# Design Problems in Practice-Centered Teacher Education*

*Problems with the term "teacher education"

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# Key questions

1. What do we mean by "practice-centered" or "outcomes-oriented" teacher education?
2. What is the difference between traditional "field experience" and learning through an explicit clinical curriculum?
3. What is involved in designing a professional education curriculum focused on practice?
4. What problems must be managed in specifying a explicit clinical curriculum for the training of teachers?



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# Overview

1. Introduction:  Identifying the problem and setting the problem in context
2. What do we mean by "practice-centered" teacher education?
3. Five problems inherent in making practice the centerpiece of teacher education, and an example from the University of Michigan
4. Conclusion



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# 1. Identifying the problem and setting the problem in context

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# Consider some of the foci of medical training

e.g., Conduct a chest examination:

- Observe respiratory efforts and note presence/ absence of respiratory distress
- Confirm midline tracheal position with gentle palpation anteriorally
- Percuss the chest on left and right
- Ascultate the chest using using the diaphragm of the stethoscope on both right and left sides



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# . . . and of pilot training:

- Conducting a preflight inspection
- Normal and cross-wind approach and landing
- Straight turns and climbing turns
- Effective visual scanning
- Runway incursion avoidance
- Crossed control stalls
- S-turns across a road



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# . . . or of training for the clergy

- Presiding at life-cycle events (bat and bar mitzvah, funerals, christenings)
- Counseling parishioners
- Homiletics (developing and delivering a sermon)
- Reading for preaching



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# No equivalent in teaching

- Objectives for coursework and for student teaching and other clinical experiences lack similarly precise professionally-determined and agreed-upon learning objectives
- Performance expectations for graduates of teacher education underspecified and weakly assessed



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# The problem

1. Lack of common or sufficiently precise language for the work of teaching (Grossman, et al..)
   - Teaching practice has not been decomposed into practically-sensible parts
   - Lack of useful terms for the parts
   - Where there is language, it is often not shared
2. Incomplete knowledge about the problems of designing and delivering more explicit clinical training in teaching



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# Historical and contemporary context

1. "Experience" in learning to teach not a new issue (e.g., Dewey, 1904; Feiman-Nemser & Buchmann; Hoy & Rees; Ladson-Billings; Cochran–Smith; Darling-Hammond)
2. On the contemporary scene:
   - Calls for more field experience and clinical education
   - New models for providing in-practice learning for novices (alternative route programs; residency programs; new TE structures)
3. Some work underway to identify focal practices for teacher education, in general and in specific subject-areas, and to design professional education around them (Franke et al.; Grossman, et al.; Lampert)



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# Cultural context

1. Lack of attention to teaching
   - Value-added measurement that fails to investigate variation in teaching practices
   - Orientation to "constructivist" or "student-centered" classrooms
   - Belief in teaching as highly improvisational and largely unspecifiable
2. A confounded view of "professionalism"
   - Agreement on the complexity of practice
   - Disdain for "prescriptiveness" and detail: "de-skilling" teaching (an irony)



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# 2. What do we mean by “practice-centered” or “outcomes-oriented” professional education for teachers?

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# The idea of "practice" in learning to teach is not new

- Teachers cite experience as most important source of learning (Jackson, Lortie)
- Student teaching (or "practice teaching") long a key component of teacher education
- Most teacher education programs include substantial practicum or field experience



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# What is the history of efforts to center teacher education on practice?

- Normal schools: Opportunities to practice the work of teaching in "practice" or "model" schools; some attention to what the *practices* were that students needed to learn
- 1920s: Commonwealth Teacher Training Study
- 1970s and 1980s: Competency-based teacher education; microteaching



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# What is meant by "practice"?

Term used in four different ways in teacher education (Lampert, 2009):

1. Practice in contrast with theory
2. Practices as the things that teachers do routinely
3. Practicing in order to learn
4. The practice of teaching



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# What do *we* mean by "practice-centered" teacher education?

1. Professional training focused on a pre-identified set of *practices*, with repeated opportunities for deliberate practice of those practices (i.e., definitions # 2 and #3)
2. Theory important *in use* (definition #1)
3. Claim: this kind of training can help develop a more robust *practice* of teaching (definition #4)

**"Outcomes-oriented":** Focused on beginning teachers' ability to do (as well as know, care about, be committed to) key aspects of the work of teaching — and assessments focused on these key aspects.



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# Core components of practice-centered initial teacher education

- **Curriculum**: What is there to learn in order to become a competent beginning teacher?
- **Instructional activities and settings**: What specific approaches and settings work best to prepare and support novices as they *do* the complex relational, psychological, social, and intellectual work of teaching?
- **Assessment**: How do we know when beginning teachers are ready to take responsibility for their own classrooms?



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# Resources for developing practice-centered teacher education

- Comparative investigations of other professions (Grossman et al., 2009)
- Some key work within subject areas (Franke & Chan, 2009; Lampert & Graziani, 2009; Ball, Sleep, Boerst, and Bass, 2009; Hatch & Grossman, 2009)
- New approaches to settings and activities to learn practice (Lampert, 2006); use of records of practice (Lampert & Ball, 1998; Ball & Cohen, 1999; Hatch & Grossman, 2009)
- Experience with performance assessment for some aspects of practice (e.g., PACT, National Board for Professional Teaching Standards, INTASC)



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# What still needs to be done?

- We need to identify the practices or instructional activities that student teachers need to learn to do during initial teacher education
- Recent work in specific subjects a very useful start; the task now is to identify a set of practices that will function as a common language for analyzing, studying, and teaching practice across all or most subject-areas or levels (Grossman & McDonald, 2008)



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# 3. Five problems inherent in making practice the centerpiece of teacher education, and an example from the University of Michigan

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# The challenge

*Professionals working toward practice-centered teacher education would need to manage at least five inherent problems:*

1. Specify and develop consensus around the core tasks and activities of teaching
2. Choose the elements of practice most necessary for entrants to the profession
3. Articulate those elements at an effective grain-size
4. Manage the general and subject-specific aspects of teaching practice
5. Manage the context-specific nature of practice



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# 1. Specifying and developing consensus around core tasks and activities of teaching

- Absence of robust professional knowledge base
- Link between particular teaching practices and student learning not always clear
- Weak common language for describing and studying teaching



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# 2. Choosing elements most important for competent beginning practice

- Given vast scope of teaching practice and brevity of professional training, what is most important?
- Are some aspects of practice fundamental to more advanced elements?
- Are there elements of practice that are best or only learned through formal training (rather than experience)?
- What makes a "safe" beginner?



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# 3. Articulating core practices at an effective grain-size

- How to decompose the intricate practice of teaching into parts that are small enough to be learnable but are still meaningful?
- Does it matter if core practices are of different "grain-sizes"?
- What to do about practices that cut across multiple elements of instructional work?



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# 4. Managing the general and the subject-specific aspects of teaching

- How does the work of teaching differ from one subject to the next?
- Are there practices that all elementary teachers, all secondary teachers, or all K-12 teachers need to be able to do, independent of their field?
- What are the subject-specific practices that are most important for beginners?
- How to manage without a common K-12 curriculum in the U.S.



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# 5. Managing the context-specific nature of instructional practice

- How does context interact with a given teaching practice?
- How can we account for that interaction in teacher education, particularly given the diversity of learners and instructional contexts in the United States?



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# An example: Identifying high-leverage practices at the University of Michigan

At U-M, we have tried to manage the first three of these problems by:

- Enlisting the experience and imagination of a broad range of practitioners and researchers to create a comprehensive "map" of the work of teaching
- Specifying and using criteria for identifying those aspects of the work that are the most "high-leverage" for beginners
- Deliberately choosing tasks and activities at grain sizes useful for a curriculum of learning to teach



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# "High-leverage" practices

- Have significant power in teaching because they:
  - Are central to the daily work of teaching
  - Attend to considerations of equity
  - Are most likely to support student learning
- Fundamental to the development of more complex practice



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# Examples of considerations

*Considerations central to the practice of teaching:*

- High probability of making a difference in teaching quality and effectiveness
- Effective in using and responding to differences among pupils
- Useful broadly across contexts and content

*Considerations central to teacher education:*

- Can be assessed
- Can be taught to beginners



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# Identifying high-leverage practices

- Used considerations to identify list of 88 potential HLPs
- Bundled or further decomposed items to achieve a shorter list that highlights a range of crucial features of the work of teaching



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# Examples of high-leverage practices

- Explaining ideas and processes
- Choosing and using representations, examples, and models of core content
- Setting up and managing small-group work
- Recognizing and identifying common patterns of student thinking in a content domain
- Selecting and using specific methods to assess students' learning on an on-going basis
- Conducting a meeting with a parent or caregiver



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# Assessment

*Assessment Points:*

1. Entrance and admissions
2. In-program
3. Exit

*Assessment Foci:*

- High-leverage practices
- Content knowledge for teaching
- Ethics, professionalism, and relational skill



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# In sum

1. Teaching is a practice, and learning to do it must be centered in and on the actual work.
2. Still, unmediated (or under-mediated) experience is an unreliable teacher in learning to teach.
3. Many professions and occupations make practice more central to preparing beginning practitioners. This is an important direction for the improvement of teacher education through any pathway.
4. We need to identify, collectively, those aspects of the work that are crucial for beginners, and center teacher education on them. We have a strong history and new resources for doing so.
5. The problems of designing practice-centered teacher education should be worked on across programs and approaches to the preparation of teachers.



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