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## Teachers' Reflections from Integrating Physical Activity in the Academic Classroom

From...



To...



Introduction

Classroom activity breaks are very effective at increasing elementary and middle school children's energy expenditure, by accumulating on average 19 min of moderate-to-vigorous physical activity per day, only 4 minutes short of mandatory physical education.

Activity breaks in the classroom have been shown to improve memory, on-task behavior, executive function, and test scores.

Go, research! Get motivated! Move the good out of their mind and body, and what do the students think?

After 8 weeks of using the classroom activities, we asked students what they liked, didn't like, and what suggestions they have.

**M**ove for Thought  
Integrated Physical Activities for Learning in the Elementary School Classroom

TEAM NUTRITION IOWA

www.MoveForThought.org

Methods

Sample	Measures/Procedure	Data Analysis
<ul style="list-style-type: none"> <li>N = fifteen female teachers in the 4<sup>th</sup> &amp; 5<sup>th</sup> grade.</li> <li>Interviews were conducted in 12 classes from 5 rural schools that used the Move for Thought kit.</li> <li>Teachers implemented the Move for Thought kit for 8 weeks which included integrated physical activity with math, language arts, and/or science.</li> </ul>	<ul style="list-style-type: none"> <li>Teachers were interviewed in small focus groups (1-3 teachers) or individually.</li> <li>Interviews are audio-recorded and conducted in a private area at school upon completion of the intervention.</li> <li>A semi-structured interview format with open-ended questions regarding teachers' perceptions and experiences with integrated physical activities was used.                             <ul style="list-style-type: none"> <li>"What did you like (or did not like) about the activities?"</li> <li>"What impact did the activities have on you as a teacher?"</li> <li>"What challenges did you face?"</li> <li>"What would you suggest to other teachers about implementing PAs in the classroom?"</li> </ul> </li> <li>The study received IRB approval</li> </ul>	<ul style="list-style-type: none"> <li>Interviews were transcribed verbatim and analyzed separately by two experts in this area.</li> <li>Inductive and deductive content analysis was used.</li> <li>The analysis began deductively, based on achievement goal theory and self-determination theory and continued inductively, letting for new and unique themes to emerge.</li> <li>Data quotations were combined into lower order themes, higher order themes and dimensions.</li> </ul>

Results

Table 1. Higher Order Themes & Example Quotations From Select Lower Order Themes

Theme	Positive Responses	Negative Responses
<b>MOVEMENT</b>	<ul style="list-style-type: none"> <li>"If they don't get out and move, you know I'm usually just fighting them anyway."</li> <li>"On the days that we didn't have P.E., it kind of gave the chance for the kids to get the wiggles out before we started."</li> </ul>	<ul style="list-style-type: none"> <li>"I think there were some that didn't find it the most exciting just because they aren't into that moving around."</li> <li>"What surprised me was how quick they were tired."</li> </ul>
<b>LEARNING AID</b>	<ul style="list-style-type: none"> <li>"They always think it's fun. So they're completely tricked into practicing."</li> <li>"The children were interacting with the lesson rather than just listening to it."</li> <li>"If their having to move and show me that they know what they're doing, there's more accountability there."</li> <li>"I saw something else from them besides this quiet little child in a desk."</li> <li>"I noticed that the kids were more willing to practice their facts than they had before."</li> <li>"It was like teamwork."</li> <li>"It gets their brain actively participating."</li> </ul>	<ul style="list-style-type: none"> <li>"At the beginning, they were leery because it was something different from what we had done before."</li> <li>"I think the more they do it, the more they know it and like to do it the first few times, there was just more confusion and frustration."</li> <li>"Some of the kids were very, very excited and it was harder to settle them down."</li> </ul>
<b>SUBJECT INTEGRATION</b>	<ul style="list-style-type: none"> <li>"It is actually related to the academics that they do need anyway; it is not just a fluff time or playtime or crazy."</li> <li>"It wasn't like we had to stop doing whatever we already had planned to make them fit in; we could just fit it into what we were working on."</li> </ul>	<ul style="list-style-type: none"> <li>"It was actually much easier for me to use those activities in science and social studies; other subjects, math, it was harder to adapt."</li> </ul>
<b>EASE OF USE</b>	<ul style="list-style-type: none"> <li>"I like that the activities gave me a guide to do something and you could change them and be flexible."</li> <li>"Once all the cards were made, it was pretty easy to do."</li> <li>"I think that it made the kids more excited about practicing their facts and it wasn't like pulling teeth to get them to do it."</li> <li>"It was clearly set up and easy for a sub to come in and do."</li> </ul>	<ul style="list-style-type: none"> <li>"It was great once you had it set up, but it was just a lot of time getting it prepared."</li> <li>"We were kind of limited to the ones we could do because of the space that we had."</li> <li>"If it was warmer outside...we could take them outside."</li> </ul>
<b>STUDENT Enjoyment + Behavior -</b>	<ul style="list-style-type: none"> <li>"The kids loved it."</li> <li>"They were talking, they were smiling, they were laughing."</li> <li>"I would hear things like, 'That was good. Can we do that again?'"</li> <li>"It motivated them."</li> <li>"It lessened their stress."</li> </ul>	<ul style="list-style-type: none"> <li>"They tended to be overexcited about some of these games."</li> <li>"They got a little competitive and some of them were sore losers."</li> <li>"The first couple of times it was chaotic and loud."</li> </ul>
<b>TEACHER BENEFITS</b>	<ul style="list-style-type: none"> <li>"It was really important because school has gotten to the point where we need some of that just to spark it up."</li> <li>"It encouraged me to be more creative."</li> <li>"It was refreshing to do them."</li> <li>"I have more ideas, more ways to plan a lesson and differentiate a bit."</li> <li>"I like having that bag of tricks."</li> </ul>	

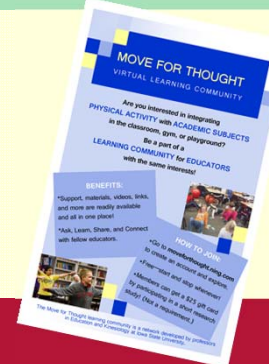
Results

Conclusions

Table 2. Future Recommendations

Theme	Teacher Quotations
<b>PACKAGE USE</b>	<ul style="list-style-type: none"> <li>"If I had it in the summer to look it over and be prepared, I probably would have been able to utilize it more."</li> <li>"Initially it would probably be a lot of work preparing just like any other game. But it would be valuable for them because the next time they wanted to use it, it would be a lot easier for them to pull it out."</li> </ul>
<b>TIME OF DAY</b>	<ul style="list-style-type: none"> <li>"Most of them were in the morning. That was kind of nice because a lot of the kids come in sleepy and not really ready for math so that was good to get them up and moving."</li> <li>"I think it could fire them up in the afternoon."</li> <li>"I would try right when they came back when they were already in that transition mode, so they were already very active coming back in the room."</li> </ul>
<b>FREQUENCY</b>	<ul style="list-style-type: none"> <li>"More continual use of it could enhance some excitement. Like I said, if they know what's coming, they know what to do they could focus more on the activity."</li> <li>"After we had done it a few times, they knew where to go and what to do."</li> </ul>
<b>MANAGEMENT</b>	<ul style="list-style-type: none"> <li>"Explain the game well to begin with and let your expectations be known."</li> <li>"I would try it again and again but it really depends on the class and the types of students you have in the class."</li> </ul>
<b>VARIATIONS</b>	<ul style="list-style-type: none"> <li>"Instead of doing the whole class, I would split them into groups."</li> <li>"I usually put music with it; I thought the kids enjoyed being active more to music."</li> <li>"I would want more activities to choose from."</li> </ul>
<b>INCREASE CHALLENGE</b>	<ul style="list-style-type: none"> <li>"It would be nice to see some 6-7 grade activities that you could do with the upper grades."</li> <li>"I tried to make it harder just by focusing on the harder facts."</li> </ul>

- From this qualitative study, 3 dimensions (positive and negative responses to integrated PA in the classroom), and 12 higher order themes emerged (Table 1 and 2).
- Several reflections from teachers reinforced the importance of integrating PA with the academic subjects.
- Teachers emphasized the benefits for the students regarding behavior, learning, motivation and social interactions.
- Years of teaching experience emerged as a unique theme that had an impact on the successful implementation of the classroom-based PAs.
- Barriers such as difficulty with transitioning back to desks and noise levels were mentioned, but most felt teachers handled these issues.
- Additional suggestions included more variety, doing the activities outside, and convert any standing time into an exercise.
- Creating awareness and promoting PA in the classroom is important for students' health.
- PE teachers have the tools and knowledge to support and collaborate with classroom teachers to successfully integrate PA with academics.



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