Peer assessment in learning contexts

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Peer assessment (PA)

Peer marking
Peer appraisal
Peer evaluation
Peer grading
Peer feedback
Peer review
Peer revision
Responsibility for own learning and that of a peer(s)

Similar status

PA

Student-Teacher scoring $\rightarrow r > .60$

Multiple PA is more reliable

Cho et al. (2006)
Strijbos et al. (2009)
<table>
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<tr>
<th>Needs for Peer Assessment</th>
<th>Needs for CL assessment</th>
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<tr>
<td>Conceptual development: regarding PA as interactive process (and/or as specific type of CL)</td>
<td>Assess individual and group level</td>
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<td>Functional development (purpose): more formative, i.e. peer feedback</td>
<td>Assess transformation over time: before, during and after CL</td>
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<td>Methodological development: more (quasi)experimental / control group studies. Greater variety in research design, instruments, analyses</td>
<td>Assess multiple and concurrent processes + outcomes (cognitive, social, motivational)</td>
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(Strijbos & Sluijsmans, 2010)  
(Strijbos, 2011)
Topic 1
PA multiplicity ...

17 variables (Topping, 1998)

17 variables in 4 clusters (Van den Berg et al., 2006)

17 variables in 3 clusters (Van Gennip et al., 2009)

Specification of PA interactivity (Strijbos et al., 2009)

"54 research variables" in 5 clusters (Topping, 2010)

20 variables in 5 clusters (Gielen et al., 2011)
How can we (systematically) describe PA contexts?
Alqassab et al. (in prep.)
Topic 2
How can peer assessment contribute to learning?
Initial search on PA = 1275 articles

Empirical + PA + Outcome = 83 candidates

Van Gennip et al. (2009)

Detailed examination = 59 articles

Included in review = 14 articles + 1 = 15
Domain specific knowledge & skills

Ability, Expertise, Competence …

PA and learning

PA knowledge & skills

PA/PF provision

PA/PF reception
Topic 3
Assessing CL ...

1. Individual and group

2. Convergence and similarity

3. Multiple concurrent processes
Strijbos (2011) Distributed emergent experience
How can we apply PA for CL assessment?
Assessing CL: (mostly) summative

Group grade for each individual, or mixed with individual tasks

Assessing CL

I: 10%, G: 90% → free-riding

I: 90%, G: 10% → devalues collaboration
PA to help teacher assess "invisible" CL processes

F2F, online, $N$ of groups

CL processes

PA to derive individual scores from group scores

Counteract free-riding
Issues with PA of CL

Formula to compute individual scores

Strijbos et al. (in prep.)
Literature to read ...

(web-based) PA

(web-based) PF

(CS)CL

Feedback

Assessment (for learning)

360-degree feedback