The Four Lenses of Learning

**Meaning Centered**
Meaning is made when students are **active** learners. This means that students must interact with texts by reading, writing, and talking. The most fundamental concern for any learner is “making sense” of what they are studying. This process cannot be passive.

**Social**
Learning occurs in a social context. Meaning is made in collaboration with other learners. Opportunities to work in pairs or small groups greatly increases the amount of oral language students use. In addition, peer groups expand the audience for student writing and work beyond the teacher and provide valuable feedback on work in progress.

**Language Based**
Content is learned with and through language processes. Students learn content best by using language purposefully and studying its use while engaged in the content. Language and content should not be separated in the classroom. Content is learned when immersed in language.

**Human**
Students bring their own prior knowledge to any learning experience. As teachers, we must seek to activate that prior knowledge and allow the student to make a “human” connection with the content. This means that students need to understand how they learn and how they think. This “metacognitive awareness” is critical in allowing the student to apply their own learning style and prior knowledge base to future learning experiences. It also allows the student to feel that they are “in charge” of their own learning and not just the victim of something being “taught to them” in which they have little control over the learning process and how they internalize new content and learning strategies.

Adapted from: *The Pennsylvania Framework for Reading, Writing and Talking Across the Curriculum. PCRP II*
Susan L. Lytle and Morton Botel for the Pennsylvania Department of Education, 1990
What does a PLN classroom look like?

Four Lenses Checklist

**Meaning Centered**
- Who is making the meaning of the content being taught?
- Are the students able to find meaning in the material with which they are engaged?
- Did the students recognize the relevance of the activity?
- How did the students question or reflect on their learning?

**Social**
- Did they work with peers to share and/or refine their thinking?
- Whose voices are heard in the classroom?
- Are the students provided the opportunity to share their reactions, ideas, beliefs, opinions?

**Language Based**
- How was language used?
- Were reading, writing and talking connected?
- Are students generating original text, that is, not parroting someone else’s answers?
- Were the students talking, writing, and asking the questions?

**Human**
- Did every student have an opportunity to be successful?
- Did each student have an opportunity to respond (i.e. talk, write, complete an assignment)?
- Are the students able to connect the content with their own lives?
- How is the new learning connected to what they already know?
- Were the students aware of their own learning process? (metacognitive awareness)
- Whose work is displayed on the walls?

Adapted from: Penn Literacy Network, PAHSCI Regional Course Material, “PLN 1”
University of Pennsylvania Graduate School of Education, 2005
The Five Critical Experiences

1. Reading: Transacting with Texts, Transacting with Problems (“Pre-Problem Solving”)
   * The reader constructs meaning according to prior knowledge, attitudes, knowledge and experiences
   * Learners are encouraged to read a variety of texts and to respond to those texts in a variety of ways
   * Learners are encouraged to use a repertoire of strategies (marking up text, text rendering, note taking, etc.)
   * Learners are encouraged to experience and learn multiple reading and “pre-problem” solving strategies
   * Students are encouraged to engage in a process of “pre-problem solving” by developing a repertoire of strategies aimed at identifying key information and defining “the nature of” mathematical, scientific and/or other content specific problems

2. Writing: Composing Texts, Composing Solutions to Mathematical, Scientific (or other content based) Problems
   * Students should experience different types of writing for different purposes
   * Learners are encouraged to learn to write while writing to learn
   * Writing is a means of learning content and provides a potential avenue for a wide range of discourse
   * Students should develop written solutions to mathematical, scientific and/or other content based problems

3. Extending Reading and Writing / Extending Problem Solving
   * Meaningful experiences are provided for the student to extend beyond what has been taught
   * Self-selection of reading and composition both in and out of classroom is encouraged
   * Teacher should be committed to planned, allotted time for students to choose reading and writing activities that reflect their needs and interests
   * Independent and self-reliant learning is the focus
   * Students consider multiple solutions to mathematical, scientific and/or other content based problems
   * Students consider how a solution to a specific problem can be applied to other problem situations
   * Students apply theoretical knowledge to specific, real world problems
   * Extending activities should be related to the curriculum

4. Investigating the English Language / Investigating Mathematics (or other content based) Language
   * Students consider how the English language is used
   * Students consider how mathematical language is used as well as how the English language can aid in developing and supporting solutions to problems, further developing the mathematical and scientific process
   * Students consider how the language of the content area is used
   * Students think about how language works; Students think about how the language of the content area works
   * Linguistic awareness / different language styles and functions / students investigate language

5. Learning to Learn:
   * How am I learning? How do I learn? How can I use these skills elsewhere?
   * Students ask questions that help them become reflective and strategic learners
   * These questions are part of the “AFTER” in the Before / During / After framework.

Adapted from: Penn Literacy Network, PAHSCI Regional Course Material, “PLN 1”
University of Pennsylvania Graduate School of Education, 2005

Problem Solving, Mathematical/Scientific and Content Area extensions by:
Todd Edwards, 2007