MANAGING PUPILS' CORE DRIVES TOWARDS AN E-INCLUSIVE AND TRANSFORMATIVE PRIMARY ENGLISH CLASSROOM

GERIR AS PRINCIPAIS MOTIVAÇÕES DOS ALUNOS PARA UMA SALA DE AULA DE INGLÊS DO 1.º CEB INCLUSIVA E TRANSFORMADORA

GESTIONAR LOS PRINCIPALES IMPULSOS-CLAVE DE LOS ALUMNOS HACIA UN AULA DE INGLÉS DE PRIMARIA INCLUSIVA Y TRANSFORMADORA

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Abstract

During the transition to the 21st century, Jacques Delors gave a powerful reminder on how Education "is one of the most powerful tools with which to shape the future or, to use more modest terms, to steer us into the future by taking advantage of constructive trends and trying to avoid pitfalls" (Delors, 1996).

Following this ideal, the current educational scene should be seen as one in which the main focus ought to give students "opportunities that challenge them to solve complex problems, make rational decisions, and present compelling arguments for their solutions to the problems" (Harshbarger, 2016), instead of ensuring that students can prove proficiency on annual assessments as most contemporary public education settings do (Harshbarger, 2016).

Hence, Chou's Gamification Octalysis Framework becomes a valuable management tool for pupil motivation, engagement, and holistic development (Chou, 2016), aiming at a profile through which knowledge, skills, and mindsets (Ehlers, 2020) are mobilized to answer complex demands (OECD, 2018). Moreover, its core-drives deal with intrinsic and extrinsic motivations that foster desired-actions (Chou, 2016) in the English learning classroom, thus promoting e-inclusive and transformative approaches which are aligned with the Universal Design for Learning (Hersh, 2020).

This study is being developed as part of a PhD project which main objective is to reflect upon the Gamification Pedagogy and how it may affect the teaching and learning of the English language, following an ethnographic and qualitative methodology. Results tend to show that pupils became more productive and engaged towards learning a second language, however, some challenges occurred during our practices.

Keywords: gamification, e-inclusion, transformative approaches, Primary English.

Resumo

Durante a transição para o século XXI, Jacques Delors alertou para o facto da educação ser "um dos instrumentos mais poderosos para moldar o futuro ou, em termos mais modestos, para nos orientar para o futuro, tirando partido de tendências construtivas e evitando obstáculos" (Delors, 1996).

Posto isto, o cenário educativo atual deve ter como foco principal dar aos alunos "oportunidades que os desafiem a resolver problemas complexos, a tomar decisões racionais e a apresentar argumentos convincentes para os solucionar" (Harshbarger, 2016), em vez de incidir em avaliações sumativas anuais, como acontece na maioria dos contextos educativos públicos contemporâneos (Harshbarger, 2016).

Assim, o Octalysis Framework de Chou surge como uma ferramenta valiosa na gestão da motivação, envolvimento e desenvolvimento holístico dos alunos (Chou, 2016), visando um perfil através do qual são mobilizados conhecimentos, competências e valores (Ehlers, 2020) para responder a exigências complexas (OCDE, 2018). Além disso, este quadro de referência incide em motivações intrínsecas e extrínsecas que fomentam ações desejadas (Chou, 2016) na sala de aula de inglês, promovendo, assim, abordagens e-inclusivas e transformadoras que estão alinhadas com o Desenho Universal para Aprendizagem (Hersh, 2020).

Este estudo está a ser desenvolvido no âmbito de um projeto de doutoramento cujo principal objetivo é refletir sobre a Pedagogia da Gamificação e como esta pode afetar o ensino e a aprendizagem da língua inglesa, seguindo uma metodologia etnográfica e qualitativa. Os resultados tendem a mostrar que os alunos se tornaram mais produtivos e empenhados na aprendizagem de uma segunda língua, no entanto, ocorreram alguns constrangimentos durante as nossas práticas.

Palavras-chave: gamificação, e-inclusão, abordagens transformadoras, inglês do 1.º CEB.

Resumen

Durante la transición al siglo XXI, Jacques Delors hizo un poderoso recordatorio sobre cómo la Educación "es una de las herramientas más poderosas con las que modelar el futuro o, para utilizar términos más modestos, dirigirnos hacia el futuro aprovechando las tendencias constructivas y tratando de evitar los escollos" (Delors, 1996).

Siguiendo este ideal, el panorama educativo actual debería verse como uno en el que el principal objetivo debería ser dar a los estudiantes «oportunidades que les desafíen a resolver problemas complejos, tomar decisiones racionales y presentar argumentos convincentes para los solucionar» (Harshbarger, 2016), en lugar de garantizar que los estudiantes puedan demostrar su competencia en evaluaciones anuales, como hacen la mayoría de los entornos educativos públicos contemporáneos (Harshbarger, 2016).

Por lo tanto, el marco de gamificación Octalysis de Chou se convierte en una valiosa herramienta de gestión para la motivación, el compromiso y el desarrollo holístico de los alumnos (Chou, 2016), con el objetivo de lograr un perfil a través del cual se movilicen los conocimientos, las habilidades y las mentalidades (Ehlers, 2020) para responder a demandas complejas (OCDE, 2018). Además, sus ejes centrales abordan las motivaciones intrínsecas y extrínsecas que fomentan las acciones deseadas (Chou, 2016) en el aula de aprendizaje de inglés, promoviendo así enfoques e-inclusivos y transformadores que se alinean con el Diseño Universal para el Aprendizaje (Hersh, 2020).

Este estudio se desarrolla en el marco de un proyecto de doctorado cuyo objetivo principal es reflexionar sobre la Pedagogía de la Gamificación y cómo esta puede afectar a la enseñanza y aprendizaje de la lengua inglesa, siguiendo una metodología etnográfica y cualitativa. Los resultados tienden a mostrar que los alumnos se volvieron más productivos y comprometidos con el aprendizaje de un segundo idioma, sin embargo, se presentaron algunos desafíos durante nuestras prácticas.

Palabras-clave: gamificación, e-inclusión, enfoques transformadores, inglés de primaria

INTRODUCTION

Education is seen as vital for human development (Delors, 1996) considering it presents pupils with "opportunities that challenge them to solve complex problems, make rational decisions, and present compelling arguments for their solutions to the problems" (Harshbarger, 2016, p. 1). Hence, educating in the 21st century demands teachers a positive and constructive implementation of different resources within their practices (Neves, 2021) to keep up with these challenges of today's unpredictable times (Magalhães, 2022) as well as to promote skills which are not only related to content, but intended for a proactive and conscious involvement in society (Serrano & Seabra, 2022).

Furthermore, when paying close attention to the Portuguese educational settings, we understand that a need emerges for a teacher-facilitator rather than a teacher-transmitter of knowledge, considering that "teachers are now faced with a public that is becoming progressively more complex" (Tomazetti & Schilckmann, 2016, p. 334). However, if we also take a closer look at Portugal's education system, guiding documents, and its schooling process, we may

likewise perceive that schools persist on mass education and in an acculturation of schooling, despite the urging cultural diversity that exists nowadays and in spite of the difficulty for youths to conform to the predetermined school culture (Tomazetti & Schilckmann, 2016). By acculturation we, then, mean something which is strongly connected to the massification of education where schools impose their school practices irrespective of the pupils' beliefs, culture or motivations, thus overlooking the fact that they bring with them "their own languages and cultures, making themselves actors, active subjects in the construction of their way of being in the school space" (Tomazetti & Schilckmann, 2016, p. 334). Moreover, considering that "in Portugal, public services are, by nature, envisioned for the masses" (DN, 2019), this led to practices more focused on methods conceived "to better serve the needs of an industrial society" (Roque, 2021).

While these mechanised teaching and learning environments still manifest themselves through national exams, periodic evaluation tests and the necessity for complete curriculum fulfilment, it is true that the need for curricular flexibility arises and, therefore, schools must keep up with rapidly society of the 21st century (Silva et al., 2022). Furthermore, bearing in mind that not every child learns the same way and does not achieve a successful path the same way as their peers (Fernandes, 2019), it becomes clear that the aforementioned educational methods no longer serve the pupil's desired actions (Chou, 2016) of current times. As a result, to transform classrooms into spaces which foster effective and meaningful learning (Cruz, 2019) and a pedagogy "which values the student's real individual abilities and encourages their autonomy of thought" (Fernandes, 2019), as we will further discuss in this paper.

# 1   ON THE LOOKOUT 4 THE DESIRED ACTION: GAME ON!

21st century pupils are active agents within a complex and challenging world where they have to critically think and act beyond classroom walls by mobilizing knowledge, competencies and values which, in turn, will help them to overcome complex demands, either globally or locally (OECD, 2018).

However, to achieve this understanding, teaching, and learning should be focused on active, fun, competitive, challenging and rewarding engagement, whilst taking into consideration that each pupil and each group will respond differently to various types of stimulation (Chou, 2016). For these reasons, we perceive the Gamification Pedagogy (Chou, 2016; Cruz 2019; Oliveira, 2017) as one that tackles these issues by permitting pupils with different learning profiles to develop comprehensive and expressive communicative skills as well as competencies regarding social interaction, emotional intelligence, ethics, etc. (González & Solovieva, 2017; Chacón, 2021).

Before getting into deeper statements concerning gamification, we consider fundamental to shortly explore Bartle's Taxonomy (1996) where the author proposed four different gamer types, as represented in figure 1.

Figure 1

The 4 different types of players according to Bartle's Taxonomy
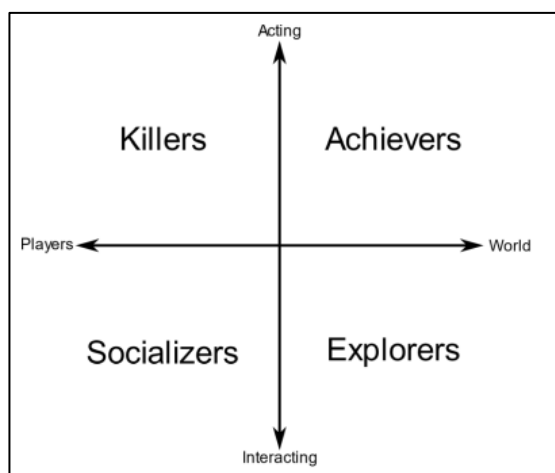
Note: figure retrieved from Jhee et al., 2023 (check bibliography for further information).

On the one hand, Killers are the ones who "are driven to act on other players [...], taking action towards them typically without their consent" (Jhee et al., 2023, p. 89) and the Achievers are looking to gain knowledge, learn new skills and improve themselves (Marczewski, 2015). On the other hand, Socializers are those that "interact with other players by communicating and cooperating with them" (Jhee et al., 2023, p. 89), whilst the Explorers want to find new things and uncover new secrets (Kummar et al., 2022).

For instance, when challenged with the task of representing different seasons (spring, summer, autumn and/or winter), we could observe that our pupils played different roles fittingly to their type of player. In other words, to accomplish the task, the group on figure 2, were more "socializers" as they interacted and collaborated with each other and with others from further groups to agree on what should be done and how. However, the group on figure 3 were more "explorers" in a sense that they felt the need to find new elements and unique things outside the classroom in order to complete the task.

Figure 2

Example of Socializers working in group

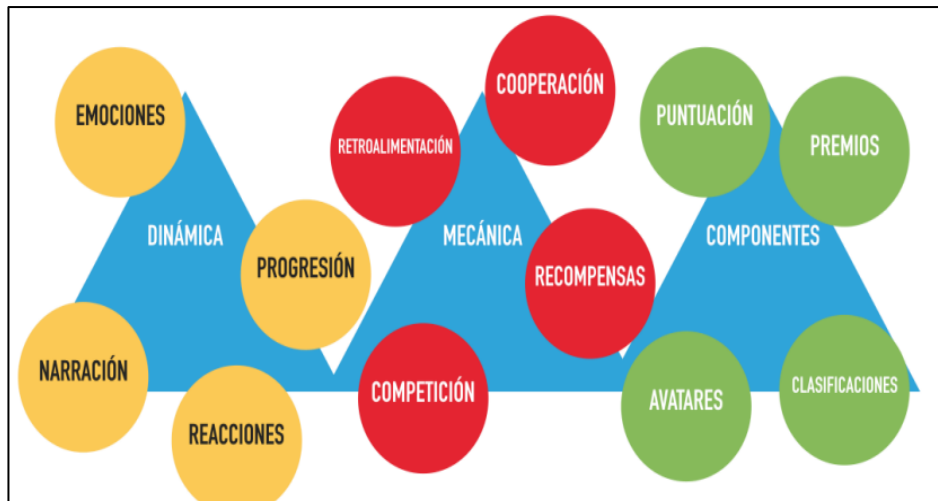**Figure 3**

Example of Explorers working on the task

Quoting Chou, "imagine if there is a truly addictive game, where the more time you spend on it, the more productive you become" (2016, p. 10). Bearing this in mind, we understand that Bartle's Taxonomy is in sync with the gamification pedagogy, since it not only can bring to the classroom "game-based mechanisms, aesthetics and game thinking" (Nóbriga et al., 2015, p. 38), but also takes into consideration the pupil's (or player's) learning profile as it fosters "emotional connections, directly linked to satisfaction and pleasure, which allow students to immerse themselves in a state capable of developing motivation and engagement through a relationship of belonging" (Fraga et al., 2022, p.

4). Hence, learning experiences within classrooms will focus on the different elements of the gamification pedagogy (figure 4) in order to provide pupils with the opportunity to be "encouraged, immersed and involved in environments that are familiar to them" (Cruz, 2019, p. 147) while considering their extrinsic and, more importantly, intrinsic motivations (Cruz, 2019), being the latter the one which binds the pupil's long term learning enthusiasm.

Figure 4

The elements of the gamification pedagogy

Note: figure retrieved from Cruz, 2019 (check bibliography for further information).

Therefore, considering that pupils need to feel not only motivated, but also engaged and implicated in their learning, it becomes of high importance for teachers to be on the lookout for their student's desired action (Chou, 2016), which means that if they don't feel motivated or their "player nature" is not managed, then no substantive learning will occur (Chou, 2016). Furthermore, teachers should intertwine this desired action with an emotional attachment (Mora, 2013; Cruz, 2019) by triggering emotions which "ignite and sustain curiosity and attention and thus interest in exploring" (Mora, 2013, p. 66).

We, therefore, believe to be quite relevant to explore, in the next chapter, Chou's Octalysis Framework (2016) as it addresses the young-learners core motivational drives, thus helping to "engineer and design for motivation within a particular classroom setting, and to transform activities into meaningful and enriching experiences" (Oliveira & Cruz, 2018, p. 69).
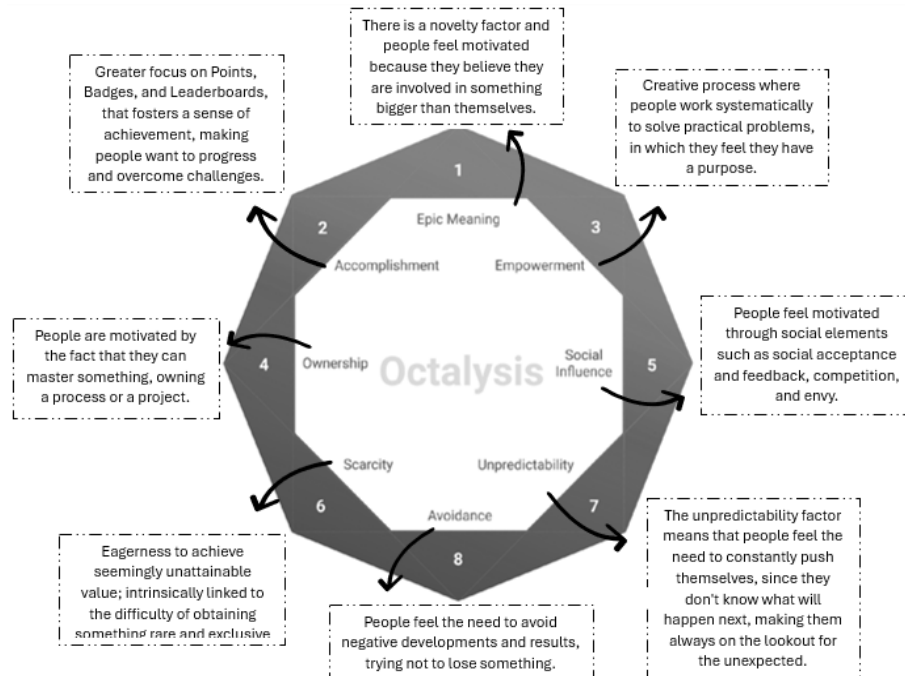
2   ADRESSING YOUNG LEARNER'S CORE-DRIVES

As we were able to understand before, gamification is the "craft of deriving fun and engaging elements found typically in games and thoughtfully applying them to real-world or productive activities" (Chou, 2016, p. 8) with focus on motivation, engagement, emotions, and empowerment (Oliveira & Cruz, 2018).

Therefore, Chou's Octalysis Framework emerges as a "Gamification Design Framework for Everyone" (Chou, 2016, p. 23), since it functions as a great resource through which teachers are capable of analysing the strengths and weaknesses of their group with respect to motivational issues, also giving emphasis to its "Human-Focused Design" (Chou, 2016, p. 49). Following this framework, teachers should address its eight main core-drives (figure 5) referred to as: Meaning; Empowerment; Social Influence Social Influence; Unpredictability; Avoidance; Scarcity; Ownership and Realisation (Chou, 2016) in order to attend to the motivational variety within the classroom.

Figure 5

The Eight Core-Drives of the Octalysis Framework and their meaning

Note: Adapted from Chou (2016). For further information you may check the following: https://yukaichou.com/gamification-examples/octalysis-complete-gamification-framework/

During our Primary English lessons, for instance, we contemplated upon our young learner's core-drives throughout our planning and later implementation to achieve active and enjoyable activities, tasks and challenges which foster knowledge and skills development (Cruz, 2019).

Our English Quest activity, for example, began with the narrative of a story related to a treasure map, where the characters had to follow a map and find clues to reach the accurate spot for the treasure. Through this, our pupils were challenged to do the same, putting into practice their language and future skills (Ehlers, 2020). Divided into groups of three, pupils had to accomplish different tasks to find clues which would lead them to the place where the reward was hidden, as seen in figure 6.

Figure 6

Primary English' pupils organising the clues (letters)

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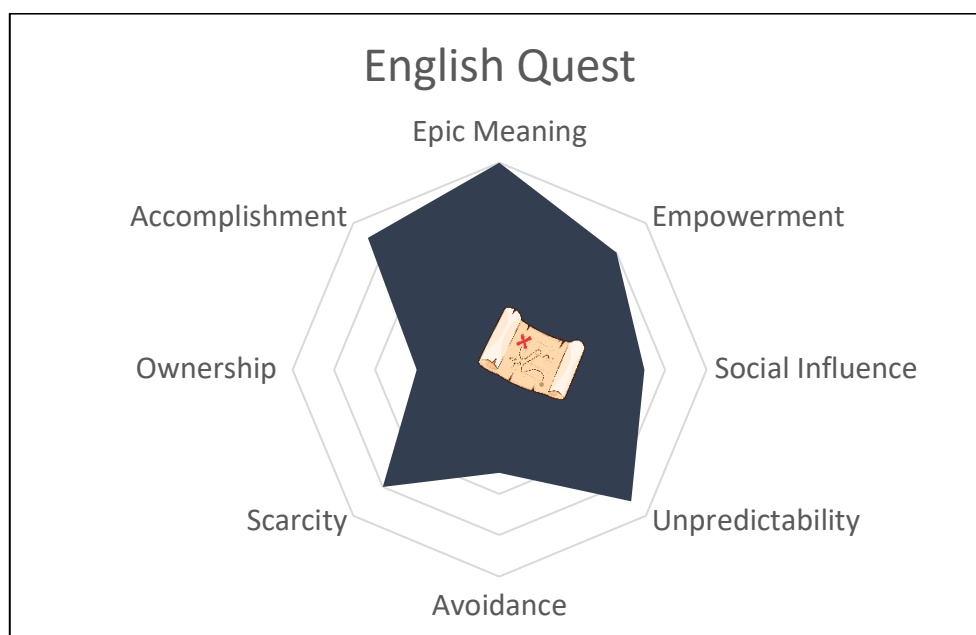de e-LEARNING

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During the activity, pupils' core-drives were managed by allowing them to fully use the skills they were developing within English language learning (Taylor & Brickman, 1991). As a result, they were confronted with the novelty factor (they had never done something similar in their previous English lessons) and had to work to solve practical problems resorting to creactical skills. Furthermore, on the one hand they felt motivated through social elements such as feedback and competition and felt the need to constantly push themselves, since they did not know what could happen next, causing them to be aware of the unexpected. Considering they were also trying to find a treasure/final prize, their sense of achievement was also tackled, making pupils want to progress and overcome challenges to reach their goal. On the other hand, pupils felt motivated by the fact that they could master something (using a foreign language in context and to solve problems, for instance), feeling the eagerness to achieve something seemingly unattainable while trying to avoid negative outcomes from their performance.

With regard to these motivational settings, we designed an Octalysis Framework (figure 7) for the English Quest activity which clearly shows the core-drives that were farther addressed in comparison to others. Moreover, it is possible to observe that our Octalysis, although balanced, has a bigger tendency to focus on intrinsic motivations (right side) and on positive engagements (upper side) rather than extrinsic motivations (left side) and negative engagements (lower side) which shows that the activity was not just based on rewards, but also on enjoyment (Chou, 2016).

Figure 7

English Quest activity represented through an Octalysis Framework

The Octalysis will, consequently, help us develop lessons which ultimately guarantee quality and significant learning for pupils (Pereira et al., 2018) as it helps provide different paths to achieve success through teaching and learning process where pupils have the opportunity to learn from Others across all lines of difference (UNESCO, 2022).

Nevertheless, as we will discuss in the next chapter, gamification also serves a great purpose as an inclusive approach to nowadays' complex and digitalised educational settings (Chacón, 2021), as it also fosters didactic strategies and practices that "make use of technology to support and maximise the learning experiences of all students" (Pellerin, 2013; Hersh, 2020, p. 3). This results in a global perspective of e-inclusive education that combines strategies and resources appropriately during the teaching and learning process (S2DINTS, 2021).

3   AN E-INCLUSIVE CURRENT… LET IT FLOW!

Talking about inclusive educational environments is utterly different from talking about schools which simply open its doors to everyone (Pereira et al., 2018) and, as Portugal's Ministry of Education emphasizes, "to be successful, an education system must guarantee quality learning for all students" (Pereira et al., 2018, p. 4). Hence, inclusion within classrooms is not a utopia, but rather something that requires comprehensive, systematic, and motivational approaches intended to develop the best out of each pupil, leading to "the value of inclusive education in mainstream schools […] being increasingly recognised" (Hersh, 2020, p. 4).
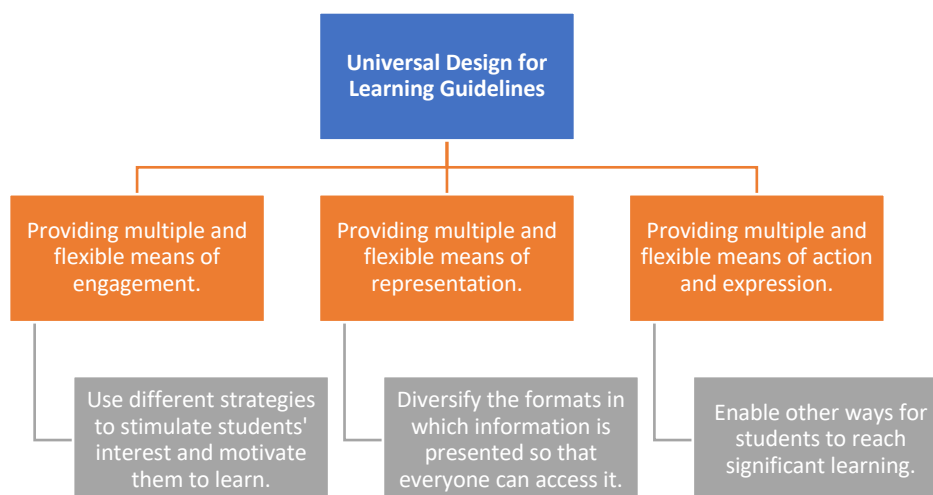
For instance, the Universal Design for Learning (UDL) focuses on the ideal that any pupil is capable of learning regardless of their disability, age, gender, size, culture, and other factors (Hersh, 2020) as long as their real needs are attended and then, managed accordingly to their motivational drives. Bearing this in mind, it becomes clear that inclusive education is deeply linked to the gamification pedagogy and to the core-drives previously depicted in the Octalysis Framework. It is, therefore, our belief that managing pupil's core-drives, while resorting to the gamification pedagogy and a UDL approach, will captivate students to learn (Cruz, 2019) and improve their learning experiences by helping them achieve "purposeful, knowledgeable, strategic and effective learning" (Almeqdad et al., 2023, p. 3).

Nevertheless, as Primary English teachers working with children that are considered as digital-natives, commonly known as Generation Z, it is fundamental to understand that our practices have to adapt to the new social skills regarding technologies, since this generation is tech-savvy and globally connected (Cruz & Díaz, 2016). Moreover, with Generation Alpha (Cruz & Díaz, 2016) these digital needs will have a more resounding role in teaching and learning processes. As a result, by intertwining digital practices with inclusive and gamified approaches we may reach an understanding which sustains that the implementation of technology in gamified classrooms will improve perspectives for inclusive environments, since pupils display "improvement in motivation, attention, self-esteem and cognitive development, which leads to a notable increase in effort and performance" (Chacón, 2021, p. 11).

On account of this, it may be safe to claim that we are teaching in an e-inclusive current where we make use of digital tools to scaffold learning aligned with the UDL principles (figure 8), thus giving voice to each pupil, respecting their interests and capacities and allowing the curriculum to flow alongside the young learner's profile (Hersh, 2020; S2DINTS, 2021).

Figure 8

The Universal Design for Learning Guidelines

Note: Adapted from Universal Design for Learning Guidelines (Bonança et al., 2023).

In this scenario, we brought into or Primary English classroom the ClassDojo digital platform which can be used by teachers, pupils, and families, permitting behavioral management (Chiarelli et al., 2015) and "minute-by-minute, day-by-day, week-by-week feedback" (Chiarelli et al., 2015, p. 83). Besides, ClassDojo allows all pupils to feel more

encouraged and motivated towards doing a better job and achieving success at their own pace (Chiarelli et al., 2015; Chacón, 2021).

Within one of our classes, we were confronted with a pupil suffering from selective mutism which, very briefly, is when a child can't speak in certain settings. For instance, a child may not be able to speak at school but speak at ease at home, which was the case of this specific student. So, our e-inclusive approach (Hersh, 2020) within gamified contexts, by resorting to ClassDojo, enabled us to create a learning path in which the pupil felt comfortable, allowing them to develop skills in a differentiated way. Through this, we could also find new ways of interacting with the pupil, giving them immediate feedback, and implementing an alternative form of evaluation, as exemplified in figure 9.

Figure 9

*Pupil accomplishing a reading task in ClassDojo*

Despite the pupils' specific learning needs, they effectively experienced their educational and personal success through a reading task, which was only possible to do, due to an e-inclusive approach. This use of technology in teaching and learning practices "helped engage students and enable them to learn successfully" (Hersh, 2020, p. 8) sustaining the idea that besides fostering a more active foreign language learning, e-inclusion was also found to be "effective in improving vocational, independence and social skills" (Hersh, 2020, p. 11) by providing a diverse range of technological opportunities in education settings.

Furthermore, this connection between e-inclusive approaches and the gamification pedagogy leads us to assume that all types of pupils may also reach a state flow (Csíkszentmihályi, 2008) where they feel engaged in activities which are suitable for their skills level, thus not leading to too much anxiety or boredom (Oliveira & Cruz, 2018) as the difficulty of the various challenges keeps up with the skill set of the user/pupil (Chou, 2016). Thus, teachers are able to facilitate pupils with an envisioned passport which will allow pupils to effectively use English in different contexts to help them exercise their citizenship proactively (Cruz, 2019), now and in the future.

As we understand, both teachers and pupils must act "as decision agents" (Leite et al., 2022, p. 108) so that the aforementioned principles come into fruition, by transforming pedagogical and curricular practices towards learning environments which favour critical thinking, reasoning and reflection (Wolff et al., 2022) within 21st century classrooms, as it is the case of Primary English classrooms. We, therefore, bolster, in our classrooms, competencies that raise reflection upon intended actions and their impact (Leite et al., 2022), giving pupils skills based on cognitive, motivational, flexible and social resources (Ehlers, 2020), as represent by the Triple Helix Model of Future Skills (figure 10).

Figure 10

The Triple Helix Model of Future Skills
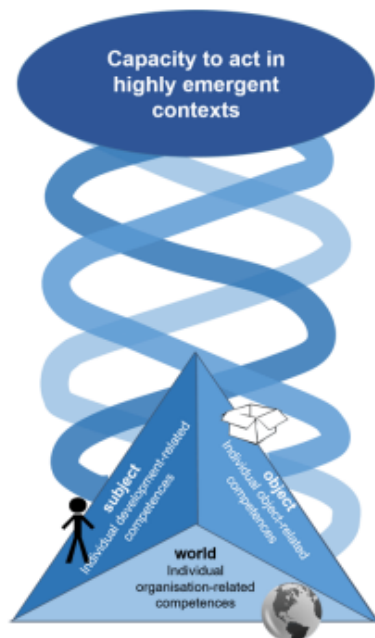
Note: retrieved from the NextSkills Project (Ehlers, 2020).

According to the Triple Helix Model, pupils should develop a Future Skills Profile through which they mobilise their knowledge and abilities to act in fast-changing and rapidly emerging contexts of the 21st century. Their skills should be transversal to one another and provide them with a holistic development which allows them to adapt and grow in order to cope with future challenges, as well as solve complex problems and act consciously and accordingly within various settings of a global society (Ehlers, 2020).

Bearing this in mind, we do believe that by managing pupil's core drives towards an e-inclusive and transformative Primary English classroom which follows the gamification pedagogy, will not only push pupils into developing foreign language skills but also prepare them for future ways of living, future ways of work and future ways of learning (Ehlers, 2020).

FINAL CONSIDERATIONS

This study follows an ethnographic and qualitative methodology and is part of our PhD research. The practices shown occurred in a school of the Algarve region, with young learners attending 3rd and 4th grades and learning Primary English as a foreign language.

As it is our belief that "formal systems [...] need to become much more open and flexible, so that [...] opportunities can truly be tailored to the needs of the learner" (Laal, 2011, p. 471), the main objective of the study is to examine the impact of gamified learning experiences for inclusive and transformative Primary English classrooms and the impact that these practices have on the pupils learning and development as active and conscious individuals in the 21st century society.

Until now, preliminary results show that pupils became more productive and engaged towards learning a second language when feeling that their motivational drives were being managed throughout meaningful activities. Pupils also show more willingness to use the English language in different settings as they also feel a sense of empowerment by doing so. Moreover, we are able to observe a progress with regards to future skills development, since pupils communicate more with each other to solve problems, they tend to collaborate more and help others voluntarily, showing initiative and more autonomous behaviours. It is possible to observe that this happens not only

because they want to earn points on their ClassDojo profile, but also because they construct meaning and understanding from their active participation throughout the lessons, mobilising their different core-drives and player profiles in an implicit way.

However, we also encountered challenges mainly regarding the digital component of our gamified practices. For instance, many families do not log-in into ClassDojo which ultimately leads pupils to do the same at home. Thus, some of them do not accomplish given tasks if they are not in the classroom. Furthermore, while on ClassDojo pupils still use more their mother-tongue rather than the intended foreign language when writing comments or asking questions in the platform.

Therefore, we conclude that our study still needs further investigation to draw more comprehensive conclusions, especially concerning foreign language skills development.

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