Core Practices for Teaching: Taking Stock and Planting Seeds

Pam Grossman University of Pennsylvania



#### Goals of work on core practices

- Strengthen teacher preparation and professional development by targeting foundational practices for teaching
- Provide common language and tools for analysis and assessment
  - In teacher education programs
  - In research on teaching and teacher education

#### Current landscape of core practices

- Explicit identification of core or high leverage practices
  - K-12 teaching generally
  - Science and history/social studies
  - Special education
  - Language teaching
  - Project-based learning

CORE PRACTICES IN TEACHER EDUCATION



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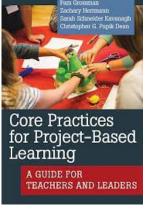
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#### Current landscape of core practices: Challenges

- Lack of consistent terminology to describe core practices
- Lack of consistent definition and grain size in determining core practices
- Lack of agreement in the field about which core practices are foundational for preservice teacher education
- Lack of systemic approaches to embedding core practices within curriculum of teacher education

How core practices have been taken up in initial teacher education





Teaching and Teacher Education Volume 132, October 2023, 104206



Research paper

From coursework to fieldwork: How do teacher candidates enact and adapt core practices for instructional scaffolding?

<u>Gøril Brataas</u> ္ 절, <u>Inga Staal Jenset</u>	
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- Reorganizing the class to teach to these core practices
- Assessing if students have developed these practices

## Program-wide adoption

- University of Connecticut, USA
  - Levine, T. H., Mitoma, G. T., Anagnostopoulos, D. M., & Roselle, R. (2023). Exploring the Nature, Facilitators, and Challenges of Program Coherence in a Case of Teacher Education Program Redesign Using Core Practices. Journal of Teacher Education, 74(1), 69-84. https://doi.org/10.1177/00224871221108645
- University of Michigan, USA
- National Louis University, USA
- Universidad Catolica, Santiago, Chile
- University of Oslo, Oslo, Norway
  - Klette, K. Jenset, I. S., & Brataas, G. (2024). Practice what you teach: Using core practices to improve connections between theory and practice in secondary teacher education. In P. Grossman & U. Fraefel (Eds). Core practice in teacher education: A global perspective. Harvard Education press.
- Vrije Universiteit Amsterdam, Netherlands
  - Westbroek, H., Kaal, A., & Donszelmann (2024). A motivational perspective on learning core practices: The case of a Dutch teacher education program. In P. Grossman & U. Fraefel (Eds). Core practice in teacher education: A global perspective. Harvard Education press.

#### By states and countries

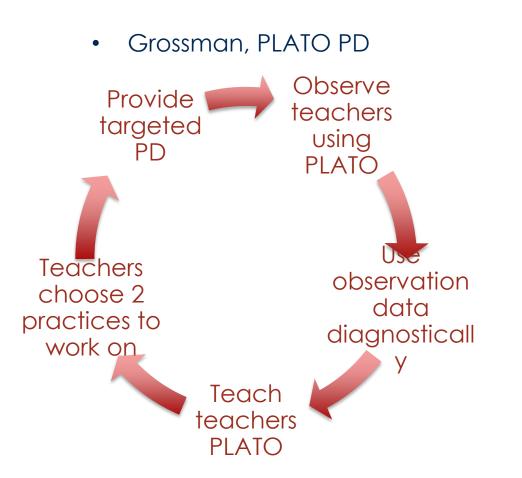
#### By field

- Michigan's list of core practices
- Georgia's integration of CEEDAR's high leverage practices for special education
- Work in Thailand with 12 universities on core practices for teacher education

#### Special Education

Brownell, M. T., Benedict, A. E., Leko, M. M., Peyton, D., Pua, D., & Richards-Tutor, C. (2019). A Continuum of Pedagogies for Preparing Teachers to Use High-Leverage Practices. Remedial and Special Education, 40(6), 338-355.

#### Organizing Professional Development around Core Practices



**Michael Tengberg (Karlstad University),** Use of PLATO with experienced Swedish teachers

Kristin Waege (Norwegian University of Science and Technology) Mastering Ambitious Mathematics teaching project with experienced teachers in Norway

**Alexander Groschner, Tina Seidel**, Dialogical Video Cycle with experienced teachers in Germany

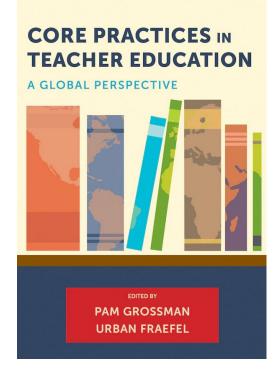
# Research on core practices

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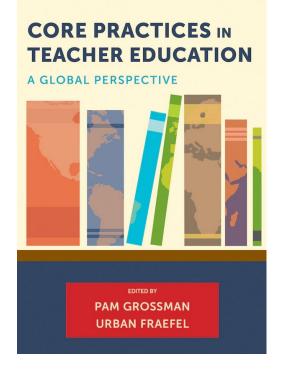
#### Research on core practices

- Growing number of studies focus on the specific teaching of core practice or HLP in TE
  - Facilitating discussion
  - Eliciting and responding to student thinking
  - Modeling
  - Feedback
- Research focuses more on general core practices although some studies targeted on particular subjects, teaching approaches, or student populations
  - CEEDAR 22 core practices in Special Education
  - Core practices for PBL
  - Subject-specific practices in ELA, science, and history



#### Research on core practices

- Practices related to the teaching of discussion are most prevalent
- Still relatively few studies that connect quality of core practice to student learning
  - Challenge of identifying relevant outcome measures of student learning
- No studies that assess whether grain size matters to learning of core practices

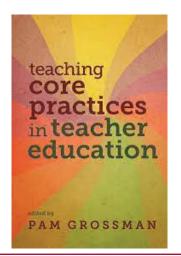


#### Research on teaching core practices

Prevalence of framework for teaching practice and associated learning cycle in studies

- Most research on teaching of core practices focuses on use of approximations/simulations
- Emerging research on importance of decomposition in the teaching of core practices
- Emerging research on whether order of learning cycle matters

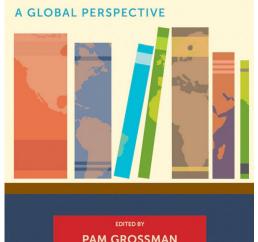




#### Research on teaching core practices

- Importance of opportunities for enactment in learning a practice
- Importance of decomposing core practices
- Importance of decomposition and analysis prior to enactment

#### CORE PRACTICES IN TEACHER EDUCATION



**URBAN FRAEFEL** 

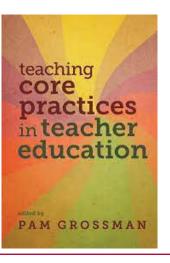


#### Importance of decomposition: Research on initial teacher education

- Emerging evidence on the importance of enactment and decomposing the practice prior to enactment
  - Comparative study of 3 conditions of teaching a core practice (NÜCKLES & KLEINKNECHT, 2024)
    - Students with opportunity to enact practice outperformed peer who did not
    - Students who decomposed practice prior to enactment outperformed peers who enacted first.



A GLOBAL PERSPECTIVE



#### Importance of decomposition: research on coaching

- Representation of practice was more common than decomposition of practice in coaching. However, "when coaches represented and decomposed inquiry-based teaching practices, teachers were likely to improve their practice."
- The length of time spent decomposing a practice predicted whether teachers grew in that practice.

(Kavanagh, Farrow, Bernhard, Guillotte, Pupik Dean, 2024)

#### Research on approximations in TE

- Review of 26 studies with control groups, most using simulations (Cohen, in preparation)
  - Majority of studies find have positive impact of approximations on learning to teach
    - 23 studies with positive effects, 3 studies with no effect

"Taken together, the reviewed studies suggest approximations of practice (largely, in this corpus, in the form of digitally mediated simulations) and corresponding scaffolds, can support candidates in learning to teach."

#### Challenge of defining focus for approximations

"It is worth noting "deliberate practice" as defined by Ericsson and Pool (2016) is predicated on coalescence in a field around what should be practiced and how one would know someone has developed the requisite skills. Unlike Ericsson and Pool's (2016) research on practice in competitive fields with accepted training methods that have been gradually refined, as in classical music and mathematics, the field of teacher education does not generally agree upon what constitutes "good performance" or how to measure it, making it difficult for teacher education practice to be deliberate." (Cohen, in preparation)

#### Challenges of capturing teacher learning across multiple measures

- Despite definition of practice as including knowledge, judgment, identity,
  - lack of attention to how focusing on core practices helps develop teacher pedagogical reasoning (Kavanagh, Danielson, Gotwald)
  - lack of explicit attention to the development of pedagogical content knowledge in conjunction with focus on core practice
  - Relatively few studies that look at cultivation of professional identity in conjunction with focus on core practice

# QUINT's Contributions

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## Growing body of evidence on teaching quality

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classroom teaching: Pitfalls and	DOL 10.1177/1474904117703228
possibilities	journals.stgrp.bcom/nome/eer
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Marte Billatad-Balas Department of Teacher Education and Shoot Research, University of Oslo, Norwa

Abstract

The number of this paper is to denote the role of coding and observation memorial descent optimics. While observation amends have been a part of the methodologist toolid is reasoning various reports of individual of descripts the field here also been sufficiently paradigm warks, frequentition and body production of individuality. Secondor hereworks for investigating teaching are needed, including observation incluments for teaching that are toolin generate and subject operation. Secondor hereworks developed within an integrated methodologist design could help reservations note for research developed within an integrated methodologist design could help reservations note and an advect here both generated here and the second here and the second heredologist and subjects. This active serves are used anticy after mechanism by summarizing and recurring codings status, overview and boxes of the different testing and coding procedures and y provide increased rights and advect vocabulary to talk about testings. We discussion by this advector is advected vocabulary to talk about testings we discusses have been advected as a reflective meaner, coding meands, and are get that if trees is a reflective meaner, advecting meands care roots to actively mean days, and vocabulary when talking about – and researching – descrease to advecting and testing.

Keywords Coding manuals, video sludies, comparative classroom research



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Research paper

classrooms

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Teaching and Teacher Education Volume 110, February 2022, 103593

Teacher feedback on procedural skills,

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#### Using Video to Foster Teacher Development

Improving Professional Practice through Adaptation and Reflection

Edited by Marte Blikstad-Balas and Inga Staal Jenset



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/csje20

The Quality of Instruction in Swedish Lower Secondary Language Arts and Mathematics Growing efforts to include PLATO practices in the curriculum of teacher education across Nordic context

- Norway
  - University of Oslo
  - Western Norway University of Applied Science
- Iceland
  - University of Iceland
  - University of Akureyri
- Denmark:
  - UCL, Denmark
  - UC Syd, Denmark

An infrastructure to support practice-based teacher education and research in Nordic countries

- Video libraries for use in teacher education and professional development
- Materials and resources for teacher educators
- The next generation of researchers and teacher educators!



Improving Professional Practice through Adaptation and Reflection

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#### Use of PLATO as set of core practices

- Use of common tool for research
  - Provided common technical language for researchers and teachers
- Systematic research on instructional practice across multiple national contexts
  - Provided evidence that descriptions of classroom practices can travel across national borders
  - Yielded findings on instructional quality within and across Nordic countries
  - Stimulated use of PLATO practices for professional development and preservice education

#### What Observation Protocols Enable

- Common lens for looking at classroom practice
- Vision of accomplished practice: Professional vision
  - Practice defined at various levels of quality
- Identification of components that provide basis for targeted feedback
- Clear specification of qualities of a practice
- Ability to compare quality of instruction across classrooms and countries (in the case of QUINT)
- Tool for assessing change over time



# Challenges related to use of observation protocols

- Potential for narrowing vision of observers
  - What are we missing?
- Potential for reductive view of teaching
- Potential for transforming scaffolds to straightjackets
- Challenges of tracking improvement given restricted scale
- Nonetheless—a potentially powerful tool for improvement



## Directions for future research

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#### Outstanding questions for the field

- How best to define and delineate what constitutes a core practice
  - Lack of shared understanding of the term
  - Need to distinguish between domains of practice, core practice, and components of practice
    - Classroom Management (domain)
    - Creating and reinforcing norms for positive participation (practice)
    - Narrating positive student behaviors (teacher move)

#### Outstanding questions for the field

- Appropriate grain size for **definition** of core practice
  - Goldilocks problem

Too big: Creating a Positive Classroom Environment Too small: Using wait time Just right?

- Appropriate pedagogical grain size for **teaching** core practices
  - Importance of focusing on smaller components of practice during approximations

## Outstanding questions for research

- Which core practices are most important to target in preservice teacher education?
  - Building an evidence-based theory of the trajectory of teacher learning
- How best to teach core practices in preservice TE?
  - Role of decompositions and approximations
  - Role of coaching
- To what extent does a focus on core practices during initial TE **transfer** into practice of beginning teachers?

#### Outstanding questions for research

- To what extent are novices developing professional vision and judgment, as well as professional identities, as they learn to enact core practices?
  - Respecting socio-cultural definition of practice that includes knowledge & judgment
- To what extent does a focus on core practices during initial TE develop teachers' content and pedagogical content knowledge?

## Taking stock and planting seeds

- Evidence that a number of teacher educators are taking up the ideas and pedagogies around teaching core practices
- Emerging research base that offers opportunities for refinement of model and improvement of teacher education
- Need for continued conversation and debate about definitions and trajectory for learning core practices
- Hope for continued systematic research on both core practices of teaching and on teaching of these practices

#### Gratitude

When Giving Is All We Have

One river gives Its journey to the next. We give because someone gave to us. We give because nobody gave to us. We give because giving has changed us. We give because giving could have changed us.

We have been better for it, We have been wounded by it— Giving has many faces: It is loud and quiet, Big, though small, diamond in wood-nails. Its story is old, the plot worn and the pages too, But we read this book, anyway, over and again: Giving is, first and every time, hand to hand, Mine to yours, yours to mine. You gave me blue and I gave you yellow. Together we are simple green. You gave me What you did not have, and I gave you What I had to give—together, we made Something greater from the difference.

Alberto Rios

# Questions?

