Lee Shulman, who we know from his categorization of teacher knowledge, most notably pedagogical content knowledge (PCK), has, throughout his career, championed teaching as a profession and the importance of teachers being educated like other professionals. However, he recently made a rather provocative statement about teacher education that I found to be a bit off-putting; he claimed that “there is no teacher education”. Shulman explained that professional education such as law or medicine; has signature pedagogies. “Signature pedagogies are modes of teaching that have been inextricably identified with preparing people for a particular profession” (Shulman, 2005). Signature pedagogy has three characteristics. 1) It is distinctive to the profession; 2) it is pervasive in the curriculum – there are continuities across the program that are part of what it means to think like a member of that profession, and 3) is essential as elements of instruction and socialization. These pedagogies are characterized as routine; the rules of engagement in this pedagogy are repeated so that everyone knows what to do and the thinking of students is made visible so that “everyone is accountable – expected to know and to carry out procedures – no one can hide” and “students will not just be asked to comment but to build on the comments of those who spoke before them.”

However, when he looks at professional education for teachers, he suggests, “there is no signature pedagogy as there is in the other professional fields, for example, law, and medicine.” Instead, each teacher education program “seems to feel that it needs to be special, singular or unique.” To solve this problem, Shulman and colleagues at the Carnegie Foundation are developing multi-media cases of “accomplished practice of teaching”; then studying how the teacher educators use these cases in educating new professionals, and finally investigating the “emergent practice” of these “neophytes”. Shulman contends, this approach would

...lead to a program of signature pedagogy for teacher education that combines the best features, on the one hand, of case method – where you are dealing with
the rich growing archive of existing cases. And on the other end, our best ideas from lesson study where you’re now setting teaching and learning objectives, jointly designing instruction to accomplish these goals, actively engaging in teaching to try out the design, seeing how it works, and bringing it back to the seminar or workshop in which you’re working on learning to teach.

While I might not agree with all that Shulman claims, the idea of a research program that focuses on the design of an approach to teacher education that considers building from accomplished existing teaching and using known effective methods in teacher education to provide coherence and consistency for the professional education of the next generation of teachers is compelling. But what still concerns me about Shulman’s project is the selection of models of professional practice that become the cases; the selection of these cases becomes extremely critical because they will be the basis for all that follows.

Turning to the papers in this issue, two of the articles address using features of mathematics lessons as means to support practicing teachers’ learning. One paper examines specific principles in the design of tasks and the other article proposes specific types of teacher–student interaction as possible resources for teacher learning.

Helen Doerr and Lyn English, interested in design research, show how specific features of tasks known as model-eliciting activities supported the development of two middle school teachers’ content knowledge and teaching as their students engaged with the task. Model-eliciting activities follow six principles in design that are found to affect student learning, but only three of the principles were important to teacher learning. These were the: Reality Principle which refers to the meaningfulness of the task to the student; Self-Evaluation Principle which means that the task is designed such that the students judge for themselves the quality of their response; and, the Documentation Principle which means the task is designed such that students are required to document and represent their ideas which explicitly reveals how they are thinking about the situation.

Julia Anghileri focuses on the act of pedagogy and the ways in which different forms of teacher-student interaction influences pupil learning. She identifies a hierarchy of interactions that can enhance mathematics learning through different forms of scaffolding. She identifies two new categories of scaffolding that enhance mathematics learning, reviewing and restructuring, that characterize effective teacher–learner interactions. This hierarchy of interactions, specifically reviewing and restructuring could be used in teacher education as a means for identifying and discussing with teachers their ways of interacting.