

Educating Teachers: A Comparative Perspective across the Professions

Summary of a Keynote Address by Lee S. Shulman, Stanford University, USA

Key words: Signature Pedagogy, Honesty, Humility, Humor, Hope

A comparative study of the signature pedagogies of different professions

My interest is teaching and learning. I am interested in the quality of pedagogy. What I decided to study together with my research colleagues at the Carnegie Foundation was how people are prepared to become members of professions, how they learn to work as members of professional communities. And we conducted research across a number of professions. We studied how people learn to be lawyers, how they learn to be engineers, how they learned to become members of the clergy – priests, pastors and rabbis. We investigated how students learn to be nurses and physicians. We studied how they learn to be business leaders and teachers.

We even studied how students become members of the academic professions. To do that, we studied how people learn to be professional scholars in programs in the fields of mathematics, history, literature, chemistry, neurosciences and that most complex field of all, our own domain of education. How do they learn to be professionals, we asked? How are they taught? What are the pedagogies of the professions? What are the “signature pedagogies” of each profession and how do those particular forms of pedagogy mark and define the character of each professional field and its practitioners?

We didn’t think that any one profession had it perfectly. But we thought if we can examine this variety of pedagogies carefully, through reading and

research, through careful case studies and ethnographies, through interviews and surveys, we would discover a complex array of approaches and methods. And we hoped to learn about the underlying models of professional preparation from analyzing the similarities and differences among those approaches and to try to understand the reasons for them.

Our Carnegie Foundation staff consisted of philosophers and psychologists, sociologists and anthropologists, educational scholars and historians. We also worked with members of each of the professions we were studying, thus comprising a rich set of interdisciplinary collaborative teams. These studies went on in parallel at the same time, as we attempted to ensure that members of different research teams interacted, participated in research with one another, and learned from one another. We took seriously the “wisdom of practice,” so we asked, for example, why certain methods of teaching had survived in medicine or nursing for so many decades, and why very different approaches have flourished in law or religious seminaries, and yet other approaches in engineering. We didn’t take their survival as self-evident evidence that an approach was good, but we thought it would be interesting and instructive to explore its persistence.

In that sense, we not only looked at the *wisdom* of practice, we also examined carefully where we discerned the *ignorance* of practice. That is, we looked critically at practices that appeared to accomplish some purposes successfully while at the same time they caused damage to other goals of professional education. And from the perspective of what we knew about the learning sciences and what we knew from what educators in each profession explained that they trying to achieve, we critically examined their approaches. So we were not uncritical by any means as students of these pedagogies, but we were enthusiastic learners and we were trying to give the benefit of the doubt to each profession and its pedagogical practices.

Habits of mind, habits of the hand and habits of the heart

From our studies, we concluded that all professionals must learn some combination of three things: habits of mind, habits of practice and habits of the heart. As we examined their role in other professions we also developed some insights into the signature pedagogies of teacher education.

Whenever we looked at any form of professional education, included teaching, we asked “How do they teach the *habits of mind* necessary for practice in the profession, that is, the ability to think like a member of the profession?” Thus, in legal education, both the faculty and the students argued

that the primary purpose of legal education was to teach future practitioners how to “think like a lawyer.” The pedagogy of the law did not aim at teaching the practice of law, or the values and ethical dispositions for legal work.

The next question was “How do they teach the habits of practice, the practical, technical skills of the profession”, which we called “habits of the hand?” There is no profession that doesn’t require an enormous body of technical skills that are needed for practice. In teacher education, we may want our candidates to become “reflective practitioners,” but we need for them to be skilled practitioners first so they have something worthwhile to reflect upon. Teacher educators are frequently guilty of distorting the world of teacher education comes as we have lost the balance between practice and reflection. We are teaching our students to be far better at reflection than they are at actually performing as professionals, at really doing things. Professionals only develop through a substantial amount of time in developing skills, even when the skills appear simple and routine. As a president of Teachers College, Columbia University observed many decades ago, we are often embarrassed when we say that we teach elementary school teachers how to write on the blackboard correctly or create a lovely, engaging bulletin board, because those appear to be such mundane, mindless skills. But those who train surgeons spend hundreds and perhaps thousands of hours teaching surgeons how to sew, and they don’t apologize for it. Teacher education should be similarly adamant about the importance of teaching the habits of practice.

The third domain is habits of the heart. These are the moral emotional, ethical cores of professional work. In every profession, in addition to learning how to think and practice appropriately, professional learning requires the formation of professional identity, the sense of self, integrity, and ethical responsibility. This is equally true of the education of teachers.

Those three forms of learning, which we at times called apprenticeships, must develop in some integrated balance, in a manner appropriate to each profession and define the character of the signature pedagogies of professional education. So as we analyzed each of the many professions we studied, each one for three or four years of study, we asked how they created apprenticeships of thought, apprenticeships of practice and apprenticeships of identity and integrity. Indeed, we analyzed doctoral studies across the disciplines in those terms as well, because we viewed learning to be a scholar as a form of professional learning, of developing habits of mind, practice and moral identity. Becoming a member of the academic profession, of the community of scholars, is as much a process of professional formation as is learning to be a physician, an engineer or a pastor.

Routines are central to signature pedagogy

When we think of the pedagogies of professions, we often think first of complex forms of problem solving, judgment, decision-making and highly complex performances. Indeed, there is truth to that perception, because most professions are characterized by the need for professionals to make complex judgments under conditions of uncertainty and unpredictability. Nevertheless, one of those things we began to see with every profession was that to learn to be a professional inevitably requires the development of extraordinarily well-oiled highly skilled routines. Yes, routines. Those things that happened again and again and again are incredibly important to professions. And to learn them, by and large, you have to practice. You don't learn them in one shot. In fact, the reason we call them *habits* of mind, *habits* of practice, and *habits* of the heart, is because you learn them by *doing* them repeatedly. There is no angel that lands on a student's shoulder and sprinkles magic dust on them and suddenly they know how to the practice. In fact, if you look at skilled practitioners like musicians, chess players and athletes you notice, even at the peak of their careers, that they are repeatedly practicing their basics skills. We observed that across most forms of professional pedagogy, there are three characteristics that were found to be signatures. We named these (in the words of my Carnegie Foundation Anne Colby) *enactment, embodiment and dailiness*. The first term describes the observation that the pedagogies of professions are active pedagogies. It's rare for students to sit there, sleeping and texting or texting and sleeping. They do not learn by listening and remembering. Because even in large classes they never know when the instructor is going to say "and what's your definition of the case?" and the instructor expects them to be ready. Most representative of this kind of pedagogy is clinical rounds in medicine and nursing, where every day, students are visible and active, accountable for their performances, their diagnoses and strategies, and for the ethical quality of their decisions. The faculty members are expected to *embody* in their manner and their thought the values of the profession. This sort of teaching does not occur occasionally or rarely, but indeed on a daily and routine basis.

Formation of professional identity

In learning to be a professional, what's happening is not just the acquisition of knowledge and skill and values in separation. All of these learnings are embodied, integrated and internalized into the formation of a *professional*

identity, an identity that is modeled by the instructors and the more mature practitioners with whom the candidate interacts. The profession is being learned and developed; professional identity is under formation. I think the term in German or Norwegian context would be *Bildung*, or *dannelse*.

In some professions, you can observe the integration of those pedagogies sometimes working well. Nursing I think, often does it beautifully and yet often it can fall short in the apprenticeship of thought. Law is lacking in the apprenticeships of practice and integrity. So, the first big challenge for all of us teacher educators is how do we pedagogically develop and change our methods so that we strive to create an integration of apprenticeships. In the United States I would say that we handle the teaching of planning, reflection and values stuff much more effectively than the teaching of practice. If you compare the setting in which we teach teachers to practice with those used in nursing or in medicine or in engineering, the other professions have much more structure, routine and public performance. They use simulations where students have to do things again and again, perceptually, intervening, and lots of embedded assessment. In these other fields there is almost no “high stakes assessment” but much more case assessment that is going on every single day. There is an important lesson here for teacher education.

A fourfold blessing of honesty, humility, humor and hope

Even in the presence of the routines of signature pedagogies, every profession must prepare its future practitioners for the inevitability of surprise. And that’s true, not only for us teachers and teacher educators, for all of scholars of teacher learning as well. I know you have been told you have a successful dissertation when your hypotheses have been confirmed. I have a secret for you: that’s my definition of a boring dissertation. You have a successful dissertation when you have findings that shock and surprise you. You must seek findings that challenge your assumptions and surprise you. You become a real scholar when you get findings that put you in a state of amazement. How did that happen? I’m in the state of amazement almost every time when I watch a gifted teacher teach. How in the world did she pull that off? But without that sense of amazement we would be stuck in the routine. It is the blend of the routine and the surprising, the skill and the strategy, that professional mastery lies.

So let me leave you with a fourfold blessing that I learned when we did the study of the professional education of clergy and I interviewed a professor of church history, William Ferry, at Howard University. He said

that he teaches his students four principles: Honesty, Humility, Humor, and Hope.

Honesty

The first is honesty. You must be honest! You must call them as you see them. You must not force, allow yourself to see the world the way you ideologically would like to see it. Honesty is the first principle.

Humility

The second principle is humility. You must always recognize the limits of your own perceptions and understandings. The world is more complex than we are capable of grasping and is it only if we can approach what we do with humility that we are, along with the honesty; capable of doing the job we are meant to do. But one must be careful. When you put honesty and humility together it can become pretty good recipe for clinical depression. Try it someday.

Humor

This is why the third principle is humor. You must learn to laugh at yourself or at one another to not be so arrogant that we don't see our own absurdity at times. To try and to recognize this sense humor is an absolute prerequisite to wisdom.

Hope

But finally, the fourth H, without which none of us can educate and investigate, is hope. In spite of the problems honesty creates, because we have to see the world as it is and not only as we would love to see it. We are educators because we have some kind of optimism, some kind of hope.

As educators, we are committed to doing something so that we can make the world a better place. That is the heart of our professional identities as teachers, educators of teachers, and scholars of teaching. And all I can wish for you is that you can engage together in fulfilling our shared hope of making this world a better place for ourselves, and most important, for the next generation.