Thoughts on the Future
of the Classical Worksheet

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Observations

- traditional paper-based worksheets are still used to a big extent

- the identical paper and pencil version of online is used very often

- paper-based worksheets

- their digital counterparts

- analysis

- the school of the future

- conclusion

paper and pencil

scenarios

- accompany on-site teaching
- self-organized learning
- working in groups
- drilling
- tests
- documentation

The digital counterparts

- DGS
- CAS
- handhelds

- special software
- online testing

DGS

- mainly: explorative DLE

- HTML-based versions
- or within the tool

CAS

- 'notebook features' can be found in all the standard CAS

- e.g. TI InterActive!: editing of text emphasized

handhelds

e-activities:

interplay of
- algebra
- analysis
- graphs

special software

e.g. complementary to school books

special emphasis on
- feedback
- automated evaluation

Analysis

- hardware

- competencies required
    - for deployment
    - by producer
    - by user

- competencies taught

hardware

- paper and pencil
- compass and ruler
- scissors

hardware

- paper and pencil
- compass and ruler
- scissors

- pc, tablet pc, mobile devices, Whiteboard
- equipped with appropriate software

Competencies

competencies required

- by producer

- for deployment

- by user

surplus of digital media

- substitute missing competencies
  e.g. in construction
- animations
- interactive 3D illustrations

further aspects

- different types of learners
- which traditional competencies are to be preserved?
- which new competencies are necessarily taught?
- social interactions
- keep it simple

The School of the future

abolish, keep or change?

How can we bring digital media into school?

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scenario 1 - abolish:

- abolish traditional school
- completely substitute it by digita media
- send our students to web 2.0

scenario 2 - keep

- keep traditional school
- digital media are just a further option

scenario 3 - change

- we neither abolish nor keep the school as it is today

- we change the roles of the players – teachers and students

Conclusion

- again: blended learning?
- coming closer together
    - using e-pen and whiteboard technologies
    - pdf with media elements
- both forms are capable to support modern didactical models
- digital media are particularly strong when not just imitating

Thank you!

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