

ORIGINAL RESEARCH

Using Sport Education to Teach Wushu, a Form of Chinese Martial Arts

Peter A. Hastie¹, Yanhua Mo², & Hairui Liu³

¹ School of Kinesiology, Auburn University, AL, USA

² Guangxi Normal University, China

³ University of Winnipeg, Manitoba, Canada

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ABSTRACT

This study examined the veracity of the commonly held notion that ‘there is only one way to teach Chinese martial arts.’ To achieve this, a cohort of Chinese physical education majors and their teacher participated in a semester-long season of Wushu taught using Sport Education (SE). Data were collected from the teacher in the form of weekly logs and interviews and students participated in small-group interviews throughout the program. Student grades were also analyzed. Student and teacher generated data were analyzed using analytic induction and constant comparison techniques. There was a high consistency among teacher’s log entries, her interviews, and comments made by students during interviews. Nevertheless, one topic that occupied significant discussion in the final interview was the teacher’s sense of professional renewal as a result of the SE project. Analysis of student interviews generated six themes, most which reflected student responses about SE (e.g., teams, competition, roles) but which also expressed a preference for the instructional climate of classes. Further, participation during the season did not compromise knowledge or skill performance of these students. Rather, SE led to higher levels of enthusiasm and engagement than in students’ previous martial arts courses.

Key words: Wushu, Teacher Education, China, Engagement, Motivation

INTRODUCTION

The practice of martial arts in China has a long and storied history, tracing back as early as the Shang dynasty (1600-1066BC) (Li & Du, 1991). Currently, it is estimated that over 70 million Chinese citizens practice martial arts as part of their lifestyles, with a focus on the fighting, health, or cultural elements (Zheng & Yuan, 2013). Originally there was not a single martial arts style, but a number of schools and variations (Wang, 2010). However, in the 1950s all different forms of martial arts were standardized by the central party (Lorge, 2012). The term adopted was “Wushu”.

There are two disciplines in modern Wushu competition: routines (*taolu*), consisting of sets of connecting stylized movements (with or without traditional weapons), and free sparring (*sanda*) that includes kicking, punching, grappling, and throwing techniques (Chinese Wushu Association, 2008). However, within school and university physical education, only the *taolu* discipline is taught.

In Chinese universities, physical education is a compulsory requirement for graduation for students in all degree programs. Instruction in Wushu itself appears in three formats (i) as an optional physical education class for all students, (ii) as a required component of physical education degrees, and (iii) as a specialty study area within physical education. Nonetheless, the instruction of Wushu is not without its critics. Some of these are philosophical, while others focus on pedagogy. From a philosophical perspective, the content of courses is seen as somewhat superficial, leading to what Tan (2009) describes as a curriculum that is “broad but not deep, substantive but not refined”, and where students’ learning of martial arts techniques and martial arts culture mostly stays at the level of “initial experience”. Further, Chai and Sun (2020) suggest that the focus on technique fails to include the spiritual/theory behind the practice of Wushu.

More frequent than philosophical discussions about Wushu content, however, are criticisms about how Wushu instruction is delivered (Du et al., 2018). In essence, the teaching of Wushu follows a very controlling form of teaching where the teacher is seen as the

exclusive source of knowledge, and students practice rote movements in specific orders in order to develop mastery of individual techniques (Wang, 2018).

Together, these features of rote learning within Wushu instruction have been critiqued from two perspectives. The first is that many students see it as boring, particularly given the emergence of new physical spaces and digital cultures that play a significant role in Chinese society today (Frangville & Affric, 2019). Second, given the lack of Wushu instruction in primary and secondary schools, college students are not familiar with, do not understand, do not respect Wushu, and generally lack interest in learning Wushu (Li & Lu, 2018). Within the abundance of theoretical papers recommending an overhaul of the practice of Wushu instruction, there are those who present the Sport Education (SE) model (Siedentop et al, 2020) as a way of changing the paradigm (Tan, 2009; Yang & Yang, 2012). The central tenet of these papers is that through the repositioning of the status of students and teachers, in which cooperative learning is promoted through various roles and responsibilities, students would gain a more complete understanding of the content of Wushu.

The use of SE in Chinese physical education is not new, and there have been reports of successful forays reported in both Chinese and English journals. Examples include increases in students' intrinsic motivation and task orientation (Xiong & Ma, 2013), enhanced student enthusiasm and initiative, and well as improved interest in learning and participation (Wu, 2018), and increases in motor skills (Liu, 2015; Liu et al., 2020).

Despite this evidence, the notion of SE being a suitable vehicle for the instruction of Wushu has met significant resistance. Arguments include that students do not have sufficient content knowledge or technical skill to carry out the roles that are transferred to students during the model. In particular, the main concerns relate to the capacity of apprentice Wushu participants to teach/coach peers or to adequately and accurately officiate during competitions. Ancillary concerns include the time taken to train students in these roles takes time away from performance training. The primary aim of this paper was to explore whether participation in a season of SE would compromise the learning of Wushu technical skills, which is the fundamental goal of the traditionalists. A second aim was to examine the experiences of the participants within SE classes (teacher and students) in terms of their motivation and attitudes toward Wushu.

METHODS

Participants

Participants in this study were 54 male physical education students enrolled in two second-year level Wushu classes at a university in southern China. Twenty-eight students participated in a class using the SE model and 26 students in a second class following traditional, teacher-directed Wushu instruction. At the end of the first class, students were asked to answer three questions with respect to their experience with Wushu. These were answered using a 7-point semantic differential scale. Questions included "How would you rate your skill level of Wushu?, How much do you enjoy practicing Wushu?, and How confident are you in your ability to teach Wushu to students in school?" Both cohorts were very similar, with students reporting low levels of perceived competence (< 1.5), mediocre levels of enjoyment (< 4.4) and low levels of instructional competence (< 3.5).

The female teacher in this study had been a faculty member in the college of physical education for the past 11 years. She had been teaching Wushu for 10 of those years to both the regular student population in elective physical education classes, as well as to physical education majors. The teacher had also participated in three Wushu specific professional development programs at both regional and national levels. Her annual teaching evaluations average 93+ on a 100-point scale.

Wushu Instruction

Students in both classes participated in two, 90-minute lessons per week over 16 weeks that were conducted in a large indoor sports hall. The Wushu content for all students consisted of three parts (a) fundamental body movement skills - punch, (b) skills with a knife, and (c) skills with a stick. Punch, knife, and stick parts involved learning 32, 18, 17 movements respectively. All skills were learned in a set order. In this study, traditional and SE cohorts followed some content progressions, with only the format of delivery being different. Table 1 shows the traditional presentation of Wushu content.

Table 1. Traditional Wushu Class Schedule

Week	Content	Week	Content
1	Introduction of syllabus and skills	10	Knife movements 13-18
2	Review fundamental movements; First 14 punch movements	11	Test: Knife movements 1-18; Stick movements 1-8
3	Review first 14 punch movements; Paired practice 14 movements	12	Stick movement 9-17
4	Practice individual and paired 14 punch movements; Test	13	Stick movement review
5	Introduce and practice second 18 movements	14	Test: Stick movements 1-17
6	Practice individual & paired 18 punch movements	15	Practice: punch, knife, and stick
7	Test: individual & paired 18 punch movements	16	Practice: punch, knife, and stick
8	Fundamental knife movements; Knife movements 1-6	17	External skill testing for grade
9	Knife movements 7-12		

Traditional Format

The focus of instruction for the traditional class was exclusively on learning the fundamental technical skills of Wushu and then demonstrating the correct form. Lessons consisted of 25 min of warm-up, followed by 40-50 min of teacher demonstration, and 15 min of individual skill practice. The time spent on the various disciplines (punch, knife, and stick) was approximately six, four, and three weeks respectively, with the final three weeks allocated to theory learning and practice for the final exam.

Sport Education

Table 2 shows the plan for the Wushu season. Central to the plan were four competitions interspersed with formal instruction from the teacher as well as team practices. Students were also given opportunities to learn the officiating process of Wushu. The first three competitions focused on the development of skills relating to (a) fundamental body movements - punch, (b) skills with a knife, and (c) skills with a stick. These skills were repeated during the fourth competition (the culminating event) where teams presented choreographed routines.

The competitions were central to the season. During these competitions, a randomly selected student from each team was required to demonstrate a random sequence of four moves (e.g., 4-7 or 13-16) before a judging panel consisting of the teacher and two representatives from each of the other teams. Scoring for each competitor was on a 1-5 rating scale that focused on posture, quality of movements, smoothness, and the correctness of the sequence. The grade from the teacher counted towards the performing team, while the score for the officiating team was derived from the extent to which the judges matched the teacher's score.

Table 2. Wushu Sport Education Season Plan

Week	Content	SE Tasks
1	Introduction of syllabus, Explanation of the season, Introduction of skills	<i>Place students in teams</i>
2	First 14 movements, Teacher directed learning (whole class), Some partner checking of easy skills to check	<i>Partner checking of easy skills (Teacher to choose from the list of 14)</i>
3	Team training First 14 movements, Teacher rotate through teams Offer voluntary T led training camp for students struggling	<i>Students have random numbers of cards with skills listed Test teammates knowledge of moves, Check for form Can be led by a student leader or in pairs (small groups)</i>
4	Second 18 movements, Teacher directed learning (whole class) Some partner checking of easy skills to check	<i>As per week 2</i>
5	Team training Second 18 movements, Teacher rotate through teams Offer voluntary T led training camp for students struggling	<i>As per week 3</i>
6	Introduce competition 1, Random sequence of 4 moves (4.5.6.7 or 14,15,16,17) etc., Explain scoring system	<i>Practice with 2 teams to show how the whole competition works (Practice), Second lesson of the week do the competition, Scoring is by T and 2 representatives.</i>
7-8	Repeat lessons 2 & 3 with knife movements	
8	Knife competition as per lesson 6	
9	Repeat lessons 2&3 with stick movements	
10	Stick competition as per lesson 6	
11	Revisit punch movements	
12	Revisit knife/stick	
13	Team practice and allocation of presentation within team	
14	Presentation competition (round 1): punch competition, knife competition, stick competition	<i>Team A vs Team B</i>
15	Presentation competition	<i>Round 2 – semis and finals</i>
16	Practice for final assessment by external teachers	
17	External skill testing for grade	

Fidelity of the Instructional Conditions

In terms of validation, videos and photographs taken during the course showed students participating in student-led team practices, officiating, and record keeping. To account for constraints that may have resulted in a possible misapplication of the model, the teacher sent a weekly review of events in which any problems or misunderstandings were outlined. The teacher received a response within 24 hours. All these strategies served to confirm that students did receive a well-founded version of SE as intended by its creators.

Data Collection

Student grades: Students' scores for the three components of the course, (a) class performance (10%), final skill examination (60%), and theory test (30%), as well as the overall grade were recorded. Class performance was awarded by the teacher based on attendance, effort, and commitment to learning. The final skill examination was conducted in week 17, in which students from all classes reported to the indoor sports hall. Students rotated through three stations (punch, knife, stick) and performed the complete set of Wushu skills before college faculty and senior students certified as Wushu referees. The final evaluation was based on five perspectives: (a) postures (correct) - 20%, (b) movement (standardized) - 20%, (c) power or strength of the movement -20%, (d) coordination (hand-eye) - 20%, (e) presentation/performance/spirit - 20%. Punch accounted for 40% of the total score, while knife and stick were 30%.

Data were collected from the two classes of the instructor in this study as well as two other classes from other Wushu instructors during the same semester. Having grades from other Wushu instructors provided a large sample of data from the traditional format.

Teacher logs and interviews: Each week, the teacher wrote a reflective log (ranging between 1000 and 1500 words) to describe particular incidents and interactions that happened during the lessons and how these were particularly meaningful to her. These were emailed to the research team weekly.

Two interviews were held between the teacher and the third author. Following the second competition, the teacher was asked to compare her experiences of the two classes, particularly in terms of skill development, motivation, and behavioral and cognitive engagement. The teacher was also asked to comment on her confidence to deliver SE. At the completion of the course, the teacher was asked to provide an overall summary statement about her experiences in the project, referencing both classes. Follow up questions focused on her pedagogy, the abilities and responses of students, as well as any difficulties and challenges faced when implementing SE. Both interviews lasted one hour.

Student interviews: At three time points during the course, two students representing each of the teams participated in small-group interviews, also with the third author. The first interview (conducted following the first competition), focused on the design of the class, students' ideas of team training and the taking of roles, as well as their greatest and least concerns about their potential success in the course. These questions were also posed after the second competition, with particular interest being placed on any changes of perceptions with added experience in the SE format. Following the grand presentation at the end of the course, students were asked to reflect on the season as a whole, the development of their Wushu skills, and for comparisons between this format of instruction and those they had previously experienced in the training as prospective teachers. Interview time was one hour per interview for the first two, and two hours for the final interview.

Data Analysis

Student grades: Four separate analyses of variance (ANOVA) were conducted to compare the scores for the three components of the course and the overall grade for students participating in either SE or traditional instruction. An alpha level of 0.0125 was used based on a Bonferroni adjustment.

Logs and interview data: All logs and interview transcripts underwent a line-by-line analysis by two members of the author team. Each record was identified by class (SE or traditional) and week. Analytic induction and constant comparison techniques (Goetz & LeCompte, 1984) were used to reduce the data to meaningful themes. Specifically, participant responses were coded, categorized, and then collated into themes. Specific quotes and terms were then selected to represent each theme.

RESULTS

Student Grades

Table 3 compares the performance of students in the two teaching conditions. For the three most critical elements (skill exam, theory tests, and overall score) there were no significant differences between the classes. These data allow us to reject the idea that learning Wushu through SE would compromise student learning and performance. The one difference between groups was for class performance. While accounting for only 10% of a student's grade, it is notable that students in SE significantly outperformed their peers in terms of attendance, effort, and commitment.

Table 3. Comparisons of Student Performance Across Teaching Conditions

Component	Sport Education M (SD)	Traditional Instruction M (SD)	F (1,106)	p	η ²
Skill exam (60%)	81.5 (8.7)	79.3 (7.6)	1.88	.176	.034
Theory tests (30%)	91.9 (5.1)	94.4 (7.8)	2.38	.126	.022
Class performance (10%)	96.7 (2.9)	87.8 (14.6)	9.49	.003	.152
Overall score	86.2 (5.2)	85.2 (8.1)	0.26	.530	.004

Student Perceptions

Analysis of interviews with SE students generated six themes (see Table 4). Within these themes, certain comments or ideas were repeated by a number of students across all three interviews. These were categorized as “predominant”. “Reoccurring” topics appeared across more than one interview, although were expressed less often. Those terms or topics relating to the theme that appeared as single cases or within one interview were considered “incidental.” However, these incidental cases still related to the central theme and add to our understanding of the students’ perspectives. In fact, some of these incidental comments were negative cases of the theme.

Climate: The students were unanimous in their view that the practice of Wushu in the past had been particularly boring, to the point of being tedious. In essence, they described their previous lessons as “skill instruction, then practice, practice, practice.” In contrast, the SE format was given many labels, including “motivating,” “fun” and even “innovative.” This led to it being described by most students with the phrase “this form is *not* boring.” While many students suggested they were prepared to undergo skill instruction followed by practice, they expressed the major pedagogical challenge of a traditional teacher was “how to keep the student-focused is the most critical issue they are focused in the first half, but the second half is the challenging part.” What was attractive about SE was that it was “more than teaching and practice.” Practice was accompanied by competitions, learning how to referee, and leading team and class events such as warm-ups. In essence “the structure makes every student have to participate and be involved.”

Competitions: The competitions (referred to as “games” by the students), were seen as central to the positive climate of the class. They were seen as fun and meaningful, leading students to be more enthusiastic about Wushu, “rather than just practice-practice-practice forever.” The competitions were seen as serving a dual pedagogical purpose. First, as “Wushu needs a lot of time to practice, the competition encourages students to practice with a specific purpose.” Practices thereby assumed a degree of seriousness, as “preparation for the game can encourage students to review/go over the movements we learned in the past lessons.” Second, the feedback given to students in terms of scores “helped them keep improving the movement quality.”

The one negative case discussed by students was that there were too many competitions during the course. Students were required to participate in a college-wide competition in addition to those in the course, and two students commented that this extra demand “detracted from the time students spent practicing,” given the time needed to learn how to officiate associated with the games.

Teams: The most common point made by students concerning persisting teams is that they “created a peer support mechanism.” In essence, “every student in the team can ask questions or seek help if they need it.” Others commented that having teammates will help you to “not be intimidated by your lack of confidence in Wushu skills.”

Some students focused on the pedagogical advantage of teams. As one noted, “compare this to a class without divided students into a fixed team, and I can imagine the teaching will be hard to organize. You will have to miss part of students who needs the teacher to help them with additional instruction. The structure of the team (3-4 people) can solve this problem.” Others reinforced this idea that having peer instruction allowed the teacher to “move more freely to assist students most in need.”

Roles: Across teams and time, students noted that the roles of team coach and warm-up leader provided “an opportunity for the student to practice their leadership”. As a coach it was “important to get the respect of your teammates”, while leading the class in warm-ups required you to be “responsible to plan carefully.” Nonetheless, not all roles were seen as essential. Aside from the coach, the team roles of strength and conditioning specialist and team manager were seen as somewhat “superfluous.” The students mentioned that these roles were rarely incorporated during classes and at times, the responsibilities associated with them were “unclear.”

Referee: The role of referee was seen by students as a positive aspect. First, they noted that “experiencing both player and referee help me learn better. Knowing the criteria will help you learn Wushu.” More specifically, “you notice a lot of the wrong movements when you are a referee... you will pay attention to your own practice and recall these wrong movements and postures, then avoid making those mistakes.” The students also agreed that their officiating judgments became more accurate with time. Indeed, by the third interview, students commented that “most are getting close to matching the teacher’s score. It is impressive.”

New learning style: The final theme had a future focus in that it did not relate to the specific elements of the season. Rather it was a holistic assessment of how the structural features of SE “all help prepare me (as a pre-service teacher) for my future career.” Examples included “learning how to lead a warm-up,” and “how to organize class (teaching).” The learning enhancement provided by persisting teams and the motivating feature of competitions were also seen by the students as “providing more elements and opportunities for students in their learning.”

Table 4. Prevalence of Themes from Student Interviews

Theme	Predominant	Reoccurring	Incidental
Climate	<ul style="list-style-type: none"> • Traditional Wushu is boring/tedious • This form of Wushu is not boring 	<ul style="list-style-type: none"> • Motivating • Fun 	<ul style="list-style-type: none"> • New • Innovative Exciting
Teams	<ul style="list-style-type: none"> • Peer support mechanism 	<ul style="list-style-type: none"> • Frees teacher to attend to specific students 	<ul style="list-style-type: none"> • Small teams benefit practice • Element of seriousness
Competitions	<ul style="list-style-type: none"> • Encourage focused practice (prior to) • Help learning by providing feedback (following) 	<ul style="list-style-type: none"> • Fun to compete • Meaningful learning • More enthusiastic about Wushu 	<ul style="list-style-type: none"> • Nervousness (though decreases with time) • Too many detract from practice time
Roles	<ul style="list-style-type: none"> • Practice leadership 	<ul style="list-style-type: none"> • Some roles are superfluous 	<ul style="list-style-type: none"> • Unclear responsibilities
Refereeing	<ul style="list-style-type: none"> • Enhances one’s own learning • Improves with practice 	<ul style="list-style-type: none"> • Learn more than just skills 	<ul style="list-style-type: none"> • Another angle to experience Wushu
New learning style	<ul style="list-style-type: none"> • Learned skills I can apply in future teaching 	<ul style="list-style-type: none"> • Allows all students to participate • Good way to learn skills 	

Teacher’s Perceptions

The teacher’s interviews served as a form of triangulation between her more extensive log entries and the comments made by students during their interviews. Analysis of these led to the generation of five themes.

Differences in time: The teacher commented that she was spending significantly more time in planning during SE than in previous iterations of Wushu instruction. In essence, “in the SE class, especially during the competitions. I have to train referees, prepare tables, assign students to the right place to take their duty (referee or players), and manage the whole performance. This is new.” In contrast, “the traditional class is easy. I don’t need to prepare anything for them. I can use 5-10 minutes to think about how to teach when I am on the way to campus (in the bus). Then I am ready for teaching.”

Teaching leadership: The teacher also mentioned in the first interview how some students were struggling with their leadership roles, perhaps because “they are not super confident to comment or correct their teammates’ movements.” Of interest, however, is that she also suggested their leadership was “not strong,” which ran counter to the point made by the students that having roles gave them an opportunity to develop these skills. Where the teacher and her students were in alignment was with respect to those roles the students described as superfluous, describing some as “just a title without meaning for students.”

Differences in motivation: The teacher noted a marked difference between the levels of motivation shown by the students in the two classes was also mentioned. In particular, the teacher believed that “I can teach more [in SE] because students are paying attention to what I am saying. I can feel students want to learn.” Control students were described as “disengaged” and “lazy”

The benefits of teams: Consistent with the views of the students, it was the persisting team that was the catalyst that “significantly impacted the effect of team practice,” an effect the teacher described as “amazing.” Small teams allowed for “efficient peer support,” and allowed the teacher more freedom to check individual student’s progression. It was not only that students were in teams that generated this focused engagement. The teacher recognized the value of the competitions. She commented:

Another part is the games, where students were required to be both referee and player. They built a sense of ownership for my students in the class. Combined with the team training, I thought the organization of the games shifted the power from teacher

to students. Students are more independent to learn in the classroom. We always mentioned that learning should be student-centered. The teaching reform advocated learning should be help students to develop in multiple perspectives. I think this is how this model is functioning well to meet those education goals.

A breakthrough in my professional development: One topic that occupied significant discussion in the final interview was the teacher's sense of professional renewal as a result of the SE project, and particularly the students' responses to it. She began by commenting that "I always thought that students' learning motivation could impact teachers' motivation and effort in teaching. And it also caused me to believe that the highly motivated students/class will improve performance better." This belief was reinforced during this class, as this "new concept forced me to think about how to teach PE differently." Indeed, she believed that "my teaching ability has improved a lot after this semester. I am more confident in the teaching (of Wushu) because I have to think about how to organize my teaching, class management, and routine...It pushes you to think about how to provide a better PE."

DISCUSSION

The number one take-home message from this study was that participation in a season of SE did not compromise the learning or performance of Chinese physical education majors during a course of Wushu. As predicted by skeptics, there were instances where the teacher needed to spend time helping students become competent at providing feedback and instructing them to officiate competently in class competitions. However, the key finding is that participation in these aspects of the course did not negatively affect the students' grades. As such, the results of this one intervention provide a small chink in the armor of the belief that 'there is only one way to learn Wushu – using a highly trained performer as instructor and students undertaking rigorous repetition of movements.'

Motivation Led to Engagement

The structure of Wushu learning follows a process of numerically mandated movements (either with or without weapons) in a repetitive learning environment. All participants who were interviewed noted that irrespective of their depth of prior learning, that the elements of SE served to make Wushu practice "not boring", but motivated them in several ways. We argue that the hallmarks of the SE model placed students in situations where they experienced all the dimensions of "situational interest". Within physical education, Chen and Darst (2001) list these as novelty (e.g. 'What we did was new'), instant enjoyment (e.g. 'What we did was enjoyable'), exploration intention (e.g. 'I wanted to analyze and have a better grasp of what we were learning today'), attention demand (e.g. 'What we were learning demanded a high level of attention'), and challenge (e.g. 'What we were learning was hard to learn'). A meta-analysis of motivational constructs related to student engagement in physical education has found that situational interest is a primary motivator (Chen et al., 2012). Of particular significance is the finding that situational interest is *directly* related to student engagement (at least behavioral engagement), and engagement seems to be a significant determinant of skill outcomes.

We suggest that the curricular and instructional aspects of SE served to motivate students, which then had a positive impact on their engagement in class. Further, this increased engagement more than compensated for the lower amounts of time spent in teacher-directed skill practice.

Engaged Learners

"Engagement" is an active, effortful, goal-directed interaction with one's learning environment (Hastie et al., 2020). Engagement is a multidimensional construct involving behavioral (effort and active involvement), cognitive (self-regulation and investment), and emotional (positive attitude and interest) aspects (Appleton et al., 2008). In addition, Reeve and Tseng (2011) have noted that some students become so deeply involved during instruction that they contribute to the evolution and growth of the lesson, a concept they labeled as "agentic engagement."

Behavioral engagement of students: Behavioral engagement is a student's effort, persistence, and on-task behavior demonstrated in learning (Xiang et al., 2017). The teacher's logs and interviews were replete with examples of SE students arriving early to class, giving full effort during lessons, and being highly self-disciplined. Compared to the students in the traditional format, the teacher reported these students positively using movement cards and e-books to explore and organize their learning/practice.

From the students' perspective, the structure of the season (with intermittent competition and practice) "encouraged students to practice with a specific purpose." Given that "Wushu needs a lot of time to practice," the model provided a level of "content-embedded accountability" (Hastie, 2000). Accountability refers to being held responsible and answerable for specified results or outcomes of an activity over which one has control. Because the competitions "counted" toward a season outcome, team practices were taken more seriously.

Cognitive engagement: The cognitive aspect of engagement refers to mental effort students spend on learning tasks (Chapman, 2003). Through her logs and interviews, the teacher used the terms "serious," "organized" and "having an active learner attitude" to describe how students projected their approach to the content. She saw them "positively using movement cards and e-books to explore and organize their learning/practice". Comments from students add to the validity of the teacher's perceptions. They reported "learning

the rules of referring very seriously” and having to “think carefully about preparing lesson plans.” Students reported that the “game pulls students’ attention to their learning, and even cases where when a student was absent from class, “he will be asking me (coach) or the team captain to teach him the lesson he missed.”

Emotional engagement: Emotional engagement is reflected by students’ attitudes toward and interest and values in learning (Xiang et al., 2017). Evidence of this came from the teacher’s log where she wrote that some students suggested using music to invigorate the atmosphere of the competitions. As a result, the whole process of the competition was videotaped, and each team was specifically recorded with a mobile phone. Students also took photos of themselves in preparation and during the competition to share on social media. During interviews, the students all claimed that the format of practice and competitions “kept everyone motivated and excited about Wushu.”

Agentic engagement: Agentic engagement is evident when students proactively attempt to learn and contribute to the flow of instruction their teachers provide (Reeve & Tseng, 2011). It is different from the other dimensions of engagement in that it is exhibited in student-initiated, action. Agentic engagement is a uniquely proactive and transactional type of engagement, as students try to create a more motivationally supportive learning environment for themselves. Surface-level examples of this engagement were offered by students when they mentioned that they “also ask our teacher because she is available during team training. It will help us learn fast and efficiently.” However, more substantive cases were when the students and the teacher met to modify the scoring process planned by the teachers. Here they suggested that they use the average referee score (two referees) first, and then compare these with the teacher’s score to decide whether they win or not win the referee points.

CONCLUSIONS

In the first paper reporting the outcomes of the adoption of SE, Alexander, Taggart, and Thorpe (1996, p. 36) made the following conclusion:

“Skill development is one area in which sceptical teachers are often quick to criticise the sport education concept. However, through a combination of longer units of work, increased motivation amongst students as they learn to work effectively in persisting groups, the relevance offered by competition and the removal of the need for teachers to always be organisers and disciplinarians, significant improvements in skill development have been reported, especially for lower skilled students.”

Twenty-five years later, we could make the same statement. The data from this report show that both teachers and students developed “a spring in their steps”, providing them with a degree of professional renewal, at no cost to the quality of performance of Wushu techniques. For the teacher, new opportunities to be “off center-stage” provided her with the time and energy to more frequently ask how she could do it even better. For the students, the structure of SE introduced them to pedagogies that would help them in their future careers and provided them with a structure of teaching that provides more elements and opportunities for students in their learning.

FUTURE RESEARCH

The primary goal of this study was to determine whether a new method of teaching Wushu would negatively affect student achievement. As such, it was centered on the performance and experiences by the key players who participated in Sport Education. Given the results, future research on SE and Wushu would be enhanced by having more quantitative measures of student engagement during classes. These could include behavioral measures such as time in practice (both teacher-directed and independent), as well as motivational inventories by participation in a curriculum model where the students were given more autonomy, and where the teacher was less of a director. In that way, factors such as situational motivation, enjoyment or perceived physical literacy could be used to differentiate the experiences of students in both SE and traditional wushu instruction.

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Author Information

Peter A. Hastie, Ph.D., *Corresponding Author*

ORCID: <https://orcid.org/0000-0002-3727-6006>
School of Kinesiology
Auburn University, Auburn, AL, USA
✉ hastipe@auburn.edu

Yanhua Mo, Ph.D.

College of Physical Education & Health Science
Guangxi Normal University, China
✉ yanhua_mo@foxmail.com
IRB Approval #GNU20200036

Hairui Liu, Ph.D.

ORCID: <https://orcid.org/0000-0002-0497-3622>
Department of Kinesiology and Applied Health
University of Winnipeg, Manitoba, Canada
✉ ha.liu@uwinnipeg.ca

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