



Oplæg af José María Marbán på møde 27. April i Projektforum

José María Marbán:

Den spanske matematikdidaktiker José María Marbán er lektor ved Universitetet i Valladolid og dekan for universitetets lærerskole i Soria, hvor der er 550 lærer- og pædagogstuderende. Han har i foråret 2009 fået et forskningsstipendium fra det spanske ministerium for videnskab og innovation til at forske i fire måneder ved UCC med base i matematikmiljøet på KDAS.

Hans forskningsprojekt går ud på at finde metoder til evaluering af matematiklæreres professionskompetencer og korrelere disse med elevernes præstationer ved PISA-testene. Slutmålet for arbejdet er at udvikle nyt curriculum for matematiklæreruddannelsen. Han kan kontaktes i lokale 111 på KDAS og på adressen josema@mac.cie.uva.es

Summary:

Since PISA as an internationally standardized assessment was first implemented by 2000 and the final scores obtained from that experience somehow sorted the 43 joining countries from the point of view of gains in learning outcomes of their 15 years old students, in terms of knowledge and skills, most governments have suddenly felt awareness about the need to become a mathematically competent society. As a consequence new trends and reflections about developing mathematical competencies among students have been supported -and sometimes forced- in many different countries in order to go deep into what should be understood by mastering mathematics as well as to design policies to ensure the achievement of higher levels of this feature. This latter aim, though essential, is extremely complex and cannot be faced just from a curricular point of view as it is being the case in many countries. In particular, along the last four decades mathematics education as a research field has widely shown that there is a significant influence of mathematics teachers' behaviors and competencies on students' learning achievements and so any institutional global project focusing on developing mathematical competencies at schools has to be concerned with the even more complex task of developing professional mathematics teaching competencies.

The scope of this presentation is simply establishing the state of the art on questions such as What should it mean being a competent mathematics teacher? and How to measure quality in teaching maths? as well as giving an overview of some international answers to such questions with a special attention to the Danish and the Spanish cases including their responses through teacher training programs.