“Planet School”: blended learning for inclusive classrooms

- Research cluster: new ways to improve inclusion, participation and wellbeing
- Interdisciplinary profile: social and technical sciences

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Introduction: Planet School

Inclusive Education

Research Process

Results + Outlook

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Structure

1 Introduction: Planet School

2 Inclusive Education

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4 Results + Outlook

Translation: Ingo Bosse

About Planet School

Planet School offers materials in high quality for teachers, students and everyone else who is interested in education. In „Filme online“ short television broadcasts are provided. Detailed information and work sheets for creative lessons can be found in „Wissenspool“. Furthermore, in „Multimedia“, interactive learning with several educational games and computer animations is practicable. You can always find an assortment of current topics on the welcome page.
Research Questions

• How can the e-learning platform „Planet School“ be made universal accessible for all pupils with special needs?

• Is it enough to achieve technical accessibility? How can we design teaching and learning experience for full participation?
Public Service Broadcasting

The mission is to provide:

• basic service for all groups of society
• Entertainment, information and education
• innovative and alternative programmes, especially for minority groups
2. Inclusive Education

“full and effective participation and inclusion in society”
(UN 2006, 5)

Article 24 - Education
1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning.

Project goals

- Development of universal accessible learning materials and modules for pupils with special needs
  - Development of educational scenarios for integration of e-learning and media-education in units with Planet Schule

- Expected results
  - Universal accessible learning content
  - Educational scenarios, integration of e-learning and media education in inclusive classrooms
1. Desk Research
   - Inclusive Media Education
   - Requirements of accessible and usable learning materials

2. Trials in inclusive classrooms
   - Observations of lessons
   - Semi-structured interviews with teachers
   - Qualitative content analysis (with MaxQDA)

Aim...
   to offer variable content for different types of learners with accessible and usable materials, including movies, television broadcasts, interactive learning content.

3. Research Process

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Inclusive Schools

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Secondary School Deelen
5th term: Wild Neighbours (Biology)

Elementary School Kaiserswerth
5th term: Farm Game

Montessori Elementary School Halle
6th term: dok'mal (Film Education)

Secondary School Lünen
5th term: Flirt English

Secondary School Lünen
6th term: dok'mal (Film Education)
3. Categories by **Desk Research**

How could **Planet School** become more appropriate for inclusive education?

1. Accessible webdesign and Design for all
2. Language and Speech
3. Individualized curricula
4. Differentiated learning arrangements about the same topic
5. Respect the complexity of life-realities
6. Cooperative/ collaborative learning
7. Action-oriented instruction

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4. Results: **What teachers said...**

The teachers greatly appreciate the possibility of being able to exert direct influence over the further development.

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of Codings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good presence of life-realities</td>
<td>16</td>
</tr>
<tr>
<td>Not designed for students with special needs</td>
<td>7</td>
</tr>
<tr>
<td>Need for different learning levels</td>
<td>7</td>
</tr>
<tr>
<td>Not enough materials to work with the films</td>
<td>7</td>
</tr>
<tr>
<td>Would not use simple speech</td>
<td>6</td>
</tr>
<tr>
<td>Content has a good relation to curricula</td>
<td>6</td>
</tr>
<tr>
<td>Possibility to change fonts</td>
<td>5</td>
</tr>
<tr>
<td>A greater variety of methods</td>
<td>9</td>
</tr>
<tr>
<td>Need for texts with reduced size</td>
<td>4</td>
</tr>
</tbody>
</table>
4. Results

Recommendations: Accessibility

The possibility
- to use the tab key instead of a mouse throughout the platform;
- to jump forward and backward
- to convert all text to speech
- to obtain better contrasts on screen
- to repeat exercises
- to improve scalability for all kind of contents such as text, pictures, films, numbers and so forth.

The unclear structure of the interface runs the risk of confusing many pupils with special needs.
A navigator could be helpful to return to the starting point.

Recommendations: Language & Speech

- Offers in simple speech on topics like history and politics
  - Font type sans serif: Arial or Helvetica
- Scripture not proper: not clearly arranged, not well readable
  - Different fonts and font sizes
- Short text with action-oriented tasks for weak readers or alternative texts with visualizations for strong readers.
  - More action and product-oriented instructions
  - Alternative tasks as playful or physical exercises
  - Too much text for slow learners, reduction desirable
4. Results

Learning Arrangements

- Material is attractive and multifaceted, reduction necessary
- Films are meaningful, exciting, usable and not too abstract
- Topics fit with the life of pupils, conflicts at the bus or profile on Facebook are relevant topics
  - Different levels for all children
  - Differentiation through alternative tasks for the same topic e.g. pictured adaption, photo shootings or role playing
- All in all very receptive learning, demand of more activeness: practical partner- and group work, linked to practical action

Learning Arrangements II

- Detailed preparation of lessons, but some materials enforce teacher centred learning
- Support for the individual use of materials: individual changes shall be possible, material as Word-files
  - Forum to share work sheets
  - Compact work sheets with short texts: low costs for copying
  - Practical examples, exercises and interdisciplinary ideas
  - More use of cooperative learning
Introduction | Inclusion | Research Process | Results

Outlook

“Planet School”: blended learning for inclusive classrooms

- Recommendations for the revision are discussed in focus groups (teachers, television professionals, pupils).
- “Planet School” is to be revised one by one.
- Work on a completely new knowledge pool and on the revision of wild neighbours (biology).
- End of 2014: work at schools with new materials.

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Your Opinion?

Opinion matters