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# The Impact of Integrated Movement-Based Activities on Primary School Aged Students in the Classroom

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# The impact of integrated movement-based activities on primary school aged students in the classroom

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## Abstract

**Movement-based activities can have benefits for children from informal early childhood settings to more formal education contexts in primary schools. Integrated movement-based activities (IMBAs) are activities involving physical movement that are used to teach subjects other than physical education in the primary school curriculum. The purpose of this study was to investigate the impact that IMBAs have on primary school aged students. The study was conducted in lower and upper primary classrooms. The data was collected from the perspectives of students, teachers and a researcher using self-reflection journals, numeracy tests, self-rating scales of concentration levels, teacher interviews and researcher observations and reflections. The data was then analysed using open-coding methods. The study found that, when a supporting and structured classroom environment is established, IMBAs impact positively on students' concentration, enjoyment of learning, engagement in learning and interpersonal relationships.**

**Keywords:** integrated movement-based activities, primary school, physical education

## Introduction

The link between physical movement of the body and academic learning is progressively becoming more evident as knowledge in the area of neuroscience expands (Griffin et al., 2011; Jensen, 2008; Van, 2012). Some research is also being conducted in primary school classrooms regarding the impact of movement on learning, engagement and enjoyment (Riley, Lubans, Holmes, & Morgan, 2014). When movement-based activities are integrated into the school curriculum, these activities can have a specific impact on students. There is evidence to suggest that the integration of movement-based activities and brain break activities into the curriculum, in addition to the inclusion of specifically focused physical education lessons, can improve student learning (Hawke, 2007; Jensen, 2008). Recent developments in neuroscience have confirmed how physical movement has a positive impact on brain function. In his thesis, Movement in learning: Revitalizing the classroom, Van (2012) explains how two recent breakthroughs in neuroscience further substantiate the link between physical movement and brain activity:

1. the discovery by neuroscientists of brain-derived neurotropic factor (BDNF), a substance that is increased by movement; and

2. research that shows "movement enhances brain function by increasing communication between the cerebellum and the rest of the brain" (2012, p. 3).

Although research has already been conducted into the impact of physical education classes and brain breaks on children's learning (Brain Gym International, 2003; Hawke, 2007; Jensen, 2008), less research has focused specifically on the use of movement-based activities that are integrated into key learning areas in primary school classrooms, such as Art, Science and Mathematics. Integrated movement-based activities (IMBAs) are activities that involve physical movement which are used to teach subjects other than physical education in the primary curriculum. For example, children can

complete skipping, catching or throwing activities while recalling multiplication tables (Riley et al., 2014). To reduce the gap in existing research about how IMBAs influence learning other than that which occurs in physical education classes, the purpose of this study was to explore the impact that IMBAs had on primary school aged students in two classes, one in lower primary and the other in upper primary school. It is anticipated that this research may also contribute to our understanding of the term, integrated movement-based activities, which appears to be needed in light of recent confusion about the meaning of the terms "physical education, physical activity, fitness and sport" (Penney, Pope, Hunter, Phillips, & Dewar, 2013, p. 43).

## Background - Literature review

The positive influence of movement and exercise in the field of education has frequently been connected to primary school students' learning but, as Atkinson, Macnaughton, and Scott (2010) found, there is a "great deal of difference in the way people conceptualise the relationship between learning, movement and wellbeing" (p. 55). The value of investigating how physical movement influences cognitive learning, physical and emotional wellbeing, and social skills in primary school aged children draws on research from cognition, physicality, neuroscience and learning theories. The influence of holistic integration of physical movement on a child's development is evident in Davis' (2005) words: “Movement begins at birth and continues throughout one’s life” (p. 7). When regular physical movement is a part of a child’s life from a young age, it helps them to build confidence and a positive attitude towards movement activities (Bouffard, Watkinson, Thompson, Causgrove Dunn, & Romanow, 1996; Hands & Martin, 2003). Many teachers have discovered the positive impact these activities have on students’ wellbeing, concentration, coordination and social, cognitive and leadership skills (Cosentino & Wyrzkowski, 2007; Di Sisto, 2002; Dodd, 2003). Based on these findings from previous research and classroom teachers' observations, movement-based activities are frequently included in the typical primary school curriculum, in addition to separate physical education classes.

Three types of movement-based activities incorporated by primary school teachers into a typical curriculum can be described as 1) discrete physical activities; 2) integrated movement-based activities (IMBAs); and 3) activities that are commonly referred to as brain break activities. Discrete physical activities are incorporated into sessions in which children experience and practice a range of sport-based activities and physical exercises in a purposeful way within the parameters of a physical education lesson (Morgan, 2005; Morgan & Bourke, 2004; Penney et al., 2013; Purcell-Cone, Werner, & Cone, 2009). For example, when a class participates in a set of warm up exercises and a game of softball, this is an example of a physical education lesson. Another type of movement-based activity is that which can be integrated into general classroom lessons, not necessarily related to physical education lessons; these are referred to as integrated movement-based activities (IMBAs). These are activities that are employed to teach concepts from key learning areas other than physical education. For example, an IMBA where the students run around an oval while estimating how long their run would take could be used to teach children about the mathematical skill of estimating. Another mathematical example of an IMBA could involve data collection and representation of movement skills such as kicking and striking (Riley et al., 2014). Lastly, brain break activities are movement-based activities that are not necessarily integrated into the teaching of key learning areas, such as Science or Mathematics (Brain Gym International, 2014; Hawke, 2007; Jensen, 2008). For example, when children move away from sitting down at their desks, stand up and wriggle their arms and legs as a break between lessons, this is considered to be a brain break. The movement associated with any of these three types of activities can include any action that involves the movement of one or more body parts to increase the students’ ability to learn in one or more key learning areas. These types of movement-based activities result in what Morgan (2005) describes as "a multitude of benefits for children from involvement in physical activity" (p. 20).

Cross-curricular integration of movement-based activities is a technique that encourages children to engage in movement activities in the classroom across a range of learning and subject areas. The use of IMBAs involves integrating multiple key learning areas, such as Mathematics and Physical Education, in a way that promotes learning in an enjoyable and engaging way (Purcell-Cone et al., 2009, pp. 4-5). Paul E. Dennison, the founder of Brain Gym, asserted that “movement is the door to learning” (The Lydian Centre for Innovative Medicine, 2014). Research such as that described by Jensen (2008), Brain Gym International (2003) and Hawke (2007), supports Paul E. Dennison’s statement about the link between exercise, movement and learning.

For many years movement-based activities have been incorporated into school curricula through the use of separate Physical Education classes. Nevertheless, some educators believe that exercise and movement has yet to be given the recognition it deserves in educational circles (Edwards & Watts, 2004; Linsin, 2014; Little, 2003; Penney et al., 2013). While previous research provides evidence that

the integration of movement-based activities into primary classrooms can have a positive effect, researchers such as Morgan (2005), suggest that primary teachers sometimes lack confidence to incorporate these activities into their teaching strategies. Furthermore, the teachers themselves believe they lack these skills and feel they do not have enough time to teach Physical Education frequently enough for it to make a difference to their students' learning (Morgan, 2005; Morgan & Bourke, 2004). Consequently, the benefits of these activities are still to be fully recognised in education (Lapere, Mummery, & Yates, 2008) because some primary teachers choose to teach Physical Education less often, despite knowing the benefits that these classes may have for their students (Penney et al., 2013). However, practical strategies are being developed that will enable teachers to integrate movement-based activities into all key learning areas of the primary school curriculum (Lapere et al., 2008).

In addition to earlier research findings which have documented the perceived behavioural and learning benefits of using IMBAs, investigations into why movement-based activities have a positive influence on students' wellbeing and learning have recently extended to incorporate the field of neuroscience. The relationship between movement-based activities and how the brain works has recently been explored (Hawke, 2007; Jensen, 2008). More recently, neuroscientists have found there is a positive relationship between short periods of intense exercise and an increase in some cognitive functions (Griffin et al., 2011). Some evidence for why this occurs has been found through the study of the brain and the chemicals that it releases when a person exercises and moves (Burns, 2007; Jensen, 2008). The findings from studies conducted in this area so far have identified links between movement-based activities and effective educational practices in primary school classrooms that indicate how movement-based activities positively impact children's learning and their attitudes to learning (Brain Gym International, 2003; Hawke, 2007; Jensen, 2008; Riley et al., 2014).

Over the last few decades, research has also been conducted into the types of movement-based activities that benefit students and how best to train teachers in the facilitation of these activities in classrooms. Some researchers have developed practical movement-based activities to stimulate learning and, consequently, have created companies such as Brain Gym International and Learning Connections (Brain Gym International, 2003, 2014; Hawke, 2007). These companies offer teachers the training required to implement movement-based activities that have been specifically designed to improve students' academic performance. As another example of a program that is based on the beneficial link between physical movement and learning, The EASY Minds (Encouraging Activity to Stimulate Young Minds) program has been described as a curriculum-based physical activity integration that has been designed to positively influence children's engagement in curriculum areas other than Physical Education (Riley et al., 2014).

In light of the research findings to date about the impact of engagement in movement-based activities and Physical Education sessions on children's learning, more research needs to be conducted concerning the impact of movement and exercise on students' classroom learning (Atkinson et al., 2010). Such research needs to especially focus on determining the impact of movement-based activities that are integrated into key learning areas such as Science, Art and Mathematics. These areas of research need were identified in Penney et al.'s (2013) recent investigation into Physical Education and sport in primary schools. They found that: "The way in which physical education and sport is delivered is critical to maintaining engagement and sustaining participation" but that "current pedagogy does not always achieve this for all students" (p. 4). To address these identified needs, the research study outlined in this paper documented the process of implementing IMBAs into two primary classrooms in order to determine the impact of these activities on students and their learning.

## Method

To discover the impact on primary school students when movement-based activities are integrated into a primary curriculum, a mixed methods (Creswell & Plano Clark, 2011), emergent design research approach (Charmaz, 2006) was employed. This methodology informed the development of the key research question: How do IMBAs impact primary school aged students in the classroom? Because the research question was investigative in nature, a primarily qualitative research approach, with some supplementary quantitative measures, was adopted to ensure that the data provided "narrative descriptions of phenomena" (Jackson & Taylor, 2007, p. 74). Since the purpose of this study was to study IMBAs in-depth (Ary, Cheser Jacobs, & Sorensen, 2010, p. 25), rather than generalise the results to a wider population, small sample sizes were required. To ensure the quality of the data gathering and analysis methods, the triangulation mixed methods design was used as a rigorous approach to ensure data credibility (Patton, 2002, p. 563) and to acknowledge varied perspectives across all phases of the study: the students', the teachers' and the researcher's perspectives.

Once the research question and methodology were selected, ethics approval was sought and gained and, as a result, the selection of the research setting and participants, the data collection instruments and the data analysis procedures were designed in line with the overall research question. The research took place within two private schools located within 70km of each other in the Lake Macquarie region of New South Wales, Australia. Both schools offered Kindergarten to Year 12 classes. The gender and number of students in each phase of the study is outlined in Table 1. The three phases of the study included:

- Phase One (2 weeks): Movement-based activities integrated into a Year 5 classroom.
- Phase Two (1 week): Movement-based activities observed in a Kindergarten classroom.
- Phase Three (6 weeks): Movement-based activities integrated into a Year 5 classroom.

**Table 1: Classroom gender distribution**

| | Boys | Girls | Total Number of Students |
|---|---|---|---|
| **Phase one** | 14 | 10 | 24 |
| **Phase two** | 20 | 19 | 39 |
| **Phase three** | 14 | 10 | 24 |

The phases were conducted consecutively and did not overlap. Over the three phases of the study, data was collected from the perspective of the students through concentration diaries, guided self-reflection journals and timed numeracy tests. The self-rating scale in the form of a concentration diary was completed three times a day in all phases of the study, just before students went out on the first break of the school day, just before the second break and then again just before the students went home at the end of the day. The concentration diary used with students in upper primary classes in Phase One and Phase Three included a self-rating scale that ranged from 1 (Poorly) to 10 (Perfectly). This scale was modified to suit the lower primary children who completed the concentration diary in Phase Two. The modified concentration diary incorporated a rating scale using graphics because this format with less text had been proven to be easier for young children to understand (Anderson & Arsenault, 1998, p. 174). In addition to the concentration diary, a guided self-reflection journal was given to the students for ten minutes before the movement-based activities had been introduced and after the movement-based activities had been introduced. A timed numeracy test was completed by the students before movement-based activities were introduced and also after the movement-based activities had been integrated into the curriculum. The researcher used the results from these tests to compare completion times from the two tests and the scores that each student achieved. The average class scores and completion rates were calculated and these results were used to determine whether or not the students' attention span changed as a result of the movement-based activities.

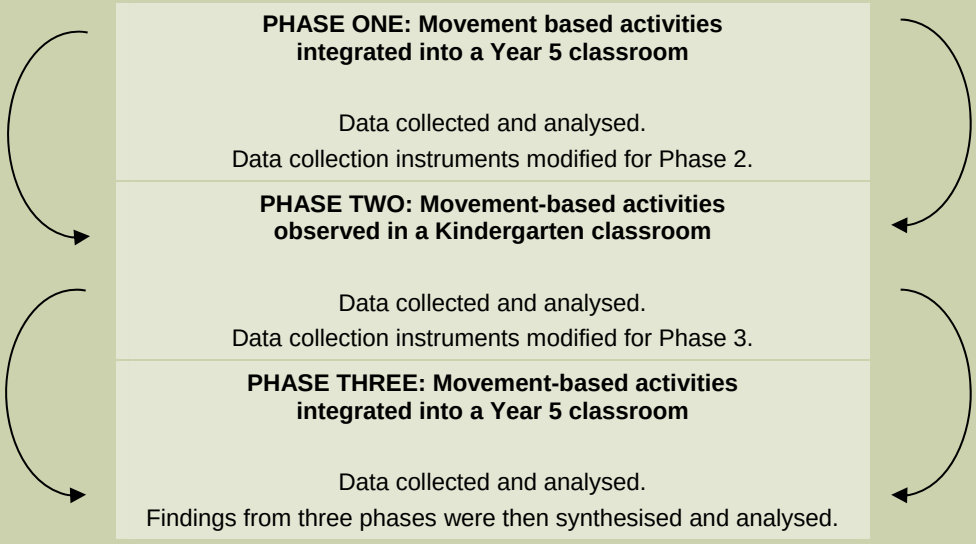
Views from the classroom teachers were sought through interviews with each teacher. The researcher also made observations each day she was in the classroom as a teacher-participant and as a researcher-observer. During the morning, the concentration levels of the class were rated by the researcher every two minutes on a scale of one (low concentration) to five (high concentration) and general observations were also made. The phases in which the data were collected throughout the study are outlined in Table 2.

**Table 2: Data collection instruments**

| | Observations by researcher as Teacher | Observations with researcher as observer | Student guided self-reflection journal | Guided self-reflection journal | Timed numeracy test | Teacher interviews |
|---|---|---|---|---|---|---|
| **Phase one** | ✓ | | ✓ | ✓ | ✓ | |
| **Phase two** | | ✓ | ✓ | ✓ | | ✓ |
| **Phase three** | ✓ | | ✓ | | | |

The data from this study was analysed in three separate phases. Guided by the emergent design approach (Charmaz, 2006), the results that emerged from Phase One were used to inform the development of the data collection instruments for Phase Two and the results from Phase Two subsequently informed the development of Phase Three (see Figure 1).

**Figure 1: Emergent design of the three phases**



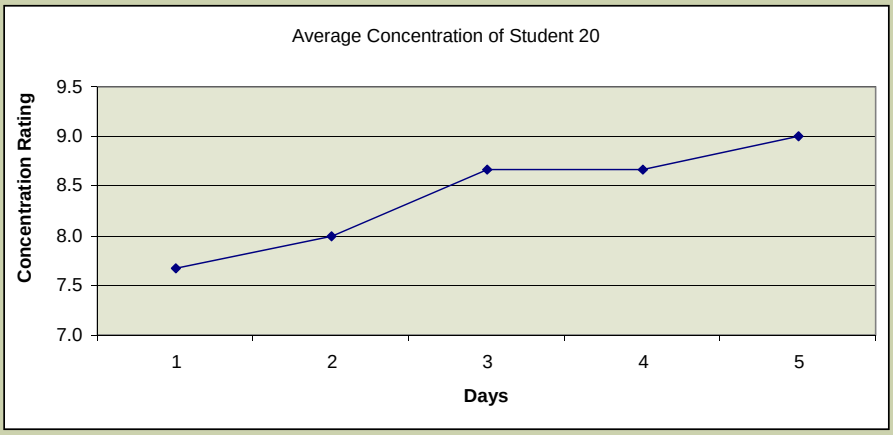

## Findings

In this section of the paper, the common themes that emerged from an analysis of the data using the constant-comparative method of coding (Cohen, Manion, & Morrison, 2011) are identified and used to answer the research question. Statistical results from analysis of data gathered from numeracy tests and concentration diaries have also been used to determine answers to the research question. Findings from this study contribute to the growing body of knowledge concerning the impact that IMBAs can have on the learning of primary school aged children, especially in relation to their concentration, enjoyment, engagement in learning and interpersonal relationships. A further theme that emerged from the study provides evidence of the impact the classroom environment can have on the use of IMBAs.

Concentration levels exhibited by the students in their classrooms were observed during all phases of this study and analysis of this data showed that the use of IMBAs improved students' concentration and engagement in their learning. Furthermore, the teachers in the study strongly believed that IMBAs

helped to increase the concentration levels of the students in their classrooms based on the evidence they observed. Also, analysis of the students' concentration diaries showed improvements in their concentration levels. A typical example of this improvement is provided in Figure 2, showing Student 20's increase in concentration levels across consecutive days during the period when IMBAs were introduced.

**Figure 2: Average concentration of student 20**




The statistics from the timed numeracy tests in Phase One of the study also showed that, after movement-based activities had been integrated into the classroom, improvements occurred in both the mean class scores and the mean class time taken to complete the test. During week one, before the IMBAs had been introduced, the students obtained a mean score of 33.96 out of 42, this increased in week two to a mean of 35.22 out of 42, after the IMBAs had been introduced (see Figure 3). On average the students also improved in the time that it took to complete the test, from seven minutes and three seconds in the first instance to five minutes and eighteen seconds in the second instance. Although the increase in mean scores and the decrease in the mean time taken to complete the test were not substantial, when considered together, these changed scores both indicated a gradual improvement in the children's performances.

**Table 3: Student's timed numeracy test results - before and after movement integration**

| | Pre-IMBA | | Post-IMBA | |
|---|---|---|---|---|
| | Week 1 score | Week 1 time | Week 2 score | Week 2 time |
| Student 1 | 29 | 7:40 | 36 | 7:00 |
| Student 2 | 36 | 3:19 | 36 | 3:07 |
| Student 3 | 39 | 2:25 | 38 | 1:54 |
| Student 4 | 36 | 6:45 | 40 | 4:16 |
| Student 5 | 33 | 8:18 | 32 | 7:18 |
| Student 6 | 37 | 2:48 | 37 | 2:11 |
| Student 7 | N/A | N/A | 35 | 4:05 |
| Student 8 | 30 | 5:32 | 34 | 3:53 |
| Student 9 | 36 | 6:20 | 40 | 8:35 |
| Student 10 | 32 | 15:00 | 38 | 11:00 |
| Student 11 | 38 | 4:12 | 39 | 3:32 |
| Student 12 | 39 | 4:12 | 40 | 4:10 |
| Student 13 | 37 | 6:45 | 35 | 4:55 |
| Student 14 | 42 | 2:08 | 41 | 1:54 |
| Student 15 | 24 | 14:36 | 27 | 8:50 |
| Student 16 | 34 | 16:31 | 36 | 11:10 |
| Student 17 | 37 | 6:45 | 39 | 5:13 |
| Student 18 | 26 | 9:28 | 22 | 6:43 |
| Student 19 | 31 | 10:58 | 33 | 6:26 |
| Student 20 | 37 | 3:19 | 38 | 2:38 |
| Student 21 | 41 | 2:08 | 39 | 2:12 |
| Student 22 | 23 | 10:02 | 25 | 6:25 |
| Student 23 | 32 | 5:00 | 30 | 4:32 |
| Student 24 | 32 | 8:08 | N/A | N/A |
| **Averages** | **33.96** | **7:03** | **35.22** | **5:18** |

Both the students and the teachers noticed how IMBAs influence the students' ability to concentrate, as evidenced in the following typical comments gathered during the study.

Teacher 1
(Phase Two)

> Just to get them to focus. They were really unsettled this morning because they were tired and it freshened them up so that they could concentrate again…The learning activities help them to focus because it stimulates the brain…They are always moving for a purpose, and the purpose is to keep the students' moving and to stimulate their frontal lobes so that they can continue to focus on their work.

Student 12
(Phase One)

> I really think that in a way this has helped me. After we did those activities I was laughing and smiling. Therefore I was willing to concentrate deeply on my work.

Students' enjoyment of learning was influenced by their participation in IMBAs. For example, on one of the days that IMBAs were used in one classroom, 26 out of the 31 students indicated in their journals that they had enjoyed their day. The students' comments demonstrated how they did not necessarily perceive the physical activities they were doing throughout the day as 'work'.

Student 3
(Phase One)

> I liked it because we got to miss out on a bit of work. It was fun and it got our brain working.

As well as influencing enjoyment levels, the introduction of IMBAs improved the students' interpersonal relationships with their peers and their teacher. This was documented in the words of the researcher, the teachers and the students:

Researcher
(Phase One)

> The movement-based activities often involved working as a part of a team and the students enjoyed this type of work.

Student 24
(Phase One)

> I have enjoyed this week because when I get to school I feel like belonging there because everyone is nice to me so I am nice back.

Teacher 1
(Phase Two)

> The children are definitely more relaxed with me as a result of the activities. The whole atmosphere is more relaxed. They are not scared or intimidated to approach me.

The integration of movement-based activities into general classroom lessons was especially effective when the environment of the classroom was structured suitably for the students to participate in them.

Teacher 1
(Phase Two)

> [The classroom] needs to be very tightly structured and the behavioural systems and framework need to be in place… You have to establish the rules and boundaries for the movement activities so that it doesn't just become chaotic.

Teacher 2
(Phase Two)

> They [the students] have to follow rules. It creates settledness in the classroom rather than the students just going off on their own. If we [the teachers] didn't have that structure in place then it would be chaos. If it was chaos then they (the students) wouldn't be able to hear and learn well.

Findings from this study provide evidence of the observable impact of IMBAs in primary classrooms when they are integrated into classroom activities in varied key learning areas. Although these findings are not necessarily generalisable to all primary school classroom contexts, they are offered for interpretation by teachers and administrators who are interested in the impact of IMBAs on primary school aged children.

## Discussion

The findings from this study contribute to our understanding of how the integration of physical activities (specifically IMBAs) into a school curriculum can increase students' concentration levels. This aligns with Cosentino and Wyrzkowski's (2007, p. 15) work which discovered that when students have an active lifestyle, they concentrate better in classroom situations. Similarly, the study currently being conducted by Riley et al. (2014) has comparable concerns: to evaluate the impact of curriculum-based physical activities on primary school students' daily school time physical activity levels, engagement and other on-task behaviours.

This study's results also support the beliefs held by many teachers in Australia and New Zealand that the inclusion of movement-based activities in their classes helps students concentrate better on academic studies (Di Sisto, 2002). By showing how IMBAs impact on children's concentration in key learning areas, besides Physical Education, the findings of this study also support the outcomes of other movement-based programs. For example, programs such as Brain Gym International (2003), Learning Connections (Hawke, 2007) and the EASY Minds (Encouraging Activity to Stimulate Young Minds) program (Riley et al., 2014) have also shown how specialised brain break activities and integrated physical activities can improve students' concentration at school. Furthermore, there is some correlation here between this study's results and that of recent developments in neuroscience claiming "exercise-induced cognitive enhancement in humans" (Griffin et al., 2011, p. 934).

The students in this study enjoyed participating in IMBAs, as did students who participated in Penney et al.'s (2013) study of the impact of Physical Education in primary schools. Similarly, Purcell-Cone, Werner, and Cone (2009, pp. 4-5) discovered that interdisciplinary physical education increases students' enjoyment of a lesson. Although contemporary research has not yet reported on any substantial connections between enjoyment of learning and the use of IMBAs in the classroom, Jensen (2008) and other researchers (Griffin et al., 2011; Van, 2012) give reasons why movement can help to stimulate the brain as it increases blood circulation which allows nutrients to get to the brain faster. These studies focused on the physiological link between brain activity and learning. Although the study documented in this article did not use methods which analysed physiological processes, the findings of this research complement the findings of Jensen (2008), Penney et al. (2013), Griffin et al. (2011) and Van (2012) by illustrating how IMBAs impact on students' behaviour and attitude.

Some previous researchers have investigated how movement-based activities can help to improve students' interpersonal relationships (Di Sisto, 2002; Dodd, 2003; Hawke, 2007). For example, children who participated in an intensive physical dance program were found to develop good relationships with adults who were involved in the program (Atkinson et al., 2010). Dodd (2003, pp. 2-3) outlines how students who were involved in a Daily Physical Education Program were found to have improved interpersonal relationships and Hawke (2007) indicates that the Learning Connections program can have a positive impact on children's social interactions. Likewise, this study has found that the integration of movement-based activities in primary classrooms improved interpersonal relationships among the students and between the teacher and the students.

The benefits of physical education classes and movement-based activities have been established (Cosentino & Wyrzkowski, 2007; Davis, 2005; Di Sisto, 2002; Dodd, 2003). However, the impact the classroom environment and structure can have on the effectiveness of IMBAs has not been previously researched in great detail. As an outcome of their study, Atkinson et al. (2010) recommend organising the classroom during physical activities to provide more choices for children and, resultantly, helping them feel more comfortable. However, previous research about movement-based activities (Lapere et al., 2008; Overby, Post, & Newman, 2005; Purcell-Cone et al., 2009) tends to be general and does not

focus on the practical aspects of establishing a structure and routine to support the integration of movement-based activities across various subjects in the primary classroom. The findings from this study recommend there is a need for planning, suggesting that the teacher's choices about how the classroom environment is organised and structured can impact on the successful use of IMBAs in primary classrooms.

## Recommendations for practice and future research

Findings from this study, in association with findings from previous research, indicate a set of practical recommendations for primary teachers. Primary teachers who intend to introduce IMBAs into varied learning areas their classrooms need to firstly plan a structure and routine which will support the activities, and encourage and reinforce appropriate student behaviour during the activity. Secondly, the findings from this study and previous studies suggest that primary teachers would benefit by developing a personal repertoire of practical strategies that could be used as IMBAs or brain break activities in their classrooms. Thirdly, after beginning to introduce IMBAs into the primary classroom, it is important for the teacher to watch for behavioural indicators that suggest the benefits and limitations associated with the use of these activities within varied learning areas.

Future research could be conducted to further examine the impact of IMBAs in primary classrooms. A longitudinal study may identify long term impacts of IMBAs on primary school aged students. Such research could determine whether or not the students' academic achievement of particular learning outcomes was linked to the use of IMBAs. In this study both non-integrated brain break activities and integrated movement-based activities were used, future research could be undertaken to determine whether or not there is a difference between the impacts that these two types of activities have on students. Furthermore, the potential for IMBAs to be used as behaviour management strategies could be explored. Lastly, although there is already some evidence that physical activity interventions do not necessary impact on one gender more than another (Siahpush, Huberty, & Beighle, 2012), an investigation could be conducted to discover whether or not there is a gender difference in the way boys and girls respond to IMBAs.

## Conclusion

The findings from this study, when placed alongside the current literature, indicate some reasons why the use of IMBAs in the classroom has a positive impact on primary school aged students and their learning. When a supporting structure and routine is established in the classroom, IMBAs can help improve students' concentration, enjoyment of lessons, engagement in learning and interpersonal relationships with their peers and with their teacher.

Teacher 1
(Phase Two)

> Adults need coffee to have the energy to continue with their busy lives. I give my students 'coffee' through movement.

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