Map use education and Geovisualisation

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Chris Board 1978
Model of map use tasks

Morrison’s (1981) feedback categories

- Verbal forms of feedback (reviews, comments, questionnaires)
- Visual forms of feedback (eye movement studies, semantic differential, psychophysical testing)
- Behavioural feedback (direct observation, protocol analysis)

Eye movement studies
Eye movement studies

Semantic differential

Semantic differential

Eye movement studies

Semantic differential

Psychophysical testing

Thinking aloud method

Thinking aloud method

Applications of the thinking aloud method in cartography

- How do blind people acquire knowledge from tactile maps
- How do people identify regions on topographic maps
- How do we make sense of contour lines
- How do we understand orienteering maps
- How do we perform way finding tasks
- How to develop a model of a region on the basis of geospatial data
- etc
Map use phases

- Map reading
- Map analysis
- Map interpretation

Skills and concepts underlying map use

<table>
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<tr>
<th>Underlying skills</th>
<th>Relevant concepts</th>
<th>subconcepts</th>
</tr>
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<tbody>
<tr>
<td>describing/identifying</td>
<td>spatial location</td>
<td>site</td>
</tr>
<tr>
<td>classifying</td>
<td>distance</td>
<td></td>
</tr>
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<tr>
<td>relating</td>
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<td>interpreting</td>
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<td>region</td>
</tr>
<tr>
<td>interpreting</td>
<td>spatial structures</td>
<td></td>
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</tbody>
</table>

Steps in map use programmed instruction

- What is on a map (identify)
- What is where on the map (classify)
- What relationships are visible on the map (relate)
- Are these relationships valid all over the map (check, monitor)
- etc

ICA activities in the field of map use education

- Commission on children and cartography
- Seminars for specialised map users: - agronomists
  - risk managers
- Commission on education and training

International Cartographic Conference
A Coruña 2005
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Visualising geospatial information