Assessment practices in PE

Lars B. Borghouts ¹, Menno Slingerland ¹, Leen Haerens ²

¹Fontys University of Applied Sciences, Eindhoven, The Netherlands
²Ghent University, Belgium
PE-objectives Netherlands

- Motor/technical and tactical skills
- Supporting skills
  - referee, instructor, safety assistance
- Social behaviour
- (Self) knowledge
  - training principles, health, ...
  - preferences, abilities, ...

- Prerequisite: fun
  - Intrinsic motivation
FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM: PLEASE CLIMB THAT TREE
Introduction

• Learning targets, teaching methods and assessment in PE should be coherent (Chroinin & Cosgrave, 2013).
  • 'Constructive Alignment Theory’ (Biggs, 1999).

• Assessment for Learning vs. Assessment of Learning (William, 2011).
Introduction

Lopez Pastor et al. (2012): assessment is “one of the most fraught and troublesome issues physical educators have had to deal with over the past 40 years or so”.

Introduction

High quality assessment is characterised by:

- clear purpose,
- clear achievement targets,
- sound design,
- effective communication,
Introduction

• Quantitative research into PE assessment practices relatively scarce.
• Most of these studies were small and/or are at least 10 years old (Veal, 1988; Matanin & Tannehil, 1994, Desrosiers et al. 1997; Kneer, 1986; Mintah, 2003).
• No studies to date have attempted to ‘objectively’ measure the quality of assessment in PE. The lack of a questionnaire specifically developed to this aim may have prevented such research.
Objective

Determine assessment practices and assessment quality in secondary PE in the Netherlands
Methods

• Questionnaire construction:
  • Theoretical framework
  • Identification of themes
  • Expert consultation (18)
  • Revision of themes and questionnaire construction
  • Expert consultation (18), Questionnaire revision
  • Pilot testing (25 PE teachers), Questionnaire revision
  • Expert consultation (18), Questionnaire revision (minor)
Methods

• Online version created using Survey Monkey-webtool
• Pre-testing by 25 PE-teachers from 3 schools
• Removal number of items on feasibility due to questionnaire > 20 minutes to complete
• The final questionnaire contains the following sections:
  – General information on the PE teacher and school;
  – Quality of assessment;
  – Intended functions of assessment;
  – Actual assessment approaches;
  – Intended goals of PE.
Methods

• Schools were approached through:
  – News letters
  – Direct mail
• One PE-teacher per school
  – Doubles were removed afterwards
• Focus @AIESEP on quality aspects
## Results

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of secondary schools</td>
<td>260</td>
</tr>
<tr>
<td>Number of students</td>
<td>292,878</td>
</tr>
<tr>
<td>% of all secondary students</td>
<td>31%</td>
</tr>
<tr>
<td>Teacher yrs. of experience</td>
<td>16 ± 10</td>
</tr>
</tbody>
</table>
Results

Which aspects are prerequisites for learning?
Which aspects are in alignment with lesson objectives?

- Effort: 96%
- Game tactics: 90%
- Active participation: 90%
- Social behaviour: 90%
- Motor/technical skills: 90%
- Fitness: 81%
- Supporting skills: 75%
- Safety assistance: 72%
- Attendance: 54%
- Appropriate attire: 48%
- Self-knowledge and reflection: 34%
- Other: 3%
## Results

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Aspect score (mean ± SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear purpose</td>
<td>3.9 ± 1.0</td>
</tr>
<tr>
<td>Clear achievement targets</td>
<td>3.6 ± 1.0</td>
</tr>
<tr>
<td>Sound design</td>
<td>3.8 ± 0.8</td>
</tr>
<tr>
<td>Effective communication</td>
<td>3.9 ± 0.9</td>
</tr>
<tr>
<td>Student involvement</td>
<td>2.9 ± 0.8</td>
</tr>
</tbody>
</table>

Mean Assessment Quality 3,60 ± 0,63  
16% of schools scores ≤ 3,00
Results

All PE teachers in my school use identical criteria for assessment.

- **Strongly agree**: 30%
- **Somewhat agree**: 40%
- **Neutral**: 8%
- **Somewhat disagree**: 16%
- **Strongly disagree**: 6%
The grade a student receives is NOT dependent on which teacher is doing the evaluation.

- Strongly agree: 23%
- Somewhat agree: 36%
- Neutral: 12%
- Somewhat disagree: 20%
- Strongly disagree: 9%
Are PE grades taken into account for determining whether a student may enter the next year?

- Yes: 78%
- No: 16%
- Sometimes: 6%
Results

effective communication

Assessment criteria are shared in advance with my students.

- Strongly disagree: 3%
- Somewhat disagree: 5%
- Neutral: 6%
- Somewhat agree: 31%
- Strongly agree: 55%

AIESEP 2014 | dr. Lars Borghouts
Results

My students receive interim feedback when working towards a final assessment.

- Strongly agree: 15%
- Somewhat agree: 35%
- Neutral: 22%
- Somewhat disagree: 18%
- Strongly disagree: 10%

student involvement
## Results

<table>
<thead>
<tr>
<th>Assessment goals</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of students (e.g. progress to the next year)</td>
<td>2.4 ± 1.3</td>
</tr>
<tr>
<td>To inform adjustments to the content and delivery of my lessons</td>
<td>3.3 ± 1.2</td>
</tr>
<tr>
<td>Justifying the subject within my school</td>
<td>3.4 ± 1.3</td>
</tr>
<tr>
<td>Support student learning</td>
<td>4.2 ± 1.0</td>
</tr>
</tbody>
</table>
Discussion
Discussion

• Which aspects are *prerequisites* for learning?
• Which aspects are in alignment with *lesson objectives*?
• Validity?
Discussion

• Assessment quality of moderate degree (‘somewhat agree’-level)
• Reliability of assessment high enough for high stakes testing?
• Student involvement not very high > AfL vs. AoL
  • PE is examinable subject in the Netherlands, however
  • PE assessment ‘must take into consideration students’ possibilities’
Discussion

• Data needs further exploration through qualitative research
• Student perspective?
• AfL interventions to study effect on students’ motivation for PE and/or physical activity
• International comparisons?
  • ‘PEAR-group’

AIESEP 2014 | dr. Lars Borghouts
Assessment practices in PE

Contact:
l.borghouts@fontys.nl
**PE goals: strongly agree**

- Experience fun through physical activity: 91%
- Interact adequately and respectfully with others in physical activity: 89%
- Develop motor/technical skills: 66%
- Self development through physical activity and sports: 65%
- Be physically active during school hours: 60%
- Knowledge and understanding with regards to physical activity: 55%
- Develop skills to participate in physical activity a in a variety of roles: 52%
- Find personally appropriate physical activities: 46%
- Increase fitness levels: 16%
**PE goals: strongly & somewhat agree**

- Experience fun through physical activity: 96%
- Interact adequately and respectfully with others in physical activity: 96%
- Develop motor/technical skills: 93%
- Self development through physical activity and sports: 93%
- Be physically active during school hours: 90%
- Knowledge and understanding with regards to physical activity: 94%
- Develop skills to participate in physical activity a in a variety of roles: 88%
- Find personally appropriate physical activities: 87%
- Increase fitness levels: 62%
References


• Rick Stiggins, 'Assessment through the Student's Eyes', Educational Leadership, 64 (2007), 22.


References