

Core Proposition #4:

Teachers think systematically about their practice and learn from experience.

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Summary: As with most professions, teaching requires practitioners to remain open, eager for, and dedicated to the pursuit of continuous growth. Because they work in a field marked by evolving questions and an expanding body of research, teachers possess a professional obligation to become perpetual students of their craft. Accomplished educators seek to expand their repertoires, deepen their knowledge and skills, and become wiser in rendering judgments. They remain inventive in their teaching, recognizing the need to welcome new findings and extend their learning as professionals. Accomplished teachers are ready to incorporate ideas and methods developed by other educators to support their instructional goals—namely, the advancement of student learning and the improvement of their practice. What exemplifies excellence, then, is a reverence for the craft, a recognition of its complexities, and a commitment to lifelong learning and reflection. (*What teachers should know and be able to do.* p. 31)

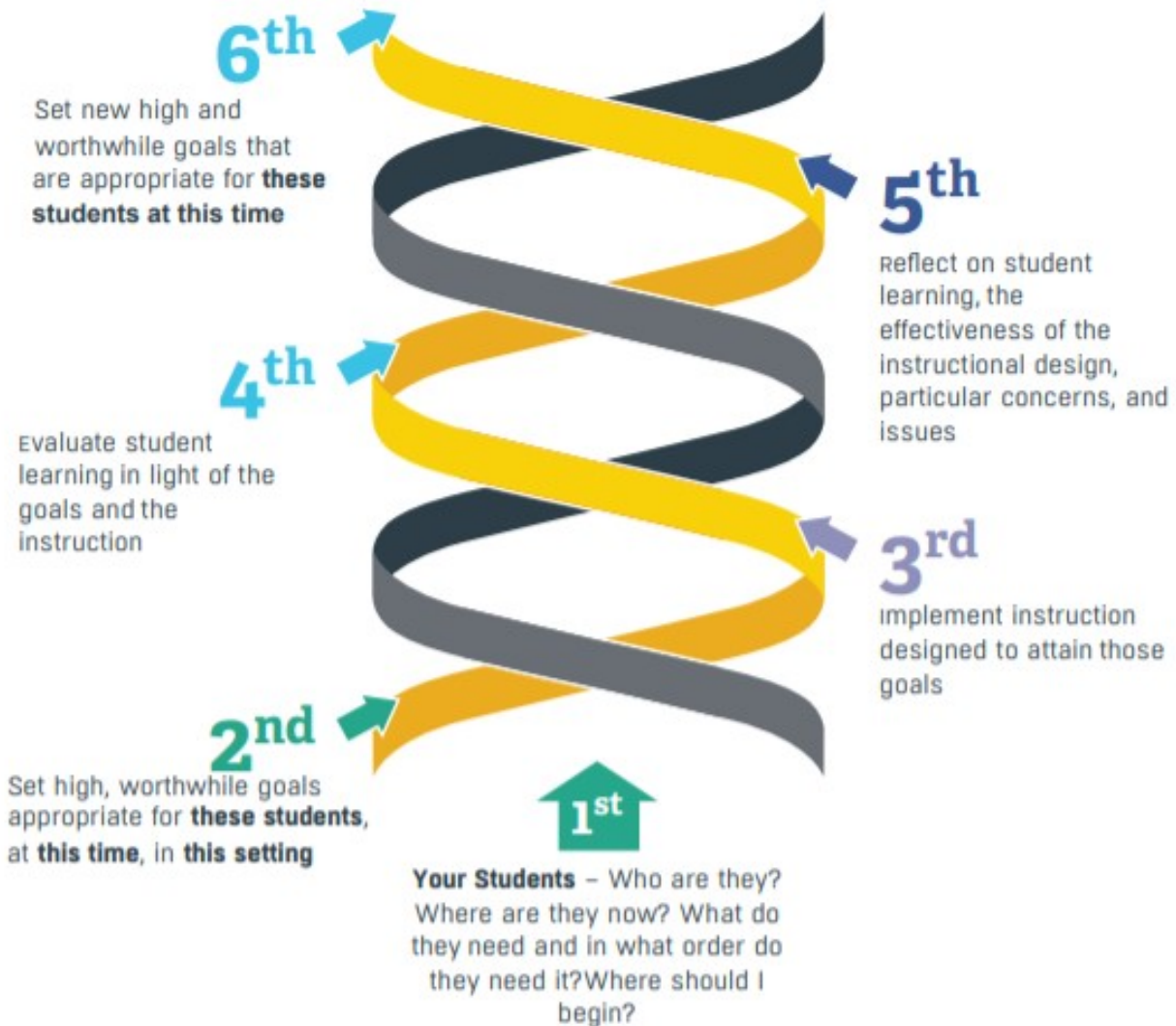
Teachers think systematically about their practice and learn from experience.

(The Five Core Propositions together are the basis for what accomplished teachers should know and be able to do in order to improve student learning.)

- ◇ Teachers who implement the Five Core Propositions within the Architecture of Accomplished Teaching and using subject specific standards will positively increase student learning.
- ◇ Students change; student learning styles changes; in certain courses, content changes; events during a day change student learning potential. “The only constant in life is change” according to the ancient Greek Heraclitus.
- ◇ Accomplished teachers are academically curious and possess the grit and resilience to reflect and to change in response to evidence presented to them and based on their experience.
- ◇ Teachers use research, collaboration, and professional development to improve their practices.
- ◇ The systematic practice of reflection and focus on student learning as a part of continuous improvement is a key element of what good teachers do on a daily, weekly, and yearly basis.
- ◇ Experience with reflection of student learning will become second nature, automatic, and constant. Teachers become lifelong learners who inherently know to reflect on and evaluate their practice.

Architecture of Accomplished Teaching

The Architecture of Accomplished Teaching: What is underneath the surface?



The Five Core Propositions

- PROPOSITION 1** (green arrow): Teachers are committed to students and their learning
- PROPOSITION 2** (purple arrow): Teachers know the subjects they teach and how to teach those subjects to students
- PROPOSITION 3** (blue arrow): Teachers are responsible for managing and monitoring student learning
- PROPOSITION 4** (dark blue arrow): Teachers think systematically about their practice and learn from experience
- PROPOSITION 5** (red arrow): Teachers are members of learning communities

Core Proposition #4 and the AAT

The Architecture of Accomplished Teaching is a complex, reiterative process that depends on paced and multistep process. Teachers:

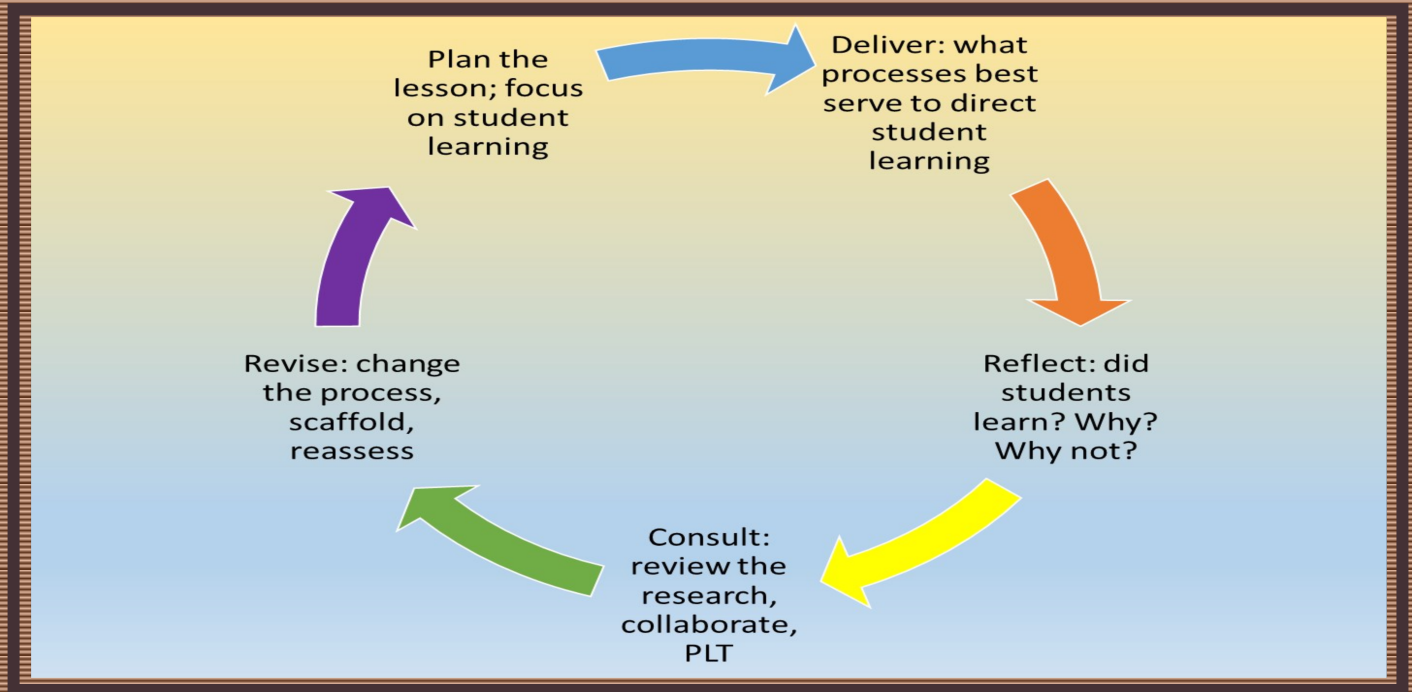
- Focus on students and their learning
- Hold to rigorous and relevant goals
- Establish and measure goal based outcomes
- Use professionally accepted standards and practices
- Look back and assess their practices on a regular basis.
- Build and internalize continuous improvement.

Accomplished Teachers:

1. **Know your students** - Teachers know their students well enough to match classroom pedagogy to the students' strengths, interests and personal situations. From education, practice and experience, teachers learn how best to create learning environments that engage students and move their learning forward.
2. **Set high goals according to subject specific standards** - Teachers will set goals that reflect the academic ability of the students in the classroom. An accomplished teacher will set a goal that students believe they can reach; the teacher will set a high, scaffolded goal that students can reach.
3. **Implement goals, according to goals and the subject specific standards:** Accomplished teachers reflect during and after each activity to make adjustments, as needed, to move the students forward in their learning. Accomplished teachers focus on the goal of student learning: how to use specific activities to implement specific learning goals, adapting as needed during the lesson.
4. **Evaluate student learning in light of goals and the subject specific standards:** Expert teachers reflect and evaluate continuously. They use formative assessments to gather evidence of successful student learning. Accomplished teachers reflect on the extent of student learning and from experience, research, and collaboration.
5. **Reflect on student learning and effectiveness of instruction from the subject specific standards:** Master teachers regularly and frequently use research based assessments (formative and summative) to determine what the students learned. Accomplished teachers inherently know to reflect on and evaluate their practice.
6. **Set new, high, worthwhile goals based on subject specific standards:** Based on the results of student learning and effectiveness of instruction, accomplished educators will decide on new, more challenging goals. The new, attainable goals stretch the students; proper instructional support advances student learning.

1. Scenario: - guided notes

The teacher decides to provide strong scaffolding with the use of guided notes. The teacher prepares the guided notes to correlate with a PowerPoint lecture. Students are given the guided notes and the teacher presents the lecture while the students fill in the guided notes.



For example:

Ms. Osblan is excited to discuss the types of plants, those with seeds and those without. She has prepared a great set of guided notes (with pertinent illustrations that can be colored) that students will complete as she lectures on types of plants, their distinct distinguishing characteristics and commonalities. The Exit Ticket will ask the students to compare and contrast two types of plants. As she reviews the tickets she realizes that students have simply listed characteristics of one type of plant with no compare and contrast. What did she do wrong, she worries?

The NBPTS process

Reflection - The teacher evaluation of the lesson is structured and focused on student learning. An accomplished teacher is always thinking and evaluating the outcomes of the strategies, thinking about what happened before and during and after a lesson, asking:

- What did students learn?
- Why? Why not?
- What could go better?

In the lesson presented, Ms. Osblan reflects and realizes that she needed to add additional scaffolding. She knows that they recognize the material, but (referencing Bloom's Taxonomy) that they cannot actually apply, analyze, and synthesize the knowledge. She decided that she would add a think-pair-share of the results. Then she would assign students to write their conclusions comparing types of plants on large format display papers. The students will hang the paper in the room. Each group of students will gallery walk, adding information to the papers hanging in the room, as needed. Finally, Ms. Osblan will lead a class discussion about the basic types of plants, examples, and analysis of why each is classified the way it is.

2. Scenario: - technology

The teacher plans a lesson using computers. Students log on and complete the assignment.

The teacher gives a formative assessment. The assessment clearly indicates the students have taken inaccurate information from the lesson.

For example:

It's a great day in Ms. Mira's class. Students will be using the newly acquired Chromebooks, a substitution for the usual worksheet, to investigate innovations during the age of the Industrial Revolution. The lesson is tied to goal *WH.H.6.4 Analyze the effects of industrialism and urbanization on social and economic reform (e.g., Industrial Revolution, urbanization, growth of middle class, increase in productivity and wealth, changes in economic status, new types of labor organizations, etc.)*. Individually students will work to complete a chart of inventions with invention, inventor, nationality, date of invention and description. They will work from predetermined websites (not googling) and then manipulate the chart (sorting and alphabetizing), building their technology skills. Most students in the class have smart phones and are comfortable with technology. At the end, the charts are beautiful, the students enjoyed the work, but they do not understand the effect of technological advancements on social and economic reforms.

The NBPTS process:

Student learning - What did students learn? What was the outcome of the strategies?

In this class students engaged in a variety of activities. Keeping the focus on what students do and what they learn is the unrelenting work of an accomplished teacher. Transitions, writing, reading, thinking, doing, all are PARTS of the lesson but the outcome is student learning. Accomplished teachers are perpetual students of their craft who continuously expand their repertoire. Successful teachers judiciously use their sources well to advance student learning.

In the lesson presented, Ms. Mira reflects and realizes that the students concentrated on the technology skills more than the academic and skills of the lesson. She remembers, from previous experience, that students enjoy using their smart phones, but sometimes lose sight of the main idea of the lesson. Ms. Mira decides to add an additional component to the lesson that asks students to explain HOW the inventions changed society both in the past and in the modern world. This will service to reinforce the analysis needed to connect the inventions to social and economic reform. She will ask the students to write a constructed response that analyzes the charts in relation to the resulting social and economic reforms. In the constructed response students will then provide modern examples of technological advances that have changed the contemporary world in their lifetimes.

SAMR Framework for Technology Integration



3: Scenario: - Group Work

Students are divided into small groups, to complete an assignment where each student has different key points, and the group must analyze and evaluate the key points. Most groups rely on 1-2 students to finish, and there is no real assessment of student learning that confirms ALL students understand the material.



For example:

Mr. Popa wants to implement inquiry based learning in his classroom. He divides the class into small groups, based on achievement levels. Each group includes accomplished and fragile learners. He distributes the Guiding Question and the documents for students to use in answering the Guiding Question. Mr. Popa explains that the students will complete a poster that reflects their answer to the Guiding Question. The posters will be displayed in the hall for all students and visitors to see during the next Open House.

Students in each group read the Guiding Question and then look over the documents. The accomplished learners quickly decide how to answer the question and how to present their findings on the poster. The posters are created and displayed in the hall. Mr. Popa is intrigued with the results. He implemented an inquiry based project, but he is concerned that only a few students understood the process and the final learning objective. He would like to ask his fellow colleagues for feedback to improve this lesson.

The NBPTS process:

Accomplished teachers use research and collaboration and are inventive in their planning. Ongoing learning from others (sharing of research, professional collaboration with Professional Learning Teams, soliciting input from Lead Teachers) helps deepen knowledge and skills. In addition, consistent tweaking of lessons to meet the students' needs, using the tools to achieve the desired outcome of improved student learning and skills, and use of subject specific curriculum, all are strategies used to improve student learning. Teachers also consciously request feedback from the range of stakeholders represented in their schools to advance student learning.

In the lesson presented, Mr. Popa asks his PLT (Professional Learning Team) for advice on how to include all students in the learning. He also asks his Lead Teacher to observe and give feedback so that he will improve his practice and advance student learning. The Lead Teacher recommends a variety of techniques:

- choosing groups with learners who are less academically diverse and smaller with specific roles for each group member.
- using the posters as a Gallery Walk and suggests that the group members clearly write their individual responsibilities.
- requiring an individual reflection from each student in the group so that he can evaluate each student's learning.

Notes

Why Reflect?

Allows for time to thoughtfully and honestly review process, content, delivery and outcome

Use reason and logic to analyze both lesson and outcome in meaningful way where there is time

Avoids off the cuff reactions and assumptions

Forces truthfulness about process and analysis

What professionals in all industries do

Becomes a meaningful and purpose driven habit

Sources

Puentedura, Ruben R. "Learning, Technology, and the SAMR Model: Goals, Processes, and Practices." *Hippasus*, 2004, www.hippasus.com.

For a full explanation of how accomplished teachers think systematically about their practice and learn from experience read chapter four of *What Teachers Should Know and Be Able to Do* published by National Board for Professional Teaching Standards. (<http://accomplishedteacher.org>).

What
Teachers
Should Know
and Be Able to Do

TEACHERS ARE COMMITTED TO STUDENTS AND THEIR LEARNING. • TEACHERS KNOW THE SUBJECTS THEY TEACH AND HOW TO TEACH THOSE SUBJECTS TO STUDENTS. • TEACHERS ARE RESPONSIBLE FOR MANAGING AND MONITORING STUDENT LEARNING. • TEACHERS THINK SYSTEMATICALLY ABOUT THEIR PRACTICE AND LEARN FROM EXPERIENCE. • TEACHERS ARE MEMBERS OF LEARNING COMMUNITIES.

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