

English-learning sports students: Is there a catch?

Steve Jugovic
Biwako Seikei Sport College

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Recently in Japan the considerable proliferation in sport and subsequent emergence of additional university sport departments have created English classes consisting of essentially sport students, which are sometimes regarded as problematic. Teachers operating under various constraints face particular difficulties, such as adhering to a content-specific syllabus and managing large class sizes with disengaged and inattentive students. As part of ongoing classroom research using questionnaires, observations and direct feedback spanning several years at a Japanese sport college, a variety of methods, approaches and activities have proven to be successful. The present study identifies the basis of these learning tasks as stemming from applicable intelligence theories such as Multiple Intelligence theory and Triarchic theory, research concerning learning with movement, motivation, emotion, and learning styles. This paper will conclude with brief curriculum suggestions and a selection of compatible language learning activities that engage the student's natural disposition of movement and incorporate creativity.

日本では最近、スポーツ専門大学および大学におけるスポーツ関連学科の設置が非常に増えている。スポーツ専攻の学生のみで構成される英語の講義が開講され、そのために問題が生じることもある。さまざまな制限下で講義を実施する大学教員は、内容が特定されたシラバスの順守や、やる気や集中力に欠ける学生たちの大規模クラス運営などの困難に直面している。日本のスポーツ大学における数年間にわたるアンケート、観察、直接的なフィードバックを用いた講義中の教室での研究の一環として、さまざまな方法、アプローチ、アクティビティが有効であることが示されてきた。本研究によって多重知性理論、三環理論、ムーブメント、モチベーション、情意を用いた学習および学習スタイルに関する研究といった適用可能な知能理論から発生した学習タスクの基礎を確認する。本論文では簡潔なカリキュラム提案および学生がもつ動きに対する生来の資質を使い、創造性を取り入れた適合性のある言語学習アクティビティの選択について結論を出すものとする。

Introduction

The learning context

The language classroom is influenced by instructional, personal and contextual variables which influence English learning at Japanese universities. In addition to typical cultural norms, many difficulties stem from the somewhat problematic Japanese English-education system characterized by test-based vocabulary rote learning, grammar-translation and teacher-centered approaches, resulting in minimal classroom communicative opportunities. According to Yashima (2000) the major driving force for Japanese EFL learners is for career and examinations, which are used as a gatekeeper for university entrance. For less academic-inclined students, overcoming such test-based hurdles and enduring compulsory English requirements



year after year can possibly be demotivating. Furthermore, upon entering university, students may fail to see the pressing need or have the opportunity to use English. The combination of these factors may ultimately attribute to a lack of motivation and affect student behaviour in class. Despite this, later in their academic careers, students often decide on careers, study paths or various interests which require English for communication with foreigners or for international travel and job promotion, all of which support an underlying need. In order to overcome difficulties in the language classroom, it is advantageous to “think outside the box,” and in various contexts, to consider and implement the physical aspect of language learning such as integrating simple activities like talking and walking, which occur in natural communicative situations.

Methods to improve sports majors’ English learning

Learning through movement

There has been a long history of the use of physical actions to teach an introductory level foreign language and growing evidence supports the notion that learning is more efficient when the body and movement are incorporated (Arnold, 1999). Arnold further claims that learning styles studies have indicated that certain people are specifically kinesthetic learners and learn better with the incorporation of movement, although all learners benefit from increased attention to movement. More recent research by Lengel and Kuczala (2010) claims that as many as 85 percent of students are kinesthetic learners. According to Reid (1987), Asian second language learners tend to be kinesthetic and tactile learners, with the Japanese weaker in auditory ability.

New research provides information about movement and its effects on the brain. According to Harvard psychologist Ratey (2008), the primary functional benefit of aerobic exercise is for

the brain, while the secondary function is for the body. Traditional theories and models of the cerebellum essentially linked it to movement but it has been discovered that it is also a support structure for emotions, memory, cognition, analysis and decision making (Lengel & Kuczala, 2010).

Movement in the classroom provides various benefits and allows students to grow cognitively, physically, mentally, emotionally and socially while providing novelty and change in the brain (Lengel & Kuczala, 2010). The authors further state that in relation to students, movement has six classroom purposes: to prepare the brain, to provide brain breaks, to support exercise and fitness, to develop class cohesion, to review content, and to teach content. Movement provides the means for students to refocus and bolster their ability to pay attention. According to Oberparleiter (2004, cited in Lengel and Kuczala, 2010), movement makes the learning process more efficient whereby the brain is attracted to novelty, pays attention to movement, needs to interact with people and things in the environment, and learning is more effective to store, remember and retrieve with an emotional base.

Increasing motivation

Student motivation is multifaceted and the teacher’s role in understanding the overall learning environment/context and fluctuating motivation of the students is equally important. Major theories of motivation are based on major theories of learning, in particular behavioral and cognitive approaches. The following four types of motivation have been outlined by Sternberg (2009).

Behavioral and extrinsic

Behavioral theories imply that rewards and punishment drive learning, with motivation being the result of seeking rewards



and avoiding punishments. Such theories are related to motivation in that external rewards are used to produce specific behaviors. A problematic feature of such an approach is that students fail to develop adequate intrinsic motivation. In support of this, Kohn (1999) claims that rewards work in the short run but ultimately fail to motivate people, as they lose interest, often leading to inferior work.

Cognitive and intrinsic

Cognitive views of motivation infer what and how the students think, resulting in the creation or reduction of motivation to act. According to Schunk (2007), cognitive neuroscience research indicates that particular influences can arouse and uphold attention. In relation to classroom instruction, such factors include the perceived importance, novelty in terms of input differing from the norm, intensity through visual or auditory stimulus and also movement.

Intrinsic and extrinsic social learning theories

Social learning approaches to motivation combine behavioural and cognitive theories in terms of extrinsic and intrinsic motivational factors. One such theory *Expectancy X value theory* combines internal thoughts and perception of the environment, such as belief in reaching a particular goal.

Humanistic

Humanistic theories of motivation propose that motivation occurs from a higher-order drive to achieve and excel, essentially coming from within the person. For example, in emphasizing the *whole student*, everything that affects the person such as thoughts, feelings and environmental factors can create or affect motivation. Typically, humanistic education recognizes both the

intellectual and emotional elements and particular techniques are generally referred to as humanistic, affective, awareness, confluent or personal growth activities (Arnold, 1999). Yoga is referred to in a later section of this paper, which as a contemplative practice is regarded as humanistic and focuses on awareness of breath, body and mind, all highly relevant to sports students' understanding.

The cognitive perspectives of motivation are particularly significant, although all four should be taken into account in the language classroom. The different learning styles are an important element of learning theories.

Tailoring lessons to consider individual learning styles

The learning styles of individual students are an important factor for consideration by teachers. In terms of learning style dimensions, *sensory preferences* are often categorized into six perceptual learning styles which include visual, auditory, kinesthetic and tactile-inferring a sensory-channel model, in which information is absorbed, in addition to learning more effectively in a group and individually (Reid, 1999). In Reid's overview, the additional styles include: the Seven Multiple Intelligences, Field Independent/Field Dependent, Analytical/Global and Reflective/Impulsive. An advantage of teachers recognizing these differences relates to more successful pedagogy, in addition to having the ability to raise the awareness of their student's individual learning strengths or combination of strengths.

According to Dörnyei (2005) the kinesthetic style implies that learning occurs most effectively through complete body experience such as whole-body movement. Furthermore, such students need regular breaks, as sitting for extended periods can prove difficult and memory is often aided by walking around. Similarly related tactile learners are more hands-on, prefer a



touching-learning approach with the manipulation of objects and often enjoy making posters (referred to in a later section with Yoga) and various visuals.

Consideration of ability, aptitude and intelligence theories

One important factor in classrooms is to understand the individual differences of students. The notion of intelligence has shown to be inconclusive in that there is no universally accepted theory, definition or list of *real* mental abilities. The term *mental ability*, which reflects cognitive processes and skills, is often used synonymously with *aptitude*. Likewise, *intelligence* is similar to ability but consisting broadly to a type of aptitude transferable to various types of performance (Dörnyei, 2005). Conventional measures of intelligence are based on the extensive work of Alfred Binet (as cited in Dörnyei, 2005) who originally designed tests to predict success in the classroom by measuring people's intelligence quotients (IQ's). In relation to this, IQ tests were designed ad hoc and have no underlying theoretical rationale supporting them (Goleman, 2007).

Various intelligence approaches include; general factors of intelligence, primary mental abilities, the crossing of processes contents and products, in addition to widely accepted hierarchical theories characterised by a general factor, and varying numbers of group factors applicable to limited ranges of tests (Sternberg & Williams, 2009). Two systems theories of intelligence include Sternberg's (2002) triarchic theory of human intelligence and Gardner's (1983) theory of multiple intelligences (MI Theory), which have been more prevalent in current literature.

Triarchic theory refers to distinct aspects of intelligence as (1) *analytical*: to analyze, evaluate, judge, compare and contrast, (2) *creative*: coping with novelty and when being involved in

processes of creating, inventing and discovering and (3) *practical* intelligence: relating to daily life problems and issues involving ability to apply and implement knowledge.

Gardner's cognitive-based MI Theory opposes the traditionally held view of intelligence based on typical measures such as the IQ test, which focuses on the left-brain linguistic and logical/mathematical intelligences. Gardner defines an *intelligence* as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner, 1999).

The seven multiple intelligences include linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal and intrapersonal. The eighth and most recent intelligence is naturalistic intelligence, and a ninth, existential intelligence, has also been proposed. Of these, bodily-kinesthetic intelligence is of particular relevance to this study and involves the potential to use the whole body or parts of the body such as hands, mouth in order to solve problems or fashion products.

According to Armstrong (2000), examples of bodily-kinesthetic teaching activities include hands-on learning, drama, dance, *sports that teach* (such as in the Yoga activity/research), tactile activities and relaxation exercises. He further suggests instructional strategies such as "build it, act it out, touch it, get a *gut feeling* of it and dance it". Armstrong (2000) claims that repetition of physical movements that represent a specific process or idea enables students to gradually internalize the process or idea. It is assumed that some predominance of this kinesthetic intelligence is prevalent in the sport students of this research.

Implications of emotional and social intelligence

Daniel Goleman (1995) in his influential book *Emotional Intelligence* provided evidence from brain and behavioral research regarding the significant effect of self-awareness, self-discipline



and empathy in relation to the importance of emotions. This view of bringing emotion to intelligence is clearly distinct from prevalent IQ thinking and general intelligence. Similarly, emotional intelligence regarding one's understanding of their emotions and behavior can be linked to the MI theory elements regarding interpersonal and intrapersonal *Personal Intelligences* (Gardner, 2006).

The language classroom is viewed as a social context in that it involves an important interaction between those present. Typical teaching approaches often neglect the consideration of the *whole* language learner. According to Stevick (1980, cited in Arnold, 1999) the "physical, emotional and cognitive aspects of the learner cannot in practice be isolated from one another: what is going on in one of these areas inexorably affects what is possible in other areas." However, this holistic composition is often solely centered upon cognitive elements such as the materials presented in class. Essentially, the emotional and *physical* attributes that are able to support cognitive processes are seldom incorporated, despite the obvious need for implementing novel approaches.

The influence of emotion on tasks

The motivational characteristics of emotion have been somewhat neglected in language learning literature despite their close interrelationship. Emotion "functions as an amplifier, providing the intensity, urgency and energy to propel behavior" (MacIntyre, 2002). Powerful emotions have a stronger effect, pervade all our activities and effect everything we do. For example, negative emotions typically cause defensive reactions such as falling asleep, daydreaming or mental lethargy in the classroom whereas positive emotions expand the mind to learning and other opportunities (Hansen, 1999).

From a *task demand* perspective, typical emotions may include anxiety, gladness, distress, sadness and anger. From this,

the learner forms a notion regarding the attractiveness, difficulty level, personal significance, competence and participatory eagerness *towards the task* (Julkunen, 2001). Julkunen further states that, emotions are also implicated with *task performance*, whereby upon completion, learners can assess achievement for ability, luck, task difficulty, effort, task attraction and reaction during task completion. A typical lecture style method evokes little emotional student involvement. Comparatively, when students are more involved in learning through activities such as role-playing, discussions and demonstrations, emotional interest should rise, along with better learning (Schunk, 2007). Considering this, positive emotions should be considered to make *interest, fun* and *variety* primary considerations in materials and methodology, rather than just added extras (Hutchinson and Waters, 1987).

Furthermore, it is commonly argued as to which human abilities are social or emotional, but neuroscientist Davidson (cited in Goleman 2007) claims that all emotions are social because causes of an emotion cannot be separated from the world of relationships considering that the driving force of emotions is based on social interactions. Both Sternberg's *practical intelligence* and Gardner's *interpersonal intelligence* can be viewed considering social intelligence. This is particularly pertinent to the socially interactive and communicative nature of typical language learning classroom situations.

The following will highlight classroom activities and research based on direct feedback, informal questionnaires and observations applicable to general EFL and sports student English classes

Classroom Yoga research

Background

Research based on the themes of language acquisition, learning theory and neurolinguistics shows the positive effects of



physical movement on cognitive learning. The intention was to consider the Japanese sport college English teaching context and engage students' interest with a physical theme around which language learning activities could be built. Consequently, the present author selectively considered the hypothesis that the choice of (Ashtanga) Yoga would facilitate the learning of specific instruction-based English content with peer-teaching movement. Additional factors include recent popularity with sportspeople, ease of implementation, holistic benefit, cultural element considering Yoga's Indian origin, and gaining knowledge about the physiological, psychological and biochemical benefits.

Classroom procedure

A total of thirty-nine students electively enrolled in two English classes, which incorporated a health and awareness textbook that was supplemented with additional activities. Initially, the students watched a DVD based on the first Sun Salutation of Ashtanga Yoga with no sound, to elicit the vocabulary to peer-teach fellow classmates. Following this, a handout was given in order to combine imperatives with elicited commands based on the various postures. On several occasions throughout the semester, the students as imaginary yoga teachers were given mid-class breaks in order to practice and peer-teach the required imperatives about postures. Assessment was based on their effort, clarity of imperatives, enthusiasm and the students were given the choice not to perform the physical action with their partner, considering that it was an English class not a PE class. As a follow-up task the students created interactive posters designed specifically with restricted use of headings and point-form, to encourage question and answer communicative exchanges. Their choice of Yoga types also included optional teaching of various postures to participants in a classroom carousel situation.

Research framework

The changing role of motivation during learning can be observed with regards to a generic model of motivated learning concerning the Pretask, During task and Post task phases (Schunk, 2007). More recent motivational studies have emphasized situation-specific and process-oriented approaches of the learning situation. The Process Model of L2 Motivation (Dörnyei, 2005) was selected, given that it was the most comprehensive and stemmed from motivational research and educational psychology. It is characterized by the Preactional, Actional and Postactional temporal phases, referred to in Table 1 below. Research limitations restricted the investigation scope to features of the Actional phase which aim to measure main motivational influences regarding *attitudes towards the course, task and task value*, and *motivational self-regulation*.

Table 1. The process model of motivation (Dörnyei, 2005)

Preactional Stage	Actional Stage	Postactional Stage
Choice motivation	Executive motivation	Motivational retrospection
Motivational Functions	Motivational Functions	Motivational Functions
<ul style="list-style-type: none"> • setting goals • forming intentions • launching action 	<ul style="list-style-type: none"> • Generating and carrying out subtasks • Ongoing appraisal (of one's achievement) • Action control 	<ul style="list-style-type: none"> • Forming causal attributions • Elaborating standards and strategies • Dismissing the intention and further planning



Main motivational influences	Main motivational influences	Main motivational influences
<ul style="list-style-type: none"> • Various goals properties (e.g., relevance, specificity and proximity) • Values associated with the learning process itself, as well as with its outcomes and consequences • Attitudes towards the L2 and its speakers • Expectancy of success and perceived coping potential learner beliefs and strategies • Environmental support or hindrance 	<ul style="list-style-type: none"> • Quality of the learning experience (pleasantness, need significance, coping potential, self and social image) • Sense of autonomy • Teachers and parents influence • Classroom reward and goal structure (e.g. competitive or cooperative) • Influence of the learner group • Knowledge and use of selfregulatory strategies (e.g., goal setting, learning, and selfmotivating strategies) 	<ul style="list-style-type: none"> • Attributional factors (e.g., attributional styles and biases) • Selfconcept beliefs (e.g., selfconfidence and selfworth) • Received feedback, praise, grades

Questionnaire procedure

The variables were selected for the aims of the research and to ascertain whether a rationale existed for a more movement-oriented English curriculum for future classes. In addition, the intention was to assess the students' opinions concerning the

motivational effectiveness of English learning tasks combined with the use of physical activity, course content relevance, incorporated materials and the teacher's method.

The research consisted of a six-point Likert type questionnaire that was translated into Japanese and categorized in four parts to include: Question 1, the rank order of eight class activities with one open-ended question; Questions 2-8: Attitude towards the course; Questions 9-20: Task and task value, and Questions 21-27: Motivational Self-Regulation, which included one open-ended question. Present limitations further restrict discussion of findings to Question 1 and Questions 9 to 20.

From the class total of 39 students a small sample size of 13 students chose to participate in the questionnaire and were broadly representative of the class population regarding key demographic variables such as present and former L2 instruction received, common L1, gender (mostly male), ethnicity, general academic capability, sport college context and sport interests.

Results and discussion

The rank-ordered results (Q1) indicated that the students most enjoyed communicating with each other in pairs followed by use of the textbook for various skills such as listening, reading and vocabulary. The third and fourth responses indicated the students also enjoyed practicing yoga in English with their partner and appraised the Yoga theme poster presentation as a highly enjoyable and useful activity for learning English.

The task and task value items (Qs9-20) referred to the Yoga teaching and task sequence, difficulty, usefulness, action for learning, autonomy and anxiety, including the Yoga poster session's usefulness, enjoyment and movement.

As expected, these sport college students again reported that they enjoyed the movement to learn English and are inclined to want to use action to learn English in the future. A slightly



surprising feature is the fact that just over half of the students reported a lack of anxiety during the performance of the Yoga assessment, considering that the rank-ordering of the *Yoga assessment* was one of the least enjoyable activities. This supports theories of reduced anxiety when learning the language through movement, and may also be linked to the sports students' confidence of physical movement abilities, considering their partial bodily-kinesthetic learner disposition category associated with MI Theory. According to *all* the positive responses, elements of the Yoga poster such as the usefulness, enjoyment and novelty with movement, indicated that it was a valuable follow-up task. From this evidence it appears that the use of Yoga content and physical movement tasks have had a positive impact on students' motivation.

Additional correlations can be drawn from the literature in relation to these results in terms of; a significant percentage of learners having a kinesthetic disposition, movement and novelty increasing the ability to pay attention, creative intelligence enabling to cope with novelty, improved learning and emotional involvement through active task involvement and repetition of physical movement.

Various limitations were present such as inadequate piloting and construction of the questionnaire, which was undertaken solely by the present author. Therefore, the issues of reliability in replicating the results and measuring validity can be questioned.

Student designed language review board games

In order to provide some novelty, enjoyment and physical movement for the students while using English, a bottom-up approach has been successfully incorporated with virtually-blank board games and dice.

Procedure

Initially in pairs during class time, students receive paper-print game boards and fill in the squares based on a review of units and questions covered in the textbook. In addition, students include other questions of their choice, game board imperatives such as *miss a turn, go to the start, stand and roll the dice twice* etc. Students complete the game boards for homework in preparation for the following class.

Game time

In pairs or small groups students use markers and a die, are encouraged to use follow-up questions and exchange board games upon completion.

Observations

The students were on-task the majority of the time, spoke mostly in English and created a non-threatening, conducive and fun atmosphere where on one occasion a male student found the courage to ask his female partner, "Do you like me?". Success or use of language games have become more prevalent in language learning textbooks although a bottom-up approach using mostly blank board games has greater utility-value and interest generated by the students. It was observed on repeated occasions that total involvement and *inspired* moments were obtained with students, similar to Goleman's (2007) claims that such a strong involvement creates a powerful combination of (much needed) full attention, enthusiastic interest and positive emotional intensity creating joy in learning from these moments.



Mid-class breaks

Mid-class breaks serve to oxygenate and stimulate the brain and to refresh students who often become lethargic. For homework, students are assigned to search the internet for brain stimulating movements that can be incorporated for two to three minutes during the middle of the class. On a rotational basis once a lesson, students lead their classmates with the exercises but are not allowed to use typical stretches used for sport. Examples include twisting, turning, moving the hands, thumbs, feet, wiggling toes and juggling. Students generally enjoy leading the class and are also learning about the brain.

General list of activities for compulsory and elective English courses

A number of suggestions are provided here for English courses. They include action-based sport demonstrations and presentations; guess the sport or activity Q&A game involving playing surfaces with use of *play* or *do*; talking and walking; pair work in two lines with student rotation; student designed Q&A interactive posters; mind-body-spirit related themes—psychological, physiological and biochemical impacts on performance; Yoga peer-teaching; somatic disciplines such as the Alexander Technique; Ki/ Chi'i based activities such as four people lifting (without muscle use!) a classmate up from a chair with only a pistol grip; research presentations; meditation for improved focus, concentration and relaxation; mindfulness and research about the skills and unorthodox approach of NBA coach Phil Jackson; sports cultures; designing a health and fitness program for parents or friends.

Supplementary curriculum suggestion

Students in general and particularly sports students have the opportunity to communicate with people of similar interests from all over the world. The theme, *global-sport global-English* focuses on the combination of greater cultural awareness content knowledge with letter and email writing. The casual nature and similarity of email writing with spoken English can also act as a preview or review of classroom activities. To supplement regular communication classes it may be possible to allocate 15 to 20 minutes per lesson for actual reading and writing the emails with the remainder of the task designated for homework. This practical English *use* as opposed to typical former *study*, is motivating, has high-utility value and potential long-term benefit.

Conclusion

The activities and tasks that were observed as most successful include the Yoga based tasks, interactive sports-hero posters, walk and talk speaking tasks, student designed board games, and Ki activities. A common underlying aspect of these tasks is the incorporated novelty and movement, which enabled students to participate actively with an increased level of emotion and interest, thereby creating a conducive learning atmosphere that facilitated more natural communication exchanges and learning opportunities.

Further research is needed in the area of integrating English learning with physical movement activities and tasks for adult EFL contexts. This may enhance the understanding of complex processes implicated with students' motivation. Some of these factors include social participation, group dynamics, understanding of the educational culture, motivational self-regulation, teaching methods, the teacher and applicable curriculum.

Considering that teachers generally have differing teaching styles, classroom management and approaches with students,



there cannot be a one-system-fits-all approach to teaching English-learning sports students. There is no *catch*, but the need for understanding the complexity of variables in relation to the students and what affects them in their learning context with the aim of fostering lifelong learning.

Bio data

Steve Jugovic is the English Program Coordinator at Biwako Seikei Sport College and has attained his Master's degree in Applied Linguistics, focusing on English for Specific Purposes. His main interests include student motivation, curriculum development, content-based teaching and integrating movement with language learning. He can be contacted at <jugovic@bss.ac.jp>

References

- Armstrong, T. (2000). *Multiple intelligences in the classroom*, (2nd ed.). Alexandria: Association for Supervision and Curriculum Development.
- Asher, J. (2003). *Learning another language through actions*. Los Gatos: Sky Oaks Productions.
- Arnold, J. (Ed.). (1999). *Affect in language learning*. Cambridge: Cambridge University Press.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. London: Lawrence Erlbaum.
- Gardner, H. (1999a). *Intelligence reframed: Multiple intelligences for the 21st century*. New York: Basic Books.
- Gardner, H. (2006). *Multiple intelligences: New horizons*. New York: Basic Books.
- Goleman, D. (1998). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D. (2007). *Social intelligence: The revolutionary new science of humanrelationships*. New York: Bantam Books.
- Hansen, G. H. (1999). Learning by heart: a Lazonov perspective. In Arnold, J. (Ed.), *Affect in language learning*. Cambridge: Cambridge University Press.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge: Cambridge University Press.
- Julkunen, K. (2001). Situation and task-specific motivation. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition: Technical Report, #23*. Honolulu: University of Hawaii Press.
- Kohn, A. (1999). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise and other bribes*. New York: Houghton Mifflin.
- Lengel, T., & Kuczala, M. (2010). *The kinesthetic classroom: Teaching and learning through movement*. Thousand Oaks: Regional Training Center / Corwin.
- MacIntyre, P.D. (2002). Motivation, anxiety and emotion in second language acquisition. In P. Robinson (Ed.), *Individual differences and instructed language learning* (pp. 45-68). Philadelphia: John Benjamins.
- Ratey, J. (2008). *Spark: the revolutionary new science of exercise and the brain*. New York: Little, Brown and Company.
- Reid, J. (1999). Affect in the classroom: problems, politics and pragmatics. In J. Arnold (Ed.), *Affect in language learning*. Cambridge: Cambridge University Press.
- Schunk, D. (2007). *Learning theories: An educational perspective* (5th ed.). Upper Saddle River: Pearson.
- Sternberg, R. J., & Williams, W. M. (2009). *Educational psychology* (2nd ed.). Upper Saddle River: Pearson.
- Yashima, T. (2000). Orientations and motivation in foreign language learning: A study of Japanese college students. *JACET Bulletin*, 31, 121-133

