 2002)* and *Student Centered Assessment (Prentice Hall, 1997)*; Mike Schmoker, *Results Now (Association for Supervision and Curriculum Development, 2006)*; Jon Saphier and Robert Gower, *The Skillful Teacher (Research for Better Teaching, 1997)*; and Carol Ann Tomlinson and Jay McTighe, *Differentiating Instruction (Association for Supervision and Curriculum Development, 2006)*.

Assessment in the context of the *Teaching and Learning Best Practices* diagram refers specifically to classroom based assessments, although standardized assessment data may be used occasionally in the process. Purposeful classroom assessment is used frequently to adjust or improve instruction, to provide feedback to students on learning progress, or to regroup learners with similar instructional needs and learning targets. Frequent assessment of learning rewards the teacher and students with evidence that laser-like instruction is paying off.

Weekly classroom assessments may be formal or informal, and the data may be collected either by the teacher or by the student for checking student progress toward a learning target. The teacher uses the assessment data to determine the next learning target, or the next lesson, or the next increment of instruction for a student or group of students. Data collected by the student can be used to track personal progress toward a learning target, or to set or revise personal learning goals, or to revise a product such as a piece of writing, a project, or a performance. These types of classroom assessments can be assessments *of* learning or assessments *for* learning. Both types of assessment, *of* and *for*, have a valuable place in the teaching and learning cycle.

Assessments For Learning

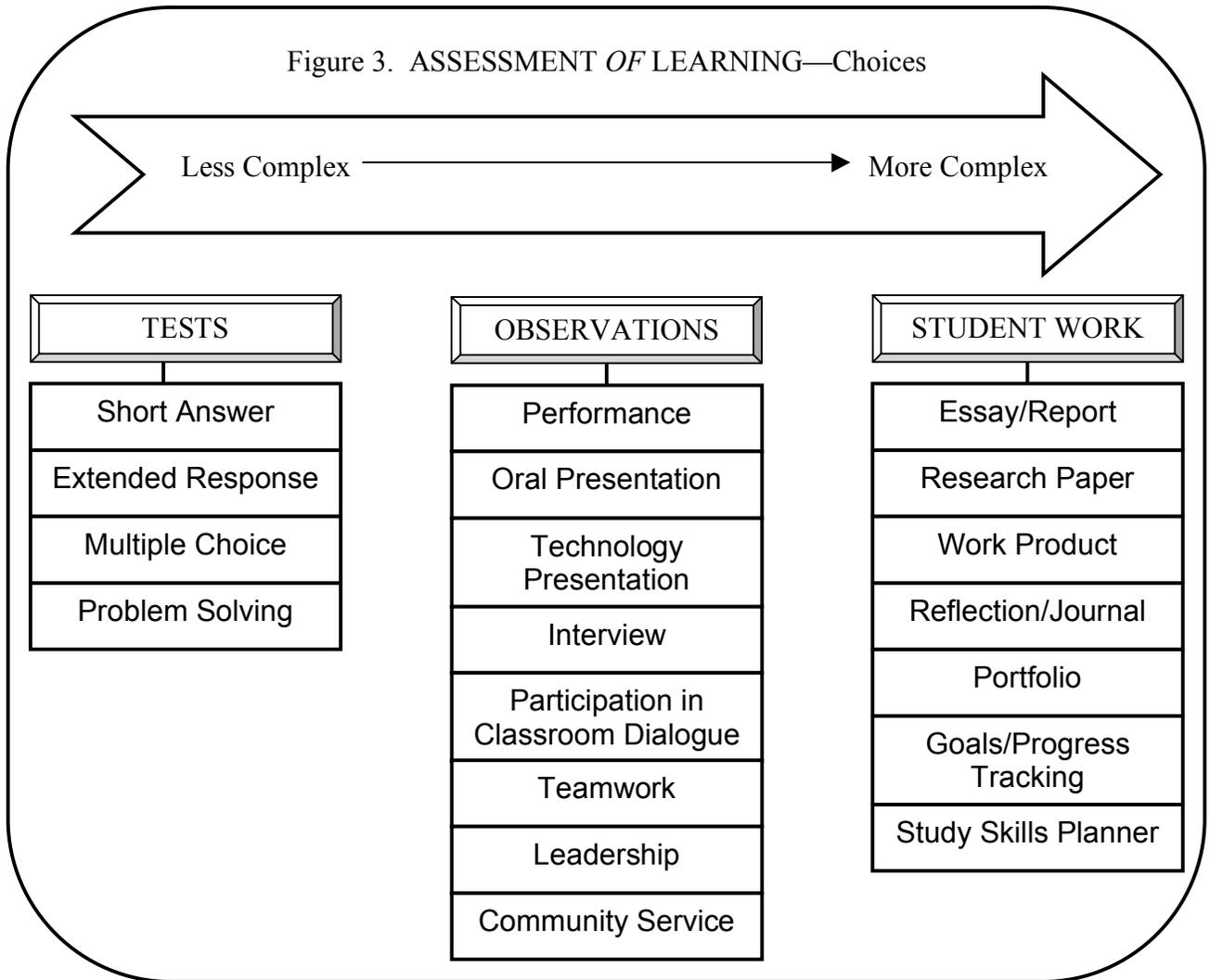
Assessments may be used to advance student learning, not merely to check the progress of student learning. The steps in this strategy are outlined in Figure 2.

Figure 2. ASSESSMENT *FOR* LEARNING—Teacher Guide

Understand and articulate the learning targets in language that will be understood by students
Inform students of these targets in advance, at the beginning of the teaching and learning process
Develop assessment exercises and scoring procedures that accurately reflect the desired evidence that student have achieved the learning target
Collect over time examples of excellent student products and performances and share examples with students as a means of establishing expectations for quality work
Engage students in self-assessment, reflection, and personal tracking of progress toward the target
Provide multiple opportunities during the assessment exercise for students to receive feedback and improve their performance or product; adjust instruction based on students needs
Actively involve students in communicating with the teacher and with their families their ongoing achievement status, improvement progress, and next learning steps

Assessments Of Learning

In *The Skillful Teacher*, Jon Saphier predicts that teachers of the future will select and design assessments that are aimed squarely at the learning target to be measured. Assessments to check the progress of student learning have been described by Saphier and others as shown in Figure 3. The emphasis is on teacher selection of an assessment strategy that best measures the desired evidence of student learning.



Assessments Prior To Teaching

In *Differentiating Instruction*, Carol Ann Tomlinson and Jay McTighe write that diagnostic assessments prior to instruction are as important as a medical examination prior to a prescribed medical intervention. At the beginning of a unit of study, some students already may have mastered the content expectations and some students may be deficient in requisite skills for mastering the expectations. They quote Hilda Taba, ‘Teaching in the dark is a questionable practice’ (p.72), for emphasis on the importance of gathering data on students and their starting points before beginning a major unit of instruction.

Pre-assessments can be used to form instructional groups, to assign appropriate learning tasks, and to locate the right materials. Teachers may also want students to record pre-assessment data in a journal for tracking personal progress toward the learning targets during the unit of study.

PRACTICE 2: LESSON DESIGN

Teachers know the value of designing effective lessons. In 2006-07, all Washougal District teachers will be involved in professional development using the *Washington State Professional Development Planning Guide* (Office of Superintendent of Public Instruction, 2006.) The professional development effort will be narrowly focused on criteria noted in Figure 4.

Figure 4. CRITERIA FOR EFFECTIVE LESSON STRUCTURE—Students will ...

- Know the learning targets; requirements for reaching the targets; a progression of learning steps.
- Understand and be able to articulate the personal benefit of the learning.
- Know how to access additional support or resources to help them reach the targets.
- Actively engage in complex, rigorous, and developmentally appropriate learning activities.

To keep things simple, the lesson planning strategy described below aligns with the district-wide professional development focus in 2006-07, “Student Learning Is Structured for Understanding,” based on the *Washington State Professional Development Planning Guide*. Steps for designing an effective lesson are outlined in Figure 5.

Figure 5. Steps for Designing Effective Lessons

Lesson Design Steps	Criteria for Observing Impact on Student Learning
<u>STEP 1:</u> Select the appropriate learning target(s); determine how the new learning is linked to prior knowledge	Prior student assessment data has been used to select the appropriate learning target(s)
<u>STEP 2:</u> Design instructional strategies for teaching students the learning target(s), requirements for meeting the target(s); progression of learning	Students describe the learning target(s) and the requirements for achieving the target(s); each student articulates a progression of learning and his/her status
<u>STEP 3:</u> Design instructional strategies for helping students understand why the learning is important	Students articulate why the learning is personally important
<u>STEP 4:</u> Design instructional strategies for teaching students how to access additional support and resources	Students are aware of the support options that are available and can be observed accessing the resources they need to meet the target(s)
<u>STEP 5:</u> Differentiate instruction so that all students engage in active, rigorous, complex learning shaped by their own interests, choices, academic needs, and developmental abilities	Students dive into their work, forget what time it is, resist interruption, voluntarily work on the project at home; they are excited to share what they are doing and proud of their accomplishments
<u>STEP 6:</u> Design instruction around developmentally appropriate, rigorous content; develop questions, pose dilemmas, promote inquiry during instruction to challenge student thinking and communication skills	Students read rigorous, appropriate texts, engage in high level thinking, routinely discuss problems; they respond to open-ended questions related to specific content, think creatively, and express opinions and ideas
<u>STEP 7:</u> Design assessment(s) to measure student progress	Students use assessment data to improve learning

PRACTICE 3: Effective Instruction

The highlights of research on effective instruction are too numerous for summary. The few strategies briefly mentioned below are intended to prompt further study by teams of teachers into the possibilities for improving instruction. The culture of Washougal School District is destined to be rich in the study of best instructional practices and dialogue among teaching professionals.

The Gordon Principle: Teachers Like Kids and Kids Like Teachers

In *The Skillful Teacher*, Jon Saphier presents the research of Thomas Gordon in which positive relationships between students and teachers had a profound impact on student learning. Gordon's work focused on improving communication between students and teachers for the purpose of eliminating conflicts and increasing trust. Students are more likely to engage and be cooperative with the teachers that they feel like them and listen to them. All students benefit from a positive relationship with their teachers. However, according to Gordon, the student who stands to gain most from a positive relationship with teachers is the student who appears resentful, is sitting out time in school like a prison term, is sometimes rebellious, and who usually has a cumulative history of increasing hostility that is manifest toward all teachers. These students respond well to a teacher who proves to be kind, understanding, willing to listen and attends to the student personally. The investment of time in building relationships with all students, even the most reluctant students, has significant benefits for the teacher, the student, and the classroom environment as a whole.

Rigorous, Complex Learning

In *Teaching What Matters Most* (Association for Supervision and Curriculum Development, 2001), authors Richard Strong, Harvey Silver, and Matthew Perini show examples of academic rigor and conclude that lack of rigorous, engaging instruction is a key factor in schools struggling to raise student achievement. A definition of academic rigor is summarized in Figure 6.

Figure 6. ACADEMIC RIGOR DEFINED

Students have the opportunity to read, gather information, formulate ideas and opinions, solve problems, discuss with others, reflect, and communicate using developmentally appropriate content that is complex and made up of intricate, interrelated ideas.

R. Strong, *Teaching What Matters Most*, p. 5-12.

Teachers Leading Students

High levels of student engagement are correlated to high levels of student learning. Phillip Schlecty, author of *Working on the Work* (Jossey Bass, 2002), proposes that great teachers are great leaders. The leadership job of the effective teacher is to convince students to volunteer their time and focus their attention on learning tasks that otherwise may have no interest to them whatsoever. The underlying premise is that students work best on what interests them most. The secret of great teaching is to design lessons that allow students to tap into their own deepest interests, to capitalize on naturally occurring motivation to learn, and tie interest to the required content. Teachers are encouraged to develop choices and options that increase individual student or small group engagement in ways that monumentally increase student ownership, investment, and productivity. When given the opportunity to delve deeply into a slice of the content that holds particular interest for them, students will most often raise their own level of academic rigor and productivity. This form of differentiated instruction is most successful when coupled with teacher accessibility, monitoring, and on-time instruction tailored for emerging learning needs.

Practice 4: Professional Learning

The research on professional learning focuses on the need for both individual professional growth based on personal reflection and goal setting, and professional learning in the context of working with a team of other teachers who teach the same content.

With respect to individual professional learning, Washougal School District teachers will write personal professional growth plans as part of the annual evaluation process. Teachers have access to negotiated professional development funds that when approved by the principal may be used to obtain training or courses aligned with the professional growth plan.

Professional learning in the context of teamwork will be centered on Professional Learning Community research and the work of Rick DuFour, Becky DuFour, and Bob Eakers, specifically books entitled *Professional Learning Communities at Work* (National Education Service, 1998), *Getting Started* (National Education Service, 2002), and *Whatever it Takes* (National Education Service, 2004).

Characteristics of Professional Learning Communities

1. Shared Vision and Values

What separates a learning community from other schools is the collective commitment by the staff to a few principles that articulate what everyone believes the school can and will do on behalf of increasing student achievement

2. Collective Inquiry, Action, and Experimentation

Teachers plan together, develop shared insights, carry out an action plan collectively, review results, and rework the plan based on results

3. Collaborative Teams

Building a school's capacity to increase student learning is collaborative, not individual. People engaged in collaborative team learning learn from one another, thus creating a momentum that fuels continued improvement. Team learning is not the same as team building. Team building focuses on courteous protocols, creating stronger relationships, and enhancing the group's ability to perform routine tasks. While those skills are good for the team, the real power of collaborative teams is designing common lesson objectives and assessments that all teachers in the team agree to use to find out which students learned and which did not learn the objectives. The team gravitates to the instruction that produced the greatest results, replicates the most successful practices in all classrooms, and figures out what to do with the students who did not meet the targets.

4. Continuous Improvement

Commitment to continuous improvement is evident in a school environment in which instructional innovation and experimentation are viewed not as one-time tasks, but rather as the way teachers approach their work every day, *forever*. A professional learning community is less like "getting in shape" than "staying in shape." Not a fad diet, but an ongoing commitment to teaching in a way that continuously improves instruction for life.

5. Results Oriented

Finally, a professional learning community realizes that the only proof of the team's efforts to improve can be found in the results, the evidence that more students are making gains in achievement based on data that is recognized as substantive and defensible.