Sport Education Model in Russian Schools: Professional Development and Effective Teaching for Pre-service Teachers

by

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Abstract

The success of most Sport Education seasons depends on the quality of planning and instruction, as well as teaching effectiveness. Sport Education is not just a season of playing games but one with purposeful instruction in the beginning parts and intentional challenging of teams to work on skills and tactical challenges in their practice times during the season. While remarkably positive findings have been presented in research focusing on this curriculum model in school settings, investigations on *how* pre-service teachers learn to teach a new curriculum in physical education have been described as "the missing link" in curriculum research (McCaughtry et al., 2004).

Pritchard, Hawkins, Wiegand, and Metzler (2008) compared traditional teaching styles and Sport Education when these were taught by pre-service teachers. They found that pre-service teachers were more effective in their teaching approach during Sport Education then during the traditional teaching. Kinchin (2006) argued that learning to teach Sport education is best done by being exposed to the model as a student, seeing the model in practice, and then teaching it.

The purpose of this study was to introduce the Sport Education model to Russian students in a physical education pedagogical college, and track their understanding and intention to teach it through a series of learning experiences. An action research methodology was employed as a main design of this study, which included four experience cycles: lecturing, participating, planning, and teaching.

Within each of these cycles, another mini-model, that being “plan-action-reflection”, was used to collect data and reflect on the research process and findings.

A qualitative approach was used to analyze data. The most significant finding related to the knowledge that pre-service teachers received during their intensive participation. In particular, this cohort of pre-service teachers began with the *misconception* that Sport Education is a model where the teacher is essentially substituted by the students in terms of the operation of the class. However, by the end of the experience, the pre-service teachers held the believe that Sport Education is more like a completely different teaching style where the teacher becomes a facilitator of class events. In addition, teaching self-efficacy was evaluated and showed significant increases toward the end of the teaching cycle. Nonetheless, some of the pre-service teachers still demonstrated a strong resistance to a future teaching of the model, while others decided to postpone implementation of the model in their future career due to various reasons.

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CHAPTER I

INTRODUCTION

In some countries, physical educators continue using outdated methods and styles of teaching, not necessarily by choice, but often as a result of a lack of appropriate information and resources (Sinelnikov, 2009). Current Russian physical education is a case in point, where many lessons directly conflict with developmentally appropriate practices. Russian physical education could best be described as a strong teacher-directed approach, involving either individual work (training) or whole-team games and providing students with little opportunity for independent decision-making (Hastie & Sinelnikov, 2006). Sinelnikov and Hastie (2008) repeatedly observed over 40 physical education lessons in a number of Russian schools and confirmed that work was essentially individual, with the exception of game play. This finding was consistent with the formal Russian physical education curriculum guide by Bondarenkova, Kovalenko, and Ytochkin (2004).

During a typical physical education lesson in Russian schools, students spend a significant amount of time waiting for their turn due to the fact that limited equipment is available for students to use. Teams for game play are often chosen by captains who usually happen to be the highly-skilled students in the class. Fitness tests and skills testing are conducted one by one when one student takes a test and other students watch the performance. The rules of adult games are rarely modified. Full field games with little attention to safety and

proper equipment are the norm. This is a typical picture that pre-service teachers can see when they come to schools for observation, semi or full teaching, and for their internship as well. This is exactly the experience and message they have acquired from experienced teachers.

Hutchinson (1993) investigated the perspectives that prospective physical educators have about the physical education teacher role prior to entering a college teacher training program. All of them have significant influence from physical education teachers and coaches as well as the social context of their schools. They tried to replicate their coaches/mentors and follow a classic custodial approach to class management. The results of this study can be applied to pre-service teachers in Russia as well. Inexperienced teachers usually follow the example of a teaching style or approach that was presented previously by a physical education teacher or a college professor. There is a need for a different, more complex and challenging approach for teaching physical education in school. That approach also requires new methods for teaching physical education and knowledge on curriculum models other than direct teaching and training. There is a curriculum model that could provide an authentic sport experiences for students during regular scheduled physical education lessons. This curriculum and instructional model is known as Sport Education (Siedentop, 1994; Siedentop, Hastie, & van der Mars, 2004). If we establish that Sport Education is a suitable model for use in Russian physical education, then the introduction of the model has to start in academic institutions such as a physical education pedagogical college or a pedagogical university. These academic institutions prepare teachers to work in public schools and their pre-service teachers should be among the first to initiate learning and use of this curriculum model.

The Sport Education model is a well-known and established instructional program that is considered throughout the world as a valuable curriculum and instructional model for teaching

physical education in school settings. Research to date gives positive accounts of improvement in student performance, enjoyment, and ownership as well as report positive outcomes of the model. Physical educators report findings on how students at different school levels enjoyed the model. In a large scale survey of 344 Australian teachers' perceptions of the Sport Education model, 83% of the teachers agreed that the model results in a greater interest in physical education than their previous approaches to teaching sports in physical education (Alexander & Luckman, 2001). Grant (1992) noted that due to this increased enthusiasm, teachers had become strong advocates of the model. It generally appears that the Sport Education model is offering increased opportunities for involvement for the lower skilled (Carlson, 1995) and habitual non-participants. However, it should be noticed that most of those findings came from studies on experienced teachers.

Fewer studies have been carried out with novice teachers and their perceptions of the model or their experience teaching Sport Education. Even fewer studies have investigated how pre-service teachers learned the principles of Sport Education during a course of study and later applied that knowledge into practice. Jenkins (2004) illustrated one approach where the Physical Education Teacher Education (PETE) program allowed pre-service teachers to learn the curriculum model by integrating its key features throughout physical education teacher education curriculum. McMahon and MacPhail (2007) and McCaughtly, Sofo, Rovegno, and Curtner-Smith (2004) also noted that pre-service teachers would benefit from experience with the Sport Education model during the Physical Education Teacher Education (PETE) program and can potentially avoid many misunderstandings and pedagogical difficulties while incorporating the model into practice and teaching.

Statement of the problem

While the earliest research on Sport Education focused on teachers' and students' responses to the model, a more recent focus has been on how best to introduce and teach its key pedagogies. This has either been through formal professional development (Sinelnikov, 2007), or through instruction or experience with pre-service teachers.

Traditional (PETE) programs take a foundational approach when training pre-service teachers to employ Sport education and other curriculum. That includes a series of elementary, secondary, and advanced methods and content courses, supervised early field experiences, and later an internship. An alternative to this more traditional multi-activity organizational approach is a models-based approach. This involves self-contained methods courses and early field experiences for each curriculum model the program faculty decide their pre-service teachers should learn to deliver. The downside of this approach is that it does not allow for pre-service teachers to implement Sport Education (or other models) throughout a PETE and pre-service teachers need more time to assimilate and comprehend the model and increase the likelihood they will deliver it successfully (Jenkins, 2004; McCaughtry et al., 2004; Stran & Curtner-Smith 2009).

Research indicates that university-based seminars and courses, or one week web-based workshops generally are not enough for pre-service teachers (Ko, Wallhead, & Ward, 2006; Sinelnikov, 2009). We also know that for pre-service teachers, the opportunity to see the model in action and to have a chance practice it provides a significant positive experience for pre-service teachers. Nonetheless, what we do not have is a systematic approach or detailed study of one group going through four stages of the process: learn, do, plan, and teach.

Purpose of the study

The primary purpose of this study was to introduce the Sport Education model to Russian students in physical education pedagogical college, and to examine their process of understanding over an extended set of experiences. The study was focused on pre-service teachers who had no knowledge or experience in teaching Sport Education season. By working with a group of pre-service teachers, the intention was to provide a series of lectures on Sport Education, let the students participate in the season and later develop their own Sport Education unit. The second purpose of the study was to investigate the mechanism through which pre-service teachers learn how to teach the Sport Education model. The final purpose was to examine and understand reasons for the students described likelihood of teaching this model during the internship (or state practicum) as well as in their future teaching.

Research questions

The purpose of this study was to introduce Sport Education to Russian pre-service teachers and to gain knowledge concerning the mechanism of learning how to teach this model. The study was designed in a manner to make the participants feel comfortable enough to answer questions freely and honestly about their experience with a new teaching model. As a primary investigator, I planned to establish contact with potential participants using my familiarity with the pedagogical college as an academic institutions as well as my advantage of speaking the Russian language. There were three research questions:

1. What is the best mechanism of learning how to teach the Sport education model (e.g. seminars/workshops, planning a season, active involvement with children)?
2. How did the participants' confidence in their own teaching (teaching self-efficacy) change over the period of the study?

3. What it the likelihood of pre-service teachers using the model in their future teaching?

Limitations of the study

The study can be limited in different ways due to the following factors. First, there was little information about the background of each subject, which could cause difficulty in controlling for bias. Second, the primary investigator is a graduate of the academic institution where the study took place. This familiarity could influence responses. However, none of the participants knew the primary investigator as a student in the past. Third, all data (survey, questionnaires, and mainly interviews) were translated from Russian to English by the primary investigator, which could limit the access to the original data. Fourth, the sample size of this study was small and the generalizability of the results is therefore limited. Also, the methodology employed placed certain limitations on the study. The data were self-reported responses, which are known for their limitations. Finally, the participants were selected from one geographical location and one academic institution that also limited the generalizability of the results.

CHAPTER II

LITERATURE REVIEW

The numbers of studies present investigations on the introduction of Sport Education into the school curriculum in United States and around the world, analyze motivational climate and positive outcomes of a Sport Education season, and describe how experienced, novice, and pre-service teachers learn how to teach Sport Education. Hence, it is necessary to overview the significant research findings from these areas. For this reason, related topics such as the key features and findings of Sport Education model, analysis of Russian physical education and teacher preparation, and research and findings from professional development were examined and are shared in this chapter.

SPORT EDUCATION

Sport Education is a curriculum and instructional model designed to provide authentic, educationally rich sport experiences for girls and boys in the content of school physical education (Siedentop, 1994). The Sport Education model has sport as its central concept in that everything that is taught or learned in physical education happens in the context of developmentally appropriate forms of sport (Kulinna, 2008). The model differs from traditional physical education in purpose, process, and assessment, and has as its primary objectives the development of competent, literate, and enthusiastic sports persons. This is in contrast to more traditional teaching that focuses on sport skills, rules, and regulations.

According to Siedentop, Hastie, and van der Mars (2004), the main idea of Sport Education as a curriculum is its intention to help students become skillful sports participants, know content of the particular sport, and grow to be successful players. The main role of the students in this model is as active participants. The physical education teacher acts primarily as a facilitator by initially providing instruction in the specific sport and gradually empowering the students (Stillwell & Willgoose, 2006). Sport Education is a well-known as the model that has six important key characteristics: (a) sport seasonality, (b) team affiliation, (c) formal competition, (d) culminating event, (e) score keeping, (f) festivity.

In order to have this model work within a physical education curriculum, all six features of the model should be used in the design and implementation phases. However, it should also be noted that Sport Education is not a direct simulation of institutionalized sport (Siedentop, 1998).

There are three fundamental differences between this model and the actual sport: participation requirements, developmental appropriateness, and diverse roles. As for participation, everyone is expected to participate in every part of the model including pre-season, competitive season, and culminative event. Developmental appropriateness takes place during the preparation stage of a season. For instance, small teams need be designed and courts, equipment, rules, and regulation should be modified based on participants' age and previous learning experience. The process of diverse roles assumes that every participant gets a role for the team, season, and final event. The number of roles depends on the students' as well as on the teacher's creativity. The success of this model also depends on several teaching characteristics. It is critical for physical educators to manage time, class, and activity routines. Regardless of the educational model, effective teachers carefully teach and allow students plenty of time to practice managerial routines (Siedentop, 1991).

To summarize, Sport Education seeks to provide students with as much authenticity as developmentally appropriate. The beauty of this model is that during the season, formal competition, and culminating event, all students and teams are still involved in the teaching/learning process and have every opportunity to be a part of it. Hastie (1996a) suggests that the nature of such sporting experience produces enthusiasm and passion that is not normally seen in typical sports units.

Key findings of the Sport Education model

A number of studies have reported positive aspects and benefits for teachers who have experience in teaching the Sport Education model. Table 2.1 presents a brief summary of the key research findings.

Table 2.1. Key Findings of Research on Physical Education Teachers

Category investigated	Study findings
Increased freedom from direct instruction	When teachers are no longer the ringmaster, they are able to attend to specific student needs, assess student work, or emphasize other curricular objectives such as promoting positive social behaviors through the reduction of poor competitive attitudes during game play (Hastie, 1998).
Peer teaching	Students had strong preferences for student coaches over teacher instruction (Carlson & Hastie, 1997; Hastie, 1996a).
Students' interest and engagement	Ormond, DeMarco, Smith, & Fischer (1995) compared traditional skills-to-game-play and Sport Education approach and reported little or no impression of team play or attempts to improve it for the traditional approach and more attempts to share the ball, utilized offensive and defensive strategies for Sport Education season.
Student behaviors	Specific examples might include increasing respect for officials, decreasing negative comments among students, and increasing the extent to which students praise others' performance (Hastie, 1998).
Low-skilled students and non-participants	Strong evidence was forthcoming identifying students' team mates as significant influences in promoting participation, even among the most difficult students (Carlson, 1995, Hastie, 1998b).

To summarize, the advantages of Sport Education are well reported in these studies and highlighted the effectiveness of the model in facilitating student engagement as an essential part of student-centered learning. In addition, the studies included in this review suggested that Sport Education as a curriculum model promotes personal and social development of the student. Having responsibilities, cooperation, and trust is critical for the model, although it should be pointed out that the effective content development, participation, and fair play might be problematic under student leadership. Another major point about these studies should also be mentioned. Most of these studies were done on or with experienced teachers with help from university professors including partial or full involvement of doctoral students. However, these are not the only scholars who can benefit from using this model.

Pre-service teachers

Another group of teachers who can also benefit from using Sport Education as a curriculum model is pre-service teachers. Jenkins (2004) illustrated an approach where the Physical Education Teacher Education (PETE) program allowed pre-service teachers to learn the curriculum model by integrating its key features throughout their physical education teacher education curriculum. The author noted that it is not enough to simply read and discuss the model. After pre-service students gain knowledge about the model, they must participate in it as it delivered in the specific class. The experience to implement the model into actual teaching would eventually help pre-service teachers to shift from traditional teaching approaches toward authentic teaching and use it as a tool to promote the quality of physical education classes. Curtner-Smith and Sofo (2004) reported that pre-service teachers generally found Sport Education more attractive due to its compatibility with their occupational socialization and its cultural and structural advantages. The results of this study indicated that it is important to make

comparisons of Sport Education with both good quality traditional instruction and non-educational low quality interpretation of the traditional model. Also, the authors noted that Sport Education was more culturally relevant for school students because it had their part taking in authentic learning activities.

Hastie, Curtner-Smith, and Kinchin (2005) also discussed the impact PETE programs have on beginning teachers' implementation of Sport Education. They suggested that pre-service teachers who are provided with a variety of opportunities and experiences to practice the model under supervision in early field and teaching practices within their PETE programs are more likely, upon graduating, to teach the model in schools. This is compared to pre-service teachers who get little or no exposure to or supervised practice of the model in their PETE programs (McMahon & MacPhail, 2007).

Stran and Curtner-Smith (2009) examined how two pre-service teachers interpreted and delivered the Sport Education model during their student teaching. This study listed those factors that led to the students' interpreting and delivering the model and revealed that high quality Sport Education in the content of a PETE program facilitated both a commitment to the model and the ability to teach the full version of it for teaching-oriented and moderately coaching-oriented pre-service teachers. The investigators agreed that key elements of a successful Sport Education model are responsible for this commitment. Also, it appeared that teaching of prescribed mini-seasons before student teaching was very helpful for pre-service teachers during their teaching experience.

McMahon and MacPhail (2007) as well as McCaughtly, Sofo, Rovegno, and Curtner-Smith (2004) also noted that pre-service teachers would benefit from experience with the Sport

Education model during the PETE program and can potentially avoid many misunderstandings and pedagogical difficulties while incorporating the model into practice and teaching.

Moreover, two studies conducted by McCaughtry, Sofo, Rovegno, and Cutner -Smith (2004) and Pope and O'Sullivan (1998) have identified a number of additional problems pre-service teachers experienced in learning to teach the Sport Education model. McCaughtry et al. (2004), in examining pre-service teachers' implementation of the SE model, identified three main areas where teachers experienced difficulties in the implementation of the model. It was reported that pre-teachers struggled with elements of the tactical instruction of the model, experienced resistance to features unique to the model, and misunderstood the role of skill development in the Sport Education units they taught. Pope and O'Sullivan (1998) found another critical factor in learning to teach Sport Education, that being time. Time was essential to learn the model because of the amount of details involved and the pre-service teacher's unfamiliarity with the activity being taught.

These two different groups of researches provided valuable support to the notion that pre-service teachers learning and implementation mechanisms of the Sport Education curriculum model is not necessarily similar and cannot be generalized for all curricular approaches. Therefore, while we acknowledge the valuable contribution of research on curriculum models in general, it is apparent why there is a need for research directly related to the experience of teaching specific curricular approaches (McMahon & MacPhail, 2007).

International research

The history of development of this model started in 1960s and continued to the present time. The model became very popular throughout the years not only in the USA but also in England, Korea, Australia, and New Zealand. The curriculum and instruction model of Sport

Education is reported to achieve similar outcomes across diverse settings with differences depending on students' sport histories and their personalities rather than the country of origin (Hastie & Carlson, 1998).

Grant (1992) in New Zealand observed that due to increased enthusiasm of students' participation in the Sport Education season, teachers had become strong advocates of the model. In Australia, Alexander, Taggart, and Medland (1993) and Carlson and Hastie (1997) provided specific examples of student eagerness and increased engagement. Nevertheless, the research of Penney, Clark, Quill, and Kinchin (2005) in England schools highlighted that students vary greatly in their ability and desire to take greater responsibility for their own learning and support others in doing likewise.

A number of studies have been completed on teaching Sport Education in secondary school in Korea. Kang, Moon, and Kim (2000) studied the Sport Education model for one semester to explore pedagogical issues in teaching the model. Kim, Penney, Taggart, Cho, and Choi (2004) presented detailed analysis of developments in one case study with initial and developmental implementation of Sport Education model. Kim, Penney, Cho, and Choi (2006) reported a qualitative case study of one teacher with regards to the role of" facilitator of learning" in the context of introducing students to new roles and pedagogical relationships in Sport Education.

Initial research on Sport Education has also been conducted in Russia. Hastie and Sinelnikov (2006) studied Russian students' participation in and perceptions on the Sport Education basketball season and reported that throughout the initial skills practice sessions, practice games, and the formal competition part, students of both genders and skill levels spent most of their lesson time actively engaged in motor tasks. Similar to Western research in Sport

Education, Russian students also enjoy their participation, their intrinsic levels of motivation increased and levels of amotivation decreased (Sinelnikov, Hastie, & Prusak, 2007). Hastie, Sinelnikov, and Guarino (2008) examined the development of skill competence and tactical knowledge of Russian students as they completed a season of badminton conducted following the features of Sport Education. It was reported that the structure of the Sport Education season allowed students significant practice opportunities, and that the authenticity and substantial nature of the game helped improve all students and move all of them except weak novice students from a more cooperative version of net-game play to one where students used tactical decision making and execution.

To summarize, Sport Education is a popular instructional model for many English-speaking countries and it is becoming more attractive for non-English speaking countries as well. It appears that Sport Education is transferable between different counties and cultures, however it is still limited such as text books in foreign languages and scholars experienced in the model. Making this model more accessible for foreign educators and determining how to educate people to teach the Sport Education model is becoming a new focus for many investigators.

Considering the fact that the current research project took place in Russia, it is necessary to explain some peculiarities of Russian traditional physical education curriculum and its place in the Russian education system. The brief discussion of this aspect with support from a few Russian studies and personal experience of the principal investigator is therefore warranted.

Physical education classes in Russia

Physical education is a part of the Russian school curriculum that offers physical education classes twice a week for 45 minutes from first until eleventh grade. This is a required class for all school students except those who have severe health conditions. The purpose of physical education curriculum in Russia is to promote the prolonged, organized pedagogical process. It has a goal of training healthy, cheerful, thoroughly physically developed people. The process of physical education in Russian schools usually refers to physical training. In the process of physical training the following basic tasks are solved: strengthening health, the hardening of organism and raising the level of physical development, and fitness for work. Development of physical qualities such as rapidity, force, adroitness, and endurance as well as mastery of special sport exercises technique (sport technology) are also considered within the Russian physical education program. The physical education system in Russia uses 5-points grading system to assess student performance where 5 is the highest score possible and 2 is the poorest. A score of 1 is used very rarely.

Physical education in 1-4 grades (elementary level) continues the affair of pre-school establishments (Matveev, 2002). Particularly, physical education at elementary school level continues to develop endurance, adroitness, force of arms and legs, motor coordination, habits of

participation of the command games. Development of all important aspects of physical education and healthy lifestyle takes into account special physical and mental features of a child's organism and specific age. Physical education in the school in the initial classes continues to train the children in following areas:

- Correct to breathe and combine respiration with the motion
- Locomotor skills such as running, skipping, galloping, jumping, sliding
- Leaping into the length and a height from the takeoff
- Non-locomotor skills such as toss up and to catch ball by one and two hands; throw ball into the purpose at the different distance
- Climbing by different methods on the gymnastic wall
- Modified sport games
- Skiing and skating
- Swimming (depends on availability of the facility in the school or in the neighborhood)

Physical education in the middle school level, 5-8 grades, is achieved in the more varied forms. These forms are interconnected and supplement each other in the united process of physical training. Physical education curriculum in the more upper classes must include instruction in the bases of psycho-regulation, hardening, massage, and self-control. The curriculum itself is based on full-version of team sports as well as participation in individual sports with variety of fitness and skills tests.

Physical education in the upper classes, 9-11 grades (high school level), aims to achieve a sense of habit with respect participating in physical activities and sports through the entire life. It is a purpose of the physical education program in Russian school to develop an orientation to a healthy means of life.

Physical education classes in the upper classes must stimulate students to further independent participation. For that reason, physical education classes are separated for boys and girls. Usually, each group has a same sex physical education teacher and practices sports that are considered to be developmentally appropriate for males and females. For example, boys concentrate more on team sports such as basketball and soccer as well as weight training, while girls do different types of aerobics, dance, and swimming.

A standard physical education lesson consists of three parts and lasts for 45 minutes. The first part is introductory/warm-up part with length from 5 to 8 minutes and consist of fitness exercises such as marching, running (in all directions), performing of various calisthenics, and track and field strides. The next part is the main part. That consists of various skill development exercises for individual and team sports. Learning technique of various movements is another stress of teaching physical education. Two of the most popular activities in standard physical education lesson in Russia are relays and game play. Most commonly, the physical education teacher divides the class into teams, however sometimes students pick up their own team to play a game. The selection of team mates is based on an individual's physical ability and sporting experience. The final part of a lesson is a conclusion that involves a summary of what has been learned during the lesson and sometime cool-down activities such as light jogging. Students' grades in Russian physical education are determined solely on their performance on standardized fitness tests (Sinelnikov & Hastie, 2008).

There are three main groups of children who can participate in physical education classes: *main group*- includes all healthy children who don't have any medical restrictions for physical activity and are able to participate in physical education classes and sporting event on the regular basis; *preparatory group*- includes children with mild health problems who have

some restrictions for participation in physical activities and sports; *special medical group*- includes children with serious health conditions such as heart diseases, high blood pressure, problems with vision. Usually, the main and preparatory groups have regular physical education classes except for preparatory group students not having some strengthening, conditioning, and tumbling activities. The special medical group usually exercises separately from other students, during after school hours, and under supervision of a physical education teacher or a physical therapist. It is the responsibility of the teacher or therapist to develop a curriculum plan for their special medical group as well as oversee other issues such as attendance and safety. Students from the special medical group receive a grade for physical education class based on their performance during those special sessions.

There is limited or no freedom for students in typical Russian physical education class. Russian physical education could best be described as a strong teacher-directed approach involving mostly individual work. A typical physical education teacher spends more time on discipline, safety, and class management rather than on teaching, instructing, and feedback.

Moreover, there are many current thoughts in Russian academia on the place of physical education in the public schools. One of them is to use school physical education facilities and physical education lessons as centers for the scouting and training grounds for elite athletes. Balsevich (1999), a well-respected Russian academician, has suggested a complete elimination of physical education during regular school time, instead opening the doors of "training interest clubs" outside of regular school hours. Students would be offered a choice few sports for the semester. Once a sport is chosen, the student would then participate in a rigorous training for this particular sport. The "training clubs" would be school based but the teaching would be in accord with coaching principles. In fact, it is also suggested that coaches from different sports and not

physical education teachers would be the ones providing instructions and training for students (Sinelnikov, 2007).

Sinelnikov and Hastie (2006) argued that there is a possibility to provide an alternative approach (that being Sport Education), which contrasts with Balsevich's vision of physical education in Russian schools. This approach would not require such drastic changes as the elimination of the subject of physical education from the school. Critics of this model contend that with the abuses of evident in organized sports as virtually at all levels, students should be exposed to fewer activities based on the professional sport models (Stillwell & Willgoose, 2006). Although, the promoters of this model argue that since sport has gained such an important position in our society and culture, it should be included in physical education school curriculum as a tool to enhance the development of an appropriate sport behavior.

Model suitability

Sport Education model is a suitable model for use in Russian physical education. First, Sport Education has six important key features that can naturally fit into instructional approach to teach physical education in Russia. Second, several positive outcomes for teachers have been identified in this paper previously. Many of those outcomes seem to be attractive for physical education teachers in Russia: (1) it frees the teachers from formal/direct instructional approach to teaching (Alexander and Luckman, 2001), (2) Sport Education model provides excellent opportunity for the students to work in small groups (Hastie, 1998), (3) students become better game players, low-skilled and non-participating students gain more benefits from participation in Sport Education than in traditional approach (Carlson (1995), Hastie (1998b), (4) significant increase in student enjoyment, perceived effort, and students are rarely off task in the Sport Education season (Alexander et al. (1993), Hastie, (1996), Carlson & Hastie (1997), (5) students

enjoy the multiple roles, team affiliation, and the ownership and investment in the sense of identification as a member of a team (Ormond et.al (1995), (6) provides adequate amount of physical training at moderate-to-vigorous level of physical activity (Sinelnikov, 2007), (7) the model is suitable for all school levels- elementary, middle, and high- as well as for collegiate level.

Sport Education as a new instructional model can bring not only positive outcomes to the pedagogical system in another country but also create some challenges not only for experienced but also for pre-service teachers if they decided to implement the model into practice. Three biggest challenges can be identified as potential barriers for realization of the model:

Getting knowledge about the model- the Sport Education model was originally developed in the United States and always has been almost exclusively taught in English. All materials, books, and research articles, except few that were published in Russian and Korean in recent years, are written in English. It is really big challenge for Russian physical educators to have access to these materials. They either need to learn another language or find a resource for translation. For instance: the book by Siedentop, Hastie, & van der Mars (2004) "Complete guide to sport education" is not available in Russian language.

Switch from traditional to alternative approach in teaching- it is clear that this model is a big step away from direct teaching, however it needs to be specified where a teacher is during each stage of the process (season, formal competition, festivity, etc.) and what the teacher's responsibilities are.

Letting go of teacher control- it is very difficult for teachers, who used to be the center of the any physical activity and instruction, to step aside and willingly pass the control to students.

Sinelnikov and Hastie (2006) studies two Russian physical education teachers as they first experienced in teaching Sport education model. The authors specified another three aspects that were identified as potential challenges for those teachers:

Model congruency validation- the teachers reported that they need constant validation of the accuracy of their teaching and model application. That need for model congruency validation of teaching and how teaching and student behavior corresponded with Sport Education was especially evident during the early lessons of the season (Sinelnikov, 2009).

Need for sample lessons and observation- after the teachers read the guide for Sport Education model and attended the two-day workshop, they realized that the need of observation of actual teaching Sport Education is crucial for them. It is better to see than to read and listen. The sample of lessons plan is also important in order to see the organization of goals, objectives, and learning content.

Establish new relationship with students- Sport Education model implies the formation of new relationships between teacher and students. In the beginning of the season, the relationship was still highly subordinate, however by the end of the season, the teachers found helpers/student coaches and felt sharing the responsibility provided different connections to students.

The findings in Sinelnikov and Hastie's (2008) study demonstrated positive responses of Russian teachers to the unfamiliar model of Sport Education and its requirements, and also illuminated some reasons why adopting such a curriculum can be challenging at least in the context of Russian schools. The authors noted that "Despite many differences between Sport Education season and a traditional Russian physical education lesson (lesson structure, shared responsibility, roles and etc.), the development of Sport Education in Russia seems to provide encouraging results thus prompting the recommendation to continue the trials of the model

induction into Russian PE" (Sinelnikov & Hastie, 2008, p. 17). These recommendations can be used for training pre-service teachers and findings are able to provide information on different aspects of pedagogical process in Russian physical education system.

TRAINING PHYSICAL EDUCATION TEACHERS IN RUSSIA

There are two main options available for teachers to be trained in field of physical education and sport pedagogy in Russia: (i) through physical education pedagogical college, and (ii) a higher education- pedagogical university or physical culture academy. Both academic programs have some aspects in common. For instance, the programs have a very strong core curriculum for tier students. However, these academics institutions also have major differences such as admission after 9^{th} grade is not eligible for pedagogical university and distance learning option is not available for pedagogical college. Table 2.2 presents a brief summary on the programs in both academic institutions.

Table 2.2. Summary of the academic programs

Characteristics	Physical Education College	Pedagogical University
Admission		
Writing test	Yes	Yes
Biology	Yes	Yes
Skill tests	Yes	Yes
Curriculum		
4 year program (after 9th grade)	Yes	N/A
3 year program (after 11th grade)	Yes	N/A
5 year program (after 11th grade)	N/A	Yes
Distance learning (DL)	N/A	Yes
PETE program		
Medico- biological subjects	Yes	Yes
Theory and methods for teaching	Yes	Yes
Public disciplines	Yes	Yes
Physical activity classes	Yes	Yes
Practicum/Internship	Yes	Yes (but not for DL)
Minor option		
Coach	Yes	Yes
Physical therapists	Yes	No
Job opportunities		
Child care	Yes	Yes
Public school	Yes	Yes
College/University	No	Yes

Several strengths and weaknesses can be identified in each system of physical education teacher preparation in Russia.

Physical education pedagogical college

Based on history and reputation of physical education pedagogical colleges in Russian, this type of academic institution has strong status for training future educators. First, there is an early introduction with the field of teaching physical education. Students of 15 years of age start to learn the basics of teaching even though they have not yet received their high school diploma. Second, the opportunity to receive a major in physical education and minor in physical therapy is available. Third, there are not too many graduate students who teach courses at this level. Most of the pedagogical colleges have experienced professors as faculties and instructors. This fact supports evidence of a quality teaching in this type of pedagogical institution. Fourth, many of pedagogical colleges still have free education and don't charge tuition or fees from students. Lastly, upon graduation students from pedagogical colleges have an excellent possibility to continue their education in the pedagogical universities and start that study in the sophomore year.

All of these benefits make education in pedagogical colleges attractive for many high school students. However, it should be noted that this system has its own weaknesses. For instance, when students enter the college at age of 15 years old and graduated four years later, some of them are still only 19 years old. This is young to be a full-time physical education teacher and take all the responsibilities for teaching or coaching in a school setting. Another weakness of this system is that it does not have an opportunity to extend the education period and postpone the military service which is required for male students of 18 years and older. One more weakness is that the chance to have a good job after graduation is slightly smaller compare

to pedagogical university because the degree from college cannot be qualified with a bachelor's degree. In addition, a college graduate can only have the lowest level (*7 razryad*) of certification that significantly influences a teacher's salary. The last disadvantage of this system is driving away many students who have families and financial responsibilities.

Pedagogical university

The university system of training physical education specialists also has its strengths and weaknesses. The university usually offers more public-related and specific courses for their students. The university provides an opportunity for students to receive a bachelor's degree, Master's degree, and continued education in graduate school. There is a good perspective for university students to do research studies and to participate in student conferences which is very limited for students in pedagogical colleges. Also, male students in universities are exempted from the national military draft for the duration of their study. The chance to find a suitable job with a bachelor's degree is also much better when compared with pedagogical college graduates. In term of salary and qualification, the university graduate would have a slightly high qualification (*8 razryad*) and salary compared again to college graduates.

Regardless of many advantages of this system, the universities also have some drawbacks. First, education in most of the universities is expensive. Second, there is no attendance policy for students and that often causes poor discipline and lower learning success for many students. Third, many courses are taught by graduate students who do not have enough experience to work with university level students. Next, many universities use department of physical education as a foreground for intercollegiate teams and pay more attention to the athletics successes rather than training of future physical educators. Lastly, the graduation rate among athletes is low and most of them did not go to work for public school system.

As a conclusion, it should be noticed that both systems (college and university) have no flexibility in their core curriculum. There is absolutely no freedom for students to choose which courses they would like or have specific interest in. All courses are required and failing one or more course would lead to academic probation followed by withdrawal from the institution. There is no room for new subjects or courses because the program is asserted by State Department of Education and cannot be changed easily. It takes time, effort from the physical education department, and even some expenses to change the core curriculum and to have new courses in it. Lastly, there is no possibility (in general) for Russian college and university students to have access to innovative teaching methods and techniques that were recently developed overseas due to language barrier and technical difficulties.

PROFESSIONAL DEVELOPMENT

In recent years, professional development for pre-service and in-service teachers became essential part for many teacher preparation programs across the country.

Three models of professional developments (Ferreira, Ryan, & Tilbury, 2007) have both concepts of normative and creative learning and can be identified as having potential for using in pre-service teachers preparation. These models can be used in classrooms as traditional lectures, seminars, and workshops as well as outside of the regular classroom activities during field experience. Spilkova, (2001) argued that pre-service teachers need to find a suitable balance between training on special skills, readiness to discover problems, the critical reflection, the ability to ask new questions, and the effort to find better procedures.

The collaborative resource development and adaptation model

The Collaborative Resource Development and Adaptation Model has been widely used in professional development in teacher education. Ferreira, Rayn, & Tilbury (2007) stated that the Collaborative Resource Development and Adaptation Model assume that change can occur through the provision of curriculum and pedagogical resources and adequate training in the use of these. Many professional development programs develop resources, often in the form of teaching kits that address a range of issues. Commonly, such resources are developed along with professional development courses that are provided to assist pre-service teachers in implementing the materials in their particular setting.

Educational action research model

Action research in its broadest sense can be defined as “the study of a social situation with a view to improving the quality of action within it” (Elliot, 1991, p. 69). Action research as

an integral part of pre-service teacher education has been given relatively little attention in the professional literature (Gitlin et al., 1999; Price, 2001). Action research is a tool that helps professionals to constantly improve their work in a systematic manner. Teacher educators have for a long time been dissatisfied with the traditional model of teacher education, where pre-service teachers are told what works and consequently what they should be doing in their classrooms (Korthagen, 2001; Nieme, 2002). A new model of teacher education is rapidly emerging, based on a learner-centered view of teaching and on the view of teachers as reflective practitioners. Teachers with a learner-centered approach are responsible for their own professional development, determined towards continuous renewal and growth in their chosen field (Gitlin et al., 1999; Levin & Rock, 2003; Spilkova, 2001). It is impossible to prepare pre-service teachers for every situation and problem they might encounter. Instead of a 'prepared solutions book' approach to teacher education, teachers need to be empowered and provided with tools using which they would able to analyze the situation, challenge it, and know where and how to look for solutions.

The whole-of-system model

The Whole-of-System Model of professional development has a significantly different approach to change than the models described above. The Whole-of-System Model demonstrates a richly contextual understanding of the nature to change and attempts to align and engage all elements of the system in reorienting the initial teacher education system towards sustainability. Ferreira et al., (2007) stated that this model assumes that change towards sustainability will only occur if all levels and contexts within the system are present. The Whole-of-System Model includes working at the interface of every contextual layer of initial teacher education from students and practicum school teachers to program directors and external agencies, so that the

organizational culture and processes of each can be influenced. This is a broad, complex, and time-consuming approach to professional development and it is difficult to coordinate. That can lead to limited use of this model, however the initiatives using this model demonstrated the greatest degree of long-term and system-wide change (Ferreira et al., 2007).

As a conclusion, three issues can be addressed in the future work on professional development models for pre-service teachers. First, a deeper integration of theoretical and practical preparation of students (especially in pedagogical disciplines) and new forms of cooperation between the faculty, tutors, cooperative teachers and student teachers need to be established. Second, special attention should be paid to training strategies in order to help students to use rational analysis of their teaching activities, and to become aware of their knowledge and intuitive behavior. Third, the concept of reflective practice with accent on the development of students' individual teaching styles needs to be established.

Action research in physical education

Action research was developed as a research paradigm in the mid-1940s when Kurt Lewin first coined the phrase "Actioned Research" and envisioned it as "a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the results of the action" (Lewin, 1946, p.38).

Empirical evidence of effective professional development programs in physical education is limited. Most professional development programs are thought of almost exclusively in terms of formal education activities, such as courses or workshops. However, such "in-service" programs may or may not be relevant to teachers' professional development needs, and school districts often receive little guidance about how to manage and improve their efforts in the area of professional development (Corcoran, 1995). In the field of physical education, teacher's

experiences in such programs are said to lack coherence and relevance (Armour & Yelling, 2004), as well as appropriate progression (Ward & Doutis, 1999).

Many physical education (PE) programs suffer from a lack of accountability, effectiveness, equity and meaning (Cothran 2001). Academics in physical education have long voiced their concerns at the persistence of classroom practitioners' use of outdated instructional approaches that are predominantly teacher-directed and technique-centered. Putman (1993) suggested that although pupils and education are changing, educators' instructional approaches have been slow to evolve. Curtner-Smith, Todorovich, & Lacon (2001) hypothesized that in order to meet current pedagogical demands, teachers would "…need to shift from the exclusive use of direct, teacher-centered, or reproductive styles of teaching to employing more indirect, pupil-centered, or productive styles"(p.178).

Most of the published action research in physical education has been generally focused on the improvement of one's own teaching or understanding the impact of particular methods in educating children or pre-service teachers. Some physical educators in teacher education who use or advocate action research methods include Kirk (1983), Tinning (1987, 1992), Martinek and Butt (1988), Gore (1991), and Baker and Stanley (1994).

For example, in Tinning's study (1987) action research strategy was used to facilitate students' reflection during student teaching experiences. Student teachers were asked to identify an issue of concern from their teaching and to work through the action research cycles with their peers, as well as with their cooperating teachers and university supervisors. Participants improved the aspects of their teaching that they considered important, and they also improved their understanding of different issues involved in their own teaching (Tinning, 1987). Similarly, Gore (1991) described an action research project also involving student teachers and reported

that the experience was beneficial for all participants because it forced systematic reflection about teaching and schooling. Using action research as a vehicle in promoting critical and reflective teaching, Noffke and Brennan (1991) reported that "we have found that engaging in action research continues to be useful in our efforts to enhance our understanding of teaching practices, to improve those practices and to improve the situation in which those practices take place." (p. 200)

To consider the ways in which action research has been differently interpreted and read within physical education, Tinning (1992) described three accounts of action research that are located in the official discourses of the profession (namely, in journals and books). The first account is *technical action research* which can be described as collaboration between a faculty from a university and teachers from a local school. The author argued that such teamwork, through the action research process, helped teacher became the researchers and university faculty became consultants and recourse persons. Second, *practical action research* can be explained as "the research task for the teachers is to test diagnostic hypotheses about teaching for understanding in games… doing research into effective ways of supporting teachers' theorizing about their practice" (p. 146). Third, *emancipatory action research* is attempted to use action research as a way of improving the educational practice of pre-service and in-service teachers. It was discussed that student teachers would, as a result of their experience with action research, improve their practice of physical education teaching and understandings of importance of the practice in schools.

Two recent studies utilized action research approach with pre-service teachers and for cooperative learning and tactical games curriculum models. Gubacs-Collins (2007) employed an action research methodology with pre-service teachers to gain a fresh perspective on the tactical

approach teaching tennis. The ‘products’ of action research generally include the generation of knowledge about teaching and learning, increased understanding of practice, and improvements in teaching and learning. This research fully describes the first action research cycle of planning, acting, observing, and reflecting on the implementation of a non-traditional teaching approach.

Casey and Dyson (2009) explore the use of action research as a framework to investigate cooperative learning and tactical games as instructional models in physical education. The results of this research reinforce the concept that the implementation of any new pedagogical approach is time-consuming and highly labor intensive (Fullan, 1999). It was also reported that the conceptual shift the teacher made to relinquish control to students was one of the most difficult, but important, outcomes of this action research process.

Action research has established a tradition of helping to validate teachers as thinking professionals and it provided educators with the time and space to reflect upon their teaching (Sheridan-Thomas 2006). In the words of Stark (2006), action research reflected teachers’ desire “to find a solution to real problems [and] bring about a positive change”(p. 23).

To conclude, much has been written about the need for physical education teachers to be more reflective about their practice through action research (Almond & Thorpe 1988; Kirk 1995; Martinek & Butt 1988). Yet, despite the support of these academics, action research has failed to realize any substantial following in research on teaching in PE (Casey, Dyson, & Campbell, 2009). Also, none of the research is available on teaching Sport Education model through action research methodology.

Action research for Sport Education model

At this point in time, no literature exists on using action research to prepare pre-service teachers to teach Sport Education curriculum model in school settings, and researchers have used only elements of some models for professional development.

Two current research studies attempted to use systematic professional development for pre-service and novice teachers during Sport Education season. Sinelnikov (2009) implemented the on-site professional development program as two physical education teachers (experienced and novice) learned to teach Sport Education. The theoretical framework of Birman, Desimone, Porter, and Garet (2000), who describe the essential components for a professional development program to include form, duration and participation as structural features that set the context for professional development, was used in the study. The professional development plan was to provide the teachers who were unfamiliar with the model, with resources for physical educators and have them implement the model into practice. The plan had three steps: (1) printed materials on the benefits and the main features of the model, and detailed explanations on how to implement Sport Education in practice; (2)a two-day Sport Education model workshop which was delivered focusing on specific features of Sport Education model with purpose to design a Sport Education season, outline major points of the season, and write sample lesson plans; (3) the final and most time consuming and challenging part of the professional development program was the attempt to connect the theory (Sport Education curriculum) and practice (actual teaching). The researcher used several tools - e-mail correspondence, telephone conversations, researchers' log, informal discussion, interview, and peer debriefing. It is clear, given the information discussed above, what part of action research model (on-site learning, debriefing,

and reflection) was used in this study as well as collaborative recourse development and adaptation model (printing materials, design of a season, and developing lesson plans).

McCaughtry, Sofo, Rovegno, & Curtner-Smith (2004) used cognitive developmental theory to analyze how teachers learn to teach Sport Education. They studied two groups of students who received different training in PETE prior to teaching a Sport Education season in the school. The design of this professional development was partially related to a collaborative recourse development and adaptation model. Finding revealed that group one (which had a secondary methods course and then taught a Sport Education season) struggled with the tactical instruction in Sport Education and students expressed resistance, for number of reasons, to incorporate most of the unique characteristics of Sport Education model in their future teaching in secondary classrooms. Second group teachers (which had the secondary methods course and then were enrolled in an independent study) misunderstood the task of skill development in Sport Education model. Despite learning the model the previous year, they appeared to overly conflate Sport Education with the traditional model of teaching and assumed that skill development is not an important part of Sport Education and should be learned prior to initiating the model. Rovengo (1992) argued that these teachers lacked details and well-differentiated knowledge of the curriculum. That led them to overgeneralize Sport Education with previously learned traditional approaches.

As we can see, it is critical that teacher educators help pre-service teachers to learn importance of the types of learning involved in Sport Education. Rovegno (2003) noted that when teachers construct their knowledge about a particular curricular approach they formed a cognitive understanding of it -"knowing about". However, it should be noted that 'knowing about' a particular curricular approach is not the same as 'knowing how' to use that knowledge,

especially theory, in practice. Lack of experience with Sport Education and specifically the absence of methods course and specific professional development courses related to the teaching of this new curriculum, often result in pre-service teachers having to rely on their physical education and sporting experiences which are mostly traditional skill-based approach to teach games where skills are taught in isolation from game context. Pre-service teachers should be provided with more opportunities to do not only collaborative learning when they collect and share materials on particular curriculum but also to have hands-on or action research approach to Sport Education model. It ought to be a combination of two – collaborative recourse development and action research. That includes seeing the model in practice, designing a season of Sport Education and becoming aware of effects of the model as they take part in it as participants, reflecting on their own work and revising any drawbacks, and then later incorporating the model in their independent teaching. One-shot instructions for pre-service students as well as for novice teachers will not work. This is a multiple part task that requires time to teach for educators and time to learn for pre-service teachers. The implementation of this instructional model is a complex and labor-intensive enterprise and it may take two or more years for a teacher to be comfortable and effective (Dyson, Griffin, & Hastie, 2004, p. 236).

CHAPTER III

STUDY DESIGN

The chapter illustrates the methodology and study design that were implemented in the research project. The context of the study, use of action research techniques, and a description of the participants and background of the research settings are presented. A brief description of the instruments used in this research project is also provided. The issue of research triangulation and trustworthiness of this study are also addressed here.

Design

The investigation was a multipart study comprising four cycles. Based on the description of the action research model, there are cycles of the research process. These cycles included learning, practicing, planning, and teaching. The initial design for this research project was proposed based on this feature of the action research model. First, I developed a seminar for pre-service teachers. The main purpose of the seminar was to introduce the Sport Education model to pre-service teachers at Ulyanovsk physical education pedagogical college. Second, after this seminar, college students practiced a Sport Education season with freshmen students from the same academic institution under the supervision of the primary investigator. All materials, lesson plans, and season design were developed by the primary investigator. Third, I planned to work with the same group of college students using an interactive website my.pbwiki.com in order to develop a new season for the student's upcoming school practicum. However, this online instrument did not work for this group of prospective student-teachers, and consequently, all the

season development was done in person as a form of teaching kit for college students and portfolio for the primary investigator. Fourth, I observed and supervised the pre-service teachers implementing Sport Education seasons at a local school, studying their experience and perceptions on the model, as well as examining the likelihood of them teaching the model in the future. All of these steps fit within circle of action research that is presented in Figure 3.1. While this research model was used as a general model for the whole project, each cycle followed a different model that consisted of three steps. This second model is represented in Figure 3.2.

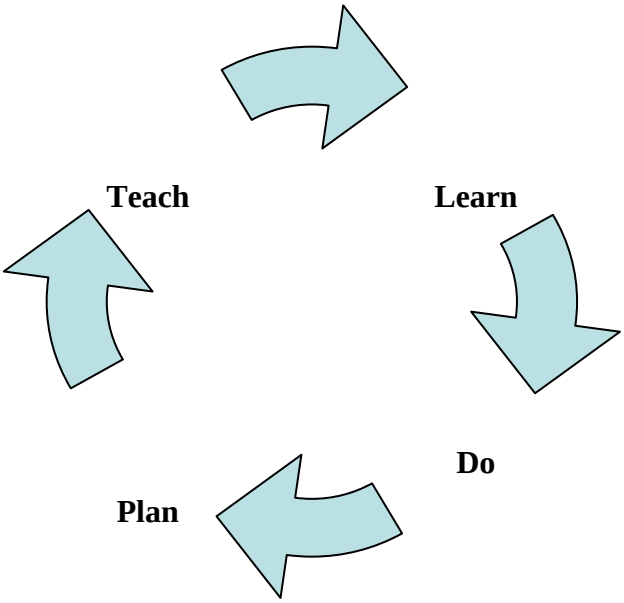


Figure 3.1. Action research model

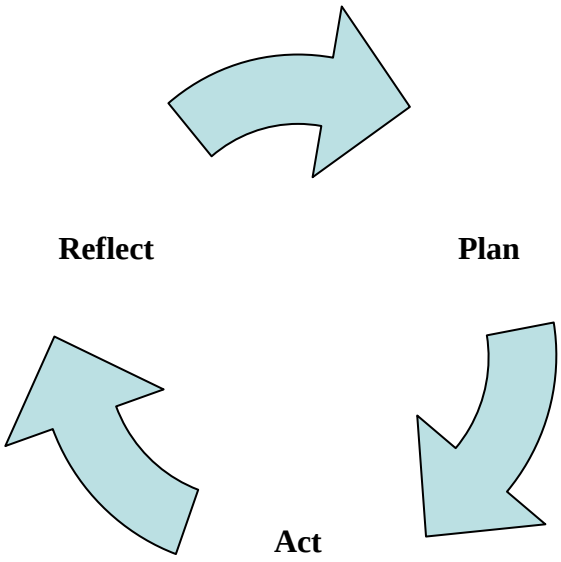


Figure 3.2. Research model for each study

Participants

The participants of this study were 27 college students from Russia. The study took place in Ulyanovsk, Russia. The town sits on the Volga river and has a population of 636, 000 people. There are three academic institutions that have a program for physical education teacher preparation. These academic institutions are Ulyanovsk State University, Ulyanovsk State Pedagogical University, and Ulyanovsk physical education pedagogical college. The original plan was to recruit between 10-12 undergraduate students from physical education pedagogical college and pedagogical university. This step was considered in order to compare students' prospective on teaching a new model in Russian schools. All of the participants had to be between 19 and 23 years old. Students of both genders were considered to participate in the study. Despite our intentions to employ participants from two different academic institutions, the only organization that demonstrated good intention to participate in this research project was the physical education pedagogical college.

Background information of the participants.

All of the participants were selected from the same second year class of students in the physical education pedagogical college. All of the participants were 19 years old by the time of the recruitment process. For the first, second, and third cycles of this research project, the college administration suggested that the researcher work not just with a small set of students but with the whole group consisting of 27 students. Among them, 10 were females and 17 were males. Also, only 6 students graduated from Ulyanovsk city schools and the rest of the group were students who graduated from more rural schools. All of the students participated in different sports – basketball, volleyball, track and field, ski - as a part of their extra curriculum for the pedagogical college but none of them played at a professional or semi-professional level. None

of the participants had teaching experience or coaching experience at the time of this investigation.

For the final cycle of this project only 11 students were selected to continue their work with the primary investigator on teaching Sport Education in a school. This selection was based on students' requests to remain in this research project as well as the primary investigator suggestions for potential participants. Among the 11 students who taught Sport Education season, 6 were females and 5 were males. By the time of the final step of this research project, two students from this group started to work as assistant coaches for volleyball and gymnastics, although, this cannot be considered as coaching experience since they both were in the beginning of the coaching careers.

Description of the research setting

The project took place in two different locations in Ulyanovsk, Russia. The first location was Ulyanovsk physical education pedagogical college. This academic institution was established in 1966 and has more than 3000 graduates. The college has 22 full-time faculties and between 300-350 students every year. Facilities of this institution include a gym for team-based sports, a gymnastics facility, a pool, outdoor stadium, and a weight training room. Also, 20 classrooms are available for lecture-based classes. For the purpose of this research project one classroom was reserved for lecturing. This classroom did not have any technical equipment, so all lectures were delivered by the primary investigator in spoken form. Later, the same classroom was used for the interviewing part as well as during preparation for upcoming school practicum. Also, the outdoor stadium was used for cycle # 2 in which students participated in a Sport Education season. Two fields were reserved for teaching kickball to freshmen year students from the same college.

The second research location was municipal school # 85, Ulyanovsk, Russia. The school was established in 1994, and has 1251 students and 86 teachers. The school has two buildings (blocks), one is for elementary school students (grades 1-4) and one for middle and high school students (grades 5-11). Within two buildings, 120 classrooms, 4 gyms, 2 all-purpose rooms, and 2 cafeterias are available to school students. There are four physical education teachers, two for each block. It should be notice that even though the physical education teachers are available in the elementary school, it is the home room teachers' decision to teach physical education class themselves or give two hours a week for physical education under the supervision of the trained specialist in this subject. Physical education classes for middle and high school students also have different formats compare with other municipal schools. Usually, all physical education classes in Russia are co-educational. There is generally one gymnasium in a regular public school. Since this particular school has two gymnasia, the physical education teachers with support from the school administration decided to have school boys and girls separated with a female teacher for girls and a male teacher for boys. For the purpose of this research project, two gymnasia in the middle/high school were used and the teachers' lounge was reserved for conducting interviews.

Time outline for the project

The following time outline was proposed and followed for this research project. It was the primary investigator's decision to have two separated trips to Russia to collect data.

Cycle # 1 Lecturing - April - May 2010

Cycle # 2 Participating - May 2010

Cycle # 3 Planning - June - November 2010

Cycle # 4 Teaching – November – December 2010

Overview of the research process

Data were collected through two different instruments: surveys and individual interviews. Surveys were employed in cycles # 1 and # 4. A Sport Education questionnaire was administered before lecturing, and a content survey was conducted after the course of lectures on Sport Education. The purpose of these instruments was to collect data on students' knowledge of the new curriculum. The number of students completing these instruments was 27. A post-teaching survey was distributed among only those students who taught Sport Education seasons in the school. The purpose of this instrument was to collect data on students' knowledge of the model after teaching experience. The number of students who completed this instrument was 11.

The second main instrument for this research project was individual interviews. This instrument was used for all four cycles. The interview guides were partially adopted from existing studies (Rovegno, 1992; Sinelnikov, 2007) with input from dissertation committee members. Eleven individual interviews were used to collect data for each cycle of this study. All interviews were conducted after the particular cycle on Sport Education model was completed. All interviews for cycle # 1, 2, and 3 took place at the physical education pedagogical college. A class room was reserved for the purpose of interviewing participants in quiet and convenient location for them. Interviews for cycle # 4 were conducted at the school during the last day of school practicum. The total number of interviews conducted was 40.

The students who participated in the interviews were each given a copy of the interview transcript. This member check allowed for the students to examine the transcript and add any suggestions or make any corrections they felt necessary. None of the participants made corrections to their transcripts. The students felt comfortable and satisfied with the system of how their words had been transcribed.

Every effort was made to keep personal information/identifiers confidential during the data collection, data analysis, and discussion of the study.

Trustworthiness of the study

Action researchers position themselves in relation to the setting and participants can create the power relations in the situation and trustworthiness of the data (Herr & Anderson, 2005).

To address the issue of trustworthiness in this study, several techniques proposed by Lincoln and Guba (1985) were used. Triangulation was conducted by searching for themes emerging across data sources and participants. Categories and themes that were generated in the beginning of the study were compared with those later during the period of the investigation.

Member checks took place continually, both formally and informally, throughout the study. A final member check, a fourth interview during the last of the active teaching, was conducted after completion of analysis and interpretation of interviews texts and e-mailed to each participant for review.

Research triangulation was also employed. A university professor, who fluently speaks Russian, read and analyzed some parts of the data independently and provided a summary and conclusion on the findings. Also, the additional comments and corrections were incorporated from a peer debriefer. Peer debriefing was utilized after the interviews analyses and final member check to assist the researcher in appropriate interview coding and data analysis. This step was also added in order to establish final coding schemes.

Summary

This study utilized a multipart approach by employing four continuous steps or cycles with survey research and individual interviews. Qualitative methods, in particular in-depth interviews, provided an opportunity to describe the students' perception about their experience in learning, planning, and implementing new method for teaching sports in school setting. The combination of four parts- learn, do, plan, teach- with comprehensive interviews for each of these steps was considered the best approach to understand and add depth to the investigation. It was the goal of this study to utilize all four parts to achieve understanding and provide a clear picture of the students' learning and using the new instructional approach for teaching physical education.

CHAPTER IV

CYCLE # 1: LECTURING SPORT EDUCATION TO RUSSIAN COLLEGE STUDENTS

Purpose

The purpose of this cycle was to introduce the Sport Education model to Russian college students. Given the fact that Russian college students have limited access to new, innovative methods of teaching physical education, this particular group was interested in studying a different approach in teaching physical education to school students. As a primary investigator, I planned to develop a two-week seminar on the Sport Education model including key features of the model, instructional strategies, assessment, and designing the season. The seminar was scheduled every day. Three steps of the action research model were used to design this lecturing cycle: plan-act-reflect.

Plan

The first step of this cycle was a recruitment talk from the researcher to college students. The second step was a set of lectures on the theoretical basis of Sport Education. The last step was testing the knowledge that students accommodated during lectures. Also, individual interviews were conducted to observe students' perceptions on the Sport Education model as a curriculum model and outcomes that the model had on students' teaching self-efficacy.

The materials used in this cycle were based on the most recent book about Sport Education (Siedentop, Hastie, & van de Mars, 2004). The few articles published in Russian journals that described the model in detail were also used as supplementary resources. (Sinelnikov & Hastie, 2004, 2005; Sinelnikov, Hastie, & Sychev, 2004).

Action

As a researcher, I delivered all lecture materials to the college students, answered their questions relating to the model development, model teaching, and school students' understanding and accepting this model. The lectures outline is presented in Table 4.1.

Table 4.1. Lecture outline for teaching Sport Education model

Lesson No.	Topic	Delivery
1	Introduction to Sport Education model	Lecture
2	6 key features of Sport Education model	Lecture
3	Implementation of Sport Education model	Lecture
4	Implementation of Sport Education model (continue)	Lecture
5	Practice of the entry protocol	Practical session
6	Assessment in Sport Education	Lecture
7	Culminative event and festivity	Lecture
8	Introduction to kickball	Practical session
9	Planning Sport Education for kickball	Lecture
10	Practicing kickball/rules/regulations	Practical session

Also, I administered a Sport Education questionnaire before the main course of lectures and Content survey by the end of the lecturing part. When the lecture course was finished, I conducted all individual interviews with college students.

Instruments

Three instruments (see appendix A) were used for this cycle. First, a questionnaire on students' initial knowledge on pedagogical models was employed in the beginning of the seminar. The purpose of this questionnaire was to find out the degree in which students were familiar with the Sport Education model. This assessment provided information on teaching theories and methods that students are familiar with and it helped to develop a series of seminars and training for participants. Second, a content survey was used to assess students' knowledge on the Sport Education model by the end of the seminar. Third, individual interviews were conducted to capture the students' perception on their conception of the Sport Education model as well as their thoughts on prospective teaching. The interview guide was adapted from Sinelnikov (2007) with additional questions added through review of the existing literature and dissertation committee input.

Data Collection

The data sources for this study included a researcher's log, lesson plans, semi-structured interviews as well as data from the questionnaire and survey. The data were collected during seminars from April to May 2010. The physical education pedagogical college administrators were contacted and informed of the proposed study. Upon their approval, information about the study was disseminated to all participants prior to data collection.

Questionnaire/Survey

All participants filled out both instruments individually. Their participation in this part of the cycle was anonymous. All names were coded and only the primary investigator would know the coding key.

Individual interview

Individual interviews were conducted by the end of the seminar. The interviews followed a semi-structured format with each interview lasting from fifteen to twenty minutes. All interviews were conducted in a quiet environment in a classroom. The questions were asked in an open-ended in-depth format, which allowed the participants to elaborate on their answers. The participants were encouraged to provide any additional information or experiences that may be relevant to the research questions. All interviews were audio-taped and transcribed verbatim immediately following the interviews.

Data Analysis

The original qualitative data analysis was performed in the Russian language and the resulting themes were later translated into English for the purposes of reporting. This method was used to reduce the possibility of inconsistencies that might arise from translation. Audio-recorded data was transcribed verbatim and other qualitative data entered in the Microsoft document, labeled by type and categorized by date. The primary coding scheme included general concepts on teaching sports in school, students' perception on Sport Education, usefulness of the model, and level of confidence teaching this model. Additional developments of subcodes were based on students' responses. After preliminary analysis, the coding was given back to the participants as a form of member checking for clarity and accuracy. This step allowed the participants a chance to make comments and corrections to their own words and researcher's interpreted meaning of those words.

Reflection

Cycle # 1 took place at the physical education pedagogical college, Ulyanovsk, Russia. The purpose of the cycle # 1 was to introduce college students to the Sport Education model as a

curriculum model that they can use in their future teaching. The goal of this learning section was to give students information about the Sport Education model and its main features. The participants of the cycle # 1 were 23 sophomore students. None of them knew the Sport Education model before. Also, none of the students had taught or currently taught at public schools. The following results were established during this cycle.

Sport Education Questionnaire

A Sport Education questionnaire was distributed among physical education pedagogical college students participating in this cycle. The results indicated that all 23 participants have been taking the same core courses for the physical education major. These courses included Introduction to Pedagogy, Human Psychology, and Theory and Teaching Methods for Physical Education. Among courses mentioned above, Introduction to Pedagogy and Human Psychology were taught in the freshman year, and Theory and Teaching Methods for Physical Education was taught in the sophomore year. All participants were asked to specify their familiarity with six teaching models. The following results were received from the participants and entered in the Table 4.2.

Table 4.2 Students' familiarity with 6 teaching model currently used in USA

Teaching model/Student response	Familiar with model	Not familiar with model
Fitness model	14 (61%)	9 (39%)
Sport Education model	16 (70%)	7 (30%)
Peer teaching	2 (9%)	21 (91%)
Child design games	16 (70%)	7 (30%)
Cooperative learning	8 (35%)	15 (65%)
Adventure Education	2 (9%)	21 (91%)

Content Survey

A content survey was distributed among the same participants after the course of lectures on the Sport Education model. The participants were asked to answer 5 questions related to the theoretical basis of the model:

1. Question # 1: The general information on the model. Most of the participants identified the model based on the following characteristics: independent student teaching, accepting roles and responsibilities, partial help from a physical education teacher, self-teaching, accepting responsibilities for decision-making.
2. Question # 2: Identification of 6 key features of the model. Among 21 participants taking this survey, 18 participants (85%) identified all 6 key features, 2 participants identified 5 key features, and 1 participant identified 4 key features.
3. Question # 3: Importance of using all of 6 key features for the model. Most of the participants stated 3 reasons for using all 6 key features for the model: (1) they all

connected to each other; (2) absent of one aspect would lead to the distraction of the model; (3) the whole learning process within the model would be changed.

4. Question # 4: Long term goal. Among 21 participants, 12 (57%) could formulate a correct long term goal for the model, and 9 participants (43%) could not state a correct long term goal.
5. Question # 5: Helpful resources. The following resources were identified by the participants as helpful for their future teaching: video – 10 participants (47%), textbook – 8 participants (38%), other people experience – 7 participants (33%), Internet – 1 participant. However, the most common answer to this question was practice (14 participants, 66%) as the better way to prepare for the future teaching.

Individual interviews

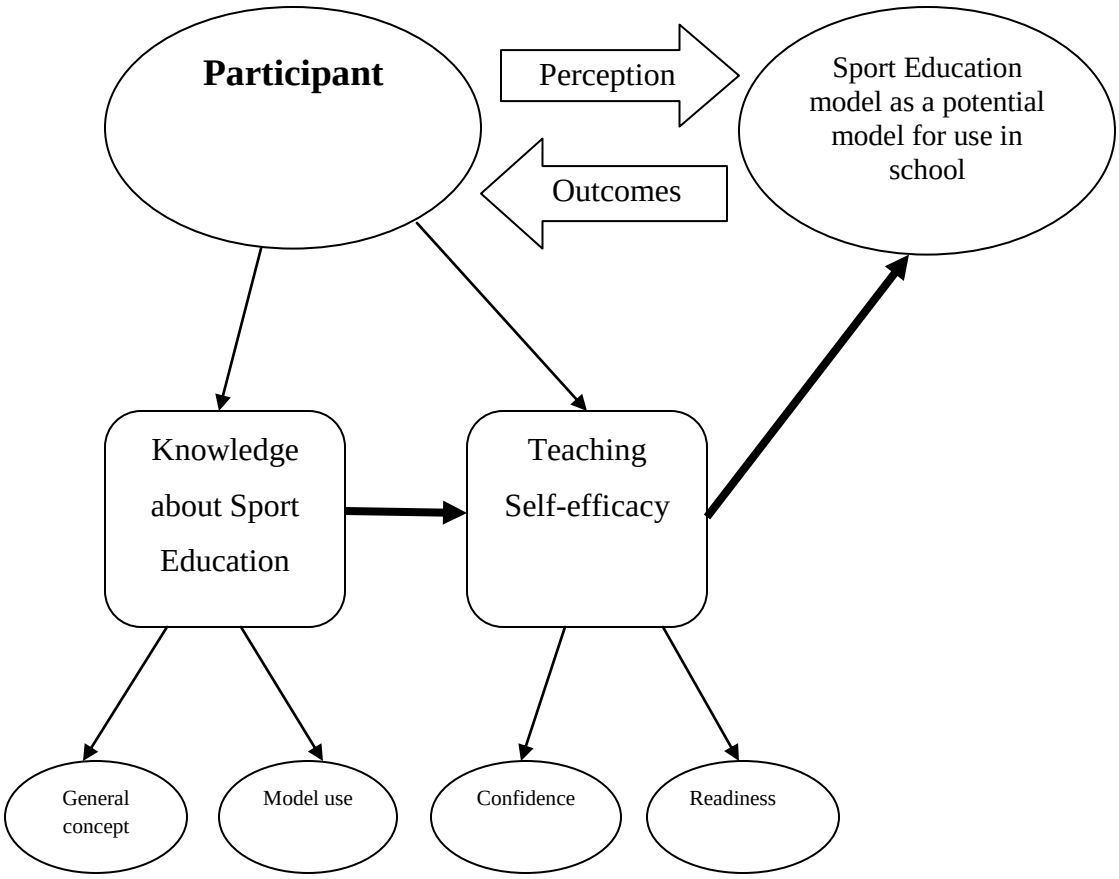
The second part of this cycle consisted of eleven individual interviews. All interviewees were selected from the survey sample. The selection on the participants was based on their willingness to participate in this part of the cycle. All of the participants had chosen pseudonyms for the cycle. This section of the analysis outlines the established themes found in the data, including knowledge and teaching self-efficacy.

A priori themes

A two-step qualitative analysis was taken to sort, organize, and analyze the data. First, the qualitative analysis of each question was performed to see any consistency of the responses across all participants. Second, the major themes found within the data were organized in a coding tree and were as follows: knowledge and teaching self-efficacy. When analyzing the major themes, a few sub-themes emerged from the process. Within knowledge, sub-themes included the general concept of Sport Education as a model and the model's use in the school

settings. Teaching self-efficacy had confidence level of teaching and readiness to teach in school. Also, an estimate of time required to learn and practice the model before teaching in schools was also considered by this group of interviewees. All priori themes and sub-themes are presented in the Figures 4.1.

Figure 4.1 Node tree display of themes and sub-themes for cycle #1



While analyzing the data from the interviews, I realized that it was impossible to share every participant's view on each theme. I selected the quotes that I believed were most representative of the participants' comments. Although every quote did not fit perfectly into a theme or sub-theme they were still selected to represent outlined opinions. In addition quote selection and thematic analysis was discussed and reviewed with a peer debriefer, an assistant professor from the Kinesiology Department. Peer debriefing was utilized after the interviews and member checks were conducted to assist the researcher in appropriate interview coding and data analysis. This step was added in order to establish final coding schemes.

Knowledge

The first major theme was knowledge about Sport Education as an instructional model. Among eleven interviewees, seven said they were not ready to discuss the general concept of the model. Two participants listed teacher substitution with students as main idea of this model. This statement was best demonstrated by ML:

> Teacher takes a second role…and kids take the main role in their hands and coordinate the lesson themselves, the teacher only take care of safety and makes necessary corrections to the students.

One interviewee talked about independent work that children can experience during the model and another interviewee specified the physical education teacher as a helper to his students. However, Lika represented the finest summary of the knowledge factors for these college students:

> …children teach themselves in a school, but teacher is still there and he helps them if they have any difficulties. Teacher does not have a role of the teacher, but a role of the helper to his students if something is not going right.

Interestingly, none of the participants mentioned roles/responsibilities or competition parts of the Sport Education model as new and important characteristics. Typically, these features are not a common feature in the content of physical education lessons in Russia.

For many participants, knowledge and concept of the Sport Education model should be given at middle school. Among all interviewees, nine agreed that at middle school age children developmentally are more ready to participate in the model then elementary school students. Pyatachok represented the most popular answer:

> …in the middle school, kids understand each other, know what they need to do…have a sense of teamship and team support. They communicate with each other better and have the same way to communicate among them. That is why middle school is better to use this model for physical education classes.

Comments provided on general concept, knowledge, and usage of the model in the school setting suggested that college students did not pay full attention to all key components of the Sport Education model. Partial substitution of the teacher to the student during the instructional and competition processes was the most attractive feature for college students. Also, the intention to start this model with middle school students provides strong support for choosing this particular age group for the teaching part of this project.

Teaching self-efficacy

The second major theme was teaching self-efficacy. Participants were asked to share their confidence level of teaching the Sport Education model for to freshmen college students. Among all interviewees, five said they feel not comfortable at all and they believed that it would be very hard for them to do. Natka provided a good reason for her position: “Even though, they are only

a year younger than us, I still feel uncomfortable…it is hard to work with them." However, four participants believed that teaching first-year students was not as difficult as it seems to be. Danya expressed an interesting thought: "I feel very much comfortable if I…let's say should explain rules for this new game, demonstrate how to play it…" ML also added that: "It should be ok, because we know those students, we saw them…and it will be easy."

In addition to other responses, two participants assumed that it was going to be difficult in the beginning, but once the model had started the process, progression would not be complicated. Pyatachok provided a motivating expectation of herself:

> During the first day, I think I will be very uncomfortable because I don't really know those students. However, once we start to play and get used to each other – coaches to their students and students to their teams- all should be very easy. I think we will communicate well and they should get used to the idea of us – second year students- teaching them how to play this game.

Responses on teaching self-efficacy in school settings had a wider range of variety in it comparison to teaching self-efficacy with the college students. Among all interviewees, three agreed that they are not ready to teach at public school. As Anna said: "I am not ready to teach this model at a school because I still need time to study this model more." Wolf and Iron Man both believed that they needed to practice this model with college students first and then decide if they are ready for school teaching.

Interestingly, four participants strongly believed that they were ready to teach at school even though they didn't have experience teaching in public schools. Viola commented: "I think it would be even easier to work with school kids then with college students. At least I feel myself more comfortable with them."

Furthermore, one participant specified that she could teach this model if there is a help available: "…there still would be some difficulties and limitations because I am a student myself and I am still learning but if I have helpers then I can do it…" (Danya)

Another sub-theme emerged from the interview after analyzing responses from this group of college students. The time required for improving teaching self-efficacy was a point of interest for the research. Most of the participants were able to specify the time they needed to improve teaching self-efficacy. However, the range of the time period for this improvement was very widespread. Two participants said they would need 2-3 weeks, as Viola stated: "I need about 2 weeks if I have physical education lessons for 3 times a week." Another participant, Shark, thought it would take longer and specified: "…5-6 months to be able to understand this model completely." Moreover, one participant (Iron Man) believed that more time should be spending on learning the Sport Education model:

> …around a year. This model is not easy as it might seem. Every detail should be considered in order to feel confident when you are in school teaching lesson. You can't have a situation when you forgot something or did not prepare something for the lesson.

Despite the fact that most participants could estimate their own potential, a few still were not sure about their teaching abilities and said they did not know when they would be ready. Anna represented the most common answer for this small group: "Right now, I can't say exactly how much time I need to feel comfortable teaching this model." Also, there was one college student who believed that it is not our time that should be estimated but it is the students who should give us a clue. Natka expressed her interesting position: "I think, as long as it takes for children to get used to this model, I will accustom to this model too."

Comments provided on current confidence level and the time needed to improve teaching self-efficacy suggested that college students were not ready to teach Sport Education in a school setting after just a course of theoretical framework of the model.

Summary and action research model reflection

This chapter presented data profiling the process of learning the Sport Education model, students' perception on the model, and students' teaching self-efficacy. Based on the questionnaire answers and responses to the interview questions, it can be stated that learning about Sport Education through the lectures and seminars is not enough for pre-service teachers. After just a series of lectures, these young inexperienced college students were not ready to accept all responsibilities and start to use Sport Education for school teaching. Listening to lectures, discussing issues, and reading materials didn't give the students a complete picture of the Sport Education model as a teaching tool. That is why additional discussion of some problems with teaching this model, availably of a text book, and watching videos on other people using this model were all mentioned by students as necessary and valuable components for the successful assimilation of new material.

The findings from this cycle certainly lead us to inquire why college students were not ready to teach the Sport Education model after a course of theoretical knowledge on the model and what we can do next in order to help students become more proficient in teaching Sport Education.

CHAPTER V

CYCLE # 2: PARTICIPATING IN SPORT EDUCATION SEASON

Purpose

The purpose of this cycle was to allow the pre-service teachers to incorporate and practice a Sport Education season with college students. The sport of "Kickball" was chosen by the primary investigator with suggestions from the participants of this study. All materials, lesson plans, assessments as well as roles and responsibilities for participants were also developed by the primary investigator. This cycle was directly connected with first study and was performed by the same participants. The same three steps of the action research model were used to design this participating cycle: plan-act-reflect.

Plan

The following steps were implemented for this cycle. First, all teaching materials and lesson plans were developed by the researcher prior to student teaching. Second, "Kickball" was introduced to freshmen year students as a new team sport. Prior to this cycle, student-teachers spent two lessons learning the rules and regulations of this sport as well as practicing playing it themselves. Third, four weeks were planned to spend on teaching the Sport Education kickball season. Last, individual interviews were conducted at the end of the teaching unit to see if students were able to apply their new knowledge to practice.

Instruments

Individual interviews (see appendix B) were conducted to collect students' perception on their first attempt to teach the Sport Education model as well as their thoughts on prospective teaching. The interview guide was partially adapted from Rovegno (1992) with additional questions added through review of the existing literature and dissertation committee input.

Action

As a supervisor for this practicum, I assigned roles for all student-teachers and developed teams for freshmen. All lessons began with detailed instructions from the researcher to the student-teachers on what they needed to do for the particular lesson. Preparation and accommodation of the competitive season was partially done by the researcher and partially by the student-teachers. All lessons were videotaped by a student-teacher and all refereeing and statistics for the competition season were carried out by the student-teachers.

Data collection

The data sources for this cycle included a researcher's log, lesson plans, and semi-structured interviews. The data were collected during a physical activity-based class in May 2010. The proposed length of this part was four weeks but it took only three weeks to complete the season. With the help from the administration of the physical education pedagogical college, lessons for this practicum were scheduled four times (in contrast of the usual two times) a week for one hour and thirty minutes for each lesson. That gave enough time, approximately 18 hours, to finish the whole season.

Individual interview

Individual interviews were conducted by the end of the season. The interviews followed a semi-structured format with each interview lasting from twenty to twenty- five minutes. All

interviews were conducted in a quiet environment in a classroom. The questions again were asked in an open-ended in-depth format. This allowed the participants to be more specific and detailed in their answers. The participants were encouraged to provide any additional information or experiences that might be relevant to the research questions. All interviews were audio-taped and transcribed verbatim immediately following the interviews.

Data analysis

The qualitative data analysis was performed in the Russian language and the resulting themes were later translated into English for the purposes of reporting. Audio-recorded data were transcribed verbatim and other qualitative data were entered in a Microsoft Word document, labeled by type and categorized by date. The primary coding scheme included general perceptions of Sport Education, the level of confidence for teaching this model, and potential barriers for teaching the model. Additional subcodes were based on students' responses. After preliminary analysis, the coding was given back to the participants as a form of member checking for clarity and accuracy. This allowed the participants to make comments and corrections to their own words and the researcher's interpretation of those words.

Reflection

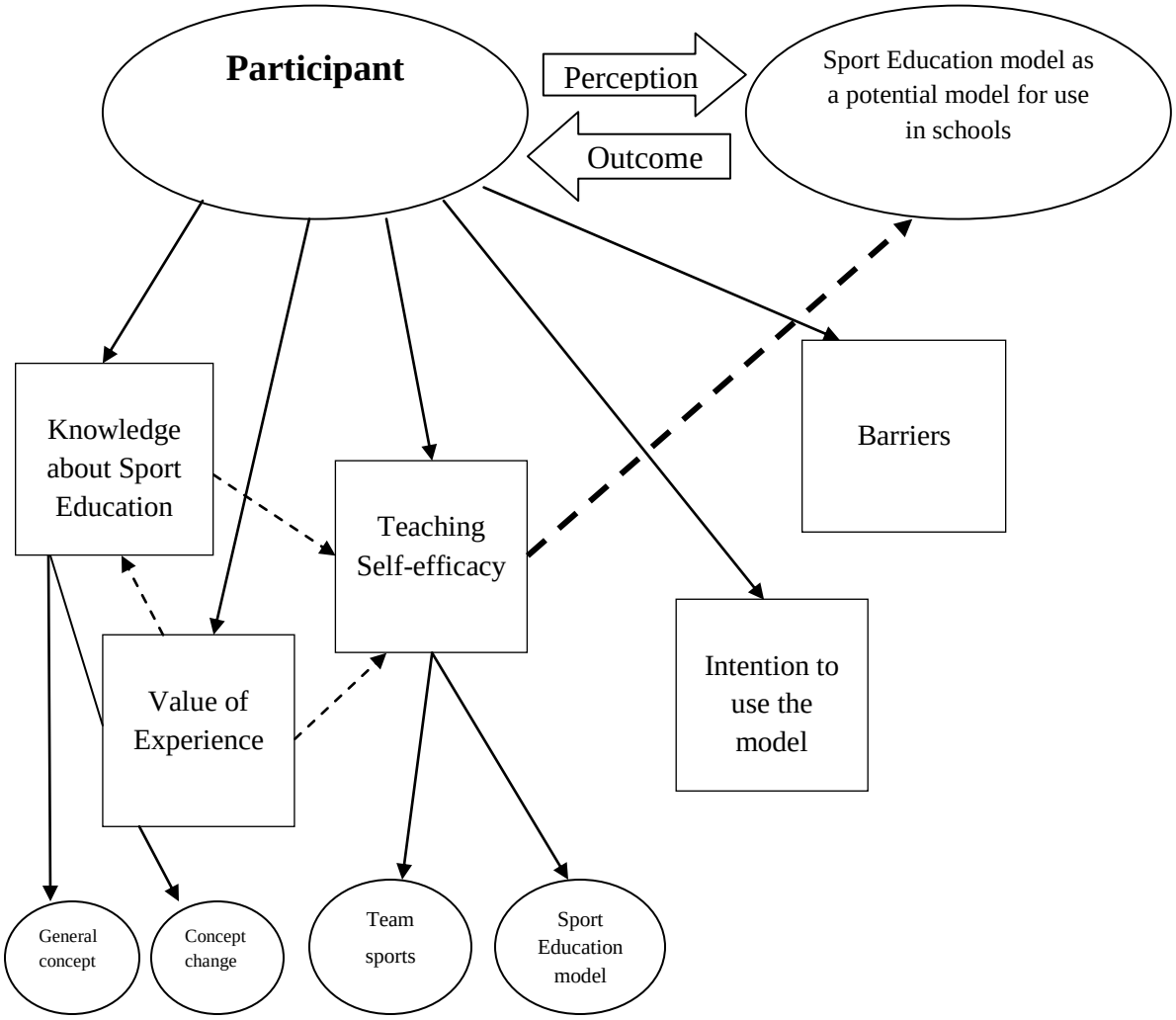
Cycle # 2 took place at the same academic institution - Physical Education Pedagogical College, Ulyanovsk, Russia, with the same participants. The purpose of cycle # 2 was to give college students an opportunity to teach the Sport Education model to freshmen year students from the same academic institution under the supervision of the researcher. The goal of this practicing section was to give students a sense and initial experience on how the Sport Education model and its main features work in a real teaching setting. The data were collected through individual interviews with 11 participants after the Sport Education season. The resulting

findings were organized in a coding tree for analysis of the data.

Priori themes

Using the same two-step qualitative analysis that was performed in the cycle # 1, five major themes were found. They were: knowledge, value of the experience, teaching self-efficacy, intention to use the model, and barriers for implementing the model. The analysis indicated that only the themes that were continuing from the cycle # 1 – knowledge and teaching self-efficacy – had sub-themes. Within the knowledge theme, sub-themes included a general concept of the Sport Education model and concept changes that students had after their first experience teaching the model. Teaching self-efficacy had confidence in teaching team sports and teaching the Sport Education model as its sub-themes. None of the new themes that were generated from the data analysis had sub-themes. All priori themes and sub-themes are presented in Figure 5.1.

Figure 5.1 Node tree display of themes and sub-themes for cycle # 2



Knowledge

The first major theme was knowledge about Sport Education as an instructional model. This theme is a continuing theme from cycle # 1. Among eleven interviewees, seven said they believed that the Sport Education model is mainly about the substitution of the physical education teacher by school students. Pyatachok represented the most popular of those responses:

> …kids teach the subject themselves and they have their roles. The coach there performs only a secondary function, he is simply present in the classroom, and watching just for the discipline and lessons are taught by children themselves.

One interviewee still was not ready to answer this question but very interesting responses were provided by three other study participants. They stated that the Sport Education model is a completely different teaching style. Futbolist provided a good summary on this question:

> …this model is very extensive and if you would like to reproduce it here, in Russia, you need to work a lot on children's behavior. Of course, we will learn it first and then teach children but it is completely different teaching style. That will take a lot.

For all of the interviewees, practicing the model was a step that changed their concept of the model. However, it should be noticed that despite the fact that all interviewees agreed on the change of their general perception of the model, they could not explain how it changed. Nine of the participants said that it changed after they participated in a teaching unit. Viola confirmed: "I would like to add that after we practiced this model and played the game, it was much easier to understand it and explain it better to others." Two other participants mentioned the video they watched before the teaching unit and agreed that this was instrumental in fostering a significant

change in their understanding the model. In addition, six interviewees were certain that the teaching experience had helped them to understand the model better. Natka provided this statement:

> …when the theory began, I did not understand and underestimate the model. Not everything was clear, but when it was time to practice, it has become clearer and more interesting. I feel how excitement appeared to this model.

Comments provided on the general concept of the model and changes in the participants' perception of the model suggested that the college students still did not pay full attention to all the key components of the Sport Education model. Partial substitution of the teacher to the student during the instructional and competition processes and the teacher being an observer and safety controller still were the most prominent and attractive features for college students. However, seeing Sport Education as a completely different teaching style provided strong evidence that students' perception about the model had changed during the teaching unit.

Experience

A second major and new theme that appeared through the data analysis was the experience that the college students acquired during their teaching an actual unit on the Sport Education model. This theme emerged as an independent complete theme without any sub-themes. Among eleven responses on this type of teaching experience, the college students mentioned they have a better understanding of teaching physical education and an improvement in communication skills. In particular, seven students said they gained experience teaching physical education lessons. Marusya provided a good statement on this category: "…interesting. We have learned a lot of new, unusual…something we don't use or have here. It was interesting…and teaching experience itself was good."

Another group of five students specifically talked about how they improved their communication skills during this unit, as ML said: “I agree we have got experience. We found a way to communicate with kids. Now I know how to approach them and build my communication with them.”

Interestingly, three participants claimed that they understood the concept of teaching during the Sport Education season. Iron Man provided a strong opinion on his experience teaching the model:

> …good experience…We have learned a lot and tried new game…and we learn new model based on this game. That was very good experience. I now understand how it works and what I should do if I am about to teach this model to school students.

Commentaries provided on the experience teaching a season using the Sport Education model suggested that college students valued this experience very much. They practiced teaching and organizational skills as well as improving their communication skills.

Teaching self-efficacy

The third major theme which is also a continuing theme from cycle # 1 was teaching self-efficacy. After analyzing responses to questions about the students' confidence for teaching team-based sports and teaching Sport Education, two sub-themes emerged to support students teaching self-efficacy. The first sub-theme was teaching team-based concepts in school settings. Most of the participants (6 students) said they did not feel confident enough to teach team-based sports. Among them, three students suggested that they needed more practice before they went to school, one student wanted to spend more time on rules and regulations for team sports, and one student wished to have a partner for future teaching in schools. Wolf represented the most

common responses for this group of students: "...I need to practice more. I still don't have enough experience and knowledge....I feel like I am about 50% ready to teach."

Another group of students (5 participants) were sure that they feel comfortable enough to teach team sports in schools. Most of them had some experience playing team sports. Pyatachok expressed a very interesting opinion that can represent a summary of this group response:

> I feel comfortable because I know several sports, team sports. And I think it will be easy for me to explain it to children and for them interesting to try out different roles: someone as a team captain... and then divide them into teams so that would have been easier to teach it. After all, when it is a team of 4 people, it is easier to explain to than rather than to 30 people.

A second sub-theme was teaching the Sport Education model in school settings. Results from this theme showed that only two college students believed they were ready to teach the Sport Education model in the school setting. Marusya said: "I feel comfortable enough." and Pyatochok replied: "I think it won't be difficult. Children will be interested too."

A majority of the participants though stated that they were not ready to teach physical education lessons based on the Sport Education model. Among them two students simply replied that they were not ready because did not understand the model completely. Three of the students claimed they did not have enough practice for teaching the model in schools. Wolf's statement is representative of this attitude:

> Comfortable? Well, maybe not ... I need more practice. May be if I have another half a year to be engaged in teaching this model, then you can teach it in school.

Also, four students from this group of interviewees' mentioned that they were somewhat or not very comfortable in teaching the model in schools. Viola stated: "Now...still not very comfortable because I still struggle with rules and procedures for this model."

To summarize, it can be stated that college students at this level feel somewhat confident to teach team-based sports mostly because they either played team sports themselves and believed that this type of personal experience would help them to teach team sports better or they learned teaching methods for team sports through two years of team sport classes in the physical education college. As for Sport Education, it still had some obstacles for college students mainly associated with the complexity of the model and the practical experience of teaching it.

Intentions to use the model

The analysis of this new theme revealed that there were two groups with strong opinions with regard to their intentions to teach Sport Education in the future. The first group (consisting of 7 students) strongly believed they would teach the Sport Education model in schools. Pyatachok explained her position on this issue:

> ...I am ready to teach this model. I like it a lot because it involves everyone, all children, to participate...Also, kids can get a change to feel old enough to be trusted, they have a sense of some responsibility...

Lika also replied: "I think I will use this model and will able to teach it because I am interested in this model..." This strong, opinioned position of the majority of the participants suggested high motivation toward teaching this model even though they had more training to complete before their actual school teaching began.

A second group of interviewees had a completely opposite opinion. They argued that they were not ready to teach the model because they had not tried it with school students. All of them

agreed it would be necessary to teach the model in school first and then decide if they were going to use it in the future. Wolf presented a good summary of this group position:

> As for today, I don't know...I am not ready. We have to practice it in school and then make a decision, and then I should know better.

Having such a strong position can suggest that students were very careful about their decisions and didn't want to make any statements until they had enough experience with this new model, a model they had not yet taught in schools.

Barriers

The last new theme related to barriers or obstacles that the students believed could interfere with teaching the Sport Education model in schools. Table 5.1 displays students' thoughts and quotes about possible barriers for teaching the model.

Table 5.1. Potential barriers for teaching Sport Education model in school

Barrier	Student's comments	No.
School administration	*The school administration will never let me try to teach this model…*	3
Difficult for children to understand the model	*It can be difficult for children to understand what they need to do in this model…*	6
Difficult for children to accept the model	*They won't accept it first because they have never heard about it…*	3
Lack of support for colleagues	*Other physical education teachers won't support you…*	2
Myself, as a physical education teacher	*I, myself, can be that barrier… If I don't understand it …there will be no teaching at all."*	2

A particularly insightful summary of these obstacles was given by Pyatachok:

> First, in the first place you may encounter with the fact that the school will not agree to teach this model.... Many think that this is just a delusion: a small child – and to teach yourself to a lesson! That's difficult. Many won't understand this model and to abandon it. Second - this is the school administration that will not make contact and do not allow this model to be taught at the school. Also, all schools have different equipment, different gyms.... somewhere it will allow to engage in Sport Education, somewhere not.

The comments on this issue can lead us to a conclusion that college students think about future teaching and potential difficulties and barriers for the Sport Education model to be implemented in Russian educational system. They also questioned their own ability to teach this model under different circumstances such as the type of support they would receive from school administration and colleges or children's' acceptance of the model. However, it has to be explained that this group of college students did not have any experience teaching physical education in school or knowledge about the school system. It appears that they may misunderstand the role of school administration and underestimated the capability of a physical education teacher. That is, in general, a school's administration is responsible for the teaching context, but it is still the teacher's decisions which curriculum model or method to use for their physical education classes.

Summary and action research model reflection

This chapter has presented data profiling the process of implementing the Sport Education model and students' perceptions of the model after an initial attempt to teach it to freshmen in a physical education pedagogical college.

Based on interview responses, it can be concluded that the experience of teaching Sport Education season with freshmen year students was valuable and beneficial for the student-teachers. However, it should be noted that advanced preparation for the teaching unit was done by the researcher. While the college students did some preparatory work for the competitive season, they still had not participated in any part of the unit design or in writing lesson plans. Without knowledge of planning and developing a season of Sport Education, it is very difficult to estimate the degree of the preparedness of the college students to teach the model in schools.

Based on this reflection, the next cycle describes our intention to enable the college students to design and develop a season using their knowledge and experience of Sport Education model to this point.

CHAPTER VI

CYCLE # 3: PLANNING A SEASON OF SPORT EDUCATION

Purpose

The purpose of the third cycle was to develop a Sport Education season for prospective teaching in a school setting during the students' internship. Two sports – mini-soccer and gymnastics- were chosen by their participants based on their familiarity with the activity and the participants' self-confidence in teaching these sports.

Plan

The following steps were used in this cycle. First, a discussion of choices of sports for upcoming planning and teaching was performed by the primary investigator with the college students. Second, an interactive web site www.my.pbwiki.com was introduced to the college students as the primary instrument for planning the teaching unit for school practice. The primary investigator used a one day workshop to teach the participants how to use this website. All students were registered on the web site by the primary investigator. Third, each student was assigned one topic to work on, for instance: write a lesson plan or specified goals and objectives for the teaching unit. All materials that were used by the primary investigator for the first and second cycles of the projects were available for pre-service teachers to use. Also, books and teaching cards for chosen sports were available in order to allow the students to review skills, drills, and technique as well as rules and regulations.

Instruments

Two main instruments were used for this part of the investigation. First, since the principal investigator was in the US when this part was started, the interactive website was intended to be used as a primary communicative tool. This website has an option to see all work that was done over a period of investigation as well as contributions from each participant. Second, individual interviews (see appendix C) were conducted after a Sport Education season was developed. The interview guide was developed by the primary investigator with additional input from committee members.

Action

As the primary investigator, I spent several hours with prospective students explaining to them how to use the wiki web site, and why it was essential for this research project. The college students assured me that they would not have any problems using this web site. However, the research team had some suspicion that the students would either postpone this work until the last week before the school practicum or would not do it at all. The web site was closely monitored throughout the time that was intended for unit preparation and season development. As expected, none of the assignments were completed and none of the participants contacted the primary investigator about technical or instructional difficulties. To ensure the whole research project and data collection for this cycle, the primary investigator then travelled to Russia two weeks before the start of the school practicum. It was decided to prepare Sport Education seasons with students in person rather than through the online resource. Within two weeks, all lesson plans, outlines for the seasons, list of equipment, rules and regulations for the competition part were developed by the college students with help from one of their college professors and under the supervision of the primary investigator.

Data collection

The data sources for this cycle included a portfolio with all teaching resources that were developed by the pre-service teachers during this extensive course of designing and developing materials for the upcoming internship. Also, semi-structured interviews were conducted to collect students' responses to the process of season development and their experience of using online communication as a learning tool. This part of the data collection took place in November 2010 before the participants were scheduled to teach the seasons in a local school. The questions were asked in an open-ended in-depth format. This design allowed the participants to provide any details on their answers. The participants were encouraged to present any additional information and share any experiences using online communication that thought may be relevant to the research questions. All interviews were audio-taped and transcribed verbatim immediately following the interviews.

Data analysis

Online communication and learning

Since the development process of the Sport Education season using wiki was no longer a significant for this cycle, the only analysis of online communication and learning was performed using questions from the interview that were probing information on these issues.

Individual interviews:

As it related to planning for the first and second cycles of this project, the qualitative data analysis for the third study was also perform in the Russian language and resulting themes were later translated into English for the purposes of reporting. The data were transcribed, coded, and organized into themes and sub-themes by the interviewer. The primary coding scheme included experience on planning and developing a season in the Sport Education model, practice using

online tools for learning, level of self-confidence for teaching a Sport Education unit, and barriers for using the unit. As before, additional development of subcodes was performed later and was based on students' responses. After preliminary analysis, the transcriptions were given back to participants as a form of member check.

Reflection

Cycle # 3 took place at the same academic institution - Physical Education Pedagogical College, Ulyanovsk, Russia, with the 11 participants who were assigned to do their internship with the primary investigator at public school # 85. The purpose of cycle # 3 was to help college students to design seasons for their school practicum and develop all materials for teaching the Sport Education model to school students. The goal of this preparation section was to give prospective students an initial experience on how to plan a Sport Education season using its main features. The data were collected through the individual interviews with 11 participants after the Sport Education season was developed and students had their teaching kits ready. The following results were discovered and organized in a coding tree for analysis of the data.

Priori themes

After the same two-step qualitative analysis that was performed in the cycle # 1 and 2, major themes were found and appeared as follows: knowledge, value of the experience, online learning, teaching self-efficacy, and intention to use the model. While analyzing the major themes, all themes that were continuing from the cycle # 1 and 2 – knowledge, experience, teaching self-efficacy, and intentions to use the model – appeared as strong, solid themes that did not have sub-themes. Teaching self-efficacy had confidence in teaching the Sport Education model in schools and time estimate for mastering teaching skills, however, the researcher chose to analyze these two topics separately but to keep this theme strong and unbroken. The only

theme that had three sub-themes was the new theme – online learning. All priori themes and sub-themes are presented in the Figures 6.1.

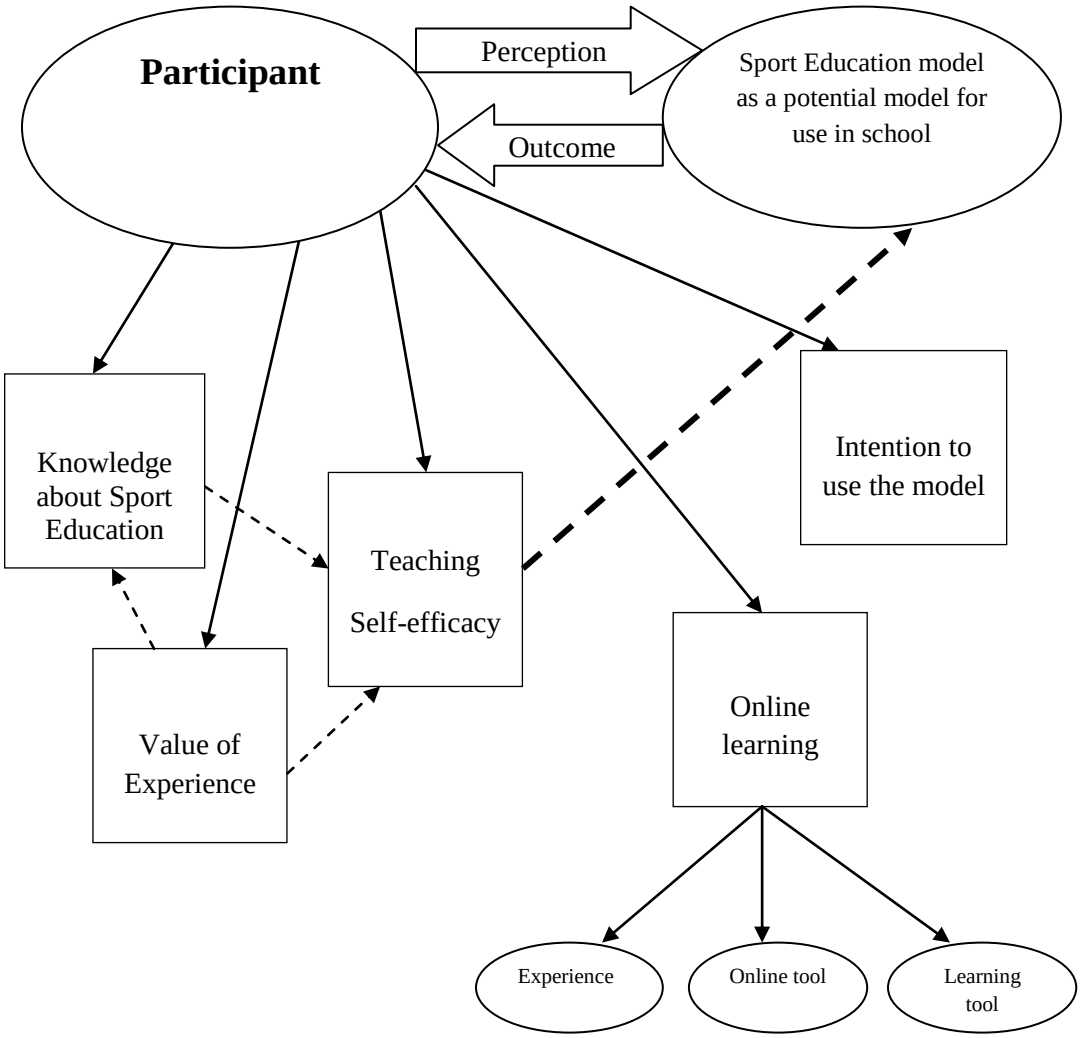


Figure 6.1. Node tree display of themes and sub-themes for cycle # 3

Experience

The first major theme that is also a continuing theme from cycle # 1 and 2 was experience that college students acquired during planning and designing sessions with the researcher. This theme still emerged as a strong independent theme without any sub-themes. All of the college students participating in this cycle agreed that they have got helpful experience planning their Sport Education seasons. Natka presented a good summary: "I had a rewarding experience, I liked it. And it is now all taken into consideration, remember and put into action."

Moreover, among nine participants eight were sure that this experience should be used in the future teaching. AK-47 provided a convincing statement: "…of course it was very interesting and I am sure it will be helpful in my future teaching…" Also, five participants said that they learned how to plan a season and write lesson plans correctly. Danya represented the finest summary of this group opinion:

> ...we had lectures how to write lesson plans correctly, how to correct behavior in the classroom...and also had our first teaching practice in the past academic year... we also did season planning according to this model key features, and now we come to school to try all of this.

For many participants, this pre-planning practicum was also the experience for general preparation for the school internship. Seven students stated that they were ready to teach in the school after this intense preparation session. Pyatachok captured the essence of these ideas in stating: "Pre-planning course has helped me... if you have not told us everything and helped to plan, I would not know what to do in the classroom…" In addition, seven students agreed that they had a rewarding experience working in small teams during this planning session. Anna provided a good summary of this group opinion: "It was much easier for all of us when we

divided this work into small parts, and each of us did one assignment…but we worked together as a team and that was very helpful."

Comments provided by college students on their experience in planning and designing the Sport Education season suggested that all of the pre-service teachers in this study valued this experience as necessary not only for teaching this model, but also for the general physical education teaching in school settings.

Knowledge

A second major theme was knowledge of planning a season of Sport Education. It was also a continuing theme from cycle # 1 and 2. All of the participants agreed that they received great knowledge of the planning process in general and designing a season in particular. Natka commented:

> I think it was a good knowledge for preparation and teaching in school. Now I understand that we have to take everything and use all we have learned. Of course there would be something to adjust or somewhere to correct, but we have to use everything we have.

Interestingly, five students said that they realized how much work should be done in order to have the season ready for school teaching only after the whole planning was finished. Anna expressed this idea in her statement:

> That was a lot of work...but this experience helped me. I figured out how to conduct a lesson and how to plan and carry it out...to make it interesting for children, and make sure a sequence of assignments is correct.

However, another group of seven students still wanted to have more practice rather than spend time planning and designing the season. As Danya said: "...on the one hand I was already ready for this, but on the other hand, there would be something new for me, but new - is the

practice in the school." And Wolf added: "...we need more practice for teaching this model. The more practice, the more knowledge and better teaching we would have."

Comments provided on the knowledge of the season preparation suggested that generally, college students appreciated everything they had accomplished during the planning season. They understand that the biggest advantage of the planning work was a collection of teaching materials they could use for school teaching. However, many of the students also believed that actual teaching and practical experience are where they can get much knowledge about education and school teaching.

Online learning

The third major and new theme that appeared after analysis of the data was online learning. This theme emerged as a strong theme with three sub-themes: experience using my.pbwiki web site and value of this experience, using this communication tool in the future, and barriers for using this online learning tool. The first sub-theme - experience using my.pbwiki web site and value of this experience – revealed information that none of the participants used this web site for planning and developing the Sport Education season. They specified five main reasons for not using the web site. These reasons are: difficulties with Internet access (5 students), general technical difficulties (5 students), time available (3 students), difficulty with foreign language (1 student), and lack of computer (1 student). Wolf represented the most common explanation for this finding: "I know very little about this web site because I did not access it. I did not have time for that and also experienced some technical difficulties with computer and Internet use." Most of the participants could not assess the value of this web site as a learning and commutation tool. As another participant, Iron Man, added: 'How can I value something I had not used or knew? I can't do it."

Finally, AK-47 provided a summary on this topic:

> I can't estimate the value of this web site as a learning tool because I had not work with it...we had not use this web site in our work because we have great problems with English as a foreign language, and during the whole time of this project, I for example did not have time to access this web site and try to use it.

Comments that were stated by the college students suggested more work should be done for college students as a general population in term of online education and Internet and computer use for learning and teaching.

The second sub-theme was using this communication tool in the future. All of the students agreed that this is very interesting and helpful tool and they would like to use this web site at some point of their teaching career. AK-47 expressed very interesting opinion: "...yes, useful...we are still young, we have many years of school teaching ahead, and this experience, I mean this instrument will be very helpful for us. I, personally, will use it." and CS added: "I agreed to try this web site...we need to use all instruments and methods for teaching in schools." Also, all of the students sounded very promising when they talked about using the Internet in general for their work: "Of course I will use it for my work." (Pyatachok), and for teaching in schools: "Internet and this web site can be both useful in finding new information for our lessons, plans, and general new knowledge." (Natka)

Students' strong motivation for using Internet and web sites as learning and communication tools in the future suggested that they were open to using technology as a new and currently popular approach for teaching and learning in higher education.

The last sub-theme was barriers for using my.pbwiki as online learning tool. The findings on this subject revealed that two students could not think about any barriers or difficulties

because they had not used this tool yet. Three other students said that time is the most critical issue in using Internet. However, mostly students still talked about Internet access as the biggest limitation to their online work. Anna explained her position that represented the group opinion on this matter: “We will have some difficulties such as time...won't be enough to do everything plus some work online...or Internet access...it just won't available.”

Comments provided on online learning as a whole theme suggested that even though the college students from Russia claimed before that they have great experience using Internet and should not have any difficulties using this web site as a communication tool, the reality was that there is a big difference in what can be expected from these students in Russia than what can be expected from college students in the USA in terms of using such online tool. Also, English as a foreign language can somehow limited access to many educational web sites.

Teaching self-efficacy

The fourth major theme that is also continuing theme from cycle # 1 and 2 was teaching self-efficacy. The analysis of the data demonstrated that most of the participants felt comfortable enough to teach the Sport Education model in school settings. Six of them said that they had good confidence in teaching the model to school students and they feel even more comfortable compared to cycle # 2. Natka expressed her strong position:

> I feel very comfortable to teach this Sport Education model to kids in schools. I think it would be even easier for me to teach it to kids during our upcoming internship then to college students again, just what we did last spring, because we know much more now, we learned a lot and we are still learning something.

Despite the fact that more students had similar opinions on their teaching confidence, three students still were not comfortable to teach this model in schools. Danya responded to this

question: “I feel...that at some extend I can teach this model but I am not sure I can teach any sports based on this model.” Also, AK-47 agreed that: “It is difficult to decide whether I am ready or not. I think I can teach this model but only with one particular grade and class.”

Comments provided by participants on this issue show us strong evidence that college students were becoming more confident about teaching the model for school students.

Another interesting finding appeared from the analysis of the interview for this cycle. When it comes to the time estimated for mastering a curriculum model such as Sport Education, college students demonstrated a very careful approach to it. Among nine participants in this cycle, four said they are not ready to give an exact time and estimate when they would become proficient in this model.

However, five other students gave a wide range of time necessary to master their teaching skills for the model. This range was from 3-4 months up to 15 years. Moreover, one student argued that:

> It is very difficult to say how much time I need to master this model or become a proficient teacher. We are saying in Russia- There is no limit to perfection. You can stay more and more goals for yourself, try to achieve them, and that would be no way for you to become perfect.

To summarize, it can be stated that college students became more confident about their teaching potentials for upcoming practice at a local school. They felt either their general confidence level went up after the planning session or they wanted to try and see everything in action.

Intention to use the model

This final theme, which is also a continuing theme from cycle # 2, was future teaching or intention to use this model in the future. The analysis of the data for this theme showed varieties of responses from participants. For instance, two college students said they believed in this model and have great intention to use.

AK-47 demonstrated a convincing response on this subject:

> Great possibility...because the standard lessons in schools are very boring and kids just tired to do it old way. But this model, Sport Education, is something new, something more interesting, and not very complicated. It will be interesting for me and for children too, and won't be boring.

Another two students said they will use it later, as Iron Man explained his position:

> ...in the beginning, I think I will have this model in the background. In the foreground though would be the plans and activities in that school, as they are taught by teachers out there, and this model will be in the background, because this is a new model, and yet students do not reach a certain balance, a balance in their movements, and comfort during the physical education lessons.

There were also two participants who stated they were not ready to answer this question and did not explain their position. However, the most interesting result from this interview was received from a group of students (3 participants) who announced that they won't teach this model in the future. One student said he does not plan to teach in schools after graduation.

Another student was certain about a lack of support from school administration and future colleagues, but the most intriguing statement was given by Danya who said:

> ...possibility that even if I can learn everything in this model for 100%...still the probability is very small for me. I just do not have a very positive attitude to this model ... I just do not understand some things ... I like how we were taught, how everything was delivered for us during lectures and first practice, and it is new and it certainly is not bad, but it is just not as what we had. And I can't just take it and teach it, no. May be with someone else but not alone.

Having two strong groups, one of which is ready to use the model and another demonstrates some doubts and resistance, can suggest that a majority of students are serious enough about their decision for the intentions to use this model in the future.

Summary and action research model reflection

This chapter has presented data profiling the process of planning and developing seasons based on the Sport Education model. By the time of this data collection, college students had already had a course on the theoretical basis of the model, first practiced implementations of the model with freshmen students from the same academic institution, and spent two weeks on designing the seasons, planning all events, writing lesson plans, and composing a set of rules and regulations for upcoming season and refereeing part of it. Based on the participants responses to the interview questions, it can be suggested that experience planning a Sport Education season was greatly appreciated by the college students, not only as an experience for this new teaching approach, but also as a general practical experience on the process of school teaching preparation. With knowledge of "what" and experience on "how", college students now should able to approximate the time and effort needed for a season development. Moreover, college

students developed more confidence for teaching after they had completed all materials for the teaching. Also, they highly appreciated the fact that the whole preparation was done in groups and not individually. This team work was a new approach compared to individual work that is a common method to assess students' work, knowledge, and performance in Russian academia.

Based on this reflection, the next step in the research process was to let the college students to teach the seasons to school children for three weeks. From now, it was to be the pre-service teachers' responsibility to deliver this new model to fifth grade students and teach all physical education lessons for this grade.

CHAPTER VII

CYCLE # 4: TEACHING A SPORT EDUCATION SEASON IN SCHOOLS

Purpose

The primary purpose of the final part of this project was to give the pre-service teachers an opportunity to implement the Sport Education season they had designed in the cycle # 3. The second purpose was to study pre-service teachers experience and perceptions on the model as well as their likelihood of teaching the model in the future.

Plan

After tree cycles of lecturing, participating, and planning, it was our intention to have pre-service teachers implement Sport Education seasons in a school setting. For that purpose, all 11 participants had a school practicum for three weeks at a local school. The following were included in pre-service teachers' responsibilities: teach physical education lessons to school students from first through ninth grade; implement Sport Education in fifth grade only; participate in extra school activities; plan and manage two after school sport events. As a primary investigator, I planned to observe all physical education lessons taught by pre-service teachers. That included not only lessons for Sport Education but all other physical education classes. Also, before each lesson that was planned for Sport Education, a short briefing section was held in order to check students' familiarity with a lesson goals and plans.

After the same physical education class, a short debriefing session was held to discuss any interesting moments of the lesson or any concerns that pre-service teachers had for instructional processes, discipline issues, or questions related to Sport Education. All materials and lesson plans were prepared by the college students during their participation in season development.

Instrument

Individual interviews (see appendix D) were conducted to collect the students' perception of their experience to teach Sport Education. The interview guide was partially adapted from Rovegno (1992) with additional questions added through a review of the existing literature and dissertation committee input. Also, a post-teaching survey was distributed among participants to collect data on their knowledge about Sport Education model after school teaching.

Action

During the first day of school practice, the pre-service teachers were introduced to the school administration, physical education teachers, and school nurse. Students spent their first day observing physical education classes in both elementary and high school blocks. By the end of this day, the pre-service teachers decided that 2 of them would have their practice in the elementary school and 9 students wanted to stay in the high school. The only time when the whole group would get together was teaching Sport Education seasons.

As determined by the physical education teachers from the school, the pre-service teachers kept the same instructional format for standard classes: school boys and girls stayed separated in different gyms and the female college students taught classes for girls and the male college students for boys' classes. Also, the school nurse had a special instruction section for pre-service teachers where they were strongly advised not to involve children with serious health

condition such as kidney problems, vision or posture problems in any tumbling and jumping activities.

As for Sport Education teaching, all questions and concerns were discussed with the primary investigator on the site of the teaching activity before or after classes. The strongest discussion was held by pre-service teachers on refereeing issues, safety, and the school children's abilities to manage some parts of the model. Most of the physical education classes based on the Sport Education model were videotaped by a pre-service teacher or the primary investigator.

In the beginning, when the pre-service teachers had introduction lessons, team developing and role assigning lessons, everything went smoothly without any difficulties or concerns from the college students. Many quotes from students' journal suggested that. For example, Iron Man wrote: "Everything was fine: warm-up, team development, and even training game. My team learned all the materials very well." However, later on pre-service teachers started to have difficulties with refereeing games. From the critical incident mentioned by AK-47: "The goalie from one of the teams just laid down in front of the goal and referee did not say anything.", also Nokia specified that: "The referee did not do any good job…" Problems such as these were discussed after each critical situation with the college students and the solution was made to pay more attention to game rules and fare play rules.

It was not just the mini-soccer season in which there were difficulties. Gymnastics also had issues with participation and the instructional process. As for participation, many pre-service students mentioned in their journal that the school girls did not want to participate in some activities. Anna wrote:" I had girls who did not want to do climbing roles." Danya added: "One girl in my team refused to participate." However, Lika had a little different situation, as she

wrote:" Some of my girls did not want to participate in the beginning but later they started to come to the lessons and they did well and now they can do all exercises." Those situations were discussed with pre-service teachers in details. Some recommendations for improvement were made by the physical education teacher and some by the primary investigator. Also, the pre-service teachers were trying to follow the same format for gymnastics lessons as they had at the pedagogical college. For example: they provided very detailed warm-up activities, spent a lot of time for demonstrations, and paid special attention to technique rather than spending more time practicing gymnastics routines. Lika wrote this in her journal: "We have to pay more attention to technique and how children do warm-up and specific exercises for different apparatus."

As the time came closer to the competition season, the student-teachers were less concerned about their instructional process and spent more time with their teams practicing gymnastics routines or going over rules and tactics for mini-soccer. The competition season and championship games in mini-soccer as well as final performances in gymnastics were organized by the pre-service teachers. The only parts where the primary investigator participated as a coordinator were the opening and awarding ceremonies.

Data collection

The data sources for this cycle included observation field notes, informal discussions, briefing and debriefing sessions, student journals, semi-structured interviews, and video records of lessons. The data were collected during internship in November and December 2010. The researcher's role in this final study was to observe lessons and to interview the participants.

Individual interview.

Individual interviews were conducted at the end of the season. As previously, the interviews also followed a semi-structured format with each interview lasting from twenty to

twenty five minutes. The questions were asked in an open-ended in-depth format and the participants were strongly encouraged to provide any additional information and share any experiences teaching Sport Education to school students that may be relevant to the research questions. All interviews were audio-taped and transcribed verbatim immediately following the interviews.

Post-teaching survey

The post-teaching survey was distributed among the college students to collect data on their post-teaching knowledge of Sport Education and their suggestions for improvement in their future teaching. This assessment was provided in order to find an additional support for the knowledge theme that appeared as one of the major themes in this research project.

Data analysis

As with planning for the previous parts of this project, the qualitative data analysis for the fourth cycle was performed in the Russian language and resulting themes were later translated into English for the purposes of reporting. The data were transcribed, coded, and organized into themes and sub-themes by the interviewer. The primary coding scheme included experience of teaching a season in Sport Education, level of self-confidence for teaching the model, likelihood of applying this model in the future and potential barriers for using the model. Additional development of sub-codes was performed later and based on students' responses. After preliminary analysis, the transcriptions were e-mailed back to participants as a form of member check.

Reflection

Cycle # 4 took place at the new location – municipal school # 85, Ulyanovsk, Russia. All 11 participants, who were assigned to do their internship with the primary investigator at this

public school, taught classes for three weeks. The purpose of the cycle # 4 was to give college students an opportunity to teach Sport Education model to school students. The goal of this teaching section was to give pre-service an initial experience on how to teach Sport Education to school students and let them see the difference between teaching approach in Sport Education and regular authoritative, teacher-centered style commonly used in Russian schools. The following results were received and interviews were organized in a coding tree for analysis of the data.

Post-teaching experience survey

A post-teaching experience survey was distributed among pre-service teachers right after the last events for Sport Education seasons. Eleven students took the survey where they specifically identified most critical elements for teaching Sport Education seasons in schools. In particular, students were asked to provide the five most important elements for teaching Sport Education, then to specify three critical elements among these five, and finally to focus on the one most critical element. The results are shown in the table 7.1

Table 7.1. Critical elements for teaching Sport Education model in Russian schools

Critical Element	5 important elements	3 critical elements	Most critical element
Instructional process	8	4	2
Training process	8		2
Participation	7		
Competition	9	3	2
Festivity atmosphere	8	3	1
Refereeing	7	2	3
Team work	4	1	
Team roles	1	1	1
Practice games	1	1	

Among resources that would help pre-service teachers use the model better, five students mentioned video about the model, three students would appreciate more teaching experience, and another three students would like to have more information (theory) about the model. Students also talked about availability of a text book, help from children, and discussion about the model with someone who has experience working with it as possible assets for better learning and teaching.

As a conclusion, the purpose of this survey was to collect information on pre-service teachers' knowledge of the Sport Education model and its key features. Based on the data collected from this instrument, the college students demonstrated a strong knowledge about the main characteristics of the model and did not have difficulties identifying them. As for additional resources for better understanding and teaching the model, participants specified those that were

not available for them due to language barriers or lack of physical education specialists with experience teaching Sport Education.

The second part of data for this cycle was individual interviews. The following priori themes appeared after analysis.

Priori themes

After the same two-step qualitative analysis that was performed in the cycle # 1, 2 and 3, major themes were found and appeared as follows: knowledge, value of experience, online learning, teaching self-efficacy, barriers for teaching this model, and intention to use the model. All major themes discovered through cycle # 1, 2 and 3 – knowledge, experience, teaching self-efficacy, and intentions to use the model – appeared as strong, solid themes in this analysis. All nut one of these major themes had at least two sub-themes within them. The only theme, also a continuing theme from cycle # 2, that did not have any sub-theme in it, but also appeared as a strong, independent theme was barriers to teaching the Sport Education model in Russian schools. All priori themes and sub-themes are presented in the Figures 7.1.

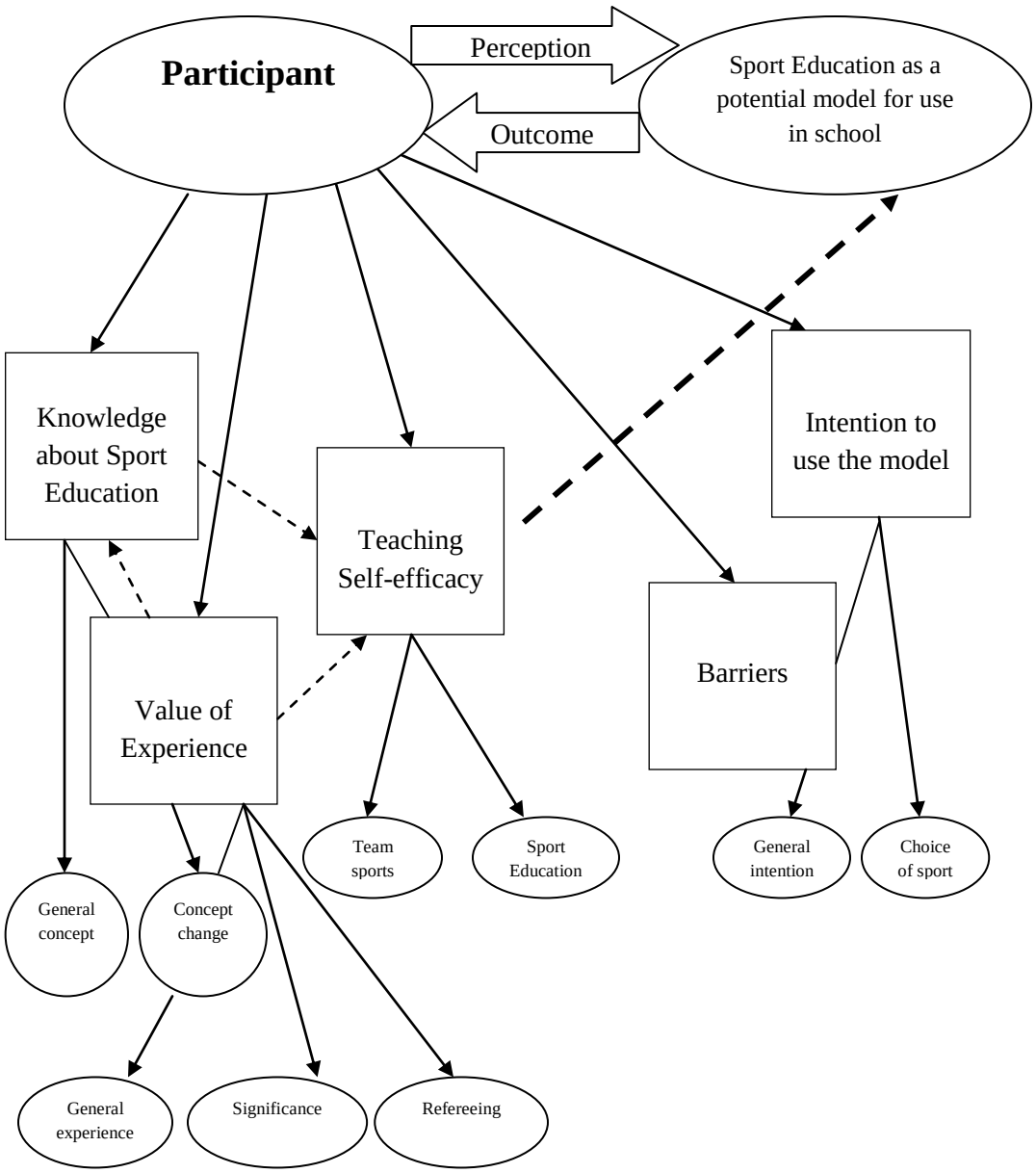


Figure 7.1. Node tree display of themes and sub-themes for cycle # 4

Knowledge

Throughout this entire project, the first and most important theme was students' knowledge on Sport Education as a curriculum model. Analysis of the data in this theme revealed two sub-themes. The first sub-theme was a general concept of Sport Education as an instructional model. Among nine participants, four stated that this was a model where participation was very important. Team performance was judged based on full participation from all team members. CS provided a very powerful statement on this subject: "The most important thing in this model is that everyone involves, all kids accepted and participated... no one is a slacker." Another two participants pointed out those school students not only learned how to play a sport, they also learned some new information about this sport such as history or rules to use for a play. AK-47 voiced a strong opinion:

> ... children not only play, but they have something in mind... knowledge that remains them about the sport. Still, all children are participating in this model. There is no such when someone advocates or sits while someone is playing. All kids take some parts in this model.

There was one student who talked about the model as a change for some independence for children in physical education lessons. Wolf said:

> Kids became independent from the teacher but it is not like they substituted the physical education teacher...No it is more. The teacher is still there but kids have more independence for decision making and they knew they can play, referee, and do everything themselves...I mean just with pout teacher telling them exactly what to do.

Despite the fact that most of the participants expressed their positive attitudes toward conceptual knowledge about this model, two participants believed that the model did not work at the school at all.

Danya motivated her position as:

> In some measure it (the model) worked, and to some extent it did not. Here, let's take the side to what extent it has failed. Every school has its own traditions for physical education classes. Can we change it? No! If they don't have something, we have shown them but everything, and I mean for this model, did not work. So I'll stay with my opinion that on the one hand some parts of this model worked but on the other hand the whole model did not work.

A second student, Natka, also argued about the model as:

> No, this model did not work because of this school traditions and rules, and also the way that physical education teachers work with kids. They have their own approach to physical education. We could not change it. It is impossible.

Comments provided on the general concept of Sport Education model suggested that the college students finally realized that this model is not about substitution but about serious teaching that involves critical thinking about the teacher’s role and the student's position in the model.

The second sub-theme was changes in concept for teaching the Sport Education model in school settings that participants had after their first internship. All participants agreed that their concept about teaching had changed during their first actual experience in a school setting. As an explanation to the question: how it changed, eight college students said they received more actual experience during their teaching and seven specified a process of getting more information about the model and teaching as their change.

Wolf had an interesting summary about this matter:

> During this practice, we started to learn more and more about this model. Previously, we have not imagined everything that goes in this model, and when I started the practice ... we have learned more. During the practice, we began to understand this model more and more, and this understanding was not from the theory but from practice.

Although, most of the students demonstrated positive outcomes from teaching this model, there were still two students who showed strong resistance to the model. Danya expressed her opinion for the changes in her teaching:

> Yes, my concept has changed and I've already previously said that it (the model) has no effect on me. I am not going to use it in the future because I got used to what I was taught. I will teach you what I know.
> Interviewer: Sport Education was also taught for you.
> Danya: Yes, but Sports Education ... I did not study it for so many years.

Comments stated by the college students can lead to the conclusion that most of them experienced positive and beneficial changes during the course of teaching Sport Education model even though there were still participants who confirmed their negative attitude and resistance for teaching the model.

Experience

Another major theme was the experience that college students received working with school children during Sport Education seasons. Three sub-themes emerged during the process of data analysis and they were as follow: general experience for teaching Sport Education, significance of the experience of teaching the model in the school, and refereeing issues. Among

all participants for the first sub-theme, seven identified their experience as positive and six stated that this whole work was very interesting for them. Pyatachok provided the best summary for this group position:" My experience was positive…I found this model very interesting because all kids participated in it as they taught lessons for themselves and helped each other to learn…" Another two participants also mentioned that watching this new model in action was a great possibility to see everything as one big picture. Iron Man replied:

> It was beneficial work for me. I have got a lot of experience. This is my first school practice in this junior year and I had a change not only to try what I have learned but also I could see how everything worked in this model. That was great.

There was a group of college students that also referred to strong motivation they had for teaching the Sport Education model to school children. AK-47 expressed his position:

> I had strong motivation for teaching and I wanted to do it, I wanted to work with school kids. In the beginning, I was a little scared but later I became more confident and felt excitement every time I was supposed to teach.

Only one student specified his experience as negative and explained it as: "During the pre-season everything was fine but when it was time for competition, my team was very disorganized and irresponsible."(Wolf)

A second sub-theme – significance of the experience teaching Sport Education - appeared as a strong solid item with all participants implying that the experience as positive and valued.

Kira summarized the most common response on this sub-theme:

> …it was positive, useful experience for us. We have learned something new, new approach, method to teach physical education lessons in schools…and this approach was very attracted to me. It was not as complicated as it might seem and kids were interesting to do most of the exercises and be responsible for their team and performance.

As a conclusion, the actual teaching experience was given high value by all of the participants in this study. College students showed more motivation and appreciation of school teaching rather than to the theoretical knowledge of the model.

The third sub-theme that emerged unexpectedly during the actual teaching of Sport Education seasons was refereeing issues and pre-service teachers' perceptions and concerns on this topic. As it was specified before, pre-service teachers taught two different sport seasons: one with team sports and another with individual sport. Despite the fact that pre-service teachers designed, planned, and taught different activities, both groups agreed that school children should not referee pre-season or competition season phases. They all stated that only pre-service teachers should take this responsibility to referee seasons for school children. Both groups discussed a lot of reasons why school children should not referee Sport education seasons. For the gymnastics unit those reasons were: safety issues, discipline issues, low level of students' specialized skills, and luck of knowledge about gymnastics and previous experience on refereeing.

Natka expressed her opinion:

> I believe that we must do it. Gymnastics is too dangerous sport and children not only can't do something at the gym, they just do not know the safety rules for all apparatus and the exercises. How can we trust them to officiate if they still do not learn how to perform some exercises and routines? How will they judge others without knowing how to do it yourself?

Another student also agreed with this group strong opinion. Pyatachok said:

> I remember what you told us about how it will be necessary to teach children to referee the competition. I was not ready for this, because I ever tried to teach it to the children, but hoped that during the practice we can try. But when we came in 5-th class and saw the level of their training, it became clear that we need to teach them to literally everything. And if so, until better time you can't talk about the officiating. It is too difficult for them, they just seems to me mentally young and intellectually not ready to execute such difficult task as judging. We would just spend time and nothing we did would be succeeded. They are simply can't referee.

For the mini-soccer group, pre-service teachers specified the following reasons for them to do the refereeing and avoid passing it to school boys: lack of knowledge of simple rules and regulations for this sport, lack of experience refereeing this sport, safety issues and injuries.

Iron Man provided excellent summary for the whole group:

> No, children will not cope with it. First, they don't know any rules for this game. How will they judge each other when we told them well, only the most basic rules? It is not enough and they will not get knowledge of other rules themselves. Second, they have no experience of refereeing. They will just stand on the field and that is all. They won't' do anything Third, the safety rules must be observed because if not then we will get injuries... a lot! And how kids will do so, to referee, to observe everything and all? No it is very difficult. We must dot all work on this because children can't do it all by themselves as we can.

After such strong resistance to give any opportunity to fifth grade students in refereeing their games and performance, the primary investigator suggested that they might want to involve high school students, for example ninth or eleventh grade boys and girls, just to help with this particular part of the model. All of the pre-service teachers agreed that this is not a bad idea, however they still strongly believed in their own abilities to referee better than any of the school students. Danya pointed out that:

> Well, maybe it will work, but it's still not safe. After all, they all have to learn how and what to do and how to evaluate and referee. They are still high school students and they can have many children in one gym or for one event, and they may just simply overlook something important. In general, you can try, but I would still prefer to do the refereeing ourselves.

Another pre-service teacher also agreed that they would do it better. CS said:

> I think that they would feel comfortable with high school students. Perhaps, they can to be ashamed that they look ridiculed. And, we also need to control those high school students that would not see something or show biases toward a team. Again, it is better if we did it ourselves.

The discussion on pre-service teachers' reasons for not allowing school students to be referees in Sport Education seasons suggested that prospective teachers were not ready to give school students this opportunity which is essential for Sport Education. Pre-service teachers were trying to explain it as safety precisions and a better instructional task for them rather than children. However, the pre-service teachers did not even try to let the children to take the roles of referees and statisticians before they made such decisions and conclusions.

Teaching self-efficacy

Teacher self-efficacy, a major theme that was discovered from the beginning of this research project appeared again as a strong independent theme in the teaching cycle. As before, this theme has two sub-themes: confidence to teach team-based sports and confidence to teach Sport Education.

Analysis of the first sub-theme – confidence to teach team-based sports- demonstrated high level of teaching self-efficacy among college students. All of them stated that they feel very comfortable about teaching team-based sport to school students.

AK-47 provided fine summary on this topic:

> I feel confident enough to teach that. I may be a bit lacking some knowledge and practice, but in general everything is fine and ... I'm pretty comfortable feel to teach team sports in school.

The second sub-theme – confidence to teach the Sport Education model – also revealed that most of the pre-service teachers felt confident enough to teach this model to school children. Six students agreed that they were comfortable or somewhat comfortable in this matter. Kira claimed that: “I am comfortable with teaching in general. That is why if I need to teach I will teach it no matter if it is old model or new one.” CS also replayed:

> I feel very comfortable. May be, for the next practicum, we need to concentrate more on refereeing, which we omitted in purpose, but other than that everything was fine.

Another group of three students still thought they were not ready to teach this model. Anna explained her position as:

> I am not ready to teach this model in schools. I have to get more practice and have more general experience in school teaching and also some particular experience in teaching this model.

However, the most intriguing answer was given by Danya:

> Yes, I know how to teach this model, I feel confident enough to teach it but I don't want to teach it. I was not taught in our college how to teach new models. I like old way, I like old teaching style. I like how teachers work now.

To summarize, it can be stated that the college students had a much higher confidence level in themselves after three weeks of practicum compared to any other point in the study. This whole teaching experience helped them to understand their potentials and to improve their level of teaching self-efficacy.

Barriers

This major theme is a continuing theme from cycle # 2 participating in Sport Education season where college students implemented a kickball season with freshmen year students from

the same academic institution under the supervision of the primary investigator. After teaching Sport Education seasons in public school, the participants identified the following barriers or limitations that can have significant influence on their decision to use this model in the future. These barriers are presented in the order from most mentioned to least. Support from physical education teachers and other colleagues was the strongest limitation. Four students talked about this particular topic as important for them. Anna demonstrated her opinion on this topic:

> ...not everyone knows this model and not everyone understands how to work with it. It can be very difficult to have some sort of support from your colleagues and convinced them that this model is interesting, easy to understand and ...worth of trying.

Another common response for potential barriers for this model was children understanding the model. Four college students agreed that it can be very difficult for school children to understand this model and this would be a factor that could possibly prevent acceptance of this model. One student mentioned school traditions as a barrier and another student talked about school administration that can also prevent this model from being implemented. Two participants also referred to themselves as people who will or will not agreed to use this model.

The most comprehensive response was given by AK-47:

> First of all, I think Russian education as a whole system is not ready for new model such as this one. It might seem unusual if young specialists, teachers, would come to schools and start to teach this new model. Despite the fact that it is good model, physical education teachers, other teachers, and children won't accept it easy just because they don't know it. They are not ready. But I hope we can deal with it.

Responses and comments provided on this theme can lead to a conclusion that the college students thought seriously about teaching in school settings after graduation. They were also concerned not about their teaching skills and abilities as new, novice teachers but also considered the need for support from school administration and school teachers.

Intention to use the model

The last major theme, intention to use the model, is also a continuing theme from cycle # 2 and 3. The analysis of this theme identified two strong sub-themes: general intentions to teach this model in the future and influence from the choice of sport. The first sub-theme revealed that four participants from this group of pre-service teachers would like to teach the Sport Education model in the future. Iron Man convincingly answered: "Yes, there is great possibility I will use it." Two students expressed their concerns that they are still not ready to teach this model. Kira provided her explanation:

> It is difficult to say...I like this model. I want to use it...it just...I am a little afraid that I am not ready. It takes a lot of preparation and it will be very hard for me to do it on my own and not to forget something important.

Also, one student was not ready to answer this question and two students strongly believed that they won't use this model. Danya identified her position as:

> I have said already I will not teach this model in school. I do not like the way how it all should be build and plan. It's not something we have been taught and not how we were taught physical education at school when I myself was a school student. I like how the old way works, as my teacher taught physical education lessons. I will teach this way as well because I know how to do it, but in this model everything is just odd.

Having such strong positions for the intentions to use this model in the future suggested that pre-service teachers became more decisive in their decisions. They did not hesitate to show positive as well as negative attitudes and even some resistance to the model.

A second sub-theme was related to the choice of sport that the pre-service teachers used for their school teaching. As discussed earlier, one group of college students taught team-based sport (mini-soccer) and another group taught gymnastics. Discussion on students' choice of sports revealed the group of male students, who taught mini-soccer, strongly believed their selection of team sport was a correct decision and it had great influence on their intention to teach the model in the future.

AK-47 had good summary of this group position:

> I think it did have great influence on my intention to teach mini-soccer during this school practice and in the future. You see, mini-soccer is much easier then gymnastics. Mini-soccer is team sport and it is much interesting then gymnastics. There you have to perform individually but in mini-soccer you play for the team, you are the part of your team. It is all about team work and it is much interesting and fun.

Another group of pre-service teachers, which consisted of the female college students, also believed that the choice of sport may have had some influence on their teaching. However, they did not talk about a right or wrong choice of sport. Moreover, it was mostly about the technical difficulties they experienced during this teaching unit and the children's motivation for participation in gymnastics classes. All of the interviewees pointed out that they had students who did not want to participate or could not participate due to health problems. Kira explained her situation: "Yes, some kids were just absolutely afraid to come near any gymnastics

equipment.” Danya also admitted that: “I had a half of my team not participating in tumbling and vault jumping because they had health problems with vision and spine.”

All college students in this small group agreed that gymnastics is a very difficult sport to learn and school girls were not ready to experiment with this new activity. Having this instructional difficulty can suggest that pre-service teachers are usually more comfortable with sports they have participated themselves or have studied during the course of physical activity classes in their pedagogical college. Gymnastics, on the other hand, was the sport that these pre-service teachers had been learning since their freshmen year. Keeping that in mind, it can be concluded that children's motivation, resistance to a new activity, and low level for development of specialized motor skills were likely factors that influenced college students' perception toward this particular sport.

Summary and action research model reflection

This chapter presented data profiling the process of teaching seasons based on Sport Education. By the time of this data collection, the pre-service teachers had already had a course of theoretical basis of the model, first practice and implementations of the model with freshmen students from the same academic institution, a two-week intensive workshop on designing and planning the season and all events for it, and finally a school practicum for teaching physical education lesson. Based on the participants’ responses to the interview questions, it can be surmised that experience teaching physical education classes at a standard, urban school was greatly appreciated by all the pre-service teachers. However, teaching seasons based on the Sport Education model was a new and controversial experience for this group. Their contradictory perceptions on using a new teaching approach such as the Sport Education model can be discussed from different points of view and general conclusions can be drawn about students'

teaching skills. It was first school practicum where college students should not just teach lessons using knowledge and skills acquired during two and a half years of study in pedagogical college but also in implementing a new model for which they had exposure limited to a single mediator between the model and the students.

CHAPTER VIII

DISCUSSION

According to Ormond et al., (1995), Wallhead and O'Sullivan (2005), Kinchin (2006), and Sinelnikov (2009) the Sport Education model is a very effective curriculum model that is being used around the globe to positively impact student learning in physical education. Teachers' use and responses to Sport Education have also been overwhelmingly positive (Hastie et al., 2008; Kinchin, 2006; Penny et al., 2005; Wallhead & O'Sullivan, 2005). Currently, it is apparent that learning to teach Sport Education is best done by first being exposed to the model as a student, seeing the model in practice, and then teaching it (Kinchin, 2006).

Research on how pre-service teachers learn, interpret, and deliver SE has been limited (Curtner-Smith & Stran, 2009). Curtner-Smith and Sofo (2004), Hastie, Curtner-Smith, and Kinchin (2005), and Stran and Curtner-Smith (2009) have indicated in their research that a significant proportion of pre-service teachers are attracted by the Sport Education model because of the following factors: (i) it appears to be compatible with those pre-service teachers' occupational socialization and their beliefs about how the subject should be taught; (ii) pre-service teachers recognized the model's structural and cultural advantages over more conventional models.

In addition, Jenkins (2004) has indicated that imparting Sport Education throughout a physical education teacher education (PETE) program and having pre-service teachers teach prescribed mini-units of SE during early field experiences suggested by Curtner-Smith and Sofo (2004) and Curtner-Smith et al. (2008) appear to increase pre-service teachers' chances of comprehending and using the model properly.

Not only positive outcomes of learning and teaching the Sport Education model were indicated in the existing literature. On the downside, research has also pointed out on some difficulties that pre-service teachers have been experienced. Curtner-Smith and Sofo (2004), McCaughtry et al. (2004), and Parker and Curtner-Smith, (2005) specified teaching skills and tactics within game play sessions, providing respectable levels of moderate-to-vigorous physical activity (MVPA), and designing developmentally appropriate game forms for competitive phases of a Sport Education season as most challenging to accomplish. Finally, McMahon and MacPhail (2007) argued that pre-service teachers may struggle with tactical teaching within a traditional school culture that emphasizes skill-based instruction.

This study was an attempt to investigate Russian pre-service teachers who did not have any knowledge or experience teaching Sport Education but were engaged in an extensive research project and completed three preparation cycles (lecturing, participating, and planning) before the actual teaching of the model. Before discussing the findings of this study, I have to note that these findings can be generalizable only for Russian college students and not for all college students and pre-service teachers in other countries.

In the current study, I set out to answer the following three questions:

(i) what is the best mechanism of learning how to teach Sport Education curriculum model

(e.g. seminars/workshops, planning a season, active involvement with children); (ii) how teaching confidence changed over a period of study; (iii) what factors would motivate pre-service teachers to use this model in practice. Results will be discussed accordingly.

Mechanism of learning

The first research question asked was what the best mechanism of learning how to teach Sport Education curriculum model to pre-service teachers. As it was stated before, most of the current PETE programs offered a course of theoretical basis of the model and then a practicum at a school setting. Simply, that just was not enough for pre-service teachers. This approach neither looks as systematic nor as fundamental. Some steps, links are missing in that process of learning. In the current study, we designed not just two steps -lectures and practicum- but four -lectures, practice, planning, and finally practicum. It was proposed that going through such an intensive process of learning the model would benefit pre-service teachers and help them become more proficient teachers.

Results from the first instrument in cycle # 1 -Sport Education questionnaire – were very much predictable. College students from this academic institution did not know most of the curriculum models that were recently developed and implemented within the physical education system in the US due to a lack of information on teaching innovation in countries other than Russia. The participants were only slightly familiar with the Fitness model (n=16) and Child design games (n=16). Also, 70% (n=16) of the participants mentioned that they were familiar with Sport Education, however this statement was made after the primary investigator's recruitment talk and brief introduction of the model for the college administration. Results from the second instrument in cycle # 1- Content survey- indicated that after the course of lectures 85 % (n=18) of the participants learned all key components of the model and could easily identified

them. Moreover, 85 % (*n*=18) explained the importance of using all six key features as : (i) they all connected to each other; (ii) absent of one aspect would lead to the distraction of the model; (ii) the whole learning process within the model would be changed. They also mentioned availability of a text book and video as helpful resources for better understanding the theoretical aspects of the model. Based on that, we can conclude that the college students in this study have learned the main aspects of the model and demonstrated interest in acquiring more knowledge about the model.

The third instrument that was used to evaluate pre-service teachers' knowledge on the Sport Education model in cycle # 4 was the post-teaching questionnaire. Results from this instrument revealed that pre-service teachers acquired strong knowledge of the model. This conclusion is possible based on the pre-service teachers' responses to the most critical elements of the Sport Education model and their explanation as to why they believed in the significance of those elements. It was expected that pre-service teachers would identify instructional and training processes as most important for them to teach. There were strong roots and fundamental belief in the Russian education system that the training process should take most of the time during a physical education lesson in order to provide school children with necessary cardiovascular, strengthening, and conditioning load for main medical group. Interestingly, the pre-service teachers also identified the refereeing as one of the critical elements for them in Sport Education. This finding was attention-grabbing based on the fact that the post-teaching questionnaire was administered after school teaching during which the refereeing component did not work for this group of the college students. That suggests these pre-service teachers developed some concern and critical evaluation on their own teaching experience.

Results from the interviews that focused on the process of learning Sport Education, also support the idea that these pre-service teachers developed a strong knowledge of the model. Knowledge, as a theme, appeared in all four cycles of the research and data collection. In the beginning, most of the college students either could not explain their concept of the Sport Education model or just simply replied that it is mostly about student-teacher substitution. The quote from one of the participants in cycle # 1 presents this position:

> Teacher takes a second role…and kids take the main role in their hands and coordinate the lesson themselves, the teacher only take care of safety and makes necessary corrections to the students.

During cycle # 2, most of the college students still believed that teacher substitution is the main feature of Sport Education. However, some students began to mention that Sport Education is a completely different teaching style, the model itself is very capacious, and they underestimated the model after the first cycle of this study. As the learning and planning processes progressed, the college students started to form their perception about Sport Education more clearly. During cycle # 3, participants generally appreciated the work that was accomplished in developing the teaching kits. The model now became more interesting and separate pieces finally came together in a big picture. It was also mentioned by students that they were impatient to see the model in action.

Finally, during cycle # 4 the pre-service teachers did not mention substitution at all. Instead they argued that Sport Education is a complex model where participation, knowledge about sports, and independence in decision making are essential elements. For this study, it is safe to conclude that this particular group of pre-service teachers gradually built their knowledge of Sport Education across the program of study. This finding is consistent with several previous research studies examining the knowledge that the pre-service teachers construct during their

methods classes and actual school teaching (Jenkins, 2004; McCaughtry et al. 2004; Rovegno, 2003). This is a great change in pre-service teachers' knowledge and perception on new instructional model. Such change was also mentioned by Swanson and Spears (1995) who argued that a major change occurred in the content of teaching physical education when the curriculum in physical education shifted from an emphasis on just instructing and testing to an approach emphasizing learning and developing. Pre-service teachers in this study were able to list the key factors that had a significant influence on their work throughout the whole project and culminating internship. Specifically, these were the impact of cooperative work with the primary investigator, the extent to which they were held accountable for teaching the model, and the nature of the pupils they encountered. These factors were very similar to those organizational socialization agents that Curtner-Smith et al. (2008) had noted shaped the beginning teachers they had studied once they had graduated and begun their careers.

In addition, research on Sport Education and knowledge types suggests that it is "not necessary for pre-service teachers to have high levels of content and pedagogical content knowledge in order to use Sport Education effectively, providing they had a good understanding of the model, general pedagogical knowledge, and their pupils" (Stran, 2007). Findings from the current study did not support this statement. It was clear that pre-service teachers did not just have knowledge and understood how the model works. It was more than "knowing about" the model. It was also "knowing how" to do the model. This conclusion is similar to what Rovegno (2003) noted about teachers when they construct their knowledge about a particular curricular approach, that is, they form a cognitive understanding of it. Pre-service teachers in this study demonstrated a craft of the teaching by adding to knowledge by doing it and learning more by teaching it.

Teaching self-efficacy

The second research question was how the students' teaching confidence changed over the period of the study. This teaching self-efficacy was the second theme that appeared as a strong and solid theme throughout this research project. It was our intention to observe the pre-service teachers developing their own teaching styles with an increasing level of confidence for teaching at school settings. The development of the teaching style, defined as those behaviors used separately or in combination with other behaviors to convey the aspects of teaching excellence, things such as organization and clarity, personhood, integrity, and uniqueness (Parini, 2005). Sport Education is the model where pre-service teachers can work on these personal and professional characteristics.

As stated previously, none of the pre-service teachers in this study either taught physical classes before or had coaching experience. Considering this fact, we can speculate that in the beginning of the study, the college students were not ready to teach at school settings. Despite this, four out of eleven participants in cycle # 1 argued that they would feel comfortable teaching in school settings. Other participants were not that certain and agreed that they needed more time and practice before they actually enter a school gymnasium as pre-service teachers. After cycle # 2, where college students participated in a Sport Education season, their confidence level about teaching the model increased slightly. Yet, a majority of the students still had some uncertainties as to whether they were ready or not to teach the model. Many suggested that there was still a need to have more information about the model and practical experience teaching it. For the next cycle, planning a Sport Education season, we did not expect teaching self-efficacy to change significantly as this cycle did not involve any teaching experience. Despite this belief, most of the students stated that they felt very confident and wanted to teach the model following their

planning period. There is an explanation for this pre-service teachers' behavior which can be found in the structure and requirements for the planning process in the Russian education system. Planning is one fundamental and perhaps the most important part of the study process in the pedagogical colleges and universities. It is required of students that they have everything planned before any school practice or even lessons taught for classmates. Planning was a significant part of the upcoming school practicum for these pre-service teachers, and perhaps explains the level of appreciation for the time they spent in small groups and the primary investigator. Their teaching self-efficacy increased significantly because everything was done in advance, all lesson plans were written, rules and regulations for the seasons were discussed, and sceneries for culminating events were developed.

This strong valuing on the labor intensive process of planning that is so common in Russian pedagogical institutions helps us appreciate the failure of the online component during planning cycle. Despite the fact that technology has become an essential part of education and online and Internet usage is now a “must have part” of academia in many parts of the world, there are still countries, and Russia is one of them, where educational technologies are still underdeveloped and advantages of using online teaching and learning are underestimated. While designing this research project, in which the primary investigator could not be with the participants during the whole time of the study, it was our professional intention to use online-based communication tool to have ongoing process of developing Sport Education seasons and a discussion of work that is done on that subject. However, it did not work with this group of college students even though the students understood the importance of the research project and the need for them to have teaching materials ready for upcoming practicum in school. Moreover, they demonstrated a strong motivation and interest for using the Internet and online learning

tools in the future and specified many advantages for employing online resources into physical education profession. Nevertheless, the reality is different. We, of course, appreciate those students intentions to use technology for improving their learning and teaching qualities. However, it takes more than just one student's group intentions and one research project to change the current situation with technological approach in teaching professions.

As it relates to the current study, a Russian business professor Godin 2010, argued about the potential of online learning for academic institutions in Russia. The following limitations for implementing online education were mentioned. First, it is just not common for Russian people to rely more on some mechanism rather than a person (or in this case, a teacher). Second, the financial aspect of this type of learning is always a consideration for academic institutions in Russia. Many of these institutions simply do not have funding for computers and technology support for education. Third, accessibility to the Internet is somewhat limited. For instance, the physical education pedagogical college where the study took place had only four computers available only for college administrators, and only two of these computers are connected to Internet. There is no a computer lab or Internet connection available for students. Fourth, faculty support is also important in order to have meaningful use of technology for teaching process. Currently, it is very difficult to hold students accountable to use online instruments when the more familiar way of teaching and testing for them is still in place and hand writing is the most popular way of taking tests and preparing materials for lectures and exams.

To conclude, it was our prediction that the college students might not be fully engaged in online learning for the purposes of developing seasons for Sport Education. However, it was not expected that they would completely avoid the online component of this study due to technical difficulties and Internet accessibility. Nevertheless since they heavily depended on the planning

process for their school practicum and still could not trust to technological innovations enough to use it in planning process, the “old-fashion way” of planning was employed which subsequently resulted in increased levels of teaching self-efficacy.

The findings with regard the planning process were consistent with several previous research studies examining the importance of the planning process in physical education. As an example, Stroot and Morton (1989) found that one of the main characteristics of beginning physical education teachers in the K-12 setting was an extreme “plan dependence”. Beginning teachers relied heavily on written planning materials, especially when teaching unfamiliar models. Curtner-Smith et al. (2008) and Stran and Curtner-Smith (2009) also noted that gradually giving pre-service teachers more autonomy to plan their Sport Education seasons and lesson plans also seems to be important. Pre-service teachers' initial attempts to teach the model are more successful when they are provided with a season plan written by a faculty member from which they write lesson plans. This strategy ensures that pre-service teachers include all elements of Sport Education and allows them to experience the model's structural advantages.

Finally, during the actual teaching in a school (cycle # 4), most of the pre-service teachers (*n*=6) agreed that they felt comfortable enough to teach, but still believed they needed time and more practical experience before they would use the model in the future. They described this particular model as a more difficult pedagogical approach then their more familiar teaching. They saw Sport Education as more challenging to teach and suggested that they needed more time to acquire more specific teaching skills. Three pre-service teachers agreed that despite this intensive teaching and learning, they were still not ready to use Sport Education. In essence, they were unable to see any legitimate contexts where they would see themselves teaching what they considered to be such a complicated model. However, they did note that perhaps in the

future they may reconsider. Lastly, two pre-service teachers argued that they were ready to teach the model, had confidence in their teaching skills, but they had no interest in teaching Sport Education. This finding was the most intriguing outcome of this study because it was reinforces the findings of Sinelnikov (2009) during his study of veteran Russian teacher. In that case, the physical education teacher struggled to relinquish control of the instructional and competitive process during the season of basketball. Casey and Dyson (2009) in their study of a teacher learning to incorporate cooperative learning, also reported that the challenges of relinquishing control to students was one of the most difficult, but important outcomes.

Another critical incident that occurred in this study, was associated with this control issue, was refereeing. As it was reported, the pre-service teachers absolutely refused to give the school children an opportunity to referee their games and performances, and showed very strong resistance to any of the primary investigator attempts to reason about this issue or find a solution for this critical situation. It was their strong belief that only pre-service teachers should referee the competitions. The only rational explanations for their position were related to safety, discipline, and inexperienced pupils. However, perhaps the underlying (but not voiced) rationale had to deal with this notion of giving up control. The pre-service teachers knew about this important characteristic of the Sport Education model. They also planned the season and students refereeing as a part of the season, but still decided not to implement this key feature. This is also suggested that extra skills, actual experience, and trust needed to overcome such challenge as providing more autonomy to students.

The current research on pre-service teachers' self-efficacy in physical education is somewhat limited. However, the findings of this study do have parallels with others. For instance, Fisette (2010) argued that factors such as getting know your students, cooperative

learning, and projecting a positive self-image can significantly improve teaching self-efficacy among physical education teachers. Curtner-Smith and Stran (2009) also discussed conditions encountered by pre-service teachers in their culminating teaching practice that would appear to be crucial in terms of both learning and gaining the confidence to teach using the Sport Education model. Specifically, optimal conditions would involve pre-service teachers' being supervised by relatively innovative cooperating teachers, being asked to teach pupils who are reasonably well-disciplined in the first place and who have a reasonable level of skill and a basic understanding of sport.

Professionals in other educational areas are also concerned about the confidence level or teaching self-efficacy among pre-service teachers when they enter the field experience. In science, Palmer (2006) reported that many pre-service primary teachers initially have a low self-efficacy, or belief in their ability to teach, but well-designed education courses can produce significant positive changes in efficacy beliefs. However, the extent to which the belief changes are durable, or maintained over time, is yet to be established.

Future teaching

The final research question in this study was the likelihood of teaching this model in the future. During the interview part, this topic had very strong, opinionated responses from the participants and analysis of the data revealed it as a well-build independent theme. In the beginning of the research project (cycle #1), it was not reasonable to seek the college students' opinion of their intentions to the model in the future, given that at that time, they had so little exposure to the model and limited knowledge of it. After participating in the season (cycle # 2), however, the college students had two strong but completely opposite responses. Most (n=7) were particularly positive and stated that they were ready and would teach the model in the

future. Others (*n*=4) were more negative. They argued that despite the fact they had the first attempt to participate in the actual season, they did not want to make any predictions until they tried the model with school children. Also, the students mentioned obstacles they believed would prevent them from teaching the model at school settings. These were a lack of support from the school administration and colleagues as well the complexity of the model for school children to understand and accept. Interestingly, the college students did not report that the model was difficult to learn, however, they argued that it would be difficult for school children and other physical education teachers.

During the next cycle, Sport Education began to appeal to most of the students. After an intensive team work on planning Sport Education season, most of them agreed that they were ready or somewhat ready to use the model in the future. This change of opinion can be explained by the personal presence and involvement of the primary investigator as well as by increases in teaching self-efficacy achieved during cycle # 3. In addition to the positive responses, negative responses still did appear in some students' opinions about their intent to teach Sport Education. There was a group of students who believed they would not teach the model, due again, to issues of school politics as well as a perception that children would be unwilling or not motivated to participate.

By the end of the teaching practicum and the research project itself, two groups with strong opinions on intentions to teach the model became apparent. All of the male pre-service teachers and one female stated they would use this model in the future. This motivating position can be explained based on the factors that were expressed by the same pre-service teachers. These include team participation, children's attraction to the model, pre-service teachers' beliefs that the model is not complicated at all, and a sense that current physical education is boring.

However the second group, which consisted of female students (who had taught the gymnastics unit), strongly agreed that they either still not ready for independent teaching of the model or they would not teach it all. A variety of reasons can be explored when trying to explain these positions. First, the students' physical education experience and personal biographies should be considered. For instance, one pre-service teacher talked about her own physical education experience as the only one that is right. Danya identified her position as:

> I have said already I will not teach this model in school. I do not like the way how it all should be build and plan. It's not something we have been taught and not how we were taught physical education at school when I myself was a school student. I like how the old way works, as my teacher taught physical education lessons. I will teach this way as well because I know how to do it, but in this model everything is just odd.

Second, school traditions or school politics were another significant concern for the pre-service teachers. This essentially, however, was a misguided conception about the role a school's administration plays in any physical education teacher's choice of curriculum model or teaching style. In Russian schools, the administration is responsible for the curriculum and content of school subjects, but it is the physical education teacher who is responsible for the method of delivery the lessons content. Nonetheless, there was a strong belief that other physical education teachers would not support this innovation. Third, these particular pre-service teachers seemed to already have a strong stereotype on how physical education should be taught, largely due to the significant influence of their current physical education system and college learning experience. As they were still inexperienced and needed perhaps more time to gain knowledge, confidence, and practical skills, this stereotype is understandable.

These findings are supported by existing literature on pre-service teachers' intentions to use alternate teaching approaches. Hutchinson (1993), for example, examined pre-service teachers' reason for entering the educational field and stated that many of them followed the examples set by their physical education teachers. This phenomenon is known as a custodial teaching approach.

In addition, the pre-service teachers in the current study demonstrated strong intentions toward teaching rather than coaching. This finding is supported by Curtner-Smith et al. (2008) who suggested that recruits with what they called " a teaching orientation"(that is, were more oriented to teaching physical education than coaching sports) and who received excellent training in Sport Education in their PETE program were more likely to teach some form of Sport Education.

Once again, school culture has the potential to impact the type of season implemented. In what Curtner-Smith describes as an " innovative culture" (one where students are prepared to initiated change and take curricular risks) would see teachers implementing the full version of Sport Education whereas those in a custodial culture would either fight to change the status quo and employ the full version of Sport Education or used only some parts of the model. In this Russian case, however, these pre-service teachers appeared to be strongly teaching-oriented who initially intended to employ the full version of the model, but were unable to overcome some of their own beliefs and past experience.

Conclusion

Despite some limitations, this study contributes to our understanding of the mechanics of learning and implementing the Sport Education model by pre-service teachers during their field experiences. To conclude the discussion on the findings of this research project, it can be stated

that this study was unique in a number of ways. In previous research, there has been a variety of approaches to teaching Sport Education to pre-service teachers. Some PETE programs suggested in-depth teaching methods/models courses followed by school practicum. Others offered participation in a Sport Education season after a teaching methods course, but without any actual school teaching. Still in other cases, the only exposure involves a seminar on current curriculum models without any follow up practice or teaching. This study was the first to examine pre-service teachers during all four steps: lecture participation, planning, and teaching. Also, data were collected at all four stages which allowed for the constant monitoring of the process of learning, understanding, and implementing the model. Another unique aspect of this study was the evaluation of pre-service teachers self-efficacy. There is no other research available that has studied teaching self-efficacy during the learning, participating, and teaching a Sport Education season. This study was also the first to use an action research approach when learning Sport Education. It was also observed that this method kept the student-teachers motivated and on-task throughout the study. A combination of action research and Sport Education allowed pre-service teachers and the primary investigator to have high activity ratios as well as teaching environments that kept motivation and interest high.

The findings of this study allowed us to identify the critical features that are supporting and inhabiting both self-efficacy toward teaching Sport Education and the likelihood of doing it later in school settings. For some students, the positive responses of the school children gave them enough confidence that they would try to do it in the future. However, for others, the ability to accept a model that challenges their physical education biographies, both as students in school and students in pedagogical college, was too strong to overcome.

Finally, this study presents many implications for physical education training programs and provides directions for future research and ways to incorporate this study's findings into the preparation of pre-service teachers, not only in Russia, but also in the United States. Even within early field experience, the strong teaching strategy can result in pre-service teachers focusing on the outcomes of their teaching and on the effect of the various components of Sport Education on school children as opposed to being consumed with their own actions, discipline, and management as they are when at the same stage of learning to employ this or other models (Curtner-Smith & Sofo, 2004; Curtner-Smith et al., 2007).

Future research

For the reason that this was an international study but with the model that was originally developed in the US, recommendations for the future research should be made for both international and domestic research.

Considering the fact that this study was an initial attempt to introduce Sport Education and employ a professional development to pre-service physical education teachers in Russia, more studies are needed to further investigate the potential of professional development in Russian academic institutions.

Future investigation might follow up this same group of students to see if they do indeed use this model or some part of the model for their final internship during their senior year in the pedagogical college. Further, it would be worthy to follow these students after they graduate and begin their teaching careers. In particular, when, and under what conditions are led to actually incorporate Sport Education, and if they do not do so, what are the actual inhibitors. Moreover, the present study could be replicated in other pedagogical colleges, or in state university programs.

Another set of recommendations can be made particularly for research in the United States. This study looked specifically at pre-service teachers using Sport Education. This research might be extended to examine learning of other curriculum models. Following pre-service teachers through learning any model or in teaching physical education in general, should be very helpful in observing and learning how students gain knowledge and understanding of models-based practice and their intentions to use it.

Future investigations may also look more into using action research approaches for teaching Sport Education (or other curriculum models) to pre-service teachers. Despite the complexities of this action research project I learned that this in-depth reflective experience brought me closer to my students both as a professional and as a fellow teacher. I learned to listen to the opinions and responses of my students during our continuous interchange of action and reflection. The pre-service teachers in this study took their responsibility seriously and provided me with continuous feedback during the research process. As a teacher educator/action researcher I became closely involved with the participants of this study as we shared the responsibility of teaching and learning with a non-traditional approach. We all learned later in the practicum that the pre-service teachers' success at learning and teaching Sport Education approach was greatly dependent on my interest and involvement in the process of introduction of this new instructional approach. That could be another potential future research, the investigation of the role of the facilitator in the professional development for pre-service teachers during a season of Sport Education.

This study provides a rich description of professional development and effective teaching for pre-service teachers in Russia. However, more studies are needed with pre-service teachers working in different school settings, with different levels of teaching or coaching experience, and

diverse backgrounds in their past physical education experiences and personal biographies. The pre-service teachers in this study held similar understanding of the concept of Sport Education. Therefore, research with pre-service teachers, who hold different theories, is recommended in order to explain and expend our knowledge of the relationship between pre-service teachers' theories of action and the theories-in-use (Tsangaridou & O'Sullivan, 2003).

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APPENDIX 1

CYCLE # 1

QUESTIONNAIRE/SURVEY

INTERVIEW GUIDE

Sport Education Questionnaire

This questionnaire is developed to identify student's initial knowledge on pedagogical model in general and the Sport Education model in particular.

Name: _____

Directions: Below is a section of questions of your knowledge and understanding of pedagogical model in physical education. Please indicate your answers by filling in the blanks provided or checking the appropriate response.

What pedagogical classes did you take as a part of your major?

_____

_____

_____

_____

_____

Are you familiar with any of the following models used in physical education?

Fitness testing Yes____ No ____
Sport education Yes____ No ____
Peer teaching Yes____ No ____
Cooperative learning Yes____ No ____
Child-design games Yes____ No ____
Adventure Education Yes____ No ____

Have you ever heard about the Sport Education model? Yes_____ NO ____

If yes, please provide everything you know about this model in the space below

_____

_____

_____

_____

_____

_____

Content Survey

Name: _____

Directions: Below are questions about your knowledge and understanding of Sport Education model. Please indicate your answers by filling in the blanks provided or checking the appropriate response.

Describe Sport Education as a curriculum model.

_____

_____

_____

_____

_____

_____

Identify six key essentials of the Sport Education model.

_____

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Why it is important to include all six features in each sport unit?

_____

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_____

Identify one short and one long-term goal for a Sport Education unit.

_____

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_____

What do you think will help you in the future to teach Sport Education better?

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Interview guide

1. What is your general concept of teaching team sports in school setting?
2. What is your general perception on the Sport Education model?
3. In your opinion, how useful this model for elementary and secondary school? Why have you specified these aspects?
4. The next part of this project is to design and implement a Sport Education unit using college students as your participants. How comfortable are you to teach this model to college students?
5. Eventually, you will develop and teach Sport Education unit for this class. How comfortable are you to teach this model in school?
6. Can you estimate how much time you need to become confident teaching Sport Education model?
7. Is there anything else you would like to say about Sport Education model, your thoughts and experience about it?

APPENDIX 2

CYCLE # 2

INTERVIEW GUIDE

Interview guide

1. Tell me about your general perception on Sport Education model based on your first experience teaching it.
2. Have you concept changes during the course of teaching this model? Please give details of any specific ideas you have.
3. How can you evaluate experience you have gotten teaching team sport (especially Sport Education unit) with college students this semester?
4. How comfortable are you to teach concepts of team sports in schools after this class?
5. How comfortable are you to teach Sport Education unit in schools after this class?
6. What is the probability that you will teach it in school in the future?
7. Can you identify any barriers for you as a future physical education teacher in term of teaching Sport Education model?
8. Is there anything else you would like to say about Sport Education model, your thoughts and experience about it?

APPENDIX 3

CYCLE # 3

INTERVIEW GUIDE

Interview guide

1. Tell me about your experience on planning and developing a Sport Education unit?
2. Tell me about your experience on using interactive website for developing a Sport Education unit?
3. How can you evaluate this interactive website as a communication tool? Was it helpful for you to use? Did you experience any difficulties during the communication process with primary investigator? Please give details of any specific concerns you have.
4. Can you identify any barriers for you as a future physical education teacher in term of using this interactive tool for teaching Sport Education model?
5. How can you evaluate experience you have gotten developing Sport Education unit for your actual teaching?
6. How comfortable are you to teach concepts of Sport Education in schools after this experience?
7. What is the probability that you will teach it in school in the future?
8. Is there anything else you would like to say about Sport Education model, your thoughts and experience about it?

APPENDIX 4

CYCLE # 4

SURVEY

INTERVIEW GUIDE

Post-teaching experience survey

Name: _____

Directions: Below are questions about your teaching experience with Sport Education model. Please indicate your answers by filling in the blanks provided or checking the appropriate response.

What were the most critical elements that helped you learn how to teach Sport Education? List as many as you can think of.

_____

_____

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_____

Select your top five critical elements in order of importance starting with one as your highest priority.

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Select your top three critical elements and explain why they are your top priority?

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What do you think will help you in the future to teach Sport Education better?

_____

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What would you change next time when you are doing Sport Education season?

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Interview guide

1. Tell me about your experience on teaching a Sport Education unit?
2. Tell me about your general concept on Sport Education model.
3. Have you concept changes during the course of teaching this model? Can you compare your learning/teaching experience in the beginning of this project with your actual teaching in a school? Please give details of any specific thoughts you have.
4. How can you evaluate experience you have gotten teaching team sport (especially Sport Education unit) with school students this semester?
5. How comfortable are you to teach concepts of team sports in schools after this experience?
6. How comfortable are you to teach Sport Education unit in schools after this experience?
7. What is the likelihood that you will teach it in school in the future?
8. Can you identify any barriers for you as a future physical education teacher in term of teaching Sport Education model?
9. Is there anything else you would like to say about Sport Education model, your thoughts and experience about it?

APPENDIX 5

IRB FORMS

LETTERS

AUBURN
UNIVERSITY

COLLEGE OF EDUCATION

DEPARTMENT OF KINESIOLOGY

INFORMED CONSENT
for a Research Study entitled
"Sport Education Model for Russian schools: Professional Development and Effective Teaching for Pre-Service Teachers"

for Physical Education Pedagogical College № 3

You are invited to participate in a research study to determine how pre-service teachers learn to teach a Sport Education model. The study is being conducted by Olga Glotova, MA, under the direction of Peter Hastie, Ph.D. in the Auburn University Department of Kinesiology. You were selected as a possible participant because you are currently enrolled in a Physical Education Teacher Education program in Physical Education Pedagogical College № 3, and are age 19 or older.

What will be involved if you participate? If you decide to contribute in this research study, you will be asked to participate in four parts of the study. First, you would attend a seminar on a Sport Education model. Second, you will teach a Sport Education season, 12-15 physical education lessons based on one sport that including both practice and competition, to college students under supervision of the primary investigator. Third, you will plan and develop a Sport Education season using the interactive website my.pbwiki.com. Fourth, you will teach the season you have designed in a public school setting as a part of the regular physical education curriculum. After each part of the study, you will be asked to fill out a questionnaire or survey on your experience of learning the model as well as participate in semi-structured interviews. Your total time commitment will be approximately 8 months.

Time line for the project

Calendar 2010			
April	May	June-October	November-December
Part I Introduction to Sport Education model • seminar • 2 weeks	Part II Teaching Sport Education model to college students • practice • 4 weeks	Part III Designing Sport Education season for school • online • 6-8 weeks	Part IV Teaching Sport Education season to school students • practicum • 4-5 weeks

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Are there any risks or discomforts? There is a possible risk of breach of confidentiality. This risk will be reduced by using pseudonyms instead of names. The only discomfort associated with participating in this study is time inconvenience. To minimize the risk we will accomplish the study during the teaching methods class.

Are there any benefits to yourself or others? If you participate in this study, you can expect to gain experiences and learn information about designing a new curriculum model which can be applied in the Russian educational system. We cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? There will be no monetary compensation for your time.

Your privacy will be protected. Any information obtained in connection with this study will remain confidential. Information obtained through your participation may be used for a dissertation, presented at professional a conference, and published in a professional journal.

If you have questions about this study, please ask them now or contact me, Olga Glotova at my phone number in Russia (8422) 45-93-56. If you have an access to Internet, you may also contact me via e-mail by ong0001@auburn.edu. You may also contact my academic advisor Peter Hastie at (344) 844-1469 or by e-mail hastipe@auburn.edu. A copy of this document will be given to you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Participant's signature Date	Investigator obtaining consent Date
Printed Name Printed Name	Printed Name
	Co-Investigator Date
	Printed Name

Ulyanovsk Physical Education Pedagogical College № 3

25, Prospect 50-letiya VLKSM
Ulyanovsk, Russia

February 2010

Auburn University Institutional Review Board
c/o Office of Human Subjects
307 Samford Hall
Auburn, AL 36849

Please note that Ms. Olga Glotova, AU Graduate Student, has the permission of the Ulyanovsk Physical Education Pedagogical College № 3 to conduct research at our 25, Prospect 50-letiya VLKSM facility for her study, "Sport Education model for Russian school: professional development and effective teaching for pre-service teachers ".

Ms. Glotova will contact students to recruit them by approaching them during teaching methods class. Her plan is to have 10 students ready to participate in the study by the end of April 2010. In the beginning of the April 2010, our office will provide introduction information section to students regarding for her research. Ms. Glotova's on-site research activities will be finished by May 2010.

Ms. Glotova has also agreed to provide to my office a copy of the Auburn University IRB-approved, stamped consent document before she recruits participants on fields, and will also provide a copy of any aggregate results.

If there are any questions, please contact my office at 7-8422- 45-19-03

College Principal,

Borisov B.V

Municipal school № 85

145-A, Efremova street
Ulyanovsk, Russia

February, 2010

Auburn University Institutional Review Board
c/o Office of Human Subjects
307 Samford Hall
Auburn, AL 36849

Please note that Ms. Olga Glotova, AU Graduate Student, has the permission of the Ulyanovsk Municipal school № 85 to conduct research at 145-A, Efremova street facility for her study, "Sport Education model for Russian school: professional development and effective teaching for pre-service teachers ".

Ms. Olga Glotova is planning to have a practicum for pre-service teachers from Ulyanovsk Physical Education Pedagogical College № 3 and Ulyanovsk State Pedagogical University at our physical education facility. Ms. Glotova's on-site research activities will be accomplished in November-December 2010.

Ms. Glotova has also agreed to provide to my office a copy of the Auburn University IRB-approved, stamped consent document before she recruits participants on fields, and will also provide a copy of any aggregate results.

If there are any questions, please contact my office at 7-8422 - 62-05-47

Principal,

Seleznev M.Y