

---

## Using Game Playability as a Framework for Professional Development in Language Teaching

Austin Pack, Xi'an Jiaotong Liverpool University, Suzhou, China

Sam Newbould, Xi'an Jiaotong-Liverpool University, Suzhou, China

---

### Abstract

It may be difficult for some language teachers to identify how they can improve and what changes they ought to make to their language teaching. This paper proposes that teachers may benefit from learning about the concept of game playability in Human-Computer Interaction and game development and then applying the concept of playability to the language teaching and learning that occurs in their classroom. We begin by summarizing the factors and attributes of playability identified by Sánchez, Gutiérrez Vela, Simmaro, and Padilla-Zea (2012) and then compare these to factors and attributes of language teaching and learning. Lastly, in an attempt to help teachers apply the concept of playability to their language teaching, this paper proposes four self-reflection activities, a method of conducting teaching peer-review, and a form for students to evaluate teachers' activities and tasks, using playability as a framework.

**Keywords:** self-reflection, language teaching, language learning, playability, learnability, professional development, peer review, student evaluation, game development

### Introduction

As an external observer we might think of solutions to problems that we normally do not see when we are locked into playing a game or teaching a class (Donnelly, 2007). The purpose of this article is to encourage language teachers to engage in reflective exercises in which they view their own language classroom from the perspective of an external observer with the hopes that solutions to hindrances to learning in the language classroom can be found. Specifically, teachers are encouraged to view the language teaching and learning that occurs in their classroom from the perspective of a game developer, with the concept of game

playability in mind. Thinking of language teaching and learning in terms of playability may help teachers to view their teaching holistically, with the concept of playability acting as the hub or center of a wheel, connecting many important yet seemingly unrelated concepts of language teaching like pace, usability, learner autonomy, learner interaction, and the quality teaching and learning materials. By viewing these terms as interconnected spokes on a wheel, connecting to and interacting with the concept of playability, teachers may more easily identify hindrances to learning in their language classrooms as well as think of ways to remove those hindrances.

### **Playability and Game Design**

Before asking teachers to reflect on the language teaching and learning that occurs in their classrooms, we suggest that teachers first consider the concept of playability in game development. According to Sánchez, Zea, and Gutiérrez (2009), the concept of game playability is of paramount importance for game developers to be able to provide potential buyers an entertaining game with optimum Player eXperience (PX). Usability First, a website created with the purpose of informing readers about designing software and websites, defines playability as “the degree to which a game is fun to play and usable, with an emphasis on the interaction style...the quality of gameplay” (Usability First, n.d.). Sánchez et al. (2012) describe playability as “the degree to which specified users can achieve specified goals with effectiveness, efficiency and, especially, satisfaction and fun in a playable context of use” (p. 1037). These authors also point out that playability is affected by a variety of factors including pace, usability, customizability, intensity of interaction, the degree of realism, and quality of graphics and sound.

As a way to measure the quality of gameplay, it is easy to see how playability is essential to developing a game that consumers want to buy and play. If the pace of a game is too slow, then users may get bored with it and stop playing the game. The slow pace causes the game to have low playability. Likewise, if the controls, level design, or other features of a game are confusing, then players may get frustrated and stop playing. Low playability results in a poor PX which means that it is less likely that consumers will buy the game or continue to play the game if it has already been purchased. Customizability, one of the factors that affects playability, demonstrates the need for careful consideration and balance when making

decisions that affect playability. While on the one hand having a game that is customizable may lead to a better PX, a game that has too much customizability may be overwhelming for users and have the adverse effect of lowering overall playability. This demonstrates the difficulty game developers face when trying to create a meaningful and satisfying experience for each player. Each player, having different preferences, might not get satisfaction from the same part of a videogame (Sánchez et al., 2012). In short, playability is an essential component of game design and must be taken in consideration throughout the entire process of game development.

### Playability and Language Learning

The interrelation between playing and learning is by no means a new idea. In ancient Greek and Latin cultures, which to this day still strongly influence many aspects of Western civilization (like education), games, playing, and learning were all closely related (Botturi & Loh, 2008). The Greek word *paideia* denoted both game and education. The root of *paideia*, *\*pai*, can be found in the Greek word for playing, *paizó* (Botturi & Loh, 2008, p. 17), and the Greek word for boy or child, *pais* (Harper, n.d.). The word for school in Greek, *skhole* meant “spare time, leisure... that in which leisure is employed; learned discussion” (Harper, n.d.). The idea that playing and learning go hand and hand is still present in Western civilization today. Dutch historian Johan Huizinga has been quoted as saying “Let my playing be my learning, and my learning be my playing.” (Botturi & Loh, 2008, p. 1). Likewise, Marshall McLuhan, a Canadian scholar of communications and media studies, has been quoted as saying “anyone who makes a distinction between games and learning doesn't know the first thing about either” (Becker, 2010, p. 22). With this understanding of the interconnectedness of playing and learning, consider the importance of playability in language teaching and learning.

Although game developers and language teachers may ultimately have completely different goals, language teachers and educators may benefit from thinking about their curriculum, lessons, tasks, and activities in terms of playability. Just as playability is essential to any game developer who wants to attract and retain a player base, playability is vital to any language teacher who wants students to tune in and participate throughout an entire class session or course.

### **Pace**

Pace, one of the key factors of playability mentioned above, relates to language teaching and learning. If the pace of an activity, lesson, or course is too slow, then students are likely to get bored and lose motivation to participate. Conversely, if the pace is too fast then students may feel overwhelmed and become discouraged. The timing of activities and stages of a lesson is of critical importance (Harmer, 1998, p. 124). An inappropriate pace results in a poor Learner eXperience (LX) and this contributes to the activity, lesson, or course having low learnability. Modifying the definition of playability given by Sánchez et al. (2012) learnability could be defined as “the degree to which *language learners* can achieve specified goals with effectiveness, efficiency and, especially, satisfaction and fun in a playable context of use.” By carefully considering the factors that influence playability (pace, usability, customizability, intensity of interaction, and the quality of graphics and sound [materials]), language teachers might come up with ways to improve the LX of their students.

### **Usability**

Usability is also a shared concept between playability and language teaching. In game design, usability is a defining concept of the user experience (Sánchez et al., 2012), traditionally being seen as a measure of how effective and intuitive something is in allowing the user to reach their goal (Isbister & Schaffer, 2015, p.3). The goal of games is for the user to have fun, simply put if the usability of a game is low, the player will not want to play. In language teaching, where the goal is to improve a student's language level, usability can refer to two things, the first being whether or not students understand how to use what is being taught, and the second being whether or not the lesson's learning aims can actually be used by the students in real life.

The concept of usability relates to two common theories of learning: Krashen's input hypothesis and Vygotsky's zone of proximal development. Krashen's Input Hypothesis is a well-known theory within language teaching which posits that learners need to have access to language slightly beyond their current level, often described as  $i+1$  (Krashen, 1985). This is similar to Vygotsky's theoretical construct of the Zone of Proximal Development, which posits that there is a space between what learners can't do and what they can do unaided. This space is the zone

of Proximal Development and it includes what the learner can do with guidance (Chaiklin, 2003). If the teacher's instructions, the materials, the tasks set, learning objectives, or any number of possible elements of the classroom are not at the right level then the lesson may be 'unusable' because they are not effective or intuitive in aiding the learner improve their language level. If the level of the lesson is not suitable for the learner, then they will feel discouraged, unmotivated, and they may even want to disengage with the lesson (Ghazali et al., 2009), all of which impede learning. Similarly, when the usability of a game is low, a phenomenon known as 'rage quitting' may occur, this is when players feel so frustrated they end the game prematurely and do not want to continue playing (Hodent, 2017).

Usability of video games also relates to their control system, if the operation desired requires a too complex set of inputs, the menus are vague or unintuitive, or the hardware has poor ergonomics, then the player will find it frustrating and not want to continue playing (Sanchez et al., 2012). In the language classroom the control system is best viewed when considering the tasks teachers ask of students. For example, a multiple choice answer based on a reading text's "control system" may be the way in which a learner inputs their answers, if the boxes are confusing, disorganized or unclear then the student will have a difficult time answering the questions. Equally, the menu system could be viewed as how the students navigate to the answers in the text, for example 'the answers can all be found in paragraph 5' but one of the answers is in paragraph 6, then the student would understandably feel annoyed.

Finally, usability can relate to language teaching when we think about the needs and purposes for learning English of our students. Today's language classrooms are often described as learner-centred, it is then reasonable to state that catering to their specific needs is of critical importance (Seedhouse, 1995). This could be the vocabulary, grammar structure, a particular subskill, or any feature of the lesson that the learner would benefit from so that they can use the language. Not only should teachers think about the usability of the language for their students, but ideally, learners should also consider how usable the language is to their own situation as this increases motivation (Dörnyei & Ushioda, 2013, p 16). This of course, depends on the individual learner, it could be to pass a test, to help them integrate into a host or foreign culture, or simply due to personal interest.

### **Customizability**

Customizability in game design, or in other words the ability for game players to customize the game to their own playing styles and interests, is similar to the concept of learner autonomy in language learning, which was originally presented by Holec (1981). Learner autonomy, which Benson (2013) defines as a “capacity to control important aspects of one’s language learning” (p. 839), is an important part of language teaching and learning. Autonomous learners, according to Little (2003), take responsibility for their own learning by taking a role in goal setting, designing and implementing learning activities, and evaluating their own progress.

Little highlights three reasons why teachers should encourage their students to be autonomous learners. First, time spent learning is more focused and efficacious when students are reflecting on their learning because what students choose to learn is likely to relate to their personal interests and goals. Second, autonomous learners are more likely to be motivated. Third, by using language in spontaneous communication, autonomous learners are able to broaden their range of discourse.

The traditional view of a classroom and learning experience for the student is very much top down, teacher driven, and passive for the learner. In a way, the traditional classroom is like going to the cinema; the audience, or learner in this situation, has little control over their viewing experience. Whereas today’s pedagogy is abound with notions such as autonomous learning, flipped classroom, and negotiated syllabus, which all highlight the highly customizable nature of learning. So just as customizability is an important concept for game developers to include in their games to provide satisfaction to the users who play the game, learner autonomy is an essential concept that language teachers should bear in mind when designing and executing activities and lessons that motivate and enable students to take an interest and responsibility in their own language learning.

### **Interaction**

Interaction is another important attribute of both game playability and language learning. Socialization and interaction amongst players is one of the key attributes of playability identified by Sánchez et al. (2012). Multiplayer games that include communication mechanisms (text, voice, and video/voice calls) allow players to work in competition or in tandem to complete shared objectives. This socialization and interaction amongst players increases the playability of the game

and makes playing the game rewarding, challenging, and fun. This same idea that interaction between players to achieve shared goals will lead to a better PX, can also be found in language teaching. The importance of interaction in completing shared goals and objectives can be found in Communicative Language Teaching (CLT), which is one the most common language teaching methodologies used today. Consider several of the core assumptions of CLT as explained by Richards (2006, pp. 22-23):

1. Second language learning is facilitated when learners are engaged in interaction and meaningful communication.
2. Effective classroom learning tasks and exercises provide opportunities for students to negotiate meaning...and take part in meaningful interpersonal exchange.
3. The classroom is a community where learners learn through collaboration and sharing.

Both Sánchez et al. (2012) and Richards (2006) identify interaction, meaningful communication, and collaboration as essential concepts in their respective fields. Similar to how socialization and interaction in completing shared goals improves the PX of gamers, including socialization and interaction in the language classroom will improve the LX of language learners.

### **Materials**

When playing a video game, the quality of the graphics and sounds are a crucial element of playability (Sanchez et al., 2012) due to the audiovisual elements of a game being “tied to functional playability as interface aspects can directly relate to input controls and feedback of the game” (Nacke, 2009, p. 11). Additionally, quality audiovisuals can immerse the player in the game environment (Ermi and Mayra, 2005), making them more likely to continue playing.

In language teaching, the audiovisual elements of a lesson can be the materials used. How ‘playable’ these are depends on a number of categories, for example technical details. These can be obvious things such as the image quality of the video, the sound quality of the audio, but also includes things like font and text size. If the picture or sound quality is bad, maybe due to printing issues or poor speakers, then it stands to reason the learners will have a harder time understanding the language and the playability of the lesson will be low. This is especially im-

portant in testing situations as it has been shown that the audio quality of a recording has a direct impact on students' scores (Yang, 2009).

The appeal and interest of the materials used in language learning is also important. Studies have shown that teachers believe interesting visuals aid language learning in areas such as vocabulary (Yunus et al., 2013), by incorporating audio-visual elements into a lesson students motivation to engage with the lesson will be increased. That said, there is a debate in the literature as to how 'interesting materials' gain this property. It could be from the learner, who brings interest to the material, it could be from the intrinsic nature of the material, or it could be from the psychological engagement of the learner with the task (Dörnyei & Ushioda, 2013, p. 26). Nevertheless, the origin of 'interest' seems secondary to the teacher in the classroom, the fact remains that interesting materials increase learner motivation (Dubin & Olshtain, 2002, p. 103) and therefore influences a critical factor of the rate and success of language learning (Dörnyei, 2009).

In summary, materials for language teaching have long been evaluated and developed with the audiovisual criterion in mind. It's important to state that different authors and publishers have different beliefs about what constitutes a 'good' language learning material, nevertheless, they "need to recognize that layout, format, typography and graphics are also essential for a successful coursebook" and that "it is now widely felt that colourful, motivating and accessible materials can legitimately be demanded" (Sheldon, 1987). Therefore, when preparing a lesson, attention needs to be paid to the presentation of the language.

Now that the connections between playability and language teaching and learning have been summarized, it's time to look at how playability can be used as a framework for self-reflection exercises for the professional development of language teachers.

### **Using Playability as a Framework for Self-Reflection, Peer-Review, and Student Feedback**

Richards and Lockhart (2007) argue that without critical reflection gaining teaching experience will not necessarily lead to teacher development. Teachers that do reflect on their experience in the classroom "are in a position to discover whether there is a gap between what they teach and what their learners learn"



(Richards & Lockhart, 2007, p.4). We propose four self-reflective activities, a method of teaching peer-review, and a form for students evaluations of teachers, all couched in the framework of game playability. Teachers who engage in the following reflective activities should first have a basic understanding of the important factors that influence playability described in this article (pace, usability, customizability, socialization and interaction, and quality of materials).

### Self-reflection activity 1: Playability Likert scales and associated questions

Reflect for a moment on a recent activity, task, project, or lesson. Using the following Likert scales and questions as a guide, consider how the pace, usability, customizability, intensity of interaction, and quality in print/audio/visual materials affected the overall playability of the activity, project, or lesson.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
The <b>pace</b> of the activity, task, project, or lesson was appropriate for the students.	1	2	3	4	5
Students were able to successfully <b>use</b> the vocabulary, grammar, or other language that the activity, task, project, or lesson was aimed at teaching.	1	2	3	4	5
Students <b>customized</b> the activity, project, task, or lesson to their interests and/or needs.	1	2	3	4	5
The activity, task, project, or lesson was successful in encouraging and enabling <b>interaction</b> and communication amongst students.	1	2	3	4	5
The activity, project, or lesson had good <b>quality print/audio/visual materials</b> .	1	2	3	4	5

1. What, if anything, made the pace too fast or too slow? How could you modify the activity, task, project, or lesson for future use?
2. What, if anything, prevented students from being able to use the vocabulary, grammar, or other language that the activity, task, project, or lesson

was aimed at teaching? (For example: poor instructions, tasks were too complex, materials were not appropriate to student levels, etc.) How could you modify the activity, project, or lesson for future use?

3. What, if anything, prevented students from customizing and tailoring the activity, task, project, or lesson to their interests and/or needs? How could you modify the activity, task, project, or lesson for future use?
4. What, if anything, made interaction and communication amongst students difficult? How could you modify the activity, task, project, or lesson for future use?
5. What print/audio/visual materials were lacking in quality? Why? How could you modify the activity, task, project, or lesson to have better quality materials for future use?

### **Self-reflection activity 2: Questions to ask and reflection flow chart**

1. Was that lesson, activity, or task playable?
2. Were there any aspects of the pace, customizability, degree of interaction, or quality of materials used in the lesson that made students confused or disinterested?
3. What can be done to make the lesson, task, or activity more playable next time?

Figure 1 below illustrates one possible way to use playability as a framework for self-reflection soon after a lesson, task, or activity has been completed.

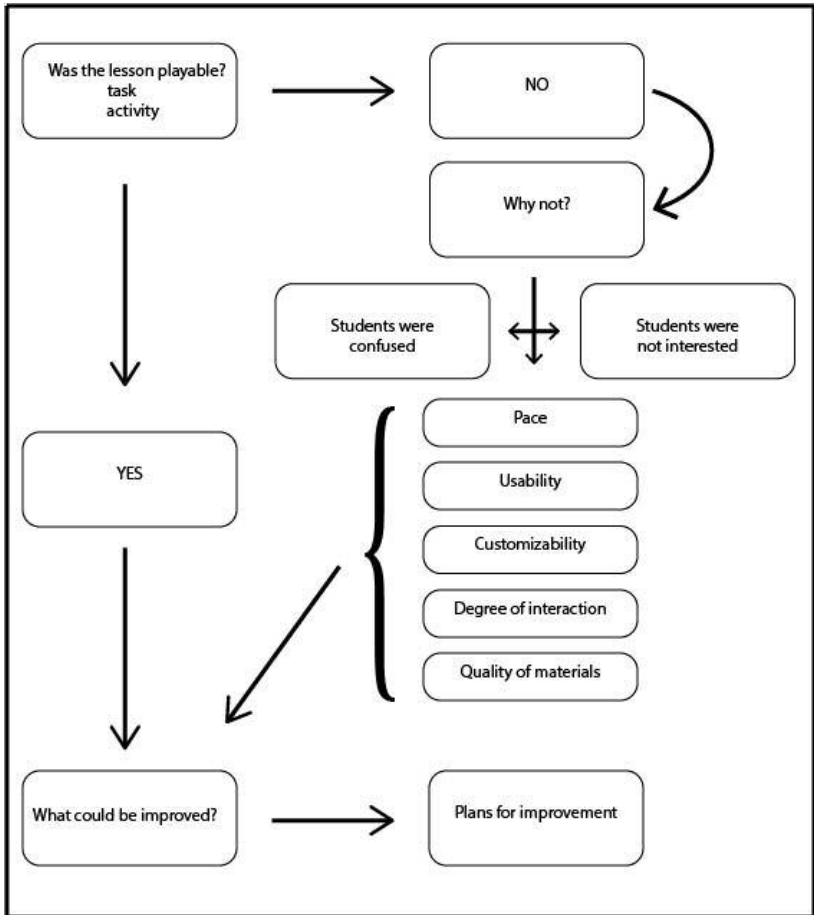


Figure 1. Post lesson self-reflection flowchart.

### Self-reflection Activity 3: Playability in teaching - Self-reflection checklist

A quick and easy way for teachers to use playability as a framework for self-reflection is the Playability in Teaching Self Reflection Checklist (see Appendix A). This self-reflection checklist follows the same idea of the post lesson self-reflection flowchart mentioned above, but provides more structure for self-reflection.

Teachers can, in a very short time, go through the checklist to see if their activity, task, or lesson matched the core components of playability (pace, usability, customizability, interaction, and materials). The checklist also contains guiding questions to help teachers identify how they could improve their activity, task, or lesson and make it more playable or learnable.

#### **Self-reflection Activity 4: General reflective discussion questions**

The following discussion questions could be used by teachers on their own or in groups: Reflect on your experience of playing board games or video games.

1. What game did you like to play?
2. What was it about the game that attracted you?
3. How did the pace, usability, customizability, intensity of interaction, and the degree of realism and quality of graphics and sound influence the playability of the game?
4. What, in your opinion, is the relation between playing and learning?
5. How do pace, usability, customizability, intensity of interaction, and quality of materials affect the learning experience of students?
6. What do you think makes an activity or lesson have good playability?
7. Consider a recent activity or task in your language classroom. Was the activity or task playable? Why or why not?

#### **Teaching Peer Review**

In addition to serving as a framework for self-reflection, playability can also be used to provide a structured approach for peer-observations. The Playability in Teaching- Teaching Peer-Review form (see Appendix B) is a modified version of the Teaching Self-Reflection Checklist and provides a way for teachers to evaluate and make comments on the teaching of their peers, within the framework of playability. This peer-review form has the same format as the Teaching Self-Reflection Checklist and is organized by pace, usability, customizability, degree of interaction and the quality of materials. Each section has guiding questions to help the reviewer use playability as a framework for their peer-observation.

#### **Student Evaluation of Teaching Activity/Task**

Another way that playability might be used as a framework for professional development is having teachers ask their students to evaluate an activity or task

based on its pace, usability, customizability, degree of interaction, and quality of materials. The Student Evaluation from (see Appendix C) is a simplified version of the Self-Reflection checklist and contains simplified questions for students to evaluate the quality of an activity or lesson. Feedback received from students completing this form may give teachers ideas as to what needs to be improved in their teaching or how to make an activity more interesting and learnable for their students.

### Conclusion

This paper has conducted an interdisciplinary analysis exploring the possible connections between game development and language teaching, specifically addressing the similarities that may exist between playability and learnability. Furthermore, this paper has presented four self-reflective activities, a method of teaching peer-review, and a form for student evaluations of teachers, all couched in the framework of game playability. Using the concept of game playability as a framework for self-reflection may help teachers to connect together the many different yet important concepts of language teaching and learning. Playability can serve as the central concept that allows analyses of pace, usability, learner autonomy, learner interaction, and quality of materials to all come together, enabling language teachers to reflect on the language teaching and learning experiences of their classrooms more holistically.

### References

- Becker, K. (2010). Distinctions between games and learning: A review of current literature on games in education. In R. V. Eck (Ed.), *Gaming and cognition: Theories and practice from the learning sciences* (pp. 22-54). Hershey, PA: Information Science Reference.
- Bensen, P. (2013). Learner autonomy. *TESOL Quarterly*, 47(4), 839-843. <http://onlinelibrary.wiley.com/doi/10.1002/tesq.134/abstract>
- Botturi, L., & Loh, C. S. (2008). Once upon a game: Rediscovering the roots of games in education. In C. T. Miller (Ed.), *Games: Purpose and potential in education* (pp. 1-22). New York: Springer.
- Chaiklin, S. (2003). The Zone of Proximal Development in Vygotsky's Analysis of Learning and Instruction. In A. Kozulin, B Gindis, V. S. Ageyev & S. M.

- Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 39-64). New York, NY: Cambridge University Press.
- Donnelly, R. (2007). Perceived impact of peer observation of teaching in higher education. *International Journal of Teaching and Learning in Higher Education*, 19(2), 117-129.
- Dörnyei, Z. (2009). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117-135. doi:10.1017/S026144480001315X.
- Dörnyei, Z. & Ushioda, E. (2013). *Teaching and researching motivation* (2nd ed.). Harlow: Longman.
- Dubin, F., & Olshtain, E. (2002). *Course design*. Cambridge: Cambridge University Press.
- Ermi, L. & Mayra, F. (2005). Changing views: Worlds in play. In S. de Castell & J. Jenson (Eds.), *Selected papers of the 2005 Digital Games Research Association's Second International Conference* (pp. 15-27).
- Ghazali, S., Setia, R., Muthusamy, C., & Jusoff, K. (2009). ESL students' attitude towards texts and teaching methods used in literature classes. *English Language Teaching*, 2(4). <http://dx.doi.org/10.5539/elt.v2n4p51>
- Harmer, J. (1998). *How to teach English*. Essex, England: Longman.
- Harper, D. Pede-. (n.d.). In *Online etymology dictionary*. Retrieved from [http://etymonline.com/index.php?term=pedo-&allowed\\_in\\_frame=0](http://etymonline.com/index.php?term=pedo-&allowed_in_frame=0)
- Harper, D. School. (n.d.). In *Online etymology dictionary*. Retrieved from [http://etymonline.com/index.php?term=school&allowed\\_in\\_frame=0](http://etymonline.com/index.php?term=school&allowed_in_frame=0)
- Hodent, C. (2017). *The gamer's brain*. Boca Raton, FL, USA: CRC Press.
- Holec, H. (1981). *Autonomy and foreign language learning*. Strasbourg: Council of Europe.
- Isbister, K., & Schaffer, N. (2015). *Game usability: Advancing the player experience*. Boca Raton, FL, USA: CRC Press.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. New York: Longman.
- Little, D. (2003). Learner autonomy and second/foreign language learning. *Guide to good practice*. Centre for Languages Linguistics & Area Studies. Retrieved from <https://www.llas.ac.uk/resources/gpg/1409>.
- Nacke, L. (2009). From playability to a hierarchical game usability model. In *Proceedings of the 2009 Conference on Future Play on@ GDC Canada* (pp. 11-12). New York, NY: Association for Computing Machinery.

<https://doi.org/10.1145/1639601.1639609>

- Richards, J. C. (2006). *Communicative language teaching today*. New York, NY: Cambridge University Press.
- Richards, J. C., & Lockhart, C. (2007). *Reflective teaching in second language classrooms*. New York, NY: Cambridge University Press.
- Sánchez, J. L. G., Guitiérrez Vela, F. L., Simarro, F. M., & Padilla-Zea, N. (2012). *Playability: Analyzing user experience in video games*. *Behavior & Information Technology*, 31(10), 1033-1054.
- Sánchez, J. L. G., Zea, N. P., & Gutiérrez, F. L. (2009). *From usability to playability: Introduction to player-centered video game development process*. In M. Kurosu (Ed.), *Human centered design* (pp. 65-74). Berlin Heidelberg: Springer-Verlag.
- Seedhouse, P. (1995). Needs analysis and the general English classroom. *ELT Journal*, 49(1), 59-65. <http://dx.doi.org/10.1093/elt/49.1.59>
- Sheldon, L. (1987). *ELT textbooks and materials*. London: Modern English Publications in association with the British Council.
- Usability First. (n.d.). Foraker Labs. *Playability*. Retrieved from <http://www.usabilityfirst.com/glossary/playability/>
- Yang, X. (2009). *Effects of digital audio quality on students' performance in LAN-delivered English listening comprehension tests*. Ohio: Ohio University.
- Yunus. M. M., Salehi, H., Sigan, D., and John, D. S. A. (2013). Using Visual Aids as a Motivational Tool in Enhancing Students Interest in Reading Literary Texts. In *Proceedings of the 4th International Conference on Education and Educational Technologies (EET '13)* pp. 114-117.

### About the Authors

*Austin Pack currently serves as the president of the International Association of Foreign English Teachers in China. He is based in Suzhou, China where he teaches EAP at Xi'an Jiaotong Liverpool University. His interests include intercultural communication and the intersection between game development and language learning.*

*Sam Newbould is an English language tutor at Xi'an Jiaotong Liverpool University, Suzhou, China. He has experience of teaching learners from a range of backgrounds and differing abilities. Sam's professional interests include English for Academic Purposes, language teaching methodology, and curriculum design.*

## Appendix A

## Playability in Teaching – Self Reflection Checklist

Pace

	Yes	Somewhat	No
Time allowed for the learning objectives to be covered in class			
Each task had sufficient time – not too long so students were bored / not too short students were rushed			

*If you answered ‘somewhat’ or ‘no’, why? Reflect below:*

*Why couldn’t you cover the learning objectives? What made the pace too slow or too fast? How could you modify this for future use?*

Usability

	Yes	Somewhat	No
The learning objectives matched those of the curriculum / syllabus			
Language / tasks had a real relation to students’ needs			
Language / tasks / materials were at the right level for the students – not too easy / not too hard			
Students could clearly understand the instructions for the task			

*If you answered ‘somewhat’ or ‘no’, why? Reflect below:*

*Why didn’t the learning objectives match the syllabus? Why didn’t the language/task match the students’ needs? Why was it too hard/easy? Why didn’t the students understand? How could you modify this for future use?*



**Customizability**

	Yes	Somewhat	No
Students had an opportunity to personalize learning objectives			
Students had an opportunity to personalize the language / task			
Students had the opportunity to reflect on their own learning			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the students have an opportunity to personalize objectives/tasks? Why couldn't students reflect on their own learning? How could you modify this for future use?*

**Interaction**

	Yes	Somewhat	No
Learning objectives / task of the lesson facilitated meaningful interaction			
A variety of interaction patterns occurred in the lesson			
Tasks offered opportunity for collaboration and sharing			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the objective/task facilitate meaningful interaction? Why couldn't a variety of interaction patterns have been used? Why didn't tasks offer opportunities for students to work together? How could you modify this for future use?*

### Materials

	Yes	Somewhat	No
Materials facilitated and were relevant to the learning objectives of the lesson			
The materials were of a good enough quality (clear printing, clear sound etc.) that students could easily use them			
Materials were interesting to the students			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the materials facilitate the learning objectives? Why weren't the materials of good quality? Why weren't the materials interesting? How could you modify this for future use?*

## Appendix B

### Playability in Teaching – Teacher peer-review

#### Pace

	Yes	Somewhat	No
Time allowed for the learning objectives to be covered in class			
Each task had sufficient time – not too long so students were bored / not too short students were rushed			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why couldn't you cover the learning objectives? What made the pace too slow or too fast? How could you modify this for future use?*

**Usability**

	Yes	Somewhat	No
The learning objectives matched those of the curriculum / syllabus			
Language / tasks had a real relation to students' needs			
Language / tasks / materials were at the right level for the students – not too easy / not too hard			
Students could clearly understand the instructions for the task			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the learning objectives match the syllabus? Why didn't the language/task match the students' needs? Why was it too hard/easy? Why didn't the students understand? How could you modify this for future use?*

**Customizability**

	Yes	Somewhat	No
Students had an opportunity to personalize learning objectives			
Students had an opportunity to personalize the language / task			
Students had the opportunity to reflect on their own learning			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the students have an opportunity to personalize objectives/tasks? Why couldn't students reflect on their own learning? How could you modify this for future use?*

**Interaction**

	Yes	Somewhat	No
Learning objectives / task of the lesson facilitated meaningful interaction			
A variety of interaction patterns occurred in the lesson			
Tasks offered opportunity for collaboration and sharing			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the objective/task facilitate meaningful interaction? Why couldn't a variety of interaction patterns have been used? Why didn't tasks offer opportunities for students to work together? How could you modify this for future use?*

**Materials**

	Yes	Somewhat	No
Materials facilitated and were relevant to the learning objectives of the lesson			
The materials were of a good enough quality (clear printing, clear sound etc.) that students could easily use them			
Materials were interesting to the students			

*If you answered 'somewhat' or 'no', why? Reflect below:*

*Why didn't the materials facilitate the learning objectives? Why weren't the materials of good quality? Why weren't the materials interesting? How could you modify this for future use?*

*What went well during the lesson?*

*What could be improved?*

## Appendix C

### Student Evaluation

#### Pace

	Yes	Somewhat	No
Time allowed for the learning objectives to be covered in class			
Each task had sufficient time – not too long so students were bored / not too short students were rushed			

*If you answered 'somewhat' or 'no', why?*

*Why couldn't the teacher cover the learning objectives? What made the pace too slow or too fast? How could the pace or speed of the lesson be improved?*

#### Usability

	Yes	Somewhat	No
Language / tasks had a real relation to your needs			
Language / tasks / materials were at the right level for you – not too easy / not too hard			
You clearly understood the instructions for the task			

*If you answered 'somewhat' or 'no', why?*

*Why didn't the language/task match your needs? Why was it too hard/easy? Why didn't you understand the task?*

#### Customizability

	Yes	Somewhat	No
You had an opportunity to personalize learning objectives			
You had an opportunity to personalize the language / task			
You had the opportunity to reflect on your own learning			

*If you answered 'somewhat' or 'no', why?*

*Why didn't you have an opportunity to personalize objectives/tasks? Why couldn't you reflect on your own learning?*

**Interaction**

	Yes	Somewhat	No
A variety of interaction patterns occurred in the lesson or activity			
Tasks offered opportunity for collaboration and sharing			

*If you answered 'somewhat' or 'no', why*

*Why couldn't a variety of interaction patterns have been used? Why didn't tasks offer opportunities for you to work with other students? Would you like more interaction or less interaction during the activity or task?*

**Materials**

	Yes	Somewhat	No
You could easily understand and use the materials			
The materials were of a good enough quality (clear printing, clear sound etc.)			
Materials were interesting to you			

*If you answered 'somewhat' or 'no', why?*

*Why weren't the materials easily understandable or usable? Why weren't the materials of good quality? Why weren't the materials interesting? How could the materials be improved?*

*What went well during the lesson?*

*What could be improved?*