

Introduction

Education is an act of love, and thus an act of courage.
—Paolo Freire (2013, p. 34)

Teaching well is an act of love for our students. It is also an act of love and respect for ourselves; for knowledge that has been developed over time in the disciplines; for reading, composing, and problem solving; and for all significant learning that makes a difference to the quality of our personal and shared human experiences. It is an act of love for the world and for the future, and an act of faith in our capacity to better ourselves and our world. Teaching well is often a kind of loving rebellion, because it requires going beyond the status quo; caring for what is yet uncared for; and working for justice, for new knowledge, for new ways of knowing and being, and for what is in the act of becoming and yet to be (Wilhelm & Novak, 2011). Teaching well is all about *transformation*.

Teaching well is an act of social justice. In America today, demographics often determine destiny. Parents' socioeconomic status and educational attainment are the primary predictors of a learner's later success. But it does not have to be this way. When we *cognitively apprentice* students into the joy and the capacity of greater expertise, social barriers to success can be overcome. Research on human potential stretching from Vygotsky (1978) in the 1920s to Benjamin Bloom (1976) to the recent work of Anders Ericsson (e.g., Ericsson & Poole, 2016) demonstrates the liberating finding that *all students* are capable of learning the next available concept or process if they get the proper assistance in a meaningful context of use—if they are apprenticed.

Teaching—as an act of love and for social justice—is the most noble calling and transformative pursuit that exists in the world.

Teaching for deep understanding and growth requires passion, purpose, and dedication, but more than that: Teaching well requires expert practice in the use of scaffolds, structures, and strategies to activate and enliven the passion and purpose; to operationalize the dedication; and to make the learning happen, now and into the future. These scaffolds, structures, and strategies move from providing models and guided support to promoting self-regulation and self-direction, and move the learners into independence, into the full flowering of their human potential. Teaching well is about inducting students into meaning-making power; it is about sharing the persuasive power of expertise *with* students, not having authoritative power *over* students.

THE TRANSFORMATIVE POWER OF GUIDED INQUIRY

This book is about using a specific form of guided inquiry (known as inquiry as cognitive apprenticeship or ICA) to teach in ways that develop passion, purpose, and independent expertise in learners. We use guided inquiry to transform literacy to transform

learning across disciplines to transform lives, and to work toward deeper learning, equity, and social justice.

The EMPOWER model we introduce in this book is a map that guides instructional planning of guided inquiry at both the unit and day-to-day instructional levels. EMPOWER names the “must-make moves” of teaching through guided inquiry and apprenticeship:

E = Envision a lesson or unit’s bottom-line goals for student learning

M = Map out the steps of the learning journey for moving to a new destination

P = Prime learners by activating their prior knowledge and interests

O = Orient learners to the goals, purposes, and payoffs of the learning

W = Walk through the process of achieving expertise through modeling, mentoring, and monitoring learner performance, gradually releasing responsibility to the learners through the process of apprenticeship

E = Extend and explore new territory as learners personalize and transfer what has been learned

R = Reflect through the process to name what was learned, how it was learned, and ways to continue growing, applying, and transferring what has been learned

EMPOWER is a model for systematic instructional planning that uses backwards design and captures current research into motivation, engagement, optimal experience, cognition, development of expertise, understanding and transfer, and more. This kind of planning is the central domain of a teacher’s professional knowledge. In the chapters that follow, we first share the research and general principles behind EMPOWER and then proceed to the specific must-make moves necessary to enact the transformational teaching of guided inquiry as we plan units, plan lessons, and then implement and hone them with our students. The strategies in this book are the concrete practices that put the must-make moves of the EMPOWER model into our teaching practice.

When we learn how to plan and then teach with EMPOWER, we focus on learners and the highest goals we have for them. We use and adapt the must-make moves flexibly and in service of learners’ deepened engagement and learning. Teaching begins and ends with attentiveness and responsiveness to students and their learning: teaching them from where they are and moving them toward where they could be. The teaching itself requires knowledge of planning and the use of strategies that scaffold and support new ways of expert learning and being, and new kinds of knowledge that can be transferred and performed.

If we have a planning process and a repertoire of strategies to model reading and composing and problem solving in new ways *for* students, then we can ask them to use these processes *with* us, then *with* each other, and finally on their own *by* themselves. This is the process of cognitive apprenticeship, also known as the gradual release of

responsibility. Our approach works toward *total engagement* and *total participation* on the part of each student and in ways that develop generative strategic and conceptual expertise that can be used and honed throughout a lifetime.

Our colleague Pedro Noguera (2018) has stressed that as a culture we typically ask the wrong question: *How can we raise achievement?* Instead, what we should ask is this: *How can we engage, challenge, stimulate, and deepen the learning of our students, those specific human beings who enter with us into our learning environments?*

Noguera's question is one we take on in this book. To undertake it, courage will be more important than caution. Improvement requires building on what we already know and do to move into new ways of knowing and doing. This book is about transforming how we teach so we can transform why, and how, and what our students learn. The ultimate goal is for students to be transformed through deep understanding and the achievement of conscious competence—the capacity to monitor, justify, reflect on, and transfer what they've learned, and the ability to extend and adapt their knowledge to solve future problems. But how do you *do* it? What is the *process* for getting the results you're seeking in your classroom?

Before we move further, let's be clear: *Guided inquiry is not an extra or an option.* It is the work of truly teaching. It is the necessary process for achieving motivation, engagement, deep learning, practical and usable disciplinary expertise, and the capacity to meet all next-generation standards and assessments. It is a way to make your classroom into a caring community of practice, where everyone works together on common projects that mirror real-world expertise. It is what is necessary to move away from the shallowness of information-driven teaching with its recitation and retrieval and to move toward learning how to expertly construct and justify meaning and disciplinary knowledge for oneself. We are devoted to guided inquiry and our EMPOWER model for planning and teaching with it, because this process

1. Promotes, increases, and leverages the motivation, engagement, and even joy of learners (Smith & Wilhelm, 2002, 2006)
2. Prepares students for the intellectual and problem-solving demands of future education, work, citizenry, and personal affairs (Newmann, Carmichael, & King, 2016)
3. Significantly boosts achievement, understanding, and transfer of learning, including achievement on standardized tests (McTighe, Seif, & Wiggins, 2004; Newmann & Associates, 1996; Newmann & Wehlage, 1995; Smith & Wilhelm, 2006; Weglinsky, 2004)
4. Strengthens a sense of belonging and of community on many levels—the community of the classroom, and the connection between students, between students and teacher, and from the classroom to real-world communities of practice—and supports collaborative culture and powerful professional community among teachers (Wilhelm, 2012), which is consistent with and extends all other proven methods of guided inquiry, as shown in Figure I.1.

■ FIGURE I.1: CHART COMPARING EMPOWER TO DIFFERENT GUIDED INQUIRY MODELS

EMPOWER	SYSTEMS CONNECT	PROJECT-BASED LEARNING (PBL)	INTEGRATED INQUIRY (INTERNATIONAL BACCALAUREATE)	UNDERSTANDING BY DESIGN (UBD)	VESTED	SHELTERED INSTRUCTION OBSERVATION PROTOCOL (SIOP)	6 E'S	TEACHING FOR UNDERSTANDING
Envision	Topic selection and learning objectives	Key knowledge	Transdisciplinary theme	Stage 1: What is worthy and requiring of understanding?		Lesson prep	Engage	Use topics that engage and connect to other subjects
Map	Essential/driving questions;		Tuning in					
Prime	context: define issues and measurable changes	Challenging problem or question and student voice		Stage 3: What learning, experiences, and teaching promote understanding, interest, and excellence?	View	Building background		Create coherent goals
Orient								
Walk Through	Plan and conduct investigations; analyze and interpret data;	Sustained inquiry, authenticity	Finding out, sorting out, going further, making conclusions		Experience	Comp. input strategies	Explore	Create engaging learning experiences
Extend and Explore	construct explanations; develop claims, informed action	Public product	Going further; taking action	Stage 2: What is the evidence for understanding?	Speak	Interaction	Explain	
Reflect		Reflect			Transform	Practice/application	Elaborate	Develop formative and summative assessments that deepen understanding
					Extend	Lesson delivery	Extend	
					Deliver	Review and assessment		
					Perform		Evaluate	

MOVING FORWARD: TAKING THE JOURNEY TOWARD EMPOWERMENT

Be aware that this process and this book is not DFY (done for you), but instead DIY (you will learn how to do it for yourself, and to adapt and extend the model for your purposes with your students throughout the evolving challenges of your career). EMPOWER is not a script; it is a flexible framework and mental model of expert teaching. Your vision, energy, and commitment to improving your teaching and helping your students plays a major role in this process. If you bring the *passion*, we bring the *process* and *teaching strategies* to implement expert planning and teaching—a process that you will soon be able to make your own. You will be able to adapt our high-leverage apprenticeship strategies, extend them, and understand the principles behind each must-make move so you can come up with lessons and activities of your own. The model and principles support transfer: the capacity to use what you learn to plan and design lessons of your own, based on our models and the principles behind them.

As Jeff’s dad used to say: If you always do what you’ve always done, then you’ll always get what you always got. Our approach rejects the traditional and typical (so embedded in educational practice) and deepens many more progressive ways of teaching, to work for deep engagement and the development of deep and usable understanding, to help ourselves as teachers and all of our learners progress toward becoming our most powerful and best possible selves.

Teaching well is an act of love. And with love—and a teacher’s mindful, planful instruction and support—all potential can be brought into being; all things can become possible.

An Introductory Activity: Getting in the Game of Guided Inquiry

What teacher has not struggled with planning curriculum that works for students? Or felt perplexed at how to help students develop the skills they need while still keeping the learning joyful? Maybe you know the feeling of giving up on creating a new unit of study (or even a lesson) because the task of putting it together and knowing if it would work was just too much. Perhaps, like your fellow teachers nationwide, you must face down a new set of standards requiring students to think at a deeper level than ever expected in the past. Or maybe you’ve just grown tired of hopelessly searching online for the “perfect” lesson or unit for your learners, only to be let down. If any of this sounds familiar, this book is for you. We intend it as a practical guide to creating curriculum and delivering instruction—units, modules, and lessons—to achieve three goals:

1. Unlock the motivation and engagement in classrooms of diverse learners
2. Maximize your students’ chances of mastering desired learning outcomes

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3. Position and help learners to think, understand, and act more like disciplinary experts and compassionate democratic citizens

We all want to make a positive impact in the lives of our learners and in the classrooms of our colleagues. In order to do that, we need a consistent, reliable way to design and deliver instruction that works. But that leads to another question: What works? Consider the four teaching vignettes below. Because we want the focus to remain on the pedagogy—the teaching moves, not the subject area—we designed scenarios around a subject we’re fairly confident few of our readers teach: rock climbing. After reading the scenarios, try to determine which one will most likely lead to the highest degree of climbing independence and expertise, and be able to explain why you think so.

Vignette 1: The unit begins with the teacher explaining why people climb mountains and how the class will climb one. Every day, the teacher models a new skill on a section of terrain for students, guides practicing the new skill for a brief while, then facilitates their independent practice. “I do, we do, you do” is practiced with each new skill each day, until the class collectively reaches the top of the mountain, with the teacher providing copious feedback along the way. At the end of the unit, students put all the skills together and climb a new mountain independently. After the climb is complete, the teacher creates a gallery of photos from certain students’ climbs and writes “a glow and a grow”—a point of praise and a suggestion for improvement—next to each photo.

Vignette 2: How do *you* think we should climb this mountain? Not wanting to stifle students’ creativity, the teacher invites students to discover their own strategies for climbing and presents them with various tools they might need. Documenting their own trial and error, students create a notebook full of personal climbing strategies. Not only do they create their own styles of climbing, but they also all climb different mountains tailored to their interests. The more naturally gifted student climbers help and give feedback to the less gifted climbers during group work. At the end, the students all climb different mountains independently using their own unique styles and give a presentation based on their climb to the community.

Vignette 3: The teacher opens the unit by asking students what strategies they already know for climbing and then assesses their use of these strategies on a climbing wall. The teacher identifies a mountain off in the distance as the end destination of the unit and poses a guiding question: Why and how do experts climb mountains? After exploring a few stories and strategies of expert climbers, the students create a basic checklist of moves for their first climb, a molehill. With a “quick win” under their belts, the students scale two progressively higher mountains with the teacher’s coaching, using and extending their “expert move” checklist after each climb. They then tackle two even higher mountains in groups, relying almost entirely on their peers’ feedback and support. By now, they have outgrown the checklists, are using more developed scorecards, and are keeping process journals. The students’ final task is twofold: (1) climb a new mountain independently and (2) teach a group of local kids who have never climbed before how to tackle their first mountain. Afterward, there is a debrief where students share their experiences and brainstorm a plan to climb another mountain or a way to transfer their skills to a new pursuit.

Vignette 4: A new unit called “Mountains and Molehills” begins. The teacher assigns worksheets about the process of climbing, multiple-choice questions about different kinds of mountains, and matching tasks relating climbing tools to their purpose (a chisel breaks rock; a rope holds the climber; a helmet protects

the head). Sometime toward the end of the year, students climb a mountain on the same day as all the other kids in their state. Afterward, students watch many, many movies about climbing.

ANALYSIS OF THE VIGNETTES

Vignette 4: Educational Malpractice

The learning activities in the worksheet-driven classroom do not correspond to how real-world climbing experts train, plan, or climb, so this approach fails to translate into gains in rock climbing expertise. Nobody wants or argues for teaching this way, but it still tends to dominate American education (see Chapter 2). Students in classrooms like these feel disengaged and grossly unprepared for their state test on “climbing” and for real-world applications.

Vignette 1: “Skill a Day” Learning

While this vignette presents many elements that *appear* sound, upon closer inspection, it appears the teacher misunderstands the gradual release of responsibility—the process of transferring ownership of a task from the expert to the learner over time—as something that happens over a day, instead of over weeks, months, or even years. While this teacher values the consistency and structure of having an “I do, we do, you do” element in every lesson, the unintended consequence of this is students becoming dependent on *daily teacher assistance*. There is always a “we do,” but never a period for students to just consolidate and extend their previous learning. The teacher’s removal of all scaffolding for the final task can be abrupt and jarring for students. One final point: By breaking down the climbing into a series of subskills and only focusing on one at a time, students never get the experience of linking moves to climb a whole mountain, even a miniature one, making success on the final task highly unlikely for many students.

Vignette 2: Discovery-Based, or “Choose Your Own Adventure,” Learning

While allowing students to wrestle with open-ended challenges has a role, exclusive reliance on this strategy is unsound pedagogy, abruptly releasing responsibility to unready learners. In this totally unscaffolded, discovery-based environment, the climbers climb, and the nonclimbers roll down the mountain. Students almost certainly will not develop real expertise because real expertise is passed down through communities of practitioners studying up on their predecessors, comparing notes, and making connections to new challenges, not by simply holing one’s self off and tinkering. We admit this vignette presents a rosy if not romantic vision of learning, but ultimately, it is a misguided and unrealistic one. Furthermore, as the description of the final task suggests, learners in classrooms like these end up “all over the map” (in this case, both literally and figuratively) as a result of uneven skill development and unclear direction. Students who never learn the practices of experts cannot be expected to independently navigate an open-ended challenge.

ANOTHER WAY?

Insightful readers may notice somewhat exaggerated parallels (though not by much) between the vignettes provided here and the most common instructional approaches employed by schools nationwide. The pedagogical issues enumerated above abound in even the most popular publishers’ curricula. So, if Vignette 1 is too scaffolded, and Vignette 2 is too unscaffolded, what is the alternative? What would such a pedagogy

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present? Ideally, such an approach would balance the need for explicit instruction with the need for student autonomy, infuse rigor with meaning, and serve learners now and in the future.

Vignette 3: EMPOWERment Pedagogy

In this vignette, the teacher *primes* learners for the new challenge by tapping into their prior knowledge and skill. She then *orients* them toward a new destination and asks a compelling, framing question. From there, it's classic apprenticeship: She *walks through* some expert approaches to the task, inviting students into a community of experts, and helps students get a quick win. Over time, the teacher *extends expertise* in learners by challenging them to take on progressively harder climbs with less assistance from her and more assistance from their peers. Finally, the teacher calls on learners to *explore new territory*, climbing the mountain independently and teaching someone else how. Both the teaching task and future climbs are made possible by students' having developed an evolved mental model of climbing expertise from ongoing opportunities to *reflect* on their process through checklists, scorecards, and process journals.

These five elements (whose initial letters spell P-O-W-E-R), in addition to two “behind the scenes” teacher moves, *envision* and *map* (giving us E-M), “spell out” the pedagogy of EMPOWERment: the subject of this book.

While other pedagogies impose artificial form and vocabulary onto learning, EMPOWER does the opposite: It distills the elements of real-world teaching and learning and codifies them into a replicable process. Far from formulaic, EMPOWER merely *describes* what happens when students and teachers engage together in highly relevant, highly authentic teaching and learning. EMPOWER leverages the power of two schools of thought:

1. Expert inquiry—the recursive process of developing and performing knowledge the way real-world experts do
2. Apprenticeship—the art of gradually releasing responsibility for task performance to learners by building their capabilities until they can “own” the whole endeavor themselves

Instead of treating relevance and authenticity as an afterthought, EMPOWER uses them as a starting place to explain real-world learning better than any other existing paradigm.

A MAP OF THIS BOOK

These vignettes attempt to answer timeless questions about teaching: What kind of teaching can actually achieve transformations in understanding, performance, and ways of being? Under what conditions are people guided to inquire and develop expertise that can be applied in the real world? In light of that, what defines excellent instructional design? What moves must educators make to guarantee that learners develop expertise, insight, and independence?

Like the students in our vignettes, as we explore how we came to EMPOWER and detail the shifts required to teach this way, you, too, will begin a journey, surveying

your methods and engaging in reflective practice. If you put in the work, then your destination is assured: You will reach new heights as an educator. You may find, too, that you'll take on a new role as an instructional leader.

We frame each chapter with a guiding question and include illustrative examples, stories from the field, and actionable insights. Chapters 1 and 2 provide a “map of the territory” and necessary background for the EMPOWER framework. Chapter 1 explores how people get better and become experts, and how EMPOWER works as a model of guided inquiry and apprenticeship to help people achieve the capacity of experts. In Chapter 2, we look at how to make the shift from informational to transformational teaching. We describe the differences so you can monitor your own shift. We explain why even very accomplished and progressive teachers often revert to the “salience of the traditional” (Zeichner & Tabachik, 1981).

Then we get totally practical. Chapters 3 through 5 explore how to work offstage to plan your units and individual lessons through the techniques of envisioning and mapping (the E-M of EMPOWER). Chapter 6 is about how to prime the classroom culture and community necessary for guided inquiry. In Chapters 7 and 8, we explore how to prime students for success with specific conceptual and procedural learning targets through priming and orienting (the P-O of EMPOWER). Chapters 9 through 13 focus on how to use various scaffolds and supports to actually apprentice, or walk through, new complex learning with students in order to develop and then extend and explore new territory (the W-E of EMPOWER), and Chapters 14 and 15 explore techniques and assessments to help students reflect (the R of EMPOWER) on, name, transfer, apply, and move consciously into the future with their newfound expertise.

We feature a throughline unit on civil rights in each of the chapters so that you can see how each must-make move of guided inquiry can be used as a lesson that is part of an actual unit. The first strategy and the accompanying lesson canvas in each chapter come directly from this unit. The following strategies in each chapter demonstrate how the featured must-make move can work in other ways in the throughline unit as well as in any other units from other subjects across the curriculum.

For ongoing updates as well as additional resources complementing and extending those from this book, visit empoweryourteaching.com.