
Playing to Learn: A Review of Physical Games in Second Language Acquisition

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Abstract

This article focuses on the potential of competitive games involving physical movement to facilitate the acquisition of a second or foreign language and argues that such activities can promote educational development too. It first provides a critical overview of the literature on physical games in language learning. Then, it outlines our theoretical position and puts forward a flexible framework for the development of principled learning materials that are designed to make use of physical games in language lessons at all levels and for all ages. This framework is text driven, in that it treats the game as a text that provides the learners with a rich, engaging, and purposeful exposure to language in use. It is also task driven, in that it provides the learners with a physical outcome that can only be achieved through language use. This framework operates in ways designed to stimulate the multidimensional mental representation and the deep processing required for effective and durable learning. The framework is exemplified by reference to physical games we have played with language learners of different levels and ages in different cultures, and then the principles and potential benefits of these games are discussed. In our conclusion, we summarize the benefits of physical games for language learners and point out the potential benefits of physical games in all educational contexts.

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affective engagement, benefits of physical games, cognitive engagement, competitive games, educational development, kinesthetic learning, language acquisition, literature review, motivation, physical games, physical movement, play, positive affect, principled learning materials

Looking through past copies of *Simulation & Gaming*, we were struck by how relatively few references are made to physical games. The same is also true on looking through past journals and books focusing on language acquisition. For example, we could find no reference to physical games in Ellis (1994), Hinkel (2005), or Tomlinson (2007c)—three books on language acquisition taken at random from our shelves. Yet in our view, getting students to play physical games is an economical, easy, and effective way of creating many of the optimum conditions for language acquisition.

Physical games in language lessons are often viewed as fun activities, which provide a break from focused study. This is a function they do perform, but more importantly, they can provide rich opportunities for language intake and for purposeful use of language. We like to view games as language texts, which the students interact with in order to win, and we look at the physical aspect of the games as opportunities for mental processing of the language used. We have found this to be true when we have used physical games in language classrooms with children, with teenagers, and with adults in culturally different countries such as Brazil, Botswana, Indonesia, Japan, Sultanate of Oman, the Seychelles, Spain, Vanuatu, and Vietnam.

Before we go on to elaborate our theory, to describe the procedural framework we have developed and to give examples of the games we have used, we would like to refer to literature that feeds into our theory and practice.

The Literature on Physical Games and Language Acquisition

What the Literature on Language Acquisition Tells Us About the Value of Physical Games

The scarcity of references on competitive physical games in relation to second or foreign language learning was noted in our Introduction section. Our thorough literature search in the major databases for the past 30 years only confirmed the absence of relevant literature. We checked 12 databases relevant to research in language acquisition (including Applied Linguistics, Cambridge Journal Online, ERIC, Oxford Journals, and Studies in Second Language Acquisition), and we found hardly any references to the use of physical games.

We first tried a combined key word search of “language acquisition/learning” and additional key words such as “physical games,” “physical play,” “competition,” “kinesthetic learning,” “experiential learning,” “play,” and “game.” These combinations revealed very few relevant references.

We then dropped “language acquisition/learning” from our search and tried individual key word searches one by one from our list. “Physical play,” for example, picked up a lot of references from a list of dedicated journals in the fields of child development and in physical education. It seems that in the fields of child development and physical education, it is almost taken for granted that physical play facilitates cognitive, affective, and social development at any age. For example, Schilling et al. (2006) report that being active and moving during play boosts children’s attention span and facilitates verbal, visual, and kinesthetic learning. They also found that physical play can be a huge boost for children’s self-esteem, especially for nonnative children. Carlsson-Paige (2008) acknowledges that child development theorists, researchers, and educators have long known that play is one of the most valuable resources of children, vital to their social, emotional, and cognitive growth. She then emphasizes the importance of educators creating an environment in which play gives children a strong foundation for learning, the emotional and mental readiness to learn, and the social and emotional skills they need for success in school and in life.

Bailey (2006) presents the result of his extensive review of research focusing on the benefits of physical education and sports (PES) in terms of children’s development in a number of domains: physical, lifestyle, affective, social, and cognitive. His review reveals that PES has the potential to make significant and distinctive contributions to development in all the listed domains. He states that, when appropriately presented, PES can support the development of social skills and social behaviors, self-esteem and pro-school attitudes, and, in certain circumstances, academic and cognitive development. He warns, however, that many of these benefits will not necessarily result from participation per se, but the effects are mediated by the nature of the interactions between students and their teachers, parents, and coaches who work with them. The important factors seem to be positive experiences, diversity, and the engagement of all. Elder (2008) points out that, despite claims that engagement in physical activity can promote socially desired behaviors, there is a lack of a clear conceptual base that can guide interventions as well as research endeavors in physical education. He then goes on to describe how such a lack of a conceptual foundation is causing problems for those who use physical activity as a learning agent, in that they have to base their practice on common sense, intuition, or trial and error. He then proposes a framework grounded in behavioral analysis that will enable physical activities to fulfill their great promise as a natural and enjoyable setting for learning and for behavioral change.

We did manage to find literature on kinesthetic approaches and on task-based approaches to language learning, which made points relevant to the use of physical games in language classes. For example, Asher (1977) developed an approach called total physical response (TPR), which involves the learners carrying out physical actions from teacher’s instructions. The basic principle of this approach is that linking physical activity to comprehensible input deepens the learning in an environment that is relaxed and nonthreatening (Larsen-Freeman, 2000; Richards & Rodgers, 2001). In later publications, Asher (1989, 1994) claimed that TPR allows the learners to use the right brain for holistic, rhythmical, and nonlinear learning and the left brain

predominantly during analytical learning in the traditional school academic environment. Tomlinson (1990) developed a variation on TPR, which he called TPR Plus. This involves the learners following oral instructions not only to perform a sequence of actions but also to combine these actions in order, for example, to dramatize a story, construct a body sculpture, or play a physical game. He claims that numerous courses around the world seem to incorporate TPR Plus, and all of them seem to report high student motivation, enjoyment, and achievement (Griffiee, 1985; Sano, 1986; Seely, 1998; Tomlinson, 1994a).

Since the late 1980s, task-based approaches have attracted much attention in the field of language learning. Task-based language teaching refers to an approach based on the use of tasks as the core unit of instruction (Branden, 2006; Richards, 2001; Willis & Willis, 2007). The literature on task-based approaches, however, makes most of its references to tasks that involve thinking, speaking, and writing, and there are few references to physical games as outcome tasks. For example, Willis and Willis (2007) include various games such as quizzes, memory challenge, finding the similarities or differences, problem-solving games, and puzzles (some of which include physical movement). Goedele and Griet (2006) briefly mentions how the world of playing games and tricks or of scientific experiments in task-based approaches provide the concrete, practical learning environment that is relevant and neutral for beginners with different familiarity with the target language.

We also found some literature on games in the communicative approach to language learning, but most of it was in the 1970s and 1980s. For example, a collection of role plays, games, and other communicative classroom activities was developed for inclusion in French CREDIF materials (Savignon, 1974/1978). Gardner (1987) reported a study aiming to find empirical evidence to support or discount claims that are often made about the pedagogic value of communication games. There are some recent references to exploring the value of language play—that is, playful and creative use of language (Cook, 2000; Pomerantz & Bell, 2007)—that are very common in real life and yet tend to be neglected or dismissed as deviant in traditional language classes. Cook (2000), in particular, often demonstrates children's language play in their first language by reference to physical games, such as skipping games. This combination of physical activity and language play is also emphasized in a number of approaches to using drama in the English classroom. For example, process drama (Kao & O'Neill, 1998; Liu, 2002) involves the learners improvising both words and actions to dramatize a given situation.

We looked at past issues of *Simulation & Gaming* and found that DeVries (1976) confirmed how instructional games had been “posited as important facilitators of the learning process for a variety of cognitive skills” (p. 21) in the 1960s and early 1970s. In his own research conducted at Johns Hopkins University with funding from the National Institute of Education, U.S. Department of Health, Education and Welfare, he found that the experimental groups that experienced team-games-tournament (TGT) techniques outperformed the control group that went through more traditional instructional approaches in standardized achievement tests in mathematics, social studies, two language arts subjects, and reading. He attributed the success of his

cooperative games, which involve competition, to the fact that they were unlike most games that are played as incidental time fillers. His TGT

1. was integrated into the class reward system,
2. incorporated experiential approaches as well as information processing ones, and
3. required acquisition of knowledge skills to win.

The lack of research-based literature on physical games in second language acquisition publications seems to testify to the fact that physical games in language learning have not been considered as a serious topic for enquiry in the past 30 years and that the potential for language acquisition through physical games has not really been explored by language-learning researchers or practitioners. However, if you go to publishers' catalogs for language-learning materials, you can see teaching materials focusing on games, especially, for young learners (e.g., Lee, 1979; Toth, 2005; Wright, Betteridge, & Buckby, 2006) or for language games, such as puzzles and board games (e.g., Howard-Williams & Herd, 1986; Rice, 1992). Very few of these materials involve physical competition, and hardly any make use of physical games as providers of opportunities for language acquisition and use.

What is needed seems to be a refined theoretical delineation of what aspects of physical competitive games can facilitate language acquisition similar to the way in which García-Carbonell, Rising, Montero, and Watts (2001) made an attempt to clarify the relationship between language acquisition theories and telematic simulation in Spanish. In the next section, we are going to list possible factors of physical games, which may encourage language acquisition, and to justify our claims with reference to the literature on language acquisition.

How We Can Connect Physical Games to the Literature on Language Acquisition

There is much debate about how learners can best acquire a second or foreign language. Our own view is that a prerequisite for language acquisition is a rich experience of language in use and that for such an experience to facilitate language acquisition:

- The language experience needs to be contextualized and comprehensible (Krashen, 1985, 1993, 1999).
- The learners need to be motivated, relaxed, positive, and engaged (Arnold, 1999; Tomlinson, 1998c, 1998d).
- The language available for potential acquisition needs to be salient, meaningful, and frequently encountered (Maley, 1998; Tomlinson, 1998d).
- The learners need to achieve deep and multidimensional processing of the language (Masuhara, 2005; Tomlinson, 2000a, 2001b).

Physical games can provide learners with a rich experience of language in use through them having to listen to or read the instructions and rules of the game, to seek clarification from a teacher and from each other, and to interact with other players and with referees. This language is totally contextualized by the game and made comprehensible through actually playing the game (and observing others playing it) rather than just being told about it. The learners are typically motivated to understand and use language by their desire to play and win, and they are typically positive, engaged, and relaxed (in the sense of not worrying about the language). The language the students experience in the game is salient and meaningful, and it is repeated many times in different ways. Also the processing of the language is potentially deep (in the sense that it is semantically focused, and it is meaningful to the learners).

This strong position on language acquisition stated above is elaborated in Tomlinson (2008b) but would not be accepted by all second language researchers. Many of them would probably accept, though, the 15 principles for second language materials' development proposed by Tomlinson (1998c, pp. 5-22), and especially that the materials should

1. expose the learners to authentic language in use,
2. help the learners to pay attention to features of authentic input,
3. provide the learners with opportunities to use the target language to achieve communicative purposes,
4. provide opportunities for outcome feedback, and
5. achieve impact in the sense that they arouse and sustain the learners' curiosity and attention.

Characteristics 1, 4, and 5 are almost automatically achieved by competitive physical games (provided that the games are not too rough or difficult), and 2 and 3 can be easily achieved by making sure that language needs to be used before and while playing the game and that there is a reflection stage afterward in which the students focus on features of language use.

Finally, most second language researchers would probably accept the six basic principles of language acquisition below.

Principle of Language Acquisition 1

A prerequisite for language acquisition is that the learners are exposed to a rich, meaningful, and comprehensible input of language in use (Krashen, 1985, 1993, 1999; Long, 1985).

In order to acquire the ability to use the language effectively, the learners need experience of the language being used in a variety of different ways for a variety of purposes. They need to be able to understand enough of this input to gain positive access to it, and

it needs to be meaningful to them. They also need to experience particular language items many times in meaningful and comprehensible input in order to eventually acquire them. This is a point made by Nation (2005), who stresses the importance of repetitions in extensive reading “with an optimal space between the repetitions so that previous knowledge is still retained and yet there is some degree of novelty to the repetition,” ideally with the word occurring each time “in a new context” (p. 587). Nation (2003) also stresses the importance of the elaboration that takes place when meeting a known word again in a way that stretches its meaning for the learner. All this can also be achieved through physical games in which meaningful language is repeated many times in a variety of different contexts and ways.

Principle of Language Acquisition 2

In order for the learners to maximize their exposure to language in use, they need to be engaged both affectively and cognitively in the language experience (Arnold, 1999; Tomlinson, 1998c, 1998d).

If the learners do not think and feel while experiencing the language, they are unlikely to acquire any elements of it. Thinking while experiencing language in use helps achieve the deep processing required for effective and durable learning (Craik & Lockhart, 1972), and it helps learners transfer high-level skills, such as predicting, connecting, interpreting, and evaluating (Tomlinson, 2007c), to second language use. If the learners do not feel any emotion while exposed to language in use, they are unlikely to acquire anything from their experience. Feeling enjoyment, pleasure, and happiness; feeling empathy; being amused; being excited; and being stimulated are most likely to influence acquisition positively, especially if the learner is experiencing positive affect in the sense of being confident, motivated, and willingly engaged. There is a substantial literature on the value of affective and cognitive engagement while engaged in responding to language in use. For example, Braten (2006) reports on research into the role of emotion in language learning and use, Damasio (1994) reports research on the important role of emotion in memory, Pavlenko (2005) investigates the role of emotion in second language learning, and both Schumann (1997, 1999) and Stevick (1999) report research on the value of affective engagement while learning a language. Anderson (1990, 1993, 1995) shows the benefits of cognitive engagement during language experience, Byrnes (2000) focuses on the value of using higher cognitive-level skills in second language learning, Green (1993) picks out cognitive engagement as one of the main drives of second language acquisition, and Robinson (2002) devotes a number of chapters to reporting research on cognitive engagement. All these findings and assertions can apply to the learning of any subject, and the cognitive and affective engagement they stress can be achieved by physical games that make the learners think about what to do before and while doing it and also provides challenge, stimulus, and emotional rewards while playing the games.

Principle of Language Acquisition 3

Language learners who achieve positive affect are much more likely to achieve communicative competence than those who do not (Arnold, 1999; Tomlinson, 1998c).

Language learners need to be positive about the target language, about their learning environment, about their teachers, about their fellow learners, and about their learning materials. They also need to achieve positive self-esteem and to feel that they are achieving something worthwhile. Above all, they need to be emotionally involved in the learning process.

The value of such positive affect has been attested to, for example, by de Andres (1999), who reports research on the value of positive self-esteem in language learning, by Arnold and Fonseca (2007), who report research on how teachers can positively influence affective involvement, by Dornyei (2002), who offers 35 strategies for how teachers might enhance their students' motivation, by Dornyei (2002), who stresses the importance of positive motivation, by Rost (2005), who reports research on the value of positive affective involvement, and by Schumann (1997, 1999), who focuses on the benefits of positive appraisal. Of course, all this can be achieved through playing physical games, provided the games are sufficiently varied, cater for many different aptitudes and capabilities, and give all the learners opportunities to be successful over a period of time.

Principle of Language Acquisition 4

L2 language learners can benefit from using those mental resources that they typically use when acquiring and using their L1.

Learners can gain especially from multidimensional representation of both the language they experience and the language they intend to produce. (See Masuhara, 1998, 2006, 2007; Tomlinson, 1998e, 2000a, 2000b, 2001a, 2001c, 2003; Tomlinson & Avila, 2007a, 2007b for principled suggestions as to how making use of multidimensional mental representation can help L2 learners.) In L1 learning and use, learners typically make use of mental imaging (e.g., seeing pictures in their mind), of inner speech, of emotional responses, of connections with their own lives, of evaluations, of predictions, of personal interpretations. In L2 learning and use, learners typically focus narrowly on linguistic decoding and encoding (Tomlinson & Avila 2007b). Multidimensional representation of language experienced and used can enrich the learning process in ways that promote durable acquisition, the transfer from learning activities to real-life use, the development of the ability to use the language effectively in a variety of situations for a variety of uses, and the self-esteem that derives from performing in the L2 in ways as complex as the learners typically do in the L1.

There is a considerable literature on the vital use of the inner voice in L1 and the infrequency of use of the inner voice in the L2. For example:

- Sokolov (1972) reports research demonstrating the characteristics and functions of the inner voice.
- Vygotsky (1986) reports research on the roles of the inner voice and stresses the importance of these roles.
- Jenkin, Prior, Rinaldo, Wainwright-Sharp, and Bialystok (1993), Masuhara (1998), and Tomlinson (1998b) report on the rarity of use of the L2 inner voice by L2 learners.
- Appel and Lantolf (1994) and Masuhara (1998) report on the use of inner speech by advanced L2 learners.
- Akhutina (2003), Steels (2003), and De Bleser and Marshall (2005) demonstrate how effective inner speech is vital for effective outer speech.

What the literature demonstrates is that in the L1, we use the inner voice to give our own voice to what we hear and read, to make plans, to make decisions, to solve problems, to evaluate, to understand and “control” our environment, and to prepare outer voice utterances before saying or writing them. When talking to ourselves, we use a restricted code that consists of short elliptical utterances expressed in simple tenses with the focus on the comment rather than the topic, on the predicate rather than the subject. It is cotext and context dependent, implicit, partial, vague, novel, and salient to ourselves. However, L2 users rarely use an L2 inner voice until they reach an advanced level, though there is evidence that the use of an L2 inner voice at lower levels can enhance L2 performance and can be facilitated by teachers and materials (de Guerro, 2004; Tomlinson, 2000a). For further details of the characteristics and roles of the inner voice see Archer (2003), de Guerro (2005), and Tomlinson and Avila (2007a, 2007b).

Considerable literature has been published on the role of visual imaging in language use and acquisition. For example:

- Paivio (1979) and Sadoski (1985) demonstrate how we represent linguistic utterances by combining images from relevant prior experience with images generated by text.
- Eysenk and Keane (1990) demonstrate how visual imaging is used to make inferences about what is not explicitly stated.
- Sadoski and Quast (1990) and Esrock (1994) stress the value of visual imaging in deep processing (demonstrated by Craik & Lockhart, 1972, to be vital for long-term learning).
- Tomlinson (1996, 1998d) reports research on the role of visual imaging in retention and recall and in preparation of what you want to do, say, or write.
- Barnett (1989), Tomlinson (1998d), and Avila (2005) report that L2 learners do not typically use visual imaging when using the L2.
- Tomlinson (1998d) and Avila (2005) report research demonstrating the potential effectiveness of training L2 learners to use visual imaging in their learning and use of the L2.

Basically, what the literature demonstrates is that visual imaging plays a very important role in L1 learning and use, that it tends not to be used by L2 learners, and that L2 learners can be trained to use visual imaging to improve their learning and use of the L2.

Ideally, the inner voice and mental imaging should be used concurrently (Collins, 2005; Leontiev & Ryabova, 1981; Sadoski & Paivio, 1994) and in conjunction with affective connections and motor imagery too. This is what happens in L1 use and what could happen in L2 use too. It can certainly be stimulated by learner participation in physical games, which encourage students to talk to themselves in the preparation and the play and to visualize the instructions as well as strategies and moves before and while playing.

Principle of Language Acquisition 5

Language learners can benefit from noticing salient features of language in use.

If learners notice for themselves how a particular language item or feature is used (Schmidt & Frota, 1986; Tomlinson, 2007d), they are more likely to develop their language awareness (Bolitho et al., 2003; Bolitho & Tomlinson, 1995; Tomlinson, 1994). They are also more likely to achieve readiness for acquisition (Pienemann, 1985). Such noticing is most salient when a learner has been engaged in a text affectively and cognitively and then returns to it to investigate its language use. This is likely to lead to the learner paying more attention to similar uses of that item or feature in subsequent inputs and to an increase in its potential for eventual acquisition. This is an approach that can be effectively applied to the use of physical games, with the teacher leading a “postmortem” discussion helping the students make discoveries about the use of language features from a game just played. The same or a similar game can then be played as a means of helping the learners apply what they have discovered and improve their performance.

Principle of Language Acquisition 6

Learners need opportunities to use language to try to achieve communicative outcomes.

When trying to achieve communicative outcomes, learners can gain feedback on the hypotheses they have developed as a result of generalizing on the language in their intake and on their ability to make use of these generalizations effectively. If they are participating in interaction, they are also being pushed to clarify and elaborate (Swain, 2005) and are also likely to elicit meaningful and comprehensible input from their interlocutors. Physical games do not typically require linguistic communication, but it is often easy for the teacher to build this requirement into a game (by, e.g., having time-out phases in a game during which each group “coach” gives advice to the players and by getting learners to develop new versions of the games themselves).

The points made about language acquisition in the six principles above are taken from and elaborated on in Tomlinson (in press).

Theoretical Justification for Using Physical Games in the Language Classroom

Here is a summary of our theoretical justification for using competitive physical games in language learning based on the points that we have made when reviewing the literature above. We should make it clear that we are not advocating using only physical games nor are we proposing that a language-learning course should be games driven. What we are suggesting is that including a variety of different types of physical games on a language-learning course can

- help the course to cater for kinesthetically inclined language learners,
- energize the teacher and the learners,
- cater for learners whose preferred learning style is experiential (Kolb, 1984),
- provide rich and meaningful input of language in use,
- stimulate affective and cognitive engagement,
- promote positive attitudes toward the course,
- promote positive self-esteem,
- provide opportunities for personalized incidental use of language through learner banter, encouragement, advice, etc.,
- provide opportunities for using language in order to achieve nonlinguistic outcomes,
- provide feedback on outcome achievement,
- provide opportunities for learner discoveries about effective ways to process and produce the second language, and
- contribute to the development of the ability to achieve multidimensional representation when receiving or producing language.

Of course, using physical games in the reality of the classroom does not always achieve these theoretical benefits. Sometimes, the game becomes too rough or noisy, and the teacher has to abandon it. Sometimes, less kinesthetically inclined learners are reluctant to participate physically. Sometimes, the learners get so engaged in the game that they only use their first language. Sometimes, the learners get so engaged that they want to focus only on the entertainment value of the game and to ignore its potential for instructional gains. In order to maximize the potential of physical games to achieve the theoretical benefits listed above, we can

- vary the type of physical games we play, so they do not always require physical strength and skills (e.g., touch rugby one week and making and flying paper airplanes the next),
- include nonphysical elements in the games (e.g., opportunities for peer coaching),

- use games in which different learners can play different roles (e.g., coach, player, referee, reporter),
- build in quiet phases as a relief from noisy chaos (though noisy chaos is useful too),
- include games in tests and examinations so that they are valued for instruction as well as entertainment, and
- include rules that penalize the use of the L1 with higher-level classes.

A Principled Framework for Using Physical Games in the Language Classroom

There are obviously many ways of using physical games effectively in the classroom, and some of these ways suit certain teachers and certain learners better than others. However, we have found that using the flexible game-driven framework below to drive the game procedures seems to be effective in most of the classroom contexts we have used it in around the world.

1. Readiness Activities

These are primarily mental activities that the learners engage in to activate their minds in relation to the game they are going to play. They are intended to arouse curiosity about the game and to help the learners connect the game to their previous experience while they are trying to understand the instructions and when they are playing the game. For example, learners who are about to play Ayo are told to think of any games they know that involve moving stones or counters from hole to hole (or circle to circle) in order to win stones (or counters) from an opponent. They then share their previous relevant experiences in groups.

2. While-Listening/Reading Activities

These are mental activities which the learners are recommended to do while listening to or reading the instructions for how to play the game. The activities are designed to help the learners to respond holistically to the instructions, to stop them from trying to understand every word in the instructions on the first listening, and to stop them from treating the instructions as a text to study. For example, learners listening to instructions on how to play Head Tennis can be told to visualize themselves playing the game as they listen.

3. Intake Response Activities

These are activities that help the learners to articulate what they have taken in from the instructions and what their responses are to their introduction to the game. For example, learners could be asked whether they look forward or not to playing FLICK

FOOTBALL and then told to tell each other in groups what they can remember about how to play the game.

4. *Trialing the Game*

In this activity, the learners receive the instructions again and then try to play the game. If they encounter any problems, they go back to the instructions and ask the teacher for help. So, for example, if the learners are not sure who serves first in a game of HIGHBALL, they can go to a transcript of the instructions and then, if they are still not clear, they can call the teacher over and ask her to explain.

5. *Playing the Game*

The learners play a full version of the game and focus on trying to win. Meanwhile, the teacher notes both successful strategies and problems so as to be able to make use of in Stage 6.

6. *Reflection Activities*

Once the game has finished, learners in groups discuss what went right for them and what went wrong. This could be in the L1 for monolingual low-level groups or the L2 for higher-level groups. Then the teacher leads a plenary discussion in English in which she gets reports from the groups and highlights the points she noticed while monitoring the game(s) in 5. Sometimes, the learners might play the game again with the help of the teacher's feedback.

7. *Development Activities*

The learners go back to the instructions for the game in order to help them produce a development from the game. This could be a similar but different game, a newspaper report of the game they played, a simplified version of the game for younger learners, a reflection on the experience of playing the game, and so on.

8. *Input Response Activities*

The teacher provides copies of the rules and/or instructions of the game the learners have just played. She helps the learners focus on a particular linguistic feature and make discoveries for themselves about how it is used. For example, learners could be asked to make discoveries about the form and function of the first conditional after playing Lowball (e.g., "If the ball touches the net before landing in the opponents' court, you get two points").

If possible, the learners then look for other examples of their focus feature in other games and texts and then modify their generalizations accordingly.

9. Revision

The learners use what they have discovered in the input response activity to help them improve what they have produced in the development activity. This could mean that they rewrite their instructions for a game and/or instruct other learners how to play their game again orally. So if the learners have focused on the use of the first conditional in the input response activity, they would go through their instructions checking that they have explained the “conditions” of the game accurately and effectively. That would then become the focal point for the teacher when giving feedback to the learners about their instructions.

Not all the above stages need to be followed in the playing of every game. It is most important that the learners enjoy playing the game, but it is also important that at least some of the language-focused stages are included in the lesson.

Examples of Physical Games in the Language Classroom

WATERMELON GAME

Procedure. Young adult beginners of Japanese are at the stage when they can recognize instructions such as “Go forward/backwards/right/left,” “Raise/lower your hands” as a result of kinesthetic activities in previous classes and are ready for oral production of these expressions.

1. Readiness activity. The teacher tells the students they are going to play a game with a watermelon, a stick, and a blindfold, and then she shows them the realia they are going to use in the game. She tells them in groups to talk about what they think they will do when they play the game.

2. While-listening Activity 1. The teacher gives a brief description of a popular beach game in Japan called *Suika Wari* (cracking watermelon), and the students are told to try to see pictures of the game in their heads as they listen. In this game, a watermelon is placed on the beach about two meters away from all the participants. One person at a time is allowed to have a go. An individual or a representative from a group is blindfolded, given a long wooden stick, and asked to turn around three times on the spot. The rest of the group shout out instructions how to get to the watermelon, when to raise the stick, and when to lower it to hit the watermelon. The other groups try to confuse the representative by giving wrong instructions. Once the stick is put down, the turn is over, and the representative is allowed to take off the blindfold to find how far off the mark she or he is. If the representative has missed the watermelon, the group gets nothing. They can only prevent other groups from successfully hitting the watermelon and increase the chances of the group having another go. If the representative succeeds in cracking the watermelon, the group gets the watermelon as a prize to savor. The game continues in the same manner with groups taking turns in making attempts until the small stock of watermelon runs out.

3. *Intake response activity.* The groups are encouraged to talk about what they are going to do when playing the game and to ask the teacher about anything they do not understand.

4. *Trialing the game.* The teacher divides the class into groups and gives time for each group to choose a representative and to practice.

5. *While-listening Activity 2.* The teacher demonstrates how the game is played by becoming a temporary representative of one group. She places a plastic beach ball as an imaginary watermelon (some plastic beach ball in Japan have a watermelon pattern) in front of the class. She stands at a distance from the ball and blindfolds herself, turns around three times, and then invites her group to help her crack the watermelon by shouting correct instructions against the other groups' wrong instructions.

6. *Playing the game.* After her demonstration, the teacher invites the learner groups to have a go, encouraging groups to come forward before the watermelons run out. If a group succeeds in hitting the ball, the teacher cuts an imaginary watermelon and gives its pieces to the group members. The group members mime eating the watermelon, while the rest of the class applaud. The teacher could increase the difficulty during the game by moving the ball away from its original position in order to counteract the advantages of later participation. She could also announce that the watermelons have run out and close the game at any time.

7. *Reflection activity.* After the game, the learners are asked if they enjoyed the game and why. They are then given an opportunity to discuss effective strategies for giving instructions and to ask the teacher for more useful expressions that they felt they needed during the game.

Principles. Prior to experiencing this WATERMELON GAME, the learners had had abundant receptive exposure to instructional language in use (Principle of Language Acquisition 1). Such exposure includes teacher's general classroom instructions and activities, such as "Moving their body to a song," "Listen and draw," "Listen and discover," "Listen and mime to a story." Note that the learners had not been asked to speak in all these activities until this game. Instead, in previous classes, they experienced the target language through listening to the teacher while creating multidimensional representation of language in their brains (Masuhara, 2005, 2007), which involves sensory and motor imaging with cognitive and affective engagement (Principle of Language Acquisition 2).

Based on the foundation established in the previous classes, the WATERMELON GAME adds reasons and motivation among the learners to actively produce language in order to achieve a communicative target (i.e., winning a watermelon) (Principles of Language Acquisition 6).

The WATERMELON GAME is a cultural experience of a silly but entertaining real-life Japanese beach game. The learners laugh and relax a lot while instructing/obstructing their blindfolded teacher or peers to edge their way toward the watermelon.

The competition adds stimulus that is compelling, fun, and yet harmless. It is nonthreatening in a sense that the game has no serious consequences. It is a group competition, and no one really watches who is shouting out the instructions. The instructions may be correct or intentionally misleading. At stake for winning or losing, after all, is gaining a mere fictional prize.

The varied and meaningful repetition in the game is designed to nurture the transfer from learning activities to real-life use of the ability to use the instructional language effectively in a variety of situations for a variety of uses.

The game often helps raise the learners' self-esteem when the learners realize that they are managing to perform well in a task that is in many ways as complex as those that they do in their L1.

The game requires the learners to connect the instructions with the actual actions and positioning. The learners can see, hear, and feel the effect and witness the consequences of their language use (Principle of Language Acquisition 4). There are opportunities for the learners to notice effective use of language and strategies (Principle of Language Acquisition 5), and the postgame discussion provides further opportunities for the learners to make discoveries about language and how it is used (Principle of Language Acquisition 6).

Benefits. Enjoying a game from a foreign country provides a positive cultural experience. In addition, it can have the following outcomes:

- The rich, varied, and meaningful exposure can lead to acquisition of useful instructional language.
- The productive use of instructional language in the game can facilitate real-life use of instructional language, such as where to put things, how to do things, and when to do things.
- The cooperative nature of the game encourages rapport among class members, that is, the learners and the teacher. Such a positive relationship makes it a likely enjoyable and durable future classroom-learning experience.
- The raised self-esteem and positive association between the competitive physical game, the cognitive and affective engagement, and the sense of fun and effective language learning can motivate the learners' autonomous pursuit for further language-learning opportunities both in and out of their classrooms.

NEWSPAPER HOCKEY

Procedure

1. Readiness activity. The learners are asked to

1. imagine in their minds a game of hockey,
2. tell a partner what they saw in 1,

3. imagine in their minds a game of NEWSPAPER HOCKEY played in the classroom between two teams of learners, and
4. tell a partner what they saw in 3.

2. *While-listening Activity 1.* The learners are asked to imagine in their minds how to play NEWSPAPER HOCKEY, while they listen to the following description of the game.

You're going to play NEWSPAPER HOCKEY. You'll be divided into two equal teams and then you'll sit in a line in your team facing your opponents. At each end of the line, there'll be a chair and on each chair there'll be a hockey stick made from newspapers. In between the two chairs, there'll be a ball on the floor also made from newspapers. Each chair is a goal, and you'll be told which goal you are defending and which goal you are attacking. Each player will be given a number. If I call out your number, you should jump up, grab the hockey stick from the goal you are defending, and then try to hit the ball into the goal you are attacking. An opponent with the same number that you have will try to stop you from scoring and will try to hit the ball into your goal. You'll stop playing when a goal is scored or I tell you to stop. The winner will be the first team to score seven goals.

3. *Intake response activity*

1. The learners in groups:
 - a. talk about whether they think they'll enjoy playing NEWSPAPER HOCKEY or not
 - b. talk about any problems they have in understanding how to play NEWSPAPER HOCKEY
 - c. write down two questions they want to ask the teacher about how to play NEWSPAPER HOCKEY
2. The teacher answers one question from each group about how to play NEWSPAPER HOCKEY

4. *While-listening Activity 2.* The learners carry out the following instructions as each one is given.

- The students on this side of the room move your desks to the nearest wall.
- Put your chairs in a line facing the opposite wall.
- Now the students on this side of the room move your desks to the nearest wall.
- Put your chairs in a line facing the opposite wall so that you face the other students.
- This is Team A and this is Team B.
- Move your chairs so that you are directly opposite a player from the other team.
- Team A put a chair at this end of the room in between the two teams. This is the goal you are defending.

- Team B put a chair at this end of the room in between the two teams. This is the goal you are defending.
- Team A you are defending this goal and attacking that goal.
- Team B you are defending this goal and attacking that goal.
- I'm going to give each team some newspapers. Now each team makes three balls. Make them as hard as you can.
- I'm going to give each team some more newspapers. Now each team makes three hockey sticks. Make them as strong as you can.
- Each team put your strongest hockey stick on your team's chair, that's the one you are defending.
- Team A put your strongest ball in the middle of the room in between the two teams and in between the two goals.
- I'm going to give each player a number. Listen carefully to your number. (The teacher gives a number to each player in each team with Number 1 being the player nearest their team's goal.)
- Remember, when I call your number jump up, grab the hockey stick from your goal, and try to hit the ball into your opponent's goal. Keep playing until a goal is scored or I stop you. Remember also, you can only hit the ball with your stick. If you touch the ball with your hand or foot it's a penalty to the other team.

5. *Playing the game*

1. The learners play the game until one team scores seven goals. The teacher acts as the referee and also reminds the players of the rules if they are confused.
2. The learners play a more complicated version of the game in which they have to work out the answer to a mathematical problem in their heads. The answer is the number of players who should jump up and try to score.

For example,

The number of sides in a triangle plus the number of musicians in a trio divided by the number of wheels on a tricycle.

6. Reflection activity. The teacher leads a reflection on the game in which the learners discuss both the successful strategies of players who scored goals and problems that players had in understanding and carrying out the instructions.

7. Development activity. In groups the learners develop and then write instructions for a game called NEWSPAPER TENNIS, NEWSPAPER GOLF, or NEWSPAPER FOOTBALL.

8. Input response activity. The learners in groups are given a written version of the instructions in 4 above and are told to do the following:

- Read the instructions and visualize yourself playing the game.
- List all the adjectives in the instructions.
- Talk to each other about what you notice about how the adjectives are used? For example, where are they usually placed in the sentence? What do they tell you? When does their form change?
- Share your discoveries with another group.

9. Revision

1. Each group revises the instructions for the game they developed in 7 above making use of anything they have noticed when doing 8 above.
2. Each group gets another group to play their game by giving them instructions orally.
3. Each group revises their instructions again taking into account any problems the other group had in playing their game.
4. The groups give in their instructions to the teacher for marking and feedback.

Principles. The game was developed according to the following principles:

- Providing motivated exposure to language in meaningful use
- Providing language repetition in a variety of ways
- Stimulating cognitive and affective engagement
- Providing opportunities for meaningful use of language
- Providing opportunities for noticing how features of language are typically used
- Providing opportunities for making use of learner discoveries
- Catering for both analytical and experiential learners and especially for the majority of learners who are kinesthetically inclined
- Contributing to the development of self-esteem
- Contributing to the development of positive attitudes to the learning experience
- Contributing to the development of the high-level skill of visualization

Benefits. Whenever we have played this game, the students have

- had great fun,
- managed to understand demanding language because of its meaningful use and because of their motivation to understand it,
- managed to use complex language themselves because of their need to do so,
- made useful discoveries about the use of English for themselves,

- made effective use of visualization in response to and in preparation for the use of English

Conclusion

The Benefits of Playing Physical Games for Language Learners

We have listed the benefits of physical games for language learners already but would just like to stress in our conclusion how cheap and effective physical games can be in providing motivated and meaningful experience of language in use. The games do not require expensive technological aids, and the fact that the target for the learners is the winning of a game guarantees that the language used will be authentic, useful, and relevant, and that the learners will be focused on their aim of winning the game rather than practicing the language.

The Benefits of Playing Physical Games for Learners of All Subjects

One of the most obvious ways in which we can connect physical games to what we know about the learning of all subjects is by stressing how they provide the learners with opportunities to gain immediate feedback on the effectiveness of the outcomes of their contribution to an activity. As Yeo and Tan (1999) say, it is important that learners “reinforce their theoretical understanding . . . through direct feedback from their actions” (p. 70), and obviously physical games do provide such feedback. In addition, all the benefits claimed above for physical games in relation to language acquisition can apply to the learning of any subject, especially the opportunities they provide for enjoyable learning from multidimensional experience.

As we have said, we are not recommending basing courses entirely on the playing of physical games, but we are saying that using physical games in the principled ways we have recommended above can increase and enrich the learning opportunities of any course.

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