

What strategies and tactics can be used to engage and train physical education teachers in the use of an eastern philosophy to human movement for learning and for the promotion of physical literacy with their student?

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Abstract

This paper was designed to determine the strategies and tactics to engage and train the physical education teachers in the use of an Eastern philosophy to human movement for learning and for the promotion of physical literacy with their students. Five kinds of diffusion-related theories were used to make the strategies and tactics. To do so, four strategies composed of eleven tactics were suggested: the first strategy was exposure, introduction and spread including mass media, pamphlets, specialized web-site, and multiculturalism; the second strategy was to make specialized agency and specialists including role as go-betweens and educational institution; the third strategy was motivation for PE teachers including regular seminar, participant in development of model, and incentives; the last strategy was mandated change including meaning-making opportunities and school-oriented approach. The most important task is to introduce new knowledge, so among the four strategies, the first and second strategies should be first, after then to persuade teachers, the third strategy might be followed. If teacher tend not to want to use the concept of the Eastern philosophy on human movement continuously, despite the attempts by creators to persuade them, the last strategy can be applied.

Key words: Physical education, Physical literacy, Teacher education, Eastern philosophy, Human movement

Introduction

According to Patrascu(1995), there are six types of teachers with respect to change: (1) those who do not want to change; (2) those who do not understand the necessity

for change(why); (3) those who want to change, but do not understand the mechanisms of change(how); (4) those who would like to change, but do not try(postpone trying) because of constraints; (5) those who try to change, but are not very successful and give up(and feel guilty); and (6) those who are successful for change.

Change during a teacher's career is regarded as unavoidable (Fullan, 1999): Programs, curriculum and resources

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become old-fashioned or outdated; and, associate staff members are removed to other locations. There is little sense of long lasting of ownership in their job environment, as the job situation may be altered and determined by the needs of the school or a government-related organization. Occasionally, major changes are required, such as the adoption of a standardized curriculum. These factors have a key impact on what is taught, how to teach it effectively, who will be allowed to teach it, and when or where it will be taught (Helm, 2006).

The traditional solution to implement changes, such as a new program, innovation, or educational philosophy, is to utilize a specialist to conduct an innovative developed activity to get the teachers motivated. However, an effective method for the introduction of an innovation, new program or educational philosophy has been a widely debated topic by many educational change specialists (Helm, 2006). According to Fullan and Smith (1999), the simple use of new materials (curricular, paradigm, etc) is important, however it is more important for teachers to develop new skills, behaviours and practices associated with the change, and acquire new beliefs and understanding of the change. In other words, change involves a process of redoing and rethinking.

There are many differences in the philosophical trends between the Eastern and Western approach (Lee, 2016).

In the Eastern philosophical approach, the concept of the body is one, not individual separated parts. When using this approach, students can be trained using both sides of the body, including the non-dominant side. In contrast, in the traditional Western approach, the concept of the body is a combination of separated parts, and students are trained usually using their dominant side of the body. The Eastern philosophical approach can practice physical activity through enlightenment and realization with instructor as facilitator. Meanwhile, the traditional Western approach might practice physical activity with instruction from an experienced teacher.

The concept of partner is also different between the Eastern philosophical approach and the Western philosophical approach. In the Eastern philosophical approach, partners are encouraged to cooperate. In the Western approach, student participate as individuals who are encouraged to engage in friendly competition. In addition, improvement in the Eastern approach is a never-ending journey, a circular practice, through the method of returning. Conversely, in the Western philosophical approach, improvement is linear. This means that improvement has a goal and timeframe. Development stops when the goal is reached. Moreover, in the Eastern philosophical approach, achievement is internal through enlightenment and realization. In contrast, in the Western approach,

Table 1. Differences of Philosophical Aspect between the Eastern and Western Approach

Criteria	Eastern Approach	Western Approach
Concept of Body	- Body is one not individual separated parts - Students train using both sides of the body, including non-dominant side	- Body is a combination of all connected parts - Students train using only dominant side of the body
Source of Learning	- Practicing physical activity through enlightenment and realization with repetition and slow body movement	- Practicing physical activity through coaching from instructor
Concept of Partner	- Cooperative partnership	- Competitive relationship
Improvement/Evolution	- Cyclic development: through returning, improvement is a never-ending journey with no limits - There is no beginning and end	- Linear development: improvement has a goal and development stops when the goal is reached - Benchmarks of time are a consideration
Achievement/Winning	- Achievement from enlightenment and realization	- Achievement and winning through competition
Establishing Control over Emotions	- Through meditation	- Through analysis and understanding

achievement is external, mainly through competition. Lastly, in the Eastern philosophical way, establishing control over emotions is via meditation. In the Western way, this same concept is through analysis, understanding and reflection (Lee, Katz, & Sheehan, 2015).

Brunner (1986) stated that Western cultural beliefs shaped experiences and cause us to place limitations on ourselves. However, the wholeness of the Eastern concepts and attitudes has begun to draw the attention of Western practitioners. Many Westerners can catch glimpses of themselves in the Eastern ideas and practices. He suggested that a holistic paradigm for physical education must borrow movement forms, images, experiences and new techniques from Eastern philosophy. He also mentioned that a holistic paradigm for physical education must embrace Eastern movement forms that provide new images and ways of describing experience, as well as new techniques that reveal universal principles of movement.

Hanna (1986) also explained that Eastern movement disciplines were a special gift to Western culture, because Eastern movement disciplines returned to human beings their depth. He also warned that the transformation would not be effortless. Hanna (1970, p. 207) said, "After spending thousand of years to hop around on one leg, it feels awkward and unnatural to walk on two."

Although there are many advantages in the Eastern philosophy to human movement, those who use the traditional Western approach to teaching may not see the value of an Eastern approach, because there may be teachers who are typically reluctant to change their way of doing things unless there is a compelling reason.

So, the purpose of this paper is to determine the strategies and tactics to engage and train the physical education teachers in the use of an Eastern philosophy to human movement for learning and for the promotion of physical literacy with their student.

Diffusion of Innovation

Rogers (1995) states that diffusion is what the process by which innovation is communicated via certain channels

over time among the members of a social system. Hence, the four main elements in the diffusion of a new idea or product are the innovation, the communication channels, the time and the social system. He also mentioned that an innovation can be an idea, practice or object to be perceived as new by an individual or other unit of adoption. Rogers' diffusion of innovations model included three main theories: (1) the innovation-decision process; (2) attributes of innovation and their rate of adoption; and (3) innovativeness and adopter categories attributes.

Innovation-Decision Process Theory

The diffusion of innovations is a process that takes place over time in the diffusion of innovation model. Rogers (1995, p. 20) defines the innovation-decision process as the "process via which an individual (or other decision-making unit) passes from first knowledge of an innovation to forming an attitude towards the innovation, to a decision to adopt or to reject, to implementation of the new idea and the confirmation of this decision." According to Rogers (2003), the innovation decision process is basically an innovation seeking and information-processing activity in which an individual is motivated to reduce uncertainty about the advantages and disadvantages of the innovation. Rogers (1995) includes five distinct stages for the innovation-decision process (Figure 1):

- 1) Knowledge – exposure to the innovation's existence and function;
- 2) Persuasion – formation of a favourable or unfavourable attitude toward the innovation;
- 3) Decision – engagement in activities to lead to a choice to adopt or reject the Innovation;
- 4) Implementation – putting the innovation into use;
- 5) Confirmation – seeking reinforcement of an innovation decision already made.

Havelock and Zlotolow (1995) mentions a six-step sequence for arriving at an implementation decision:

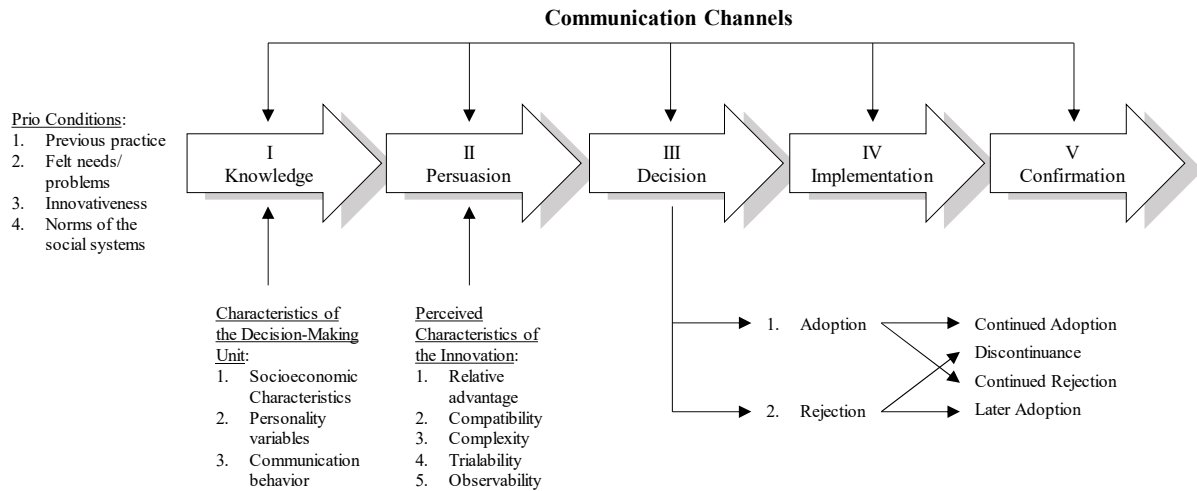


Figure 1. Model of Stages in the Innovation-Decision Process (Rogers, 1995)

- 1) Obtain an overview of the problems(s) and solution(s) from a comprehensive written source;
- 2) Obtain a similar overview from at least one person who has had direct experience with the Problem(s) and/or solution(s);
- 3) Observe the innovation in tangible form;
- 4) Obtain evaluative data from an objective source from at least two persons who have had direct experience or representing different perspectives;
- 5) Obtain the innovation for trial;
- 6) Acquire or develop a framework for evaluating its results (i.e. a rubric for making the decision to implement or reject) prior to actually conducting a trial of the innovation.

Attributes of Innovations and their Rate of Adoption Theory

Rogers (1995) suggests diffusion curves using the number of adopters as a function of time. Diffusion curves are generally bell-shaped. When a cumulative number of adopters is used as the dependent variable, the result shows an S-shaped curve, as shown in Figure 2.

This shape is a result of different diffusion rates at different stages. At the beginning of the diffusion process, the rate of adoption is accelerating, but relatively slowly.

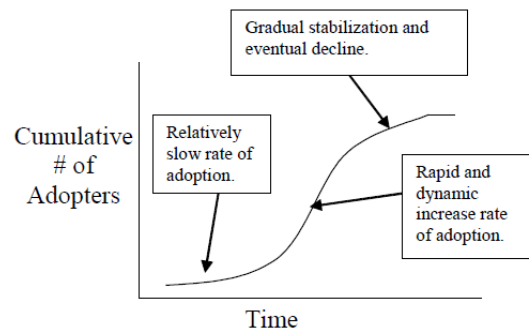


Figure 2. S-shaped adoption curve (Rogers, 1995)

In the mid-stage of the diffusion process, a rapid increase is observed. The innovation's rate of adoption gradually stabilizes, reaches saturation and eventually declines. Rogers (1995) states that five variable groups to may determine the rate of adoption: (1) perceived attributes of innovation; (2) type of innovation decision (optional, collective, or authority); (3) communication channels (e.g. mass media, interpersonal); (4) nature of the social system (e.g. norms, degree of network interconnectedness); and (5) extent of change agents' promotional efforts.

According to Rogers (2003), the communication of innovation is no longer a message from one individual to another, but is now rather communication via mass media channels: one person or a group of local people is no longer the centre of influence for diffusion. The Internet has

become a global forum for discussing the pros and cons of new information to allow adopters to make choices from many alternatives.

Rogers and Scott (1997) reported that 49-87% of the variance in the rate of adoption can be explained by the five perceived attributes of the innovation (relative advantage, compatibility, complexity, trialability and observability). An innovation that is perceived by an individual as having high relative advantage, compatibility, complexity, trialability and less complexity will demonstrate a faster rate of adoption compared to other innovations. The higher the innovation scores on each one of these characteristics, the faster the rate of adoption. It is important to note that the innovation does not need to be better or easier to use than others, but it should be perceived as such.

Rogers (2003) suggests that different rates of adoption of innovations can be explained by the following characteristics:

- 1) Relative advantage (usefulness) – the degree to which an innovation is perceived as a better idea than the idea it replaces;
- 2) Compatibility – the degree to which an innovation is perceived as consistent with the existing values, past experience and needs of potential adopters;
- 3) Complexity (level of difficulty to use) – the degree to which an innovation is perceived as relatively difficult to understand and use;
- 4) Trialability – the degree to which an innovation may be experimented with on a limited basis;
- 5) Observability – the degree to which the result of an innovation are visible to others.

Innovativeness and Adopter Categories Attributes Theory

According to Rogers (1995), it is very clear that different people adopt innovations at different rates. He also states that one of the main variables in diffusion research is innovativeness, which may explain the differences between individuals in the adoption of an innovation. He (p. 252) added that innovativeness is defined as “the degree to which

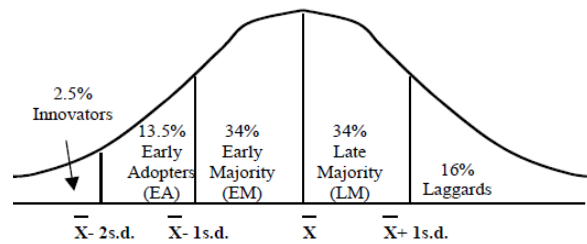


Figure 3. Adopter categories based on innovativeness (Rogers, 1995)

an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a system.” Based on their innovativeness, at the start of adoption of an innovation, individuals can be classified into five categories of adopters (see Figure 3): innovators, early adopters (EA), early majority (EM), late majority (LM), and laggards.

Change Communication Models

The change to any innovation should be viewed a process rather than an event. This process should be defined by various motivations, perceptions, attitudes and feelings experienced by individuals in relation to change (Hall & Hord, 1987).

Fullan and Stiegelbauer (1991) develop a change communication model, which change presents guidelines for resisting, coping with or leading change efforts from perspectives ranging from that of a student to the national government. Guidelines are often preceded by an evaluation of where each stakeholders stands as a group, with regards to demographics, attitudes, and other characteristics related to a disposition towards educational change. According to Helm (2006), the meaning of educational change is consistent for different individuals in different roles, with many of these people striving for the same goal. The challenge is in the establishment of areas of common interest for all stakeholders in order to move forward.

Ellsworth (2000) suggests six levels of local stakeholders as change agents and two outside the local community in a discussion of Fullan and Stiegelbauer’s model (1991):

- 1) The teacher (who has the most direct control over what happens in the classroom);
 - 2) The principal (who is positioned to set the climate for change in the school);
 - 3) The student (who, if their learning is not served, renders implementation valueless);
 - 4) The district administrator (who has significant autonomy in establishing distinct policy);
 - 5) The consultant (who brings specialized change knowledge and/or enables follow through);
 - 6) The parents and the community (who rarely become involved, but usually prevail when this happens);
 - 7) The government (who can mandate action and provide, or withhold, support);
 - 8) The teacher-educator (who can equip the faculty and staff with tools for leading change).
- 2) Design for the ideal (challenging old assumptions).
 - a. Reexamine obstacles (do old barriers still exist?)
 - b. Research solutions (have new innovations become ripple effects);
 - 3) Understand interrelationships (planning for systemic ripple effects).
 - a. Minimize conflict (be alert for dissonance between new and existing subsystems).
 - b. Maximize synergy (seek ways for new and existing subsystems to reinforce one another);
 - 4) Create a viable system (making sure that the end result works as a coherent whole).
 - a. Remove barriers (that may inhibit continuous adaptation to the changing environment);
 - 5) Reengineer the organization (to support the new set of processes).

He also states that the processes should be followed by a change agent wishing to communicate an innovation to an intended adopter. The change process establishes a channel via the change environment; however, the change environment also has some points to be able to disrupt the change process or distort how the innovation appears to the intended adopter.

Successful Implementation of Change

Reigeluth and Garfinkle (1994) mention that systemic change is frequently called a paradigm shift in their introduction to "Systemic Change in Education". In other words, systemic change creates a wholly new education system to meet the needs of our information-based society. They suggest the following issues to be key to ensuring successful reform:

- 1) Ensure stakeholder involvement (ensuring that everyone affected has input and can participate).
 - a. Coordinate efforts (as opposed to uncoordinated efforts pulling in different directions).
 - b. Work as a team (avoiding "us vs. them" or "not intended here" syndromes);

Ely (1990) was also a pioneer in the investigation of environmental conditions and their influence on the change process. He recognized that the characteristics of a given innovation were not the only factors influencing its adoption and suggested that the environment in which the innovation was to be introduced can play an equally important role in determining a change effort's success. Eight of these environmental conditions were:

- 1) There must be dissatisfaction with the status quo;
- 2) The people who will ultimately implement any innovation must possess sufficient knowledge and skills to do the job;
- 3) The things needed to make the innovation work should be easily accessible;
- 4) Implementers must have time to learn, adapt, integrate and reflect on what they are doing;
- 5) Rewards or incentives must exist for participants;
- 6) Participation in the change process must be expected and encouraged;
- 7) Unqualified go-ahead and vocal support for the innovation by key players and other stakeholders are necessary;
- 8) Leadership must be evident.

Fullan (2001) stated ten “do and do not” assumptions as basic to a successful approach to educational change:

- 1) Do not assume that your version of what the change should be is the one that should or could be implemented. Exchange your reality via interaction with implementers—some transformation or continual development of initial ideas is needed;
- 2) Must be a process of clarification via reflective practice not on needs assessment, program development and problem definition activities;
- 3) Conflict and disagreement are fundamental to successful change. People have multiple realities. Smooth implementation is often a sign that nothing is really happening;
- 4) People need pressure to change – must allow them to react, form their own position, interact with other implementers, obtain technical assistance;
- 5) Assume that effective change takes time. Unrealistic or undefined time lines fail to recognize that implementation occurs developmentally – a minimum of 2 to 3 years;
- 6) If the implementation is failing, do not assume it is a rejection. There are a number of reasons to value rejection – inadequate resources to support implementation and insufficient time elapsed;
- 7) Do not expect all or most of the people to change. Progress occurs in steps, which increase the number of people affected. Be encouraged by the increase;
- 8) Evolutionary planning and problem-coping models based on knowledge of the change process are essential;
- 9) Assume that no amount of knowledge will make it totally clear what action should be taken. Action decisions are combination of valid knowledge, political consideration, on-the-spot decisions and intuition;
- 10) Assume that changing the culture in institutions is the real agenda and not implementing single innovations.

Helm-Katz Model

Helm & Katz (2006) developed a model for implementation of innovations for teachers, which led to a better understanding of the linear nature of change, the stages of change, and the interrelationships to occur during the stages of change, adoption, and re-invention during implementation of an innovation (Figure 4).

Strategies and Tactics to be used for an Eastern Philosophy to Human Movement

Based on above five theories and models which were: Diffusion of Innovation Theory (Rogers, 1995); Attributes of Innovations and Their Rate of Adoption Theory (Rogers, 1995); Innovativeness and Adopter Categories Attributes Theory (Rogers, 1995); Change Communication Models (Ellsworth, 2000); and Helm-Katz Model (Helm and Katz, 2006), four strategies composed of eleven tactics (See Figure 5) were suggested.

Strategy A (Exposure, Introduction and Spread)

Expose, introduce and spread the Eastern philosophy to human movement to physical education teachers and highlight its relative advantages. Rogers (1995) stated that this is the first stage that was mentioned as ‘Knowledge stage’ in the innovation-decision process. In this strategy, physical education teacher can learn about existence of the Eastern philosophical new teaching idea and seeks its information. Also, through this strategy, physical education teachers attempt to determine “what the Eastern philosophy to human movement is, and how and why it works”.

Rogers (2003) also addressed that the greater the perceived relative advantage of an innovation, the more rapid its rate of adoption will be. Therefore, it needs to introduce and emphasize something better than traditional western teaching method, for example, visualization and observation skill, peer-to-peer learning, bilateral body

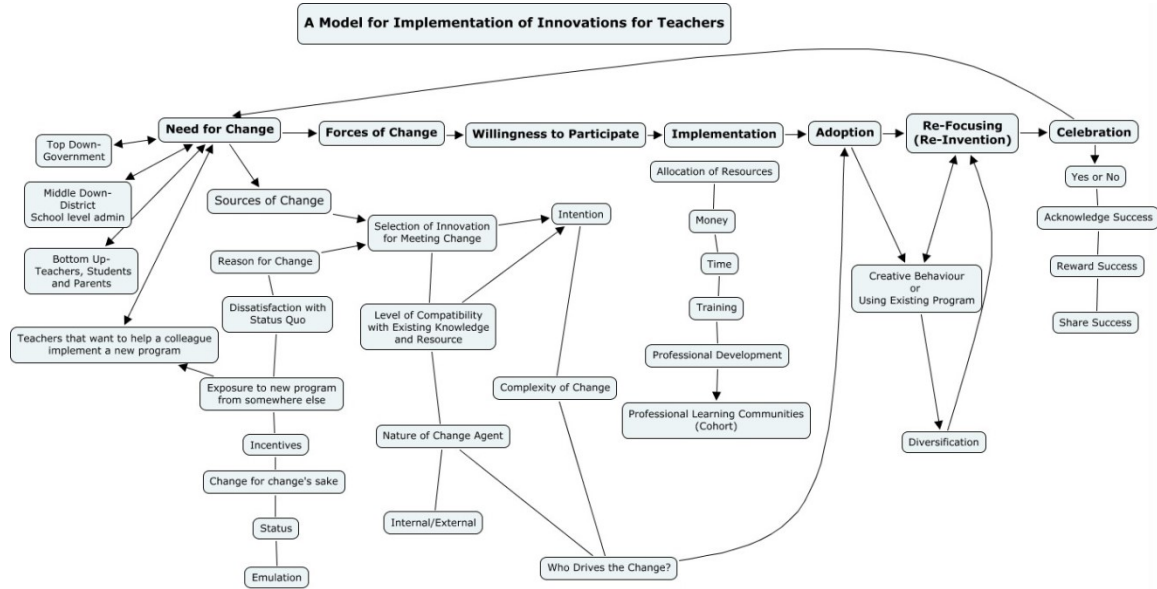


Figure 4. Helm-Katz model of implementation of innovations for teachers(Helm & Katz, 2006)

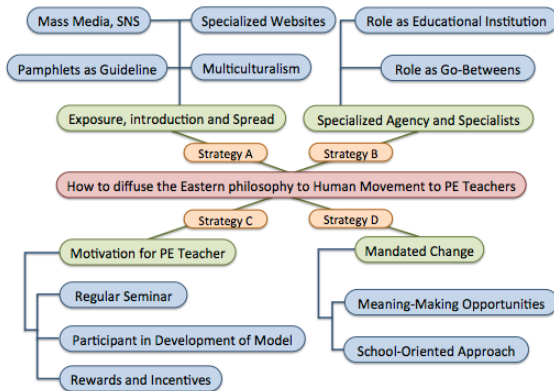


Figure 5. How to diffuse the Eastern philosophy to human movement to PE teachers.

movement, and TASP (technique, accuracy, speed and power) in the Eastern philosophical components to physical education.

Tactic 1 (Mass Media, SNS)

Use mass media, such as television, radio and newspaper. According to Rogers (1995), communication channel is main element of the diffusion of innovations process and the mass media is one of communication channels with interpersonal channel. Also, with dramatic

changes in the twentieth century within mass media, the mass media have come to play an increasingly important role in providing information (Simpson, 1997). Therefore, with this tactic, it might be quite effective to create specific programs and provide them to physical education teacher through mass media. In tune with the times, social network services, such as Facebook and Twitter, for teachers and future teachers may be able to disseminate information related to the Eastern philosophical approach to human movement as well.

Tactic 2 (Pamphlets as Guideline)

Make and distribute guidelines in the form of pamphlets for the Eastern philosophy to human movement to schools and update the guidelines periodically. With this tactic, physical education teacher can get information and use changing information. Physical education teacher also can participate in creating the guidelines as contribution with spot information and share the contents of guidelines with their colleagues. Moreover, through this tactic, time to be diffused the Eastern philosophy to human movement to schools, might be saved and there may be advertising benefits. Additionally,

this tactic can control where pamphlets are placed as well as who get it.

Tactic 3 (Specialized Websites)

Create specialized Internet websites about the Eastern philosophy to human movement for the physical education teachers and future teachers. Through this tactic, physical education teachers and future teachers can learn detailed information about the Eastern philosophical contents of classes as well as they can use visual and auditory materials in their physical education classes. The use of YouTube may be another good way to spread the information to physical education teachers and future teachers.

Tactic 4 (Multiculturalism)

Use multiculturalism, which can be utilized to spread the advantages of the Eastern philosophy to human movement. According to Rogers (2003), interpersonal channel is one of main communication channels and diffusion is a very social process that involves interpersonal communication relationship. He added to state that interpersonal channels are more powerful to create or change strong attitudes held by an individual. We are fortunate to have diverse populations in societies around the world (Wellard, 2006) and we can apply multiculturalism as interpersonal channel especially in Canada and United States; thereby, the advantages of the Eastern philosophy to human movement may be able to be spread from mouth to mouth, for example, someone who knows the effectiveness of the Eastern philosophical approach to human movement transmits the knowledge to others, including physical education teachers and future teachers. The first knowledge transmitters may be Asian immigrants who experience or know the Eastern martial arts, such as Tai Chi, Tae Kwon Do, Aikido, etc.

Strategy B (Specialized Agency and Specialists)

Establish a specialized agency and train specialists

on the Eastern philosophy to human movement. Helm (2006) suggested that a traditional solution to implement changes is to have specialists who conduct developed activities to get teachers motivated. Also, the specialist might be extremely important to ensure that physical education teachers are receiving the best information in the particular discipline as the Eastern philosophy to human movement. In the case of the Eastern philosophy to human movement, a person trained from specialist in that discipline might be able to know far more than what each component are and how to teach students. So, Specialists should be individuals who have varied applicable knowledge, careers and appropriate experiences on the Eastern philosophy to human movement. It needs that specialized agency create teaching and learning program for the Eastern philosophy to human movement, develop ways of diffusion of the new idea, and maintain the educational system to be applied them. To do so, the specialized agency has to develop a framework for evaluating its results prior to actually conducting a trial of the idea (Havelock & Zlotolow, 1995).

Tactic 1 (Role as Go-Betweens)

The specialized agency and specialists should act as go-betweens, because effective methods for the introduction of innovations, new programs or educational philosophies is a widely debated topic (Helm, 2006). The specialists should be compatible, which is one of the characteristics of the different rates of adoption of innovations (Rogers, 2003); therefore the specialized agency and specialists should help that physical education teacher effectively learn, adopt, and use the Eastern philosophy to human movement unless impose them. Also, specialized agency and specialists need to accept teacher's opinion or difficulty during the learning process, and reflect their opinion or difficulty to development of model. In this tactic, specialized agency and specialists are better equipped to develop the model of the Eastern philosophy to human movement.

Tactic 2 (Role as Educational Institution)

Specialized agency should play role as one of educational institution. In organizational system, specialists should do an in-depth study for the Eastern philosophy to human movement. According to Tzountzouris and Gilbert (2009), from the perspective of educational institutions, five systems factors drive the development of emerging skill or competency needs for healthcare practitioners: (1) scientific and technological developments, (2) public interest and needs, (3) population demographics and needs, (4) national and international healthcare trends and (5) the evolving HHR (Health Human Resources) climate. Also, Dower et al. (2001) stated that educational institutions in the context of emerging HHR practitioners have three main objectives: to act as resource pipelines to the professions, to develop the research capacity of the profession and to facilitate and leverage the evolution of the profession and the healthcare sector.

Strategy C (Motivation for PE Teachers)

Motivate to learn, adapt and use the Eastern philosophy to human movement for physical education teacher. Fullan and Smith (1999) suggest that the simple use of new materials (curricular, paradigm, etc.) is important, but it is more important that teachers develop new skills, behaviours and practices associated with change and acquire new beliefs and understanding of the change. In other words, change involves a process of redoing and rethinking. Schellenbach and Grasel (2010) addressed that the successful implementation of school innovations is based on teachers' motivation taking part into this innovation. A Chinese study (Lam, Cheng, & Choy, 2010) also explored the extent to which taking the three basic needs into consideration motivates teachers to establish new types of teaching in school in a long-term manner, and the basic needs had both a positive effect on motivation as well as on whether the teachers were interested in working with the new teaching structures in the long term. In this strategy,

three methods for motivating physical education teachers on the Eastern philosophy to human movement are suggested as tactic.

Tactic 1 (Regular Seminar)

Conduct seminars on the Eastern philosophy to human movement. In an educational setting, seminars play a significant role in simulating the thought process and they induce people to exchange new information that would not have been available otherwise (Phillips, 2014). She also stated that a properly organized seminar offers attendees a wealth of information in one place in a considered period of time. So, physical education teacher who attend seminars learn new idea and skills on the Eastern philosophy to human movement to help them improve their knowledge and teaching skill. She furthermore addressed that three role of seminars; (1) knowledge dissemination, (2) networking opportunities, (3) team building Therefore, in this tactic, regular seminars might be a good opportunity to share the latest trends on the Eastern philosophy to human movement at national and local levels, and teachers and future teachers can also get new information and join a discussion in the seminars.

Tactic 2 (Participant in Development of Model)

Involve physical education teacher in the model development process. According to Carl (2005), curriculum change does not only require new thinking on relevant curricula; it should be realized that the role of the teacher in this process has changed. Fullan and Smith (1999) also addressed that it is important that teacher develop new skills, behaviours and practices associated with change and via this process, teacher can acquire new beliefs and understand the change easily. So, Carl (2005) mentioned that curriculum change to be applied innovation should be not only include new thinking and action concerning curriculum development, but also how it relates to the way that teacher can be optimally involved in the process.

Tactic 3 (Rewards and Incentives)

Give physical education teacher rewards or incentives. Gneezy et al. (2011) classified rewards and incentives for teacher with incentives for attendance/enrollment and academic achievement. So, physical education teacher who attend in seminar and participate in model development process can be provided some rewards or incentives. Types of rewards and incentives might be monetary or non-monetary. For example, monetary incentives might be to give them opportunities to have observational training programs in Asia and non-monetary incentives might include giving certificate of completion, level up, and so on.

Strategy D (Mandated Change)

Mandate the change to learn and use the Eastern philosophy to human movement. Change can be mandatory, and sometimes change needs to be implemented by authority (Clement, 2013; Brundrett & Duncan, 2011; Fullan, 2001). Clement (2013) mentioned that mandated change (also referred to as an external approach or top-down change) is change initiated at the government or bureaucratic level and transmitted to schools, where it is adopted by the administration and communicated to teacher, who implement the change with varying degrees of enthusiasm and success. According to Spillane et al. (2002), when teacher do not understand the change, or are emotionally distressed because of the way it is being implemented, they are likely to resist implementing the change, or implement it in a different form from that intended by the initiators of the change. And Albright and Kramer-Dahl (2009) stated that sometimes teachers' practices are governed by previous policy mandates, rather than the latest innovation. Therefore, when mandated change is made, policy-makers must understand that mandates will bring only superficial change, unless they are accompanied by support for schools and teachers to facilitate teacher understanding, shifts in beliefs and values, and changes in pedagogy (Darling-Hammond, 2005; Goodson, 2001; Smith, 2008).

Tactic 1 (Meaning-Making Opportunities)

Give physical education teachers enough time to understand and make meaning of the Eastern philosophy to human movement. According to Spillane et al. (2002), the complexity of the cognitive and emotional meaning-making process in which teachers engage when confronted with educational change has been examined extensively. Teacher make sense of new information based on their knowledge, beliefs, values, emotions and experiences, so it is important that they have opportunity to explore new ideas in relation to their own ideology (Borko et al. 1997; Timperley, Annan, and Robinson, 2009). In other words, when meaning-making opportunities are lacking, teachers may have difficulty understanding mandated changes before having to implement them (Leithwood et al., 2002). Therefore, with this tactic, teachers should be given sufficient time to make meaning of this changes.

Tactic 2 (School-Oriented Approach)

Tempt physical education teacher into a school-oriented approach. Fullan (2000) recommends that teachers and schools define their own reform goals in relation to government policies in such a way that they maintain ownership. Goodson (2001) argued that the personal aspect of educational change, i.e. the beliefs and missions of individual teachers, need to be integrated with system (external) and school (internal) demands if change is to be effective. Hargreaves (2004) also addressed that external change can lead to positive and productive teacher emotions if it is inclusive of teachers' purpose, respectful of their priorities, and sensitive to their working and implementation conditions. Hence, specialized agency and specialists should tempt that teacher have some control of the change process, in other words, induce them into a school-oriented approach.

Conclusion

This paper considered teacher's perspectives on pedagogical change in order to examine the dissemination of

the new concept, which is the Eastern philosophy to human movement. To do so, four strategies composed of eleven tactics (See Figure 5) were suggested based on five theories and models which were: Diffusion of Innovation Theory (Rogers, 1995); Attributes of Innovations and Their Rate of Adoption Theory (Rogers, 1995); Innovativeness and Adopter Categories Attributes Theory (Rogers, 1995); Change Communication Models (Ellsworth, 2000); and Helm-Katz Model (Helm and Katz, 2006).

The first strategy is to expose the advantages of the Eastern philosophy on human movement to physical education teachers. This strategy employs the use of mass media and SNS (Social Network Service), guidelines in the form of pamphlets, creating specialized Internet websites, and multiculturalism. The second strategy is to establish a specialized agency, and train specialists to create and provide educational materials of the best quality. The following tactics should be utilized to conduct this strategy, the specialized agency and specialists should act as go-betweens and play the role of an educational institution. The third strategy is to motivate physical education teachers to learn, adapt and use the Eastern philosophy on human movement. Tactics under this strategy include conducting seminars, involving physical education teacher in the model development process, and giving teacher rewards or incentives. The last strategy is mandated change, which might be used when teachers continuously do not want to learn, adapt, and use the Eastern philosophy to human movement. Any tactics used within this strategy need to give teachers enough time to understand and make meaning of the Eastern philosophy to human movement. Moreover, it needs to tempt teacher into a school-oriented approach.

According to diffusion of innovation theory (Rogers, 1995), the most important task is to introduce new knowledge, for example, what the Eastern philosophy to human movement is, what the benefits and advantages from the Eastern philosophy to human movement, and so on, so among the four strategies, strategy A (exposure, introduction and spread) and B (specialized agency and specialists) should be first, after then to persuade teachers,

strategy C (motivation for PE teachers) might be followed. If teacher tend not to want to use the concept of the Eastern philosophy on human movement continuously, despite the attempts by creators to persuade them, the strategy D (mandated change) can be applied.

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