



Motivating adult learners through a gamified learning environment

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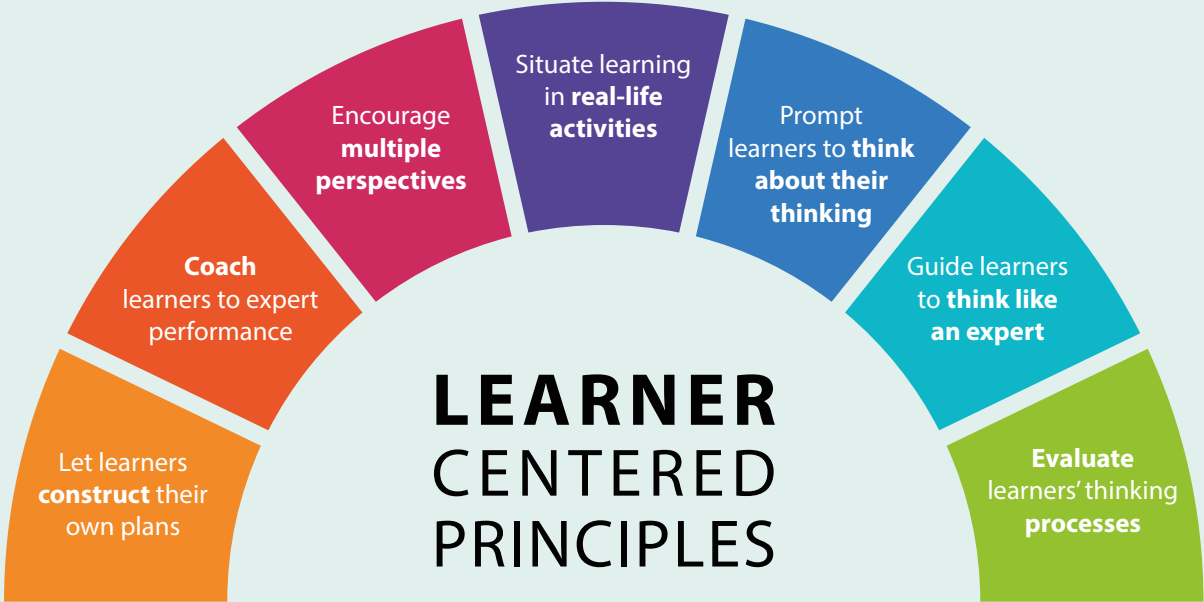
Digital games are everywhere and are attracting more and more interest from educators who are keen to learn more about using the benefits of games in their classroom. Much of the focus of conversation is on what students can learn playing games, but it is equally important to understand what educators can learn from games. Our students find them engaging and motivating and continue to play games even when they fail, which does not tend to happen with their homework. As educators, our question is: What can games teach us about creating more effective learning scenarios that foster a similar level of engagement?

Good learning is difficult to distinguish from a good game, and, at their core, good games are built with learning in mind.

Educators keen to incorporate gaming into their classroom should consider it to be another form of learner-centred design. Perhaps one of the more compelling definitions of learner-centred design comes from Shute, Rieber, and Van Eck (2011), who state that games are '(a) active, goal oriented, contextualised, and interesting' and that '(b) instructional environments should thus

be interactive, provide ongoing feedback, grab and sustain attention, and have appropriate and adaptive levels of challenge, i.e. the features of good games' (p. 321). In short, learner-centred design puts the focus on the student and not the content that is being taught.

Games do this incredibly well by placing the player at the centre of the gaming experience, challenging them with goal-based problems. Learners need goals, too; for adult learners, these goals are especially important. Not just simple goals such as winning, but goals that require us to solve messy or challenging problems to achieve them. As game designer Raph Koster (2014) states, 'it's fun to exercise your brain' (p. 33).

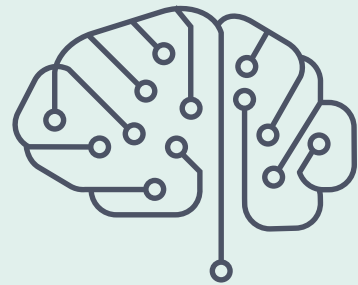


HOW DOES IT **WORK**?



GAMES

- Earn points
- Receive rewards
- Overcome challenges
- Unlock new levels



BRAIN

(Gets excited)

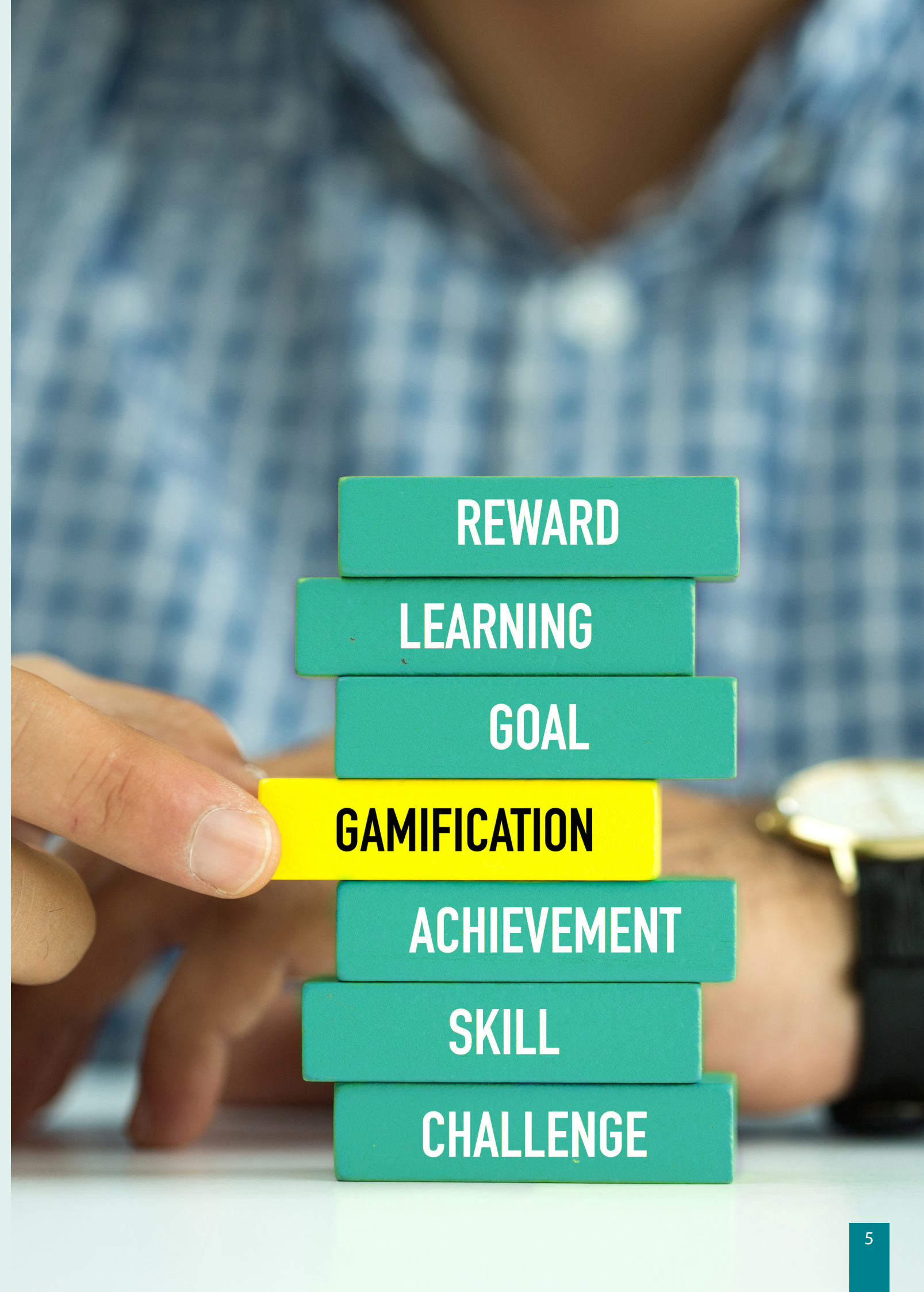


RESULTS

- Release of dopamine
 - Feel good
 - Motivation
- Chase more rewards

It is solving these messy problems and achieving a goal that motivates adult learners far more than points or grades. Adults learn best when they are learning to accomplish a goal that they have set for themselves. Knowles (1984) stresses that adults need learning contexts that shift from being content-oriented to being problem-centred. A content-oriented class puts the grammar or vocabulary that needs to be covered at its centre. Problem-centred learning provides

students with a context and purpose for using grammar or vocabulary that is directly applicable to an authentic setting. Adult learners respond enthusiastically to being given a good reason for learning something. Games do the same. They make it clear to the player why they need to do something and then challenge them to do it well. This focus on providing players with a reason or motivation to achieve a goal through a game is critical for educators.



Game-based Learning = Problem-centred Learning

Games can teach educators that putting a problem, rather than content, at the centre of a lesson can provide a strong motivational boost for learners.

When we are presented with problems to solve, we are also presented with the goal achieved by solving them. Making that problem interesting for adult learners and a goal that learners want to achieve can bolster motivation more than points or grades, as adults are often more motivated to learn due to a desire to improve themselves.

Making that shift from content-centred to problem-oriented may seem large, but teachers new to game-based learning can make small changes to learning by gamifying just one lesson to begin with. When we talk about gamifying a lesson, the idea is to use the characteristics of games to

increase engagement with the lesson activities and a great way to do that is to create problem-centred learning.

One example of this is to take a traditional debate activity and turn it into a RAFT activity. RAFT stands for role, audience, format, and topic; students are tasked with role-playing a position that seeks to sway others. In a traditional debate activity, students may not have a personal interest in the topic or the results, as it is mostly a 'for or against' activity. A RAFT activity blends debate with role-play and challenges students to assume a role and argue from that position to a specific audience.

ACTIVITY

To Automate or Not to Automate

To show you a simple example on how you can implement elements of games into everyday lessons let's use **Language Hub's Upper Intermediate Café Hub** lesson in Unit 4 which discusses the future of work and ramifications of robotics and automation on jobs.



In this example, Speaking Hub part C is a discussion on the positives or negatives of automation. As it stands, this activity is a debate, but by making it a RAFT activity, students could be challenged with a more specific problem to solve. In such an exercise, a small group of students could play the role of a city government, which is considering legislation to ban robots to prevent the loss of jobs. The activity could look something like this:

TOPIC: Robotisation and automation and how it will impact the future development of your city.

CHALLENGE: The increase in robots presents a financial opportunity for businesses to save on costs and possibly create more high-tech jobs. However, more robots mean fewer workers, which will increase unemployment, especially in service jobs. Convince your city government to support your vision for the city's future.

ROLES:

- Group A – Members of a local workers' union who are against automation to protect jobs
- Group B – Members of a local business leaders' group who see cost savings in automation
- Group C – City Council members who are considering laws that would limit or increase job automation

AUDIENCE: Your audience will be the other two groups. For example, if you are in Group A, you will address groups B and C.

FORMAT: Your group's argument should be presented in an organised presentation. Your group can decide the manner of the presentation as long as it includes at least three visuals (slides, pictures, graphics, etc.)

TOPIC: Robotisation and automation and how it will impact the future development of your city.

SKILLS: Learn and practise the vocabulary and grammar structures found in this chapter and use them to convince others to support a position for, or against, automation.

KNOWLEDGE: By doing this assignment, you will better understand how to create a persuasive argument to try and convince others to support your position – a critical workplace skill.

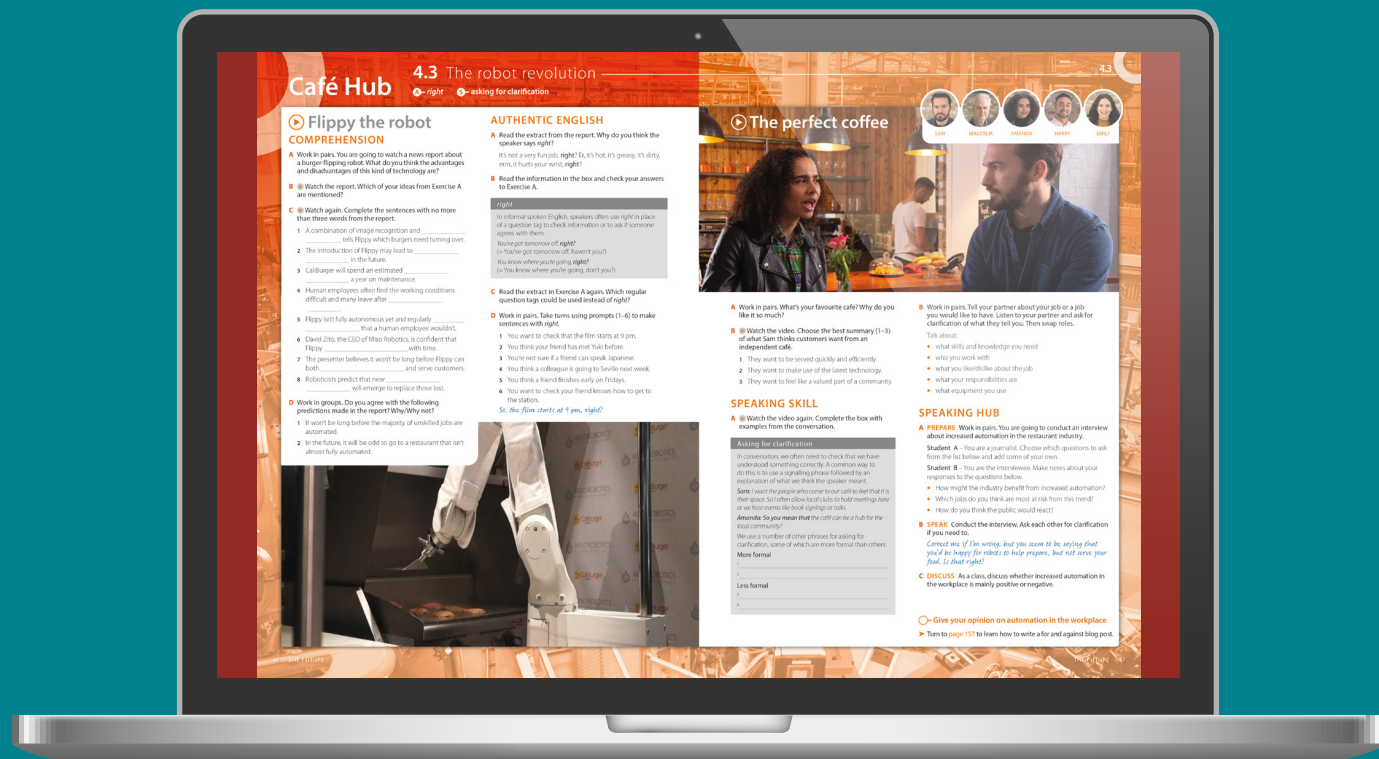
CRITERIA FOR SUCCESS:

- The city council will decide whether to support automation or not. The success of your idea will depend on this.

By increasing the lesson's interactivity from taking part in a simple discussion to planning, creating, preparing, presenting, and discussing, an educator can turn a lesson into a problem-oriented assignment.

TIPS:

- Introduce games into your classroom by iterating on an existing classroom or textbook activity – gamify it by enhancing the activity with more challenge, or by adding a problem to it that students must solve.
- Competition is not only about winning a race or contest. When students compete for the same goal, the competition is often more effective.
- For some examples of RAFT activities, and how to structure a RAFT rubric, check out: **Using the RAFT Writing Strategy**



Source: Language Hub Upper-intermediate, Unit 4

Games can teach educators that putting a problem, rather than content, at the centre of a lesson can provide a strong motivational boost for learners.

Interactivity = Engagement

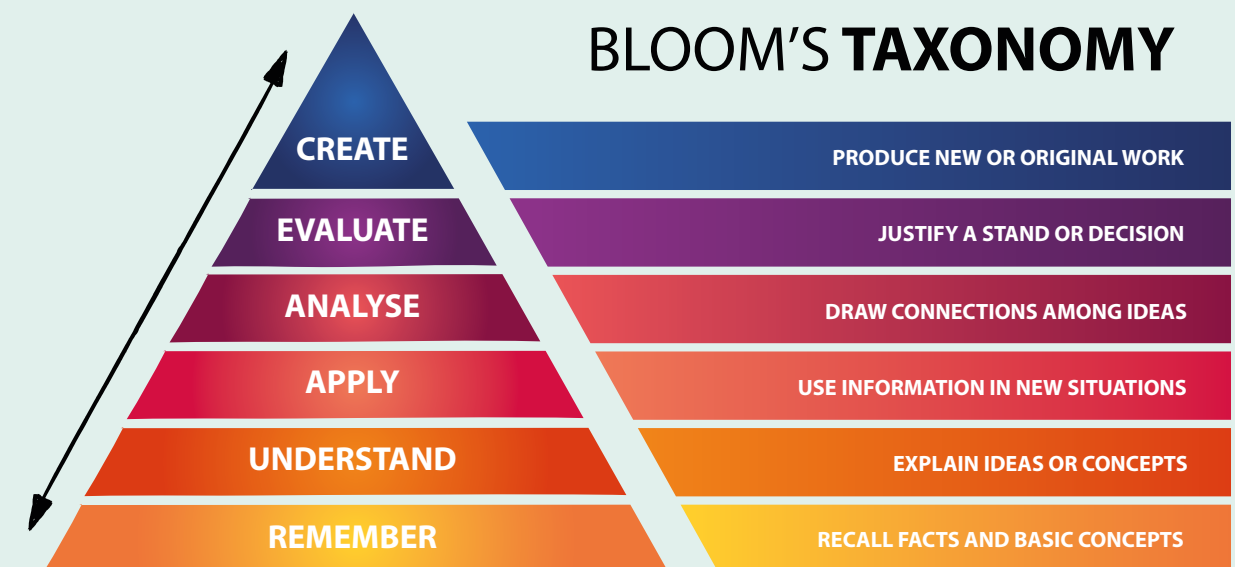
Another equally important criterion for creating a gamified classroom is to create a level of interactivity that provides learners with opportunities for active learning. A core question of game design is to continually ask, 'what is the player doing?' and then designing the game to give players as much flexibility as possible.

When considering ways to bolster interactivity within the classroom, educators should start by examining their learning objectives and considering how many ways students can achieve them. Bain (2004) argues that much of the focus in the classroom is on what the teacher needs to do and not what students do in class. Like game designers, educators should ask 'what are students doing in class?' Moving to a gamified classroom requires educators to consider how interactivity can be increased by giving students more opportunities to use strong verbs such as analyse, solve, or design – this is where Bloom's taxonomy can be helpful.

memorise, recall, and repeat. These verbs work well in a content-focused classroom in which students are expected to learn the fundamentals. To create more interactive classrooms, educators need to move further up the taxonomy and create learning objectives focused on evaluating and creating with verbs such as design, appraise, invent, or construct. This achieves two results: it gives the students more ways to be engaged and interactive and provides educators with ways to tie problem-oriented learning directly to their learning objectives.

Bolstering interactivity in the classroom begins with a solid foundation of vocabulary and grammar, so educators who are striving to enhance interactivity should begin by experimenting with end-of-unit activities after the students have been prepared with the language needed to succeed. An example of this is the **Language Hub's Pre-Intermediate Unit 3** on travel. Section 3.1 highlights the story of an individual who travelled across the world without the use of air travel.

After students have read, listened, responded, and spoken during this unit, to develop the foundational



Bloom, B. S. (1969). *Taxonomy of educational objectives: The classification of educational goals: Handbook I, Cognitive domain*. New York: McKay.

Bloom's taxonomy categorises student activity, their classroom verbs so to speak, by how active they are. The foundation of the taxonomy focuses on remembering content with verbs, such as define,

skills they need, educators could create an interactive project during which learners map a trip around the world without using air travel. It could look something like this:

ACTIVITY

Travel the World

An example of this is the Language Hub's Pre-Intermediate Unit 3 on travel. Lesson 3.1 highlights the story of an individual who travelled across the world without the use of air travel.

After students have read, listened, responded, and spoken during this unit, to develop the foundational skills they need, educators could create an interactive project during which learners map a trip around the world without using air travel. It could look something like this:

CHALLENGE: Plan a trip around the world without using air travel. The trip should include at least 20 countries and three continents.

TOOLS: OpenStreetMap, Presentation Software

SKILLS: Learn and practise the vocabulary and grammar structures found in this chapter to create new information that can be shared with the class.

KNOWLEDGE: By doing this assignment, you will better understand how to discuss journeys and

transport. More specifically, you will gain insights into negotiating with others within the context of travel.

CRITERIA FOR SUCCESS:

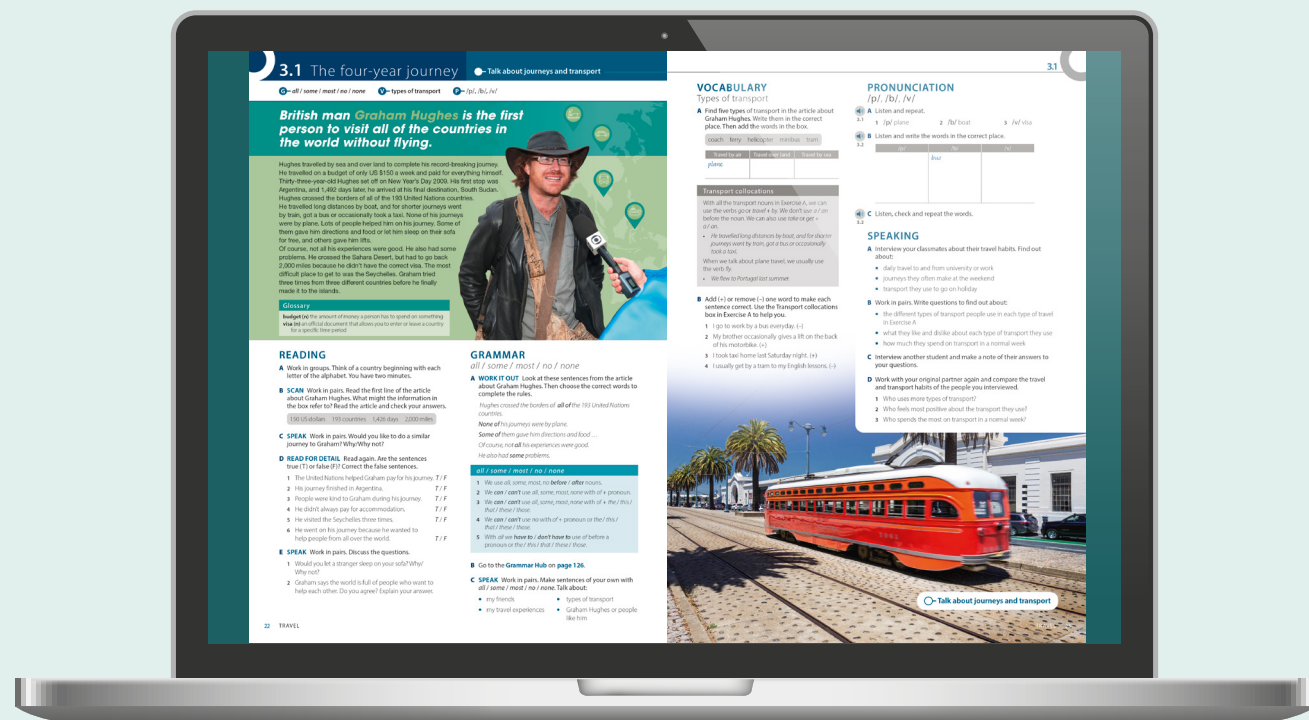
- Adequate assignments will design a trip and present it to class.
- Excellent assignments will design a trip with explanations for the countries selected, an evaluation of the pros and cons of the trip, and a discussion of the challenges encountered when preparing the trip.

By increasing interactivity from a simple discussion to planning, creating, preparing, presenting and discussing, an educator can prepare a more problem-oriented assignment.

TIPS:

- Review your classroom learning objectives to determine your classroom's interactivity. Try to move away from passive verbs, such as understand, know, and define to more active verbs such as design, create, and analyse.
- Bolster interactivity in your classroom by moving up Bloom's taxonomy and giving adult learners activities that challenge them.

Learners, especially adults, desire feedback in order to improve and benefit from being actively involved in the evaluation of their instruction.



Source: Language Hub Pre-intermediate, Unit 3

Gamification in the classroom

Gamification is a fraught word. The definition changes depending on the person using the term, especially when using it in the classroom. Generally, gamification is defined as using game tools to increase motivation. Gamification is not about using games in the classroom, but using the rewards and feelings of accomplishment that games provide to increase students' motivation.

In a practical sense, classroom gamification tends to centre on the use of points, badges and leader boards (PBL). A gamified classroom does not have points or grades; it has experience points (XPs) and students 'level up'; however, in reality, not much is actually changing in the classroom. Students still try to get the highest possible score,



and badges are still external rewards used to motivate students to progress in class.

Perhaps a more useful definition of classroom gamification could be that it uses a problem-centred approach, interactivity, consistent feedback, and adaptive challenges to keep learners engaged. Fostering this engagement and making the learner experience the core focus of the lesson requires the right planning, appropriate materials, and a positive mindset.

Gamification requires feedback

At their centre, all games focus on progress. People play games because they foster a feeling of progression and, more importantly, a sense of continual improvement. Jonathan Blow (2011), designer of the game *Braid*, proposes that for games to be successful they: have a story that justifies what happens next, have long term goals that can be broken down, feature a clear next goal that stays within reach (aka 'just one more'), and, finally, provide players with a feeling of continual improvement. That feeling of gradual improvement is key to giving players a feeling of progression. Without knowing what they did wrong, or how to improve, players will not progress, which can cause frustration. The same applies in learning.

Learners, especially adults, desire feedback in order to improve and benefit from being actively involved in the evaluation of their instruction.

This focus on feedback as a means of improvement can often be missed when a classroom only features the tools of gamification: points, badges, and leader boards. These tools tend to be used to provide feedback on a learner's performance against others

in the class, but often fail to give students feedback on their own performance and how they can improve moving forward. Adult learners are always concerned about their own performance and how they can improve.

A gamer may play the same level again and again, but the entire time they receive 'well-defined goals and clear feedback. This gives us an objective measure of our performance and allows us to optimise our strategies' (Juul, 2013, p. 10). Using the vocabulary of education, Kolb (1984) argues the best learning comes from acting and seeing the outcome of that action. However, in the classroom, learners are often only given one chance to take a quiz or exam. In a traditional classroom, failure is high stake and something to avoid, but perhaps in a gamified classroom, failure could be embraced as part of learning; when combined with feedback, students could be given opportunities to succeed

by trying again until they master the content. Feedback is useful when it helps us recognise our errors, provides guidance, and helps us achieve our goals.

Feedback is only as useful as it is timely.

In games, feedback is delivered to the player at the moment of action, and players know immediately how well they have done. Educators seeking to gamify their classroom should seek to replicate that immediate feedback as best they can, as well as make it as easy to access as possible. The Macmillan Education **Language Hub Student's App** does this by allowing students to complete language activities, get immediate feedback on their performance, and try again.



This ability to act, receive feedback immediately, and then try again provides learners with the structure they need to be successful. This clear, immediate feedback for students is bolstered by the Macmillan Education Teacher's App functionality, which provides educators with reports on overall student progress. Educators can generate reports that display each student's performance and each attempt they have made on a given assignment. Educators can use these tools to visualise overall student performance and deliver ongoing feedback to students, which is critical to a gamified classroom.

TIPS:

- Consider the evaluations in your class – do they all have all high stakes where students get only one chance to succeed? Can any of the assessments be altered to allow students multiple attempts?
- How could you provide students with more opportunities for immediate feedback? Tools such as Kahoot or Google Forms can provide immediate feedback, or consider tools that allow for more **formative assessment**.

Appropriate and Adaptive Levels of Challenge

In games, failure is important, but it is critical that the failure is fair. Games that feature too steep a learning curve or an easy game that ends with an unexpectedly tough boss level are considered unfair. The best games respond to the player and provide them with a challenge just outside of their ability – what linguist Stephen Krashen named *i+1*: a theory of language instruction in which learners are given tasks that are just outside their current ability. A learner may struggle at first but, with time, feedback, and practise, they will increase their abilities just like gamers do. Lorentz (2014) suggests the key to success in games is to

transform the frustration of failure into an energy for learning (para. 6). The same can be done in the gamified classroom by designing appropriate and adaptive levels of challenge.

Educators looking to turn that frustration of failure into energy for learning should evaluate the flexibility of their classroom material, so that adjustments can be made to the level of challenge it provides learners. In a content-based classroom, it may be challenging to adjust the materials, as the goal is to get through the material in the book or syllabus. This is why educators looking to adjust the level of challenge are best served by a problem-oriented classroom, and having a more gamified classroom mindset can help. Games present players with a challenge, but leave the solution to the players' creativity.

In a classroom in which learners are expected to write an argumentative essay, an educator should consider what it is, exactly, about the students they are evaluating. If the goal is to evaluate how effectively students can make an argument, they could just as well make an argumentative speech, record themselves in a debate, or create a video. A gamified mindset requires educators to shift to a more **rubric-centred grading system** through which students have the flexibility to approach an assignment in a way that challenges them the most; the rubric provides feedback that learners can use to help them improve.

Altering levels of challenge for students need not be overwhelming for educators. If the idea of shifting to rubric-based lessons during which students can choose how they approach an activity is too challenging an idea for educators who are new to gamification, it is possible to begin with course customisation. In the Macmillan Education Teacher App, educators can create custom lesson plans in which they can choose which materials to include or exclude.

This flexibility to adapt and alter courses based on students' needs is an effective way to begin experimenting with gamified classroom lessons.

TIPS :

- Digital tools can be an effective way to introduce course adaptation. Platforms such as the **Macmillan Education Language Hub Teacher's App** allow educators to provide tailored content for their students.
- Students can benefit considerably from courses that are more adaptive, with a shift away from a points-based grading system to a rubric-based one. With rubric-based grading, students gain a clearer understanding of how they need to improve and what they need to do to make those improvements.

Conclusion

Educators can take inspiration from games in a variety of ways and bringing a 'gaming mindset' to the classroom can be an effective motivator for adult learners. The goal of gamifying a classroom should not be to replace extrinsic points and letter grades rewards with the same disguised as badges and achievements. Instead, it should be a careful reconsideration of classroom approaches with a view to increasing student engagement. Educators can take, from games, the characteristics that make them so motivating – the goals, the interactivity, the ongoing feedback, and the flexible challenge – and use them to enhance their own classroom practice. It is no coincidence that good games share much in common with good teaching, and when proper gamification is paired with the right tools, such as those provided by the **Macmillan Education Language Hub Teacher's App**, educators can create a learning environment tailored to the needs of adult learners to succeed in ways that best fit their learning goals.

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