

Pre-service teachers' conceptions about teaching  
and the effect of teacher education programs on  
their conceptions:  
Cases from Germany and Ethiopia

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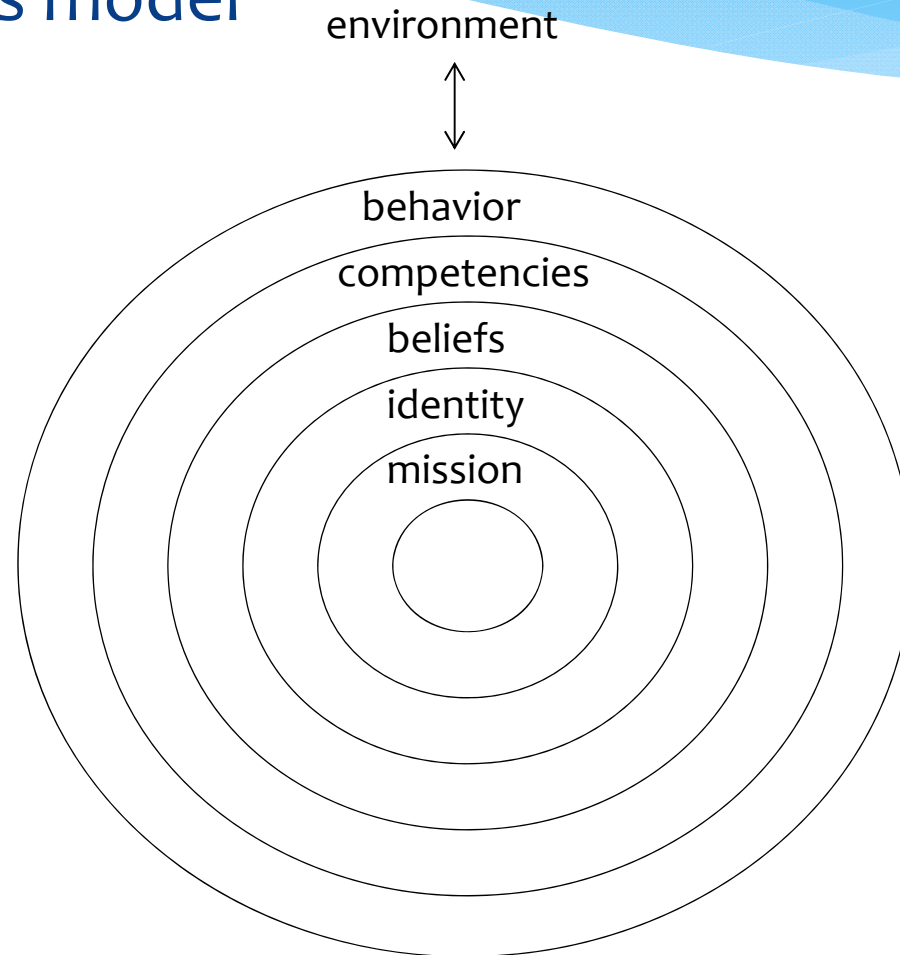
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# Why studying pre-service teachers' conceptions of teaching?

- \* Teachers' beliefs, personal theories of teaching, teachers' thinking, images, implicit theories, orientations, perspectives, etc.
- \* Teacher beliefs are the ideas that influence how they conceptualize teaching.
- \* These ideas encompass 'what it takes to be an effective teacher and how students ought to behave' (Pajares,1992).
- \* Relationship between teachers' beliefs and practices.
- \* Inconsistent findings, generally beliefs affect teachers' actual practices.
  - \* Teaching behaviors in and outside schools
  - \* Assessment practices
  - \* Classroom management
- \* Educational reforms
  - \* New teaching methods, school organization, assessment practices
  - \* Students' learning

# The levels of change: How to change teachers' practice?

Bateson's model



# Origin of teaching conceptions

- \* School experiences: Education and reproduction (habitus)
  - \* Family experiences
  - \* Experiences in colleges and universities
  - \* Socio-cultural practices and values
  - \* Teacher education programs
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- \* Conclusion: beginning teachers' have already, wittingly or unwittingly, developed beliefs about teaching before they join teacher education

# Metaphors as a means of studying teachers' thinking/conceptions

- \* Metaphors: Meaning making and construction of meaning
    - \* Self-analysis and self-understanding
    - \* Disclose deep-rooted personal beliefs
  - \* Metaphors/Conceptions: Constructivism or behaviorism
  - \* Teaching metaphors:
    - \* Teachers' understanding of teaching
    - \* Professional identity
    - \* Epistemological beliefs
- Use and drawback**
- \* Input in the design of courses
  - \* Reconstruction and deconstruction of beliefs
  - \* Limiting or restricting in scope

# Why cross-cultural studies in teaching conceptions?

- \* Comparison across cultures
  - \* Implicit beliefs and assumptions become more transparent
  - \* Gives teachers, educators and researchers a more explicit understanding of their own implicit theories
  - \* Lessons on effects of teachers on students' learning
  - \* Development of teacher education programs

# Effect of of teacher education programs in changing pre-service teachers' conceptions

- \* Some changes, temporal changes, or no changes after teacher education programs
- \* Which programs succeed in changing beliefs?
- \* Thematic organization: teaching as problem solving...
- \* Progressive and intensive internships/practicum
- \* Reflection as a method of self-study
- \* Incorporating courses directed on students teacher beliefs

# The study

- \* Close to and after the completion of the programs
- \* Higher secondary school teachers (Gymnasium in Germany and University Preparatory in Ethiopia)
- \* Interview and questionnaire
- \* 45 minutes and a questionnaire emailed or given to the respondents.
- \* 30 minutes to read and converse with the items and generate metaphors
- \* Interview items asked student teachers to describe:
  - \* ideal/good characteristics of a teachers from a personal perspective
  - \* Why they join teaching
  - \* Teaching metaphor/metaphors and state the origin/source
- \* Conducted in German, English, and Amharic languages



# Study contexts: Teacher Education in Germany and Ethiopia

- \* Teacher education programs aim at producing reflective, problem solving and inquiry oriented teachers.
- \* Objectives such as teachers are facilitators, reflective practitioners, constructivist are indicated.
- \* Significant differences in duration of study and organization of study
  - \* Secondary school about 6-7 years (including induction) in Germany and in Ethiopia about 4 years
  - \* School-based teacher education
  - \* Involvement of state education boards

# Germany

- \* Diverse across the federal states
- \* Major elements:
  - \* **Two tier training:**
    - \* University education (5 years)
    - \* Practical pedagogical training in schools and/or teacher education institutes (1.5-2 years)
      - \* Induction, practice and seminars
  - \* **First and second state examinations:** Conducted by education boards of the states
- \* Some changes (the Bologna Reform): 3 years bachelor +2 year master of education (equivalent to first exam and qualifies for induction)

# Ethiopia

- \* Integrated and consecutive models of teacher education
- \* 4 year programs (Content area and pedagogical courses)
- \* 3 +1 (Content area, followed by pedagogical courses)
- \* Mainly university-based education
- \* Secondary education the responsibility of the federal government

# Some metaphors by pre-service teachers and their sources

- \* Teaching is like a shepherd. I remember reading a book when I was a child. A teacher has to lead students to some destination. She has to show them... (Chemistry and Mathematics, pre-service student teacher, Germany)
- \* A teacher is like a captain of a ship or like a compass. The people have to get comfort and enjoy the journey. Students have to enjoy learning. They have to think from side of the ocean. The captain has to deal with the direction and wind. Students have to swim in knowledge and get the useful ones. (History and Philosophy student teacher, Germany)

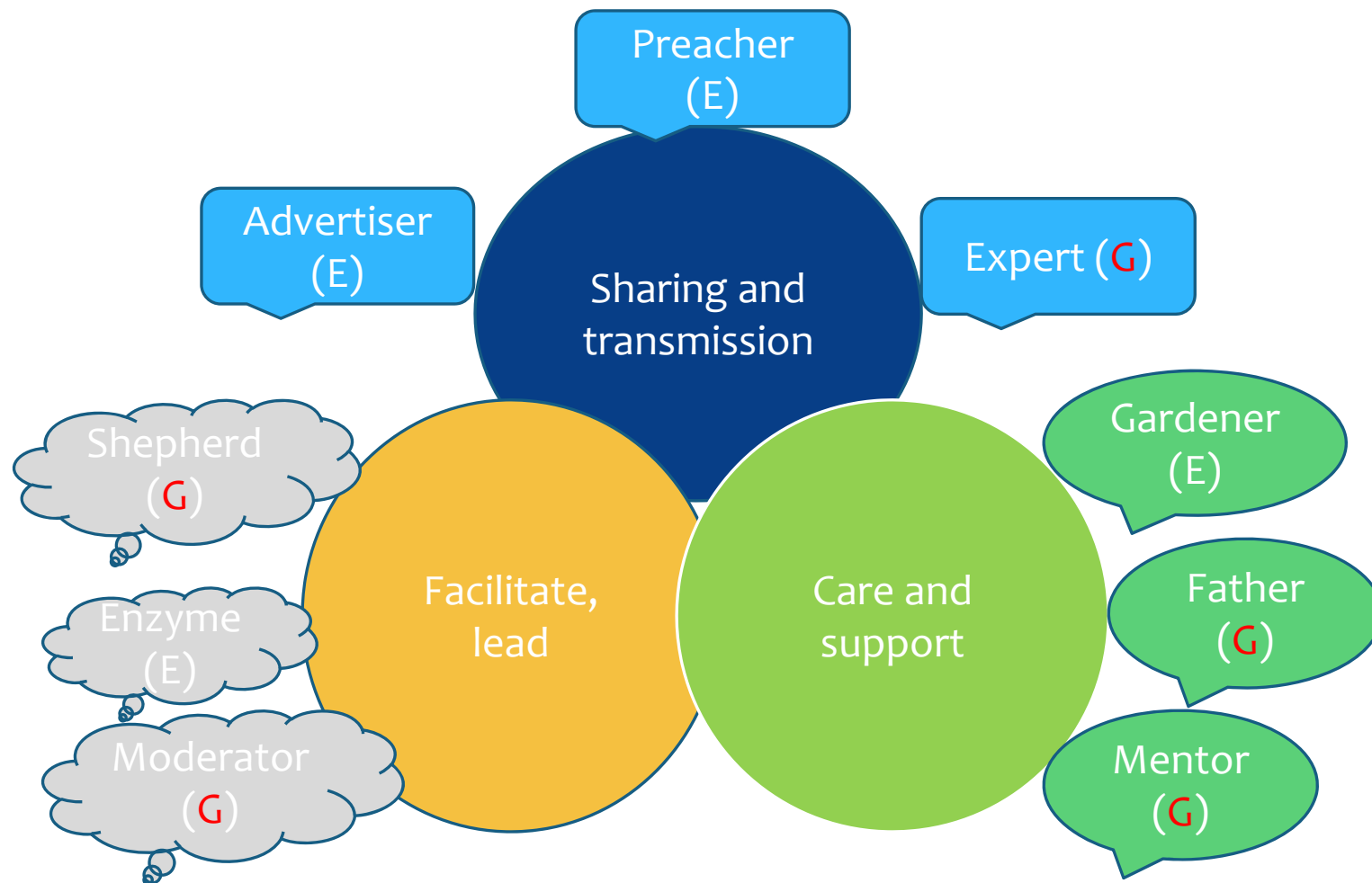
# Some metaphors...

- \* A teacher is like **an enzyme** to the students. He has to facilitate the acquisition of knowledge as enzymes facilitate the digestion of food. The best teacher teaches difficult things in a simpler way so that students can understand them (A mathematics student teacher, Ethiopia).
- \* A teacher is a good **preacher**. You teach and tell the students what is good for them. He needs to be good to be listened and attract the students in class. (Biology student teacher, Ethiopia)

# Cont'd

- \* Mentor, father, gardener, learner, expert, moderator, innovator, shepherd, father, captain/compass,
- \* Entertainer, advertiser, investigative journalist,, facilitator, technician, preacher, coach, enzyme

# Categorization of the responses: trend and socio-cultural reasons?



# Sources for metaphors

- \* **Upbringing**-My father was always acting as a good teacher. (German student teacher)
- \* **Personal experiences**: When I was in school, I read a novel whose major character was a teacher. He was taking care of the kids in class. He tried to help them learn and reach some goal. (German student teacher)
- \* **Schooling**: My best teacher in school was... (German student teacher)
- \* **Teacher education**: Teaching has to be fun. In psychology, we discussed teachers have to be humorous like entertainer (Ethiopia student teacher)
- \* **Schooling**: I think teaching is identifying the problems of students. My math teacher asked us questions that we tried... (Ethiopia student teacher)
- \* **Teacher education**: I learnt in a course that a teacher has to mediate learning... (Ethiopia student teacher)



# Conclusions

- \* Teacher education programs were not influential factors in the identification of metaphors.
- \* Respondents indicated their effect on developing some teaching skills.
- \* Although metaphors that can be categorized in the same group have been formulated by student teachers from both countries, differences have been very noticeable.
- \* Student teachers from Germany seem to base their metaphors more from personal experiences and schooling while student teachers in Ethiopia mention courses in education and sometimes previous teachers.



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