

STEM teachers’ competence development in the Netherlands

Key messages to be discussed at the Dutch multiplier event

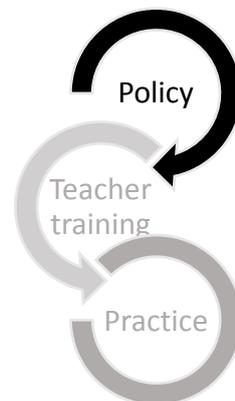
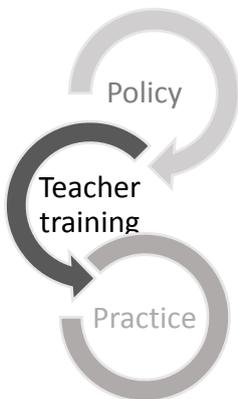
The background

Teacher professional development is part of the national agenda in the Netherlands as a warrant of the quality of Dutch education. From August 1 2017 the Law on Teacher Profession and Teacher Register makes continuous professional learning and development a compulsory part of the teacher profession. The Ministry of Education and Culture and national teacher agency (Onderwijscoöperatie) take care of the pre-requisites and the general framework by formulating the general quality standards and by financing teachers’ professional development through the system of national bursaries for masters’ or Ph.D. programs for teachers.

At meso level, school boards facilitate teacher professional development by allocating time and facilities for learning activities, intervision and network learning and support of innovation at grass-roots level. Support of participation in regional, national and international networks of schools contributes to teacher learning as well. Pre-service teacher education, publishing houses, non-governmental educational agencies and university research centers contribute to teacher learning by offering live, online and blended courses and programs and conducting research of teacher professionalization.

It is however, the teachers themselves who retain responsibility for and who have the lead in making continuous professional development an integral part of the teacher profession in the ever changing and increasingly demanding world of education.

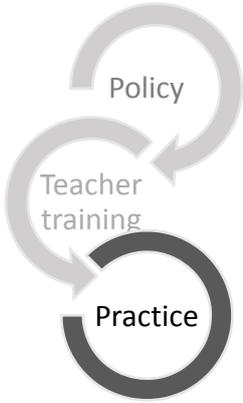
At macro level (policy): Balance between societal demands of innovation, the national core curriculum requirements and the organization of pre-service and in-service teacher learning and permanent competence development [in STEM domains]. The trigger for discussion [can be]: the pre-requisites for sustainable teacher learning and competence development against the newly defined teacher competence quality standards and beyond them.



At meso level (teacher training institutions): Transition from pioneer work, experiments, projects and lessons learned from them to integration of innovative approaches at schools into mainstream school daily practice against the background of the current practices of teacher learning facilitation by school boards. “From sowing to harvesting”. The trigger for discussion [can be] the question of how school boards ensure that innovation and teacher professional learning innovate and transform the current school practice and vice versa how innovative practice insures sustainable teacher learning.

Issues for discussion about (STEM) teachers’ professional development in the Netherlands

At micro level (practice): Integration of 21st century skills with (STEM) domain knowledge and skills, connecting learning in and out of school with ubiquitous ICT (seamless learning idea), integration of subjects, learner directed curricula - numerous trends meet in the school of today and make active teacher involvement in designing and shaping his/her lessons, courses and curricula for and with learners a necessity. Insights in what works and why are needed to underpin design decisions, therefore the inquiring mind as an attitude comes into picture. Teacher as designer and teacher as inquirer /researcher of his/her own practice are two important trends in the teacher profession nowadays. The trigger questions for discussion are on the impact these two new trends implicate for teacher professional learning and competence development and the implications they have on the school practice.



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Main theme for the Dutch multiplier event
 Impact of teacher learning (competence development) on the school practice

Structure of the Dutch multiplier event

