# The Implementation of Movement Problem-Based Learning: A Community-Based Action Research

Agus Mahendra, Yoyo Bahagia, Eka Nugraha, and Lilis Komariyah Indonesia University of Education (UPI)

#### **ABSTRAK**

Penelitian ini mengkaji metode peningkatan kualitas kinerja guru olah raga dalam melaksanakan tugas utama mereka, pembelajaran olah raga yang memenuhi persyaratan kualitas didaktik dan pedagogis. Penelitian ini sangat penting mengingat banyaknya penyimpangan yang terjadi dalam pelaksanaan landasan filosofis pendidikan olah raga sehingga mengaburkan nuansa pedagogis dan didaktisnya. Untuk mengembangkan paradigma ini, guru olah raga harus memahami landasan filosofis dan orientasi pendidikan olah raga serta implementasi model dan pendekatan pembelajarannya. Dalam penelitian ini, peneliti mengembangkan *community-based action research* dengan berperan sebagai pemimpin guru dalam melaksanakan penelitian tindakan kelas (PTK) pada dua SMA di Bandung. Setelah melalui serangkaian perencanaan, implementasi, observasi dan refleksi dalam tiga putaran, peneliti berhasil merubah pemahaman filosofis dan prilaku guru dalam melaksanakan pembelajaran pendidikan olah raga. Selain itu, guru juga memiliki kemampuan melakukan PTK sendiri.

**Kata kunci:** penelitian tindakan kelas, pendekatan pembelajaran, didaktik dan pedagogis, pembelajaran berbasis permasalahan gerakan

Poor physical fitness among students in Indonesia indicates that quality of physical education programs in Indonesia is still low. This situation can also be summarized from sporting community's opinions that underlined low physical capacities of student athletes.

It should be questioned, why the quality of PE programs in Indonesia is so poor, is it because of low quality of teachers, or is it because of other factors such as facilities and equipments unavailability? A deeper skepticism could also be raised, suspecting the irrelevance of curriculum, or probably indicating lack of support from both government and society in terms of the essence of physical education.

Those questions are not easy to answer, of course. It is necessary that there must be a scrutiny of investigation involving a review of philosophical, sociological, psychological, cultural, economic, and political perspectives. However, in the sense

of praxis, we can identify these problems from two focal points of teaching; they are the capabilities of teachers and the curriculum. The capabilities of teachers can be traced back to their value orientation (Jewet, Bain and Ennis, 1995) in terms of their awareness of PE and curriculum, and the curriculum itself can be studied from its flexibility in implementation both as documents and guidelines.

Historically, both teachers' value orientation and curriculum of PE in Indonesia nowadays originated from the heart of Indonesia sport history in the time of old-era in the 60s. There has been a considerable paradigm shift in PE since those days. The founding fathers of this nation have utilized the sport movement as strategic and political tools to cure a poor collective self-esteem of the people who had just gained their freedom and liberated themselves from the Dutch colonial occupation. A

convincing argument that developed in that time was that 'through sport we can prove to people of other nations that we have the same capabilities and potentialities', which can be shown of by the achievement elicited in sport competitions, both in regional and international events.

With such a belief, the paradigm of PE program in schools was shifted, which is no longer as an educational device as an integral part of general education (Mosston and Ashworth, 1994; Rink, 1993), but widened as a socializing process into "sport movement" to generate more schools' kids ready to become elite athletes. As the consequence, PE program, as we can notice today, has been more a kind of sport training process than educating kids through sport (Siedentop, 1992; Tsangaridou, 2005; Freeman, 2001). So powerful this sport-training paradigm that the teaching condition has always been depriving of educational values. Teachers are not aware of the necessity of delivering a Developmentally Appropriate Practice program. (Bredekamp and Copple, 1997).

Using Tinning and Macdonald' terminology, our PE teachers in school are not developing a reflective thinking, thus their teaching task is solely run as something routine, without any attempt to facilitate learning with various teaching strategies and methods (Tinning et al., 2001; Macdonald, 2000). Following Jewet's way of thinking (Jewet, et al., 1995), our PE teachers are not capable of constructing a proper value orientation in their teaching action. In other words, they have been stuck on an irrelevant value orientation.

The incapability of teachers is absolutely reasonable, considering society's expectation of PE teachers. Their role in school has been deemed minor including in the perspective of the principal and other teachers. This has been combined with the small opportunity for PE teachers to develop their career and teaching capabilities through *inservice training* and other events such as seminar or workshop. Yet, when teachers finally have such an opportunity, they are not able to improve themselves in terms of their teaching skills.

Questions that must be answered in this issue are: what kind of approach that must be carried out to facilitate teachers to become an effective and a reflective teacher? What is the best way to change old paradigm of teachers from a sort of training-based teaching to an educational-based teaching?

This research is directed to indicate the above problems in form of *community-based action research*, as a first step in modifying the old-paradigm on PE in Indonesia and at the same time to encourage teachers to be more convinced that PE program is an effective way of helping pupils develop skills, personality, and character.

#### Method

Since this issue is related to applying concept and oriented to teaching behavior modification, the method chosen in this regard was an action research method. This method was chosen in line with the fact that most of the research in curriculum has been criticized to be too theoretical and only concerned with seeing it as an empirical fact, without any attempt to change existing condition. As has been noticed, too many quantitative works in this regards is usually terminated only examination of the research hypothesis with.

With action research, the researchers are able to arrive at the core objective, bringing about changes on teaching behaviors of the teachers on the basis of certain value orientations in order to improve their teaching quality. Furthermore, this research is beneficial in improving the quality of PE learning in general, since it is the intention of this research that teachers are directed to master a research method that suits their needs, namely *classroom action research* (Kemmis and McTaggart, 1990).

Considering that a group of teachers is involved as researchers, this type of research is sometimes called "community based action research" (Kember, 2000). Other researchers termed this kind of research as "emancipatory action research" (Schmuck, 1997), in which researchers are required to make a critical investigation of themselves (in this regard: teachers), and that it is collaborative in nature. On the other side, the main researchers serve as leading action researchers, in which they should serve as a facilitator, consultant, and lead all process of the research.

The main task of main researchers is to act as agents of change in educating teachers to modify all aspects of their teaching deemed ineffective and considered to be irrelevant to the demand of current time (one of which is in value orientation, curriculum models, teaching models and approaches, and

teaching skills). In making this modification to occur, researchers also are to provide a convincing evidence to the teachers that what they are doing have a significant effect on pupils' behavior and teaching outcomes. In this regard, the changes can be identified in students' behavior in terms of physical and motor skills, positive responses to teaching tasks, and positive values on motor and physical activities.

Action research is considered a part of qualitative research. As the consequence, data collection is carried out by using the most appropriate instruments such as observation, interview, and video recording through camera.

However, to specifically evaluate value orientation aspect, there has been a modified instrument of TVOI (Teacher's Value Orientation Inventory), developed by Ennis and Chen (Jewet, 1994), and best known as VOI (Value Orientation Inventory). This inventory was given twice to the participating teachers and should be filled out in different period of times; once in the beginning and once in the end of research. The difference score between the two is assumed as a value orientation change of teachers as a result of the interaction influence between the researchers and the teachers. The above mentioned interaction was carried out in form of both formal and informal meetings, like workshop, on site visit and observation, and camera shooting.

To monitor their own progress in teaching, teachers can make use of various instruments to be utilized. Depending on their focus, there have been instruments for measuring physical fitness improvement, for identifying behavior modification of pupils along the learning process (observation guidelines), and instrument for detecting the ALT (active learning time) with differentiating between on-task time and off-task time of the students.

# Initial Condition of Teachers' Performance Preparatory Phase

What we call as preparatory phase in this regard is every preparation that teacher made prior to the learning process. In general, this preparatory phase of every teaching action is minimum. The equipment that teachers utilize is definitely dependent upon the available equipments. There has no modified equipment at all that can be identified as teachers' effort in making this

preparatory phase conducive for creating a positive learning environment. Likewise for the field or court that the school posses. The field and the court are let remain as they are in the original form.

With the very limited number of balls, for examples, there is no effort at all from teachers to modify or to utilize other forms of equipment to proportionate between the numbers of students and the number of balls. This also happened later in the game; in which there is no modification both on movement task and on rules of the games.

# Wasting time of routine activities

One indicator that our PE teachers are not really aware with time utilization can be seen from routine activities that are not efficiently benefited. Forming lines of students prior to learning process is one of the routine activities that must be seen as a time consuming. While it is not easy to form a proper line of the students since teachers are not equipped with a kind of "shuffling the deck" technique, it is not empirically proven that such an activity is effective in building discipline as many teachers would identically believe. Likewise with checking students attendance activity, that is routinely conducted in the beginning of the lesson. These two routine activities are seriously wasting time, since teachers feel that they are not in the position of making of instant technique to minimize the length of the routines.

# Traditional Warming up

Other depiction of ineffectiveness in learning process can be traced from warming up phase that is still conducted in a formal and traditional way. Teachers in this regard seems to be bound with the old structure of learning that necessitates the existence of such phases as warming up, core learning, and cooling down. In modern PE learning, those phases are not obviously followed since many teachers believe that PE learning is not identical with sport training process.

#### One-way of Learning Process.

Learning condition in which students do not have opportunity to utilize equipment adequately, will lead to a "no-learning" condition. This can happen since only few students at the same time will get involved on task activities, while the rest are waiting for the turn in a long line.

On the other hand, limited number of equipment and opportunities will lead teacher into a condition where he or she has less option in developing his or her teaching style. The only style that is possible to be applied is command style (Mosston and Asworth, 1994), which of course has limited benefit in developing students' learning capacities from other domains except psychomotor domain. Just like Mosston put it, teachers' teaching style will determine students' capabilities to be developed. If teacher decided styles that improves decision making of students, then teacher is giving a chance to students to improve their decision making capabilities. Conversely, if teacher decided to elaborate only a command style, it is unavoidably that teacher is only focusing on reproductive (as opposed to 'productive') students' capability.

#### The absence of attitude and cognitive factor

When it is deeply scrutinized, PE program conducted by most PE teachers has shifted the learning process into an one-sidedness learning focusing on sport basic-techniques learning. As the consequence, those kinds of learning have undoubtedly ignored the important aspects of attitude and cognitive development of the students. It has scarcely happened that teacher deliberately created a positive learning process conducive to developing attitudes and values such as cooperative behavior, respect to other, perseverance, determination, and personal and social responsibility.

At the same times, cognitive aspect of students is also ignored. None of the teachers participated in this research used the interval time existing between two on-task activities as time to dialog or review skill-related concept and movement principle of the skills learned. Teachers repeatedly announced the basic-techniques solely from technical aspect, thus students were not helped in making connection between the movement and its mechanical principle, in order to gain students' understanding of how making it in more productive ways.

### Poor teaching skills

Teaching skill is a set of ability that must be mastered by teachers to facilitate the learning processes. Teaching skill is a part of teachinglearning strategy, providing opportunity for teachers to develop and generate a positive learning atmosphere. These teaching skills include such techniques as organizing the class, developing the content, establishing the environment, maintaining appropriate behavior. motivating students. improving learning activities, giving feed-back and correction, and evaluating the progress (Siedentop, 1991; Graham, 1992; Graham, et al., 1993). From this point of view, it is obvious that most teachers are not familiar with those techniques, since they only focus their attention on how students master the basic techniques of the skills.

It is readily assumed that most teachers are not familiar as well with such teaching models as teaching games for understanding/TGfU (Light, 2000), dominant movement pattern (Mahendra, 2001), let alone movement problem-based learning (Crum, 2006).

# Action Planning Within the Cycles

Realizing concern related to the above mentioned initial conditions, it is necessary that researchers arrive to a firm planning of action programs giving teacher supports in improving their action of teaching. Every step of actions will reflect stages describing tasks of researchers and at the same time tasks to be done by teachers. Here are the steps.

# Step 1 – Preparation

The first step of the cycle was a preparatory step. In this step, researchers brainstormed a process to formulate stages of actions in order to give support to teachers in terms of measures to take in improving their teaching behavior and their comprehension about teaching procedures. Steps taken in this brain-storming process were documented and arranged as a general action plan to be carried out in the next steps.

#### Step 2 – Introducing the ideas to teachers

After completing the preparation step, it was time to socialize the program to the participating teachers in a sort of informal meeting. All teachers were reminded to the steps that must be passed through during the research program and to be made aware of the preparation that must be set up as part of their commitments. They were obliged

to get involved in regular meetings afterward, and in every meeting, they were required to report the progress or obstacles that they face in the applying process of new teaching methods or approaches. Planning for the next step is also a part in this step.

Step 3 – Execution of teaching practice and observation

On this stage, all teachers were assigned to bring the plan into practice as determined in step 2, meaning that in this step, teachers were to apply the new methods and approaches of teaching into their teaching processes. To make this applying practice occur at its best, it is important that teachers inform all students about the new way they are going to engage. All students need to know that sort of these stuffs are directed to improve the quality of learning.

Along the teaching process, researchers were observing teachers' performance and recording all of the weakness and strength seen in their teaching. These records were needed to provide feed-back to which all improvement steps were based. In case that the immediate feed-back could not be delivered, all of the performance of teachers was recorded by video camera. This way, researchers were able to provide a more accurate feed-back since teachers' performance can be seen over and over again.

#### Step 4 - Reflection and brain-storming

When the step 3 has been repeated for two or three times, all teachers were invited into a second meeting to elaborate their performance in a sort of process of reflection and debriefing. In this stage, they also had an opportunity to see their performance through a simple-edited movie or video, in order to identify their teaching behaviors. Any shortcomings in the performance of teaching were identified and analyzed through a technique called *cost benefit analysis*, to arrive at the problem solving stages, which sometimes came out from teacher itself. This step sometime needed to spend about two or three days of meeting.

Step 5 - Planning Action Program for the next cycles

This step 5 was basically a continuing step of step 4. It was sometimes conducted at the same time, without any obvious or discrete limit. After step 4 succeeding to be formulated, all teachers and researchers agreed to proceed to step 5 in order to reformulate planning for the next cycles. In this step 5 all of the action program for second cycle or third cycle was formulated together – which would be different among teachers— based on the weakness found in their own performance. Once this step finished, the program would return automatically to step 1, step 2, and so on, to arrive again to step 5. That's the way the steps went around the determined cycles

#### **Conclusions**

- This research has identified an apprehensive initial condition of PE teacher performance, mainly connected to the absence of value orientation of PE and its curriculum models by Indonesian PE teachers. This absenteeism leads to PE learning depriving from educational values.
- 2. The value orientation adopted by Indonesian PE teacher is a single value; that is disciplinary mastery value orientation. As the consequence, teachers applied 'sport education' curriculum model (with a narrowed meaning) as the only choice in almost all lessons. This is reasonable that all teaching process as solely constitutes a sport-based training instead of learning oriented to learning process value orientation.
- 3. Any shortcoming in teaching performance of teachers seems to be more affected by the mistake of PE paradigm matters instead of the technical matter in teaching skills. This trend must be addressed to the curriculum irrelevance on the level of higher learning of Physical Education Teacher Education (PETE) in Indonesia that still preserved the old paradigm.
- 4. Action research with community-based action research format has been successful in modifying PE teachers' value orientation, and in turn has improved the significance level of teaching, shifting significantly from teaching that initially stresses disciplinary mastery to a more democratic learning situation and student-centered learning. Authoritarian teaching is diminishing and replaced by learning that stresses students' decision making.

- In general, teachers' performance has been shifted to the learning that encourages critical thinking, cooperation, and student-initiated learning development.
- Teachers' insight is improving in terms of the essence of PE contribution, and at the same time improving the capability of teachers in conducting classroom action research in their own class.

#### Recommendations

- Government and all stakeholders need to pay a great attention to the poor condition of PE program in Indonesia as a collective national apprehension.
- 2. It is necessary that physical education scholars and academicians in higher education take serious steps in restoring the poor condition of PE program in Indonesia, both in revitalizing curriculum of PETE program in higher education and in helping teachers in schools to improve the quality of their performance.
- 3. In order to improve PE teachers performance in teaching process, it is not sufficient if the government only relies on a short course of in-service training. It is essential that government take a step to empower physical education scholars in higher education to conduct various community-based action research in many schools, involving teachers as the counterpart. With this type of program, teachers and researchers will take advantage of their positive interaction for mutual benefits.
- 4. Considering that all of the shortcomings of teaching PE program are major problems in Indonesia, the recovery program that must be run should also be a national concern and full funding of the government.

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