

THE META-DIDACTICAL TRANSPOSITION: A MODEL FOR ANALYSING TEACHERS EDUCATION PROGRAMS

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With the aim of continuing the reflection developed in the Research Forum “*Teacher knowledge and teaching: viewing a complex relationship from three perspectives*” by D. Ball, C.Y. Charalambous, M. Thames, & J.M. Lewis (PME 33, Thessaloniki, 2009), this RF intends to address the problem of highlighting and analysing the complex and dynamical processes involved during teacher education programs, focusing on the way in which knowledge for teaching mathematics can develop within them.

A new descriptive and interpretative model (the *Meta-Didactical Transposition* model – MDT) for studying the transposition from research to teaching practice during teacher education programs will be introduced. The model, based on the Anthropological Theory of Didactics (Chevallard 1992; Garcia et al. 2006), considers some main variables in the teacher education processes (community of teachers, of researchers, role of the institutions) and accounts for their mutual relationships and evolution over time.

During the first session the MDT model will be introduced focusing on its main features and embedding it in the existing literature on the subject (Wood 2008), with the aim of supporting the participants in discussing it with a critical perspective. Two examples taken from two teacher education projects developed by the presenters (one in France and one in Italy) will be analysed through the lenses given by the model to provide evidences of its possible contribution to math education and to show the differences and analogies with respect to other models.

During the second session, critical phenomena of teachers education programs will be discussed. In particular, the focus will be on the brokering function of the different actors within these programs. The following questions will be addressed:

How and which persons involved in the different roles of a teacher education program (researchers, designers, educators, teachers) participate to the evolution of teachers' practices in the classroom?

How the different theories can help the researcher to notice it?

Last names of the authors in the order as on the paper

Participants will be invited to share ideas and discuss, on the base of the presented examples, as well as of the teacher education projects in which they are involved.

The major goal of the two sessions is to point out the rationale of the MDT model and to discuss its compatibility with respect to other theoretical models existing in the literature: the examples proposed will be used as concrete reference environments, upon which the arguments can be based. In this way the model will be critically considered, pointing out its pros and cons with respect to other lenses and analysis tools used to investigate teacher education projects and highlighting possible ways of using it to complement other models focused on teachers' knowledge, such as the very well known model elaborated by D. Ball & colleagues (Ball et al. 2008).

References

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