Barbara Friehs
Department of Education, University of Graz
Meragasse 70/II, Graz, Austria
Corresponding Author: barbara.friehs@uni-graz.at

ABSTRACT
The use of games in teaching and learning – which goes back to progressive education – enhances the holistic development of a person and the emergence of a variety of skills. Whereas several studies have already shown positive results for children, the present study concentrates on games as a didactic tool for teaching foreign languages to adults – a much less investigated area. Advantages and disadvantages of this approach are discussed and problem areas are identified. In addition, the results of an empirical study are presented, in which 100 adults (n=100) at three Austrian public night schools, who had learned English for six years, participated. The aim of this study was to find out whether the integration of games into teaching English as a foreign language makes a significant difference in the improvement of language skills in adult learners. For this study 50 adults (25 male and 25 female) were taught over a period of eight weeks with the use of games, while a control group of another 50 adults (25 male and 25 female) received traditional lessons on the same topics. Games, which were used, were primarily role plays, quizzes/puzzles and business games. According to our statistical analysis the group in which games were used showed significantly better results in the area of speaking, reading, grammar and the active use of advanced vocabulary whereas listening and writing competency was not significantly affected. Without any doubt games have their justified place in adult education. A competent implementation and use by teachers, however, is of crucial importance for satisfying results.

Keyword: Adult education, language teaching, games in teaching,

Introduction
The text deals with didactic games and their use in foreign language teaching of adults. Although the “importance of playing for acquisition of knowledge” has been established numerous times over the years (Heimlich 2001,131), the pedagogical achievements of playing were still insufficient for critics of this method to accept playing as an equally as effective learning process (Kluge 1981, 55). Reasons for these critiques are outdated traditions which consider playing and learning as opposing processes; playing is viewed as purposeless, voluntary and gratifying act, whereas learning is regarded a necessary, unpleasant activity, accomplished under duress (Koriander-Bayer/Faistauer, 1999, 7).

The article intends to demonstrate how important games can be for teaching foreign languages and how they change the teaching process by helping adult learners to extend their knowledge and at the same time have fun learning. The theoretical part concentrates on the relationship between playing and learning, deals with arguments for and against the use of games in the classroom, and discusses the benefits of games for the learning process of adults. The empirical part proves how positive the effects of the use of games can be on motivation, satisfaction and learning outcomes of adults learners.

In this study we hypothesized that the use of games had a positive impact on the learning process of the participants compared to the students who were taught in the
traditional way. We did not assume any significant differences in gender alone, nor did we hypothesize an interaction between game/no game and gender.

Objectives

For this reason we wanted to refer to the evident link between learning and playing, and on the other hand prove that games are neither a disturbing element nor a foreign body in the classroom. On the contrary we want them to be regarded as an indispensable component, which facilitates teaching and learning at the same time and often enhances learning results. Therefore its integration in adult education should be encouraged by all possible means.

Theoretical Background

Functions of Didactic Games

The use of games in teaching and learning – which goes back to progressive education – enhances the holistic development of a person and the emergence of a variety of skills (Döring 1997, 40). „With educational games in general and foreign language learning games in particular, it is also useful to consider the idea of explicit learning as a certain amount of conscious attention is needed for successfully taking in and learning a foreign language (Doughty & Long, 2003). Moreover, learning is a multidimensional construct with cognitive, skill-based and affective outcomes (Bloom & Krathwohl, 1956; Kraiger, Ford, & Salas, 1993). Cognitive learning covers absorbing, reproducing knowledge and developing skills and intellectual capabilities (Rovai, 2002). The affective domain addresses attitudes, motivations, opinions, emotions and values (Kraiger et al., 1993; Rovai, Wighting, Baker, & Grooms, 2009)“ (De Grove et al. 2013, 22).

Games which are used as part of the learning process pursue a pedagogical and a playful goal (Kleppin 2003, 264). According to Steinhilber, games are employed in schools intentionally as pedagogical tools and possess the criteria of a play (Steinhilber 1979, 6; 16; 30). Playfulness and didactics are both important features to shape a didactic game.

Games in classrooms encourage interaction, thinking, learning, and reflecting, and support the development of strategies for solving problems. Students practice analyzing skills, train their memory and interpretation abilities, and perform a high level of cognitive processing. Sometimes games also require students to interact in physical activity. Moreover, “(g)ames are effective tools for learning because they offer students a hypothetical environment in which they can explore alternative decisions without the risk of failure. Thought and action are combined into purposeful behavior to accomplish a goal. Playing games teaches us how to strategize, to consider alternatives, and to think flexibly” (Martinson & Chu, 2008, 478).

Games permit for creativity, personal expression, and logical thinking. “The learning process should be interesting, easy and it should be fun to learn. It also should fit with an everyday task and the working environment in order to achieve optimum results” (Pivec & Dziabenko 2010, 1). Usually, questions posed by a teacher only have one correct answer, whereas games can allow for numerous solutions. This permits the students to see that there are several ways to tackle the same problem. This also advances confidence and participation of all students in a class (Grötzebach 2010, 9). Furthermore, as foreign language students, it is vital that they are delivered with scenarios that are as lifelike as possible. According to Westera et al. (2008), games can be used to help the teacher to develop the skills of their students by engaging participants in what can be considered real world predicament. Games offer a way to learn new skills without the risk of being in real life. If chosen well, they can simulate real life situations.

Games also support team-work among students. They let the students to put effort as a team and to work collaboratively towards a mutual goal. This cooperative effort is more than
just learning to work with others. It endorses a synergetic relationship where they can learn from each other. Students need to give explanations for why their solution is the best, pay attention to their teammates’ rationale and then decide which answer is the finest and why. So now, the joint effort is encouraging a spontaneous discussion about the material, refining pronunciation, growing participation, and helping in comprehension. The students are also evolving belief and self-esteem in this practice. Trust ripens within and among the teammates. The learners need to trust their own instincts and others’ rationale about the solution as well as the talent to produce it. Self-esteem nurtures as their answers are authenticated and teammates depend on them to be key players in the game (Talak-Kyrik 2010).

Didactic games as teaching tools are beneficial because of their supportive function for teaching and learning (Hoppe 1983, 292). In students it prompts an intrinsic motivation distracting from the learning objective which is regulated from the outside. This way the learning process subconsciously occurs in the head of the student. Even facing the potential issue of losing sight of the learning objectives, students experience the event of learning through plays more relaxing and interesting compared to normal teaching routines. The motivation to participate in playing transfers automatically onto learning and results in voluntary and active participation in class. Particularly beneficial is the motivational function of playing for advancement of verbal competence especially for foreign language classes. When playing, students lose their inhibitions to speak in a foreign language. Suddenly, the teacher no longer needs to reinforce the use of the foreign language but it is accomplished through willing participation in games and thus, readily accepted by the students which leads to voluntary use of the foreign language (Hoppe 1983, 293).

Language competency is also supported by communicative functions of playing. Games mimic various situations which help to develop interaction and communication skills in a foreign language (Hoppe 1983, 294). Although it is imaginary game, the interaction is interpreted as “authentic communication”. In these linguistic – and especially stress-free – situations, adults learn to use learned and practiced communication tools but also interact spontaneously. Games offer the unique possibility to play with the language and thereby test it out as much as possible when instructed to experiment with different language structures. Thereby, the creative interaction with the language is supported which exemplifies the creativity-focused function of playing. The relaxing and pleasant atmosphere created by playing offers additional impulses in support of imaginative and creative thinking.

Fears for negative effects of misappropriated use of games could be disproved by Steinhilber. He showed that students were not occupied by the purpose of the game but by the game itself but the purpose imposed on the game from the outside, was of no interest while playing (Steinhilber 1979, 21). The game reflects reality and supports the processing of information, role playing, decision making as well as action-based communication (Kube 1977, 35). As additional criterion Kube mentions functional pleasure which makes students to perceive difficulties, efforts or failures not as burden. Thereby, implementing targeted learning objectives is improved (Kube 1977, 29).

**How do Games Support Adult Learning?**

A great thing about games is that they provide more than just a fun alternative to lessons. Even though games might seem below adults they can actually be a great tool for helping adults learn languages.

An adult learner has a different expectation of their classroom than children do. Adults are better able to direct and motivate themselves and work towards a purpose. Adult learners also want to know how what they learn can help them in their current career or in their own personal life. To put it another way; adults need to know how what they learn directly affects them in order to learn properly.
Because adults demand this relevance from their education, teachers often assume that games are not a good choice. But in many occasions interactive games are perfectly fine to promote effective skills and help adults learn, just like it can with children. The game is non-age-dependent which makes it an invaluable education tool. What can make it more difficult for adult students is not understanding that the game is not just for fun alone but has a high educational value. Again, those who have been in the game can convince others that the game serves numerous purposes other than pleasure.

There are a few challenges with introducing games to a class of adult learners. The first is that every student needs to participate and be included. Every student in a class is different. It can be problematic for teachers to have a good balance between the ones that are outgoing and eager, and the ones that are more passive and unwilling.

There are people, who teachers will find opposing using games in classrooms. They sense that the competitive type of the games creates a hostile learning atmosphere. Competition is also already existent in our education system with test scores and grades. Therefore, when using games in the classroom, winning should never be the emphasis or goal of the games or the players. On the other side, there are also many language learning games that are not competitive in nature but one competes with oneself or teams work on a mutual result.

What are Special Features of Good Games?

One of the main selection criteria is governed by the learning objective. The student needs to understand why he/she uses the game and what he/she wants to gain from it. It needs to be clear whether the game is used to facilitate new learning material, to repeat or reinforce already acquired knowledge, to serve as wake-up call, or to establish additional activities for those students who work too fast during class and are either bored or cause unrest. The latter can be addressed by utilizing plays as means of quantitative (more play tasks for advanced students) or qualitative (more sophisticated play tasks for advanced students) differentiation (compare Steinhilber 1979, 129; Grötzebach 2010, 31-32).

Students should be asked to define preferred contents which they want to get across to their peers. Selection of plays should be driven by the target audience but should not be seen as means to an end. Therefore, plays must often be modified to adapt to the students’ needs. Students’ age, language skills and learning levels should be primarily considered (compare Dauvillier/Levy-Hillerich 2004, 45). The game should never be too easy or too difficult but should be selected accordingly. Inadequacy to the level of qualifications restricts reaching competency, which is frustrating and can result in post-frustration reactions (Steinhilber 1979, 23). Plays should provide students with the sense of competence but at the same time should not be overwhelming. Group size is very important since many plays require a certain number of participants.

The duration of the game is also a main selection criterion and so is the integration into class routine. Plays cannot last too long since the time frame of the class does not allow it. Dauvillier and Levy-Hillerich (2004, 36) motivate teachers to select plays with shorter duration because of their increased efficiency. In their opinion, students cannot remain focused for more than 15 to 20 minutes when playing in a foreign language. In addition, the teacher needs to consider that the selected play fits the overall concept of the class (Caon/Rutka 2004, 54). On the one hand the game should not be overloaded with didactics but on the other hand should not completely negate the didactic intentions (Steinhilber 1979, 24).

As already mentioned above, good games are focused on learning objectives. The skills involved and the material covered in the game are clearly defined. They also challenge the players to use what they already know and at the same time learn new skills and improve
their knowledge. A good game should also motivate to learn. “Games enhance repetition, reinforcement, retention and transference” (El-Shamy 2001, 10). By the means of games old and new material can be repeated, examined and practiced which makes the learning process solid and lasting.

Good games are challenging, but not impossible. They make the players more determined and encourage them to be successful and complete the game. Games of high quality should also challenge students by giving them new situations that take advantage of their old knowledge to allow them to learn more. Games are also motivating for adults as they are more fun and interesting than a typical lesson. This fun encourages them to not only play the game, but to want to play it again in the future. Good games are sometimes so fun and engaging that also adult students often forget that they are learning something.

Games also need to be inclusive. Every student in a class should feel comfortable taking part in a game. This builds their social interaction and communication skills and promotes a sense of community within the class.

**Challenges for Teacher**

To make games a part of routine class work a success, teachers need to be open-minded toward games but also have to believe in the effectiveness of playful learning (Schiffler 1982, 19). Besides technical and didactic-methodological competency, the teacher’s relationship towards the game is important and so is an authentic personality as a teacher (Zecha 1995, 50; Hansen/Wendt 1990, 39). Utilizing games in class also alters the teacher-student relationship which is based on trust for the most part since the distance between both parties is reduced. The developed trust between teacher and student encourages a partnership-like behavior which impacts the learning environment positively especially in adult education classes.

After a game starts, the teacher should withdraw from his dominating role and exchange it for a role as spectator. To directly interfere with the game should be reduced to events when his/her help is required (Heimlich 2001, 202). Before a play is introduced in class, it needs to be tested thoroughly for its functionality, rules, components and obviously its intentions. The main focus should be whether this play is suitable to mediate, repeat or reinforce the teaching content of the class (Dauvillier/Levy-Hillerich 2004, 35-36; Steinhilber 1979, 53).

The teacher needs to contemplate on how to correct errors while considering his role as a spectator which does not allow for direct interfering with the game to correct mistakes. It is better to list the observed errors during the game and discuss after the game has ended (Dauvillier/Levy-Hillerich 2004, 36; Zecha 1995, 51).

Games contribute to the change in class dynamic toward the student, decentralizing the role of the teacher. The teacher’s duty is now reduced to explaining the game and its rules, and to observing the game. His/her expertise is only applied when required by the students. Otherwise, the whole responsibility for learning while playing is transferred to the students. This change in responsibility provides students with a sense of freedom because they do not feel supervised while playing, and also with a sense of trust which supports their self-esteem and thus, strengthens the learning process.

Games offer a constructivist environment in classrooms. Students pull their own significance from these involvements while learning from their inaccuracies and mistakes and also from each other. They make use of their previous knowledge and use their new information in a condition distinct from the activity in which they originally acquired it. Additionally, teachers are now able to observe each student and grasp what areas the whole class or individual students have problems with or show top-rate performance. They can also sort out the social dynamics of the class.
It’s important that the teachers know what their teaching goals are. When it comes to adult education the goals will often come with elements that are unique to educating adults, like helping the student understand how they learn, or helping them understand how they can turn the knowledge and information they learn into skills.

In conclusion, games have their justified place in adult education. Games are useful tools to engage learners of several learning styles, review and bridge the concepts, motivate participation and apply knowledge and skills, conserve attention, promote the logical thinking and problem-solving skills, help in converting knowledge to decision-making, and sponsor teamwork (Talak-Kiryk 2010).

A competent selection of games and a well-planned use by teachers, however, is of crucial importance for satisfying results. If working with a group of adults, it’s not advisable to play games that will drain their powers. For this group, using a model of a popular game show like Jeopardy, computer-assisted games, or puzzles may be more appropriate. Other models include trivial pursuit or, bingo. Every game has to have an explicit learning objective in mind. If teachers want to use a game in a classroom they need to use games that have clear objectives and purposes focused towards learning. They have to make sure the game clearly shows what the students will learn and what skills they practice as they play the game.

When games are viewed as serious didactic tools their introduction is determined by the teacher and the learning objective of the game. Accordingly, one can observe that games can be applied at any phase of the class when it had been included properly during the planning of the lesson. It is the teacher’s responsibility to understand when and why at a specific time point this particular play should be integrated into the lesson. However, games should not become the dominant or even exclusive learning model. When a specific learning model is used too often, motivation suffers even if it encompasses a didactically valuable method (Steinhilber 1979, 63).

Methodology

Whereas several studies have already shown positive results for children, the present study concentrates on games as a didactic tool for teaching foreign languages to adults – a much less investigated area. In this empirical study 100 adults (n=100) with a mean age of 43.7 at three Austrian public night schools participated. The aim of this study was to find out whether the integration of games into teaching English as a foreign language makes a significant difference in the improvement of language skills in adult learners. For this study 50 adults (25 male and 25 female) were taught over a period of eight weeks with the use of games, while a control group of another 50 adults (25 male and 25 female) received traditional lessons on the same topics.

Games, which were used, were primarily role plays, (virtual) quizzes/puzzles and business games. After the teaching period all participants had to take exams that tested their skills in reading, writing, vocabulary, speaking, grammar, and listening. They were also asked to rate their level of motivation and satisfaction with their English classes during the past eight weeks.

Results

Eight two-way analyses of variance (ANOVAs) were used to examine the effects of game condition (2: games used in teaching, games not used in teaching) and gender (2: female, male) on several indicators of student success in foreign language learning, including listening, reading, speaking, grammar, vocabulary, writing, motivation, and satisfaction. There were significant main effects of game condition for reading, $F(1,96) = 79.314, p < .001$, speaking, $F(1,96) = 42.126, p < .001$, grammar, $F(1,96) = 48.640, p < .001$, vocabulary, $F(1,96) = 31.170, p < .001$, motivation, $F(1,96) = 124.839, p < .001$, and satisfaction, $F(1,96) = 127.149, p < .001$. Adult students in classrooms using games as teaching tools had better scores for reading, speaking, grammar, vocabulary, motivation, satisfaction than students in
classrooms without games (see Table 1 for group means, standard deviations, and effect sizes, with lower scores indicating better performance). Differences in listening, $F(1,96) = .419, p = .519$, and writing, $F(1,96) = 1.782, p = .185$, were not significant. There were also no significant main effect of gender for any of the student success indicators, including listening, $F(1,96) = 1.165, p = .283$, reading, $F(1,96) = 2.102, p = .150$, speaking, $F(1,96) = .387, p = .535$, grammar, $F(1,96) = .032, p = .858$, vocabulary, $F(1,96) = 3.463, p = .066$, writing, $F(1,96) = .133, p = .717$, motivation, $F(1,96) = 2.548, p = .114$, and satisfaction, $F(1,96) = 3.041, p = .084$ (see Table 2 for group means, standard deviations, and effect sizes).

Table 1
Means, standard deviations, and effect sizes for each of the student success indicators for the game and no game conditions ($N = 100$), with lower values indicating better performance.

<table>
<thead>
<tr>
<th>Student Success Indicator</th>
<th>Game Condition Mean</th>
<th>Game Condition SD</th>
<th>No Condition Mean</th>
<th>No Condition SD</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>3.76</td>
<td>.131</td>
<td>3.88</td>
<td>.131</td>
<td>.004</td>
</tr>
<tr>
<td>Reading</td>
<td>2.30</td>
<td>.137</td>
<td>4.02</td>
<td>.137</td>
<td>.452</td>
</tr>
<tr>
<td>Speaking</td>
<td>2.14</td>
<td>.159</td>
<td>3.60</td>
<td>.159</td>
<td>.305</td>
</tr>
<tr>
<td>Grammar</td>
<td>2.24</td>
<td>.158</td>
<td>3.80</td>
<td>.158</td>
<td>.336</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>2.32</td>
<td>.160</td>
<td>3.58</td>
<td>.160</td>
<td>.245</td>
</tr>
<tr>
<td>Writing</td>
<td>3.76</td>
<td>.117</td>
<td>3.98</td>
<td>.117</td>
<td>.018</td>
</tr>
<tr>
<td>Motivation</td>
<td>1.70</td>
<td>.115</td>
<td>3.52</td>
<td>.115</td>
<td>.565</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.72</td>
<td>.122</td>
<td>3.66</td>
<td>.122</td>
<td>.570</td>
</tr>
</tbody>
</table>

Table 2
Means, standard deviations, and effect sizes for each of the student success indicators for female and male students ($N = 100$), with lower values indicating better performance.

<table>
<thead>
<tr>
<th>Student Success Indicator</th>
<th>Female Students</th>
<th>Male Students</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Listening</td>
<td>3.72</td>
<td>.131</td>
<td>3.92</td>
</tr>
<tr>
<td>Reading</td>
<td>3.30</td>
<td>.137</td>
<td>3.02</td>
</tr>
<tr>
<td>Speaking</td>
<td>2.80</td>
<td>.159</td>
<td>2.94</td>
</tr>
<tr>
<td>Grammar</td>
<td>3.00</td>
<td>.158</td>
<td>3.04</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>2.74</td>
<td>.160</td>
<td>3.16</td>
</tr>
<tr>
<td>Writing</td>
<td>3.84</td>
<td>.117</td>
<td>3.90</td>
</tr>
<tr>
<td>Motivation</td>
<td>2.74</td>
<td>.115</td>
<td>2.48</td>
</tr>
</tbody>
</table>
Satisfaction

The significant main effects for game condition were qualified by significant interactions between game condition and gender for reading, F(1,96) = .4.290, p = .041, and motivation, F(1,96) = 5.442, p = .022. Interactions were not significant for listening, F(1,96) = 1.165, p = .283, speaking, F(1,96) = .071, p = .790, grammar, F(1,96) = .799, p = .373, vocabulary, F(1,96) = 3.463, p = .066, writing, F(1,96) = 1.193, p = .278, and satisfaction, F(1,96) = .014, p = .908. Specifically, female students in the no game condition (M = 3.96, SD = .193) performed similarly to male students (M = 4.08, SD = .193), while female students in the game condition (M = 2.64, SD = .193) performed worse than male students (M = 1.96, SD = .193) for reading (see Figure 1 for a comparison of the reading means by gender and condition).

![Estimated Marginal Means of reading](image)

Figure 1: Mean reading scores by gender for the game and no game conditions

The interaction results were quite different for motivation. Female students in the no game condition (M = 3.84, SD = .163) performed worse than male students (M = 3.20, SD = .163), while female students in the game condition (M = 1.64, SD = .163) performed slightly better than male students (M = 1.76, SD = .163) for motivation (see Figure 2 for a comparison of the reading means by gender and condition).
Discussion

When examining the effects of game conditions on several indicators of student success in foreign language learning, including listening, reading, speaking, grammar, vocabulary, writing, motivation, and satisfaction, we could observe significant main effects of game condition for reading, speaking, grammar, and vocabulary. Also, the motivation and the level of satisfaction were influenced in a positive way by the use of games during classes. The students showed better test results in the above-mentioned fields compared to the students who were taught in the traditional way. Only the differences in listening and writing were not significant, which may be explained by the fact that not only none of the games particularly concentrated on these two competencies but also the focus of teaching during the eight-week period was mostly on speaking, reading, and vocabulary. There was no significant main effect of gender for any of the student success indicators.

Interestingly, the significant main effects for game condition were qualified by significant interactions between game condition and gender for reading and motivation. Interactions, however, were not significant for listening, speaking, grammar, vocabulary, writing, and satisfaction. Specifically, female students in the no game condition performed similarly to male students, while female students in the game condition performed worse than male students for reading. For motivation, the results were different, as female students in the no game condition performed worse than male students, while female students in the game condition performed slightly better than male students. Further research would have to clarify reasons for these occurrences.

In conclusion, the use of games in teaching English to adults was a very successful endeavor. It did not only increase test scores in most fields but also contributed to a higher level of motivation and satisfaction among the participating students.

Limitations

Although our study confirmed previous general findings on the use of games in teaching, we acknowledge its limitations. We drew a relatively small sample from one school district and only part of our test evaluation instruments were standardized. Moreover, the games that were used were selected randomly by teachers without specifying any selection...
criteria. Further research is necessary especially on the impact of games on teaching foreign languages to adults.

**Conclusion**

The importance and educational benefits that games can have in any learning context of any age group are visible. Playing games have more benefits than just standing or sitting to teach a set of students, or preparing for a test. There is a high level of learning when games are played, and there are also games that serve an educational purpose than just fun. Games offer opportunities for students to acquire new skills without hassle created by social circumstances and daily routines or performance. It also encourage students to know more about a language and provokes social interaction in a fun and non-violent way.

Despite the traditional and annoying way of learning often recommended for adults such as website articles, podcasts and power points presentations, games are becoming more appealing and engaging to even older students. With all the games taught and practiced, it is clear that games are no longer just for young learners but for all age groups. The older ones in our society need to be convinced of how effective the game is to their learning abilities from the beginning.

**References**


