Using TPACK to examine teacher professional development for online and blended learning

1. Introduction

The increase of technology-use within education leads to a sheer amount of new teaching possibilities and learning activities. This requires teacher professional development (TPD), which should address technological, pedagogical and content knowledge (TPACK) to be effective.

2. Objective

This paper looks at 5 scientific articles regarding teacher professional development for online and blended learning. The goal is to identify which article addresses which part of the TPACK framework. The focus remains at the initial design of the TPD program, and not on the outcomes.

3. Methodology

- Sys. literature review
- Content analysis
- Situating within TPACK framework (Koehler & Mishra, 2009)
- Peer discussion of classification

4. First Results

<table>
<thead>
<tr>
<th>First author *</th>
<th>Context of TPD</th>
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<tbody>
<tr>
<td>Ching 2014</td>
<td>Prim. and sec. teachers (n=69) following an online course to develop a web-based application.</td>
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<td>Comas-Quinn 2011</td>
<td>University teachers (n=20) receiving training in delivering their courses in a blended mode.</td>
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<td>Cowan 2013</td>
<td>Sec. teachers (n=3) following expert teachers to embed the use of online teaching.</td>
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<td>Doering 2009</td>
<td>Sec. teachers (n=8) using geospatial technology, investigating optimal pedagogy for graphic problem solving.</td>
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<tr>
<td>Ernest 2013</td>
<td>University teachers (n=20) developing their experience with online group work and identifying further TPD needs.</td>
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* The numbers in the picture align with the order in the first column

5. Tentative conclusions

Difficult to reach centre of TPACK framework

Initial design focus can differ from attained results

Clear reference to TPACK in the article possibly leads to a more central position within the framework

More information needed about the relationship between the design and the results of the TPD

More research is needed about why certain TPD approaches for online and blended learning are successful

References: