The Effectiveness of an Online Community of Practice as an Intervention for Childhood Obesity

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The Problem...
What is a Community of Practice?

◆ A community of practice (CoP) is a group of people sharing a common interest in a topic and who collaborate to reach goals.
Purpose of Research

To determine whether participating in an online community of practice can affect perceived competence and intention to integrate physical activity.
Integrated PA - 1st Grade Math
Posted by Jared Clary on February 16, 2015 at 3:07pm in Integrated PA Videos

For PEDU 575 we were required to integrate physical activity into a lesson plan. I have been working with first grade so I decide to incorporate basic math problems with movement. My activity was adding and subtracting numbers 1-5 and doing jumping jacks according to the sum or difference of the equation as seen in the video below.

Comments
Emily Hall · February 16, 2015 at 12:12pm
This is awesome. I could honestly see myself using this someday, great job!
Delete
Spyridoula Yazou · February 17, 2015 at 3:29pm
Very good job Jared!
Edit | Delete
Brianna Lockaby · February 17, 2015 at 2:40pm
I am also going to be doing an active lesson with addition and subtraction. It's a little different though, instead of jumping jacks, we are incorporating the problems into a relay race!
Delete

Tags: math, addition, video, integrated pa
Participants

- 58 pre-service elementary teachers
  - 11 male, 47 female
  - Mean age 21.42 ± 2.55
  - Enrolled in classes about movement education

<table>
<thead>
<tr>
<th>Iowa State University</th>
<th>University of South Carolina</th>
</tr>
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<tbody>
<tr>
<td>KIN 312</td>
<td>KIN 284</td>
</tr>
<tr>
<td>12 students</td>
<td>21 students</td>
</tr>
<tr>
<td></td>
<td>PEDU 575</td>
</tr>
<tr>
<td></td>
<td>25 students</td>
</tr>
</tbody>
</table>
Methods

Pre-Test

10-Week Intervention

Post-Test
Measures

- Number of Total Posts
- Number of Days Active on Move for Thought
- Perceived Competence (pre $\alpha = 0.955$, post $\alpha = 0.918$)
- Intention to Use PA (pre $\alpha = 0.832$, post $\alpha = 0.888$)
What Happened?
**Perceived Competence**

*Results were the same regardless of days active*

![Change in Perceived Competence with Time](chart1.png)

- **Time Main Effect:** $F (1, 55) = 5.217, p = 0.026$
- **Time x Class Interaction:** $F (2, 55) = 13.008, p < .001$

![Class by Time Interaction for Perceived Competence](chart2.png)
Intention to Use Physical Activity

Class by Time Interaction for Intention

*When controlling for days of active participation

Time by Days Interaction : F (1 , 54) = 3.867, p = 0.054

Significant difference between classes : p = 0.031
Conclusions

◆ Future studies should take into account the characteristics of the students.

◆ Online CoP is an effective intervention for increasing perceived competence in using PA for preservice teachers.

◆ When controlling for days of active participation, a marginally significant effect was seen on intention to integrate PA.

◆ Future research could include a follow-up and inclusion of practicing teachers.
Sources:


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Thank you for Coming

Questions?