Adding a fourth dimension to presence learning

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SPACE-POL

(Staged Progressive Approach to Clinical Exam by Problem-Orientated Learning)

Exemplified by Veterinary Medicine Studies
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>To describe a real situation</td>
</tr>
<tr>
<td>2nd</td>
<td>To depict a real situation</td>
</tr>
<tr>
<td>3rd</td>
<td>To mimic a real situation</td>
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<tr>
<td>4th</td>
<td>To experience a real situation with feedback</td>
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Basic model of POL (Dewey)

1. Recognition of a difficulty
2. Defining the extent of a difficulty
3. Development of a possible solution
4. Establishing a logical solution
5. Testing and acceptance of the solution
Main advantages of SPACE-POL

- Smooth and rapid learning curve
- High level of motivation
- Concept integrating all levels of difficulty successively (adaptation)
- Progressive associative learning including all steps from theory to a real situation (including stress), with feedback
Main inconveniences of SPACE-POL

• Time-consuming

• High commitment of teacher mandatory (mostly as a moderator)

• Very elaborate organisation and planning mandatory

• ...but extremely rewarding
Students’ evaluation

- **Clear structure**

- **Usefulness for later work experience**

- **Learning objectives accomplished**
- **Difficulty**

  FAR TOO LOW

  FAR TOO HIGH

  n=31
  mw=3,1
  md=3
  s=0,3

- **Learning effect**

  1 (VERY BAD)

  6 (VERY GOOD)

  n=33
  mw=5,5
  md=6
  s=0,6

- **Planning and execution**

  - 1

  2

  3

  4

  +

  mw=3,8
  s=0,4

- **Level of interestingness and relevance**

  - 1

  2

  3

  4

  +

  mw=3,8
  s=0,4
Outlook

- Concept has been used successfully in other medical teaching domains
- Might be applicable to other fields of teaching
- Further studies have already been initiated