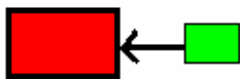


Cooperation Forms for Interdisciplinary Lessons

Short overview, according to *Model Beckmann 2003*¹

Topic and Major Subject – related form (TM - Form)

Aspects (contents, methods,..) from scientific subjects (physics, chemistry, biology..) used in mathematics lessons.



Organisation: Initiative: mathematics teacher,
Communication with colleagues teaching scientific subjects,
Colleagues support mathematics teacher

Parallel Topic - related – Form (PT - Form)

Mathematics Aspects of the theme concerning mathematics learning	Physics Aspects of the theme concerning mathematics learning	Chemistry	Biology	Geography	School year ↓
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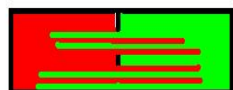


Organisation: Initiative: one or more teachers
Communication and common planning of the school year or parts of it,
Parallel teaching of the same theme and permanent exchange between the teachers during this period

Parallel Planning – Form (PP - Form)

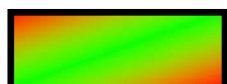
Possible example

Mathematics – physics – chemistry – biology Introduction – approaching the theme (in common)			
Mathematics Special aspect of the theme	Physics Special aspect of the theme	Chemistry Special aspect of the theme	Biology Special aspect of the theme
Mathematics and Physics Mathematical modelling of the physical phenomena			
Mathematics – Biology Using mathematics argumentation in biology			Physics Deepening of the physical aspects
Mathematics Deepening the mathematics aspects	Biology – Chemistry Discussing common aspects of the theme		
Mathematics – physics – chemistry – biology Results (in common) and summary			



Organisation: Initiative: one or more teachers
Permanent communication and common planning before and during teaching the modul, partly: common teaching according to the needs of the theme

Joint Planning – Form (JP - Form)



Organisation: Initiative: one or more teachers
Team teaching: **All subject melt together to one subject!**
Possible: project-oriented teaching with subject-oriented project parts.

¹ Beckmann, Astrid (2003). Fächerübergreifender Unterricht – Konzept und Begründung, Hildesheim, Berlin (Franzbecker Verlag), www.sciencemath.ph-gmuend.de