Learning path of implementing inquiry based teaching and its assessment in a science teacher team

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How to assess attitudes and skills in the science lessons?

Attitudes

Lab work

Cover page lab work

Assessment of attitude

Assessment sheet

File from 1st to 6th grade

Current situation: system is applied

Skills

General objectives

① RESEARCH QUESTION

To reduce a scientific problem to a research question and if possible to formulate a hypothesis or research suggestion about this question.

② TO INFORM

Gathering and structuring information about a research question.

③ TO EXECUTE

Systematically finding an answer to the research question.

④ TO REFLECT

Reflecting on an observational assignment / experiment/research and its results.

⑤ TO REPORT

Reporting on an observational assignment/experiment/research and its results.

Current situation: started 2012-2013, piloting

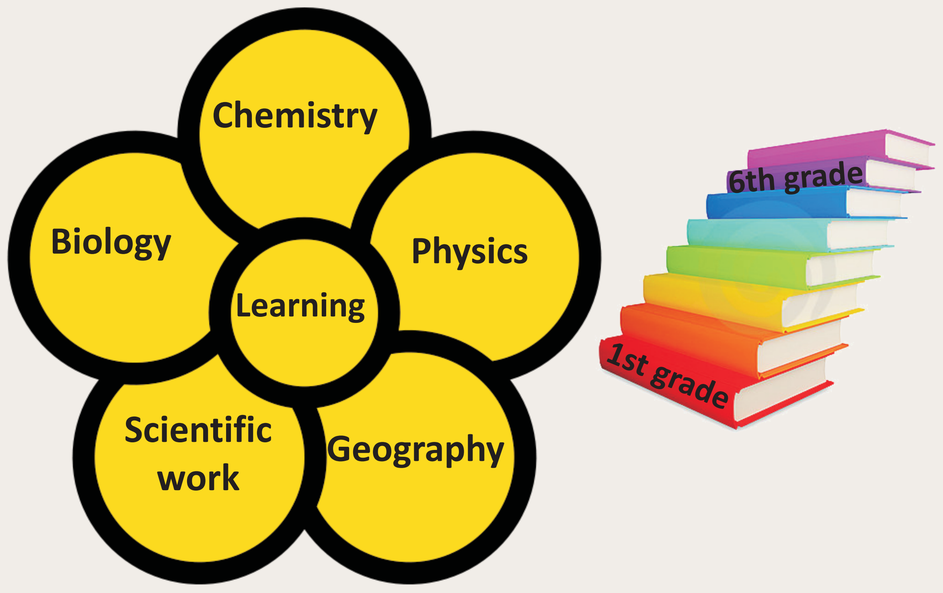
Findings

Conclusion of teacher team

Tool is useful:

- to map the scientific reasoning progress of pupils
- to guide the pupil in finding the branch of study that suits his/her interests and abilities
- to have the pupils acquire practical abilities and capacities from novice to expert level

Teamwork



Conclusion of pupils

Pupils are able:

- to adjust themselves by means of frequent feedback
- to understand the importance of peer- and self assessment
- to visualize their own progress

Discussion

Inquiry based teaching stresses the importance of learning trajectories (from 1st to 6th grade)

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The current system focuses on the assigning of scores

disadvantages: time-consuming , class size,

Conclusions

- Implementation of Inquiry Based Teaching in science offers many advantages in the assessment of attitudes and skills.
- This system requires team spirit and determination.
- The method has been recently developed and can further be optimized by means of feedback and input of a team of teachers and counsellors.
- Assessment of Inquired Based Teaching is a necessity for the future.

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SAILS Strategies for Assessment of Inquiry Learning in Science