

GRADES 6-12

PLANNING POWERFUL INSTRUCTION

7 MUST-MAKE MOVES TO TRANSFORM
HOW WE TEACH—AND HOW STUDENTS LEARN

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CORWIN Literacy

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Please enjoy this complimentary excerpt from *Planning Powerful Instruction, Grades 6-12*, by Jeffrey Wilhelm, Rachel Bear, and Adam Fachler. In this excerpt, the authors clearly define the difference between traditional or informational teaching and transformational teaching or the pedagogy of EMPOWERment.

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MAKING THE SHIFT FROM INFORMATION TO TRANSFORMATION

When we consciously adopt a pedagogy of EMPOWERment, we leave the pedagogy of poverty and the salience of the traditional far behind. Through decades of work with teachers, we have found that *any unit in any subject at any grade can be reframed into transformational teaching, if the teacher is willing to share some of the classroom power with the learners, to decenter him- or herself as the only authority, and to become a collaborative meaning-making participant with learners.*

The contrasts between informational teaching, or the pedagogy of poverty, and transformational teaching, or the pedagogy of EMPOWERment, mirror the differences cognitive science describes between information, which is inert, and knowledge, which is dynamic, generative, usable, revisable, and extensible (see Figure 2.2). The achievement of this kind of knowledge is called 3D learning: The focus is not on knowing information, but on *knowing* conceptually, *doing* by putting the concepts into use to get work done, and *thinking* through naming what was learned, justifying the learning like an expert, reflecting, and metacognating on the learning, rehearsing future uses, and achieving high-road transfer for the learning.

■ **FIGURE 2.2: TRADITIONAL INFORMATIONAL VS. TRANSFORMATIONAL KNOWLEDGE-BASED LEARNING**

| TRADITIONAL INFORMATIONAL TEACHING AND LEARNING: NONSITUATED | AUTHENTIC AND TRANSFORMATIONAL TEACHING AND LEARNING: SITUATED IN ACTUAL USE |
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| Learners learn something because it is in the curriculum or on the test; knowing is focused on the what. | <p>E-M: There are clear and authentic real-world purposes, goals, and payoffs for the learning.</p> <p>P-O: Learners understand the purpose and payoff of learning, both immediately and in the future. They work to understand how experts develop and use knowledge. Knowing involves the why, how, and what, in that order of priority. Knowing considers the when and where of application. Human purposes for using knowledge are foregrounded.</p> |
| Learning is primarily rote skills, algorithms, and information. Learning is about knowing information. | <p>M: Learning involves creating a new (to the learner) and generative mental model/map for understanding and making use of a concept, or for pursuing a problem-solving and knowledge-making process. Teaching and learning are 3D: about knowing, doing, and thinking—reflecting/metacognating/rehearsing for transfer.</p> |
| Learning is linear and sometimes fragmented. | <p>M: Teaching episodes are carefully sequenced to build on each other. Learning is structured, systematic, and weblike—concepts and processes are interconnected, and there is a clear relationship and interplay between structure, details, meaning, and use. Knowledge is perceived as a network.</p> |
| Learning is often decontextualized (taught separately from use). Although concepts or problems may have classroom applications, they rarely extend beyond this. (We call this “school-ish”—as the learning only counts in school contexts.) | <p>P-O: Learning is authentic and contextualized: learned and applied in a situation (or simulated context) in which the knowledge is required to respond to real-world questions and needs. (We call this “tool-ish”—as the learning extends human abilities to perform tasks in the world outside of school.)</p> |

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| TRADITIONAL INFORMATIONAL TEACHING AND LEARNING: NONSITUATED | AUTHENTIC AND TRANSFORMATIONAL TEACHING AND LEARNING: SITUATED IN ACTUAL USE |
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| Knowledge and practice are static: presented as established and unquestioned facts and ways of doing things; learners have no role except to accept and repeat. | W-E: Knowledge and practice are dynamic: understood to be context-dependent, evolving, extensible, and revisable. Knowledge is socially constructed, negotiated, and justified based on disciplinary standards, so competing viewpoints are honored and considered; learners play an integral role in knowledge creation. |
| Learning is received from outside sources and typically constrained (it cannot be extended by the learner); it is authoritatively imposed and requires learner acceptance and compliance. | W-E: Learning is constructivist and unconstrained because it can be built upon throughout a lifetime. Learning must involve personal effort, contributions, and connection making to be internalized by an individual—the learning is internally persuasive because it is convincing to the learner and it is understood why and how the process or concept works. Learning demands to be used and extended. |
| Learning is receptive and isolated; finding out new information is often the end of learning. | W-E: Learning is active and generative and occurs while doing real disciplinary work with proper guidance; finding out new information is typically the beginning of learning as one considers how to use, perform, explore, and extend knowledge. |
| Teaching is considered to be the donation of information to the learners: Learners listen to a teacher or read a textbook. | W-E: Teaching helps learners to transform their capacity to participate in learning and problem solving by gaining knowledge, constructing deep understandings, and developing strategies that promote independence: Learners do the discipline in a context to develop knowledge and solve and address real-world questions. |
| Learners hear about disciplines and communities of practice. | W-E: Learners participate in a community of practice that is doing disciplinary work. |
| Work is typically discarded once completed and submitted for a grade (e.g., term papers, tests, homework). | E: Learning creations are “knowledge artifacts” that are archival and extendable over time, by creator and others, and can be continually referred to, revised, and built upon by the self and by others, now and in the future, as well as adapted and transferred to new situations. |
| Learning is recapitulated. | E: Learning is transformed, transmediated, re-represented, explored, extended, and used in new and multimodal ways. |
| The end of learning is telling back; learners rarely reflect on and justify their learning. | R: Learners are presented with ongoing daily opportunities and support to reflect on learning, self-assess, and consider immediate and future applications to transfer threshold knowledge, which continues to develop and evolve throughout life as it is applied in new situations. |

Source: Adapted from Barab & Hay, 2001; Moore, 2016; Wilhelm, 2013b.

You are certainly already affected in some way by this shift from informational to transformational teaching. It is represented by the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS), or by its correlates in states like ours, where the free and independent republic of Idaho has adopted the Idaho Content Standards for English Language Arts/Literacy, Mathematics, and Science. Take a look at the new standards. You will see that they are expressed through higher-order thinking verbs such as *analyze*, *interpret*, *create*, and *revise*. The standards are now about *doing*: about *how* to read, compose, problem solve, do science and math, and so on, and about dynamic ways of making meaning, as opposed to the banking of established information in learners’ minds.

Using the EMPOWER framework does not require you to teach new texts or content. EMPOWER can *reframe any lesson, unit, text, or topic in any subject* so the teaching and learning are more motivating and powerful. The next-generation standards worldwide provide the *what* (the descriptions of the processes and cross-cutting concepts to be learned), but they do not provide the *how* for implementation. In this way, the standards are empowering, as they honor teacher professionalism and expertise to determine the best way to teach, and guided inquiry through apprenticeship is that highly adaptable best way.

When it comes to challenges of teaching and learning, many of the solutions are hidden in plain sight: in powerful examples of real-world teaching and learning. Whether it's a child being taught how to ride a bike, a hobbyist being taught to fly fish, or an intern being taught how to perform surgery, we can see guided inquiry and mental mapping at work. It's not the materials or the standards that are the real challenge. The challenge is apprenticing learners toward meeting the standards of real-world expertise, in helping them to learn how to do what experts do, and into developing the habits of mind and mental maps necessary to achieving competence and then expertise. Figure 2.3 shows what the shifts in teaching practice look like in an actual unit.

■ FIGURE 2.3: A TRADITIONAL UNIT VS. AN INQUIRY AS COGNITIVE APPRENTICESHIP EMPOWER UNIT

| | TRADITIONAL, INFORMATIONAL, AUTHORITATIVE INSTRUCTION | GUIDED INQUIRY/APPRENTICESHIP TEACHING THROUGH EMPOWER: ACHIEVING TRANSFORMATIONAL AND INTERNALLY PERSUASIVE UNDERSTANDINGS AND DISCIPLINARY KNOWLEDGE |
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| Topic | Civil War | E-M-P-O: Framed as an essential question or a problem to solve (e.g., Why did the Union win the Civil War? What determines who wins or gets their way in any conflict?). |
| Goals | Some retention of factual knowledge about the Civil War | E-M: <i>Understanding</i> and <i>transfer!</i> Apprenticeship into historical enthusiasms and thinking and therefore induction into the community of practice of doing history; development of grounded theory and threshold knowledge about causes, effects, and results of conflict and warfare; ability to analyze historical data and theorize from it as a novice historian; making predictions about current and future conflicts; excitement about history. |
| Frontloading | None or pretest | P-O: Brainstorm causes of conflict (e.g., rank those most likely to cause a war); brainstorm advantages to be sought in any conflict and especially in war (e.g., rank those most likely to determine outcome). |
| Organization | Teacher leads; everyone does the same thing | W-E: Teacher-guided explorations of various topics. Small groups and then individuals eventually divide up and take ownership of various aspects of the inquiry; distributed expertise and personalized learning is achieved and shared. |
| Instructional Activities | Textbooks, worksheets, lectures, teacher-led discussion | W-E: Historical simulations. Drama/action strategies that put learners in the position of combatants, politicians, citizens, or enslaved people to develop perspective and social imagination. Jigsawed small group inquiry discussions based on readings or direct experiences. Report out to class on small group learning progress. Analyze data, create interpretations, make visual representations of learning, present findings and arguments to others, and share and discuss. |

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| | TRADITIONAL, INFORMATIONAL, AUTHORITATIVE INSTRUCTION | GUIDED INQUIRY/APPRENTICESHIP TEACHING THROUGH EMPOWER: ACHIEVING TRANSFORMATIONAL AND INTERNALLY PERSUASIVE UNDERSTANDINGS AND DISCIPLINARY KNOWLEDGE |
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| Questions | Factually oriented; asked by teacher | W-E: Interpretive, evaluative, and applicative. Teachers ask questions of all types to model generation of higher-order question types for learners. Learners learn to generate questions and how to find or generate the data to answer them. |
| Discussion Format | I-R-E: Teacher <i>initiates</i> ; learners <i>respond</i> ; teacher <i>evaluates</i> | W-E: Learners bring questions to class, pursued in small group discussions and a variety of formats like Socratic Seminar. Roundtable reports on small group inquiries through Gallery Walks and presentations that elicit feedback and uptake from class. Whole group identifies connections among small group inquiries. |
| Reading Materials | Textbooks, worksheets | W-E: Textbook as possible reference. Primary documents regarding industrial base, trade and trading partners, weaponry, raw materials, foreign relations, organization of armed forces, leadership and generals, transportation, and economic base. Diaries (e.g., <i>In the Eye of the Storm</i>). Battle accounts, maps, drawings. Internet sites. Informant interview (e.g., with local history buff, reenactor, or Civil War roundtable group). Young adult novels; YA nonfiction; children's books (e.g., <i>Across Five Aprils</i> , <i>Pink and Say</i>). |
| Assessment, Proof of Learning | Quizzes and exams; primarily of factual information | E-R: Daily deliverables, formative assessments, and procedural feedback. Written argument about why the Union won the war, or what could have helped the South win. Living history museum exhibits exploring findings. Application of findings to a different war. Multimedia presentation of findings. Ongoing reflection and procedural feedback focused on threshold knowledge and expert moves of doing history. |

As we've stated, EMPOWER is a highly functional tool for planning and implementing inquiry-oriented units and lessons. Beyond this, however, EMPOWER inspires us because it helps us meet other related and deeply held commitments. There are six areas of research pertaining to learner needs that provide a foundation for the necessity of as well as the way to make the shifts from informational to transformational teaching (see Figure 2.4).

■ **FIGURE 2.4: STUDENT NEEDS CAPTURED BY THE EMPOWER MODEL**

1. *Provides motivation* (the continuing impulse to learn) and *supports engagement* (behavioral and cognitive strategies) by meeting the conditions of flow experience.
2. *Creates personal connection and cultural relevance* by starting with each learner's needs, concerns, lived-through experiences, and cultural funds of knowledge.
3. *Provides access to all, working for equity and social justice* by differentiating so that all learners get the assistance they need to grow from their point of need. This constitutes inductive and restorative practice.
4. *Creates a community of caring* by meeting the social contract to care, by developing social–emotional learning, through collaboration, and by fostering social connection and support to develop expertise managing complex tasks, relationships, and emotions.
5. *Bridges the knowing–doing divide* by teaching in a context of use, creating classroom communities of practice, and working for real-world application.
6. *Promotes the growth mindset* for teachers and learners (Dweck, 2006) by supporting the development of learners' identity as agents who can always learn how to get new things done if they get the proper support and the opportunity to deliberately practice.