Developing a procedure of video game integration through the task based approach

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ABSTRACT

Video Games (VG) in language education are becoming a popular after-class activity promoting authentic language uptake and use. Games came into language teaching pedagogy, as a tool promoting understanding and language use, with the communicative approach and have become popular with the introduction of the internet.

The aim of this work is to propose a criterion based procedure, which provides case specific data regarding the extent to which a VG can be integrated in the EFL class under the Task Based Language Teaching (TBLT) approach. Deriving from past research, focusing on issues of lesson “gamification” and theoretical VG attributes adaptation in the EFL class, this work extends the study of digital content integration, to an actual functioning procedure.

While the mean integration score of this procedure for various VGs was shown to be at 63% it was also proved that these tools require supplementary material and well-designed language tasks for learners to obtain maximum benefit. The integration score alone does not suffice to unveil the true potential of the game. The proposed procedure would need to be standardized and be fed with more data to become an accurate system of practice.

Keywords: Video Games; Language Learning; Game-based Learning

1. INTRODUCTION

English language instruction is a dynamic and developing domain for teachers seeking innovations and advancements in their methods and approaches. EFL has undergone so many “fluctuations and shifts”, according to Celce-Murcia (2001:3), in which many “heroes have come and gone in a manner fairly consistent with the kinds of changes that concur in youth culture”. Modern day teachers of English, share the prominent perk of having a variety of teaching methods – approaches and resources to select from, shape, adjust and stretch their teaching potential more than ever. New ideas
are created, and enter or leave the table, at a remarkable speed. The advances of technology and the ease of pc-human communication play a major role in inviting language teachers to develop their own personal selective way of teaching.

The advent of technology in the EFL class is a developing domain for over twenty years now. In recent years however, there has been a significant amount of research and practice surrounding the integration of VG philosophy and mechanics in education systems. Several theoreticians like Dichev and Dicheva (2017) are discussing about the “gamification of education” and array the studies that have incorporated VG mechanics with transcribed results. A few examples are Boticky et al. (2015) who tested the game element of “badges” in 305 primary school students for a year and noted a growth in motivation on a specific group of students through system logs, feedback and observations. Another example is the research of Hasegaw et. al (2015) who applied system points, trials, character ranking and progress measurement in a class of English language for 27 undergraduate university students and noted an increased motivation for continuous learning through a survey conducted with the test group. These examples regarded cases in which the instructor attempted to apply VG mechanics and methods in their class to achieve a specific purpose (i.e. increase motivation and learner autonomy).

Integration of a VG per se in the EFL class however is rare, and Robinson (2007) marked the lack of sound research for creating criteria for the classification and sequencing of tasks. Robinson’s theories on technology mediated tasks have been applied by a few researchers while Gonzalez-Lloret (2016:42-52) commented that his “theories do not very well predict what happens when we manipulate the complexity of a technology mediated task”.

Curriculum planners and implementers aim for the safe choice of lesson gamification by incorporating game elements than integrating the real unit as an autonomous piece, as it is thought to a) destroy the capacity of intelligent thought in children, b) delay brain development, c) reduce the senses, and d) indirectly encourage mental laziness (Winn
In addition, lack of sufficient academic experimental research generates the feeling of deficiency. VGs are established as means of leisure activity, than as a new multimodal way of data presentation and analysis, as there isn’t a systematic approach instrument procedure to evaluate and integrate them in current practices of language teaching.

It is therefore the purpose of this study to propose a justified set of criteria that aim to filter integration of VGs in the EFL class in relation to the TBLT approach. This approach has been selected as it provides the relevant theoretical methodological background while VGs offer the ideal environment for students to perform controlled and open language tasks. The ability of VGs to situate meaning, simulate situations and provide roles (Gee, 2007), ties perfectly with contemporary TBLT. Two hypotheses are pursued:

H1: TBLT approach provides an ideal background setting to enable VG integration in the EFL class.

H2: A criteria evaluation procedure could be employed to evaluate the extent of VG integration in the EFL class through TBLT.

The theoretical framework of the TBLT is initially presented followed by a discussion of VG affordances. The procedure of testing the hypotheses is then offered through which the scrutiny of a set of criteria has taken place for the subjects which were the VGs themselves.

2. A SHORT PRESENTATION OF TBLT

Nunan (2004) saw TBLT exploding in three phases, i.e. comprehension, manipulation and production of meaningful language. The task, where from the approach receives it name, is the focus of teaching and occurs within specific situational and linguistic contexts. Willis (1996) defined it as learning by doing or achieving a goal.
through the activity which involves the solving of a problem, the completion of a puzzle, playing a game or even sharing and comparing experiences, while Ellis (2003:16) as a “workplan that requires the learner to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct and appropriate propositional content has been conveyed”. It may be possible to conclude that:

- Language learning through tasks occurs in the form of problem-solving.
- TBLT is a dynamic process based on communication.
- Focus is on meaning and not on form.
- The task is evaluated in terms of the outcome or task completion.

Finally, Skehan (1998) provided a list of major task characteristics: 1. Meaning is primary, 2. Tasks need to be realistic and student centered, 3. A relationship to real-world activities needs to exist, 4. Task completion is a priority, and 5. It is the outcome that it is assessed.

TBLT develops in stages: a) a Pre-task in which the topic, the task and the directions are offered by the teacher, b) a While or During-task where the learners are working on the task with the teacher observing the process and delivering extra feedback when needed, c) an After-task in which an analysis of the language is offered supplied with relevant practice. TBLT criteria that would need to be examined in VGs are: a) problem solving situation, b) dynamic communication process, c) focus on message, d) final evaluation in terms of outcome, e) realistic tasks relating to real world activities, e) necessary task completion, f) rich input provided, g) promotion of language output and collaboration, g) corrective feedback provided, and h) existence of the above Pre-While-After task stages.

3. VIDEO GAMES IN LANGUAGE TEACHING
VGs have been considered as tools used to provide pleasure and thus associated with “childlessness and triviality” Newman and Oram (2006: 11). On the other hand, games are claimed to lower anxiety of learning and encourage interaction in a non-formal learning environment. In support, Gee (2007: 31) claims that learners “at least unconsciously, understand and operate within the internal and external design grammars or the semiotic domain he or she is learning” while Gonzalez-Lloret (2016) discusses various practical ways to integrate digital media and technologies in TBLT which include VGs. In the related bibliography it is possible to trace a few VG affordances:

- **Situated meaning** (Gee, 2007:105, 2013) entails that “the meanings of signs (words, actions, objects, artifacts, symbols, texts, etc.) are situated in embodied experience. Meanings are not general or decontextualized. Whatever generality meanings come to have is discovered bottom up via embodied experiences”.
- **Personal connections** relate to prior practices and interests which are claimed to be central to the learning experience (Schank et al., 1977). Zagal (2010), indeed sees it as a new form of literacy.
- **Complexity of signs** describes the multimodal value of meaning and knowledge being “build up through various modalities (images, texts, symbols, interactions, abstract design, sound etc.) not just words” Gee (2007:224).
- The **Sandbox effect** describes the safe and protected space for students to experiment freely, explore and interact through language.
- **Complexity sequencing** refers to the sequence of levels and complexity in VGs which shape according to the player’s progress. Jull (2003) finds this scaling important as games are rule-based formal systems with a variable and quantifiable outcome where different outcomes are assigned different values.
- The **cycle of expertise** or **probing principle** considers learning as “a cycle of probing the world (or doing something); reflecting in and on this action and, on this basis, forming a hypothesis; reprobing the world to test this hypothesis; and then accepting or
rethinking this hypothesis” Gee (2007:105). The tension level created is thought to lead to the player’s enjoyment Csikszentmihalyi (1990).

The above theoretical affordances of VGs together with some of the main characteristics of TBLT are checked in selected VGs to test the two registered hypotheses.

4. METHOD (Procedure, Subjects and Tools)

Two types of subjects were used: a) the first is inanimate and concerns the VGs to test the hypotheses, and b) the second involved two researchers, one of which performed the initial evaluation and provided suggestions for integrations and the second assessed initial suggestions. 12 VGs were evaluated in total (they appear in the analysis).

A set of selected criteria (presented in the relevant tables in the analysis), linked to TBLT, was initially prepared and a grid was formulated to act as the instrument of the evaluative procedure. Each VG was run for a minimum of 5 hours to understand its operation interface, development formula and scheduled reactions to running commands. Notes collected through this procedure were then entered in an excel file containing the grid with the set of criteria.

5. SURVEY RESULTS

Syberia (Microids, 2002).
This graphic adventure VG is performing above the borderline in almost all the criteria of the scoring procedure and creates a stimulating, motivating immersive ergodic – digital narrative environment. However, it does not react well to authentic language and focusses on form.

A similar pattern is registered in the case of another action-adventure (VG *Dreamfall: The Longest Journey* (Funcom, 2006)) based on choice making, battle systems and riddle solving.
**Wario Ware: Smooth Moves** *(Nintendo, 2006)* is a party VG different from the above.

It presents an excellent opportunity to individually practice the imperative and understanding instructions rather than the narrative as in the previous two.

**Heavy Rain** *(2010)* is another choice-based adventure game with different characters as protagonists.
It is an ideal example of Gee’s (2007) *Situated Meaning* Principle. This narrative VG could indeed replace the textbook or act as an added piece of literature in which the learners respond, interact and shape a scenario.

*Dear Esther (2012)* is a virtual narrative VG.

![Figure 5](image)

It scores low in most criteria and it would be difficult to be integrated in an EFL TBLT class. However, it may provide a listening activity opportunity as the narrator presents the story.

*World of Warcraft (Blizzard, 2004)* is a well-known war VG.

![Figure 7](image)
Despite its non-real aspect this VG meets quite a few of the TBLT criteria as users can communicate over the net in real time, interact and make decisions. Thus, it presents an opportunity for collaborative real language practice despite its limited topic. *League of Legends (Riot Games, 2009)*, another multiplayer battle arena VG, presents a similar graph pattern as the one before.

![Figure 8](image)

**Call of Duty: WWII (Activision, 2017)**, is the latest instalment of the multiple war simulation games. It is a shoot-them-up strategy game that can be played on and off line.

![Figure 9](image)
The game provides an opportunity for military English training and it could be easily integrated in an ESP course for in-class or after-class practice. Learners can interact with each other discussing strategy issues while learning vocabulary in action.

*Silent Hill: Shattered Memories (Konami, 2009)* is an indie survival horror VG based on narrative. Five endings are available.

![Figure 10](image)

Though the game is set in a fictional universe, there are some interactive sessions at the beginning in a psychotherapist’s office which may provide an opportunity for relevant vocabulary practice. Nevertheless, it does not provide opportunities for language output, nor does it support the sandbox element. It has a horror nature and could only be integrated with great caution with adult learners.

*Life is strange (Dontnod Entertainment, 2015)*. Another episodic adventure game which, similarly to the above, lies within the fictional narrative set.
Although the game performs well in the evaluation grid, as it provides a rich language input and thus promises an easy integration in different EFL contexts, again the set is far from reality. On the positive side, it does not require any teacher involvement and it can be used as an after-class opportunity for language practice.

*The Stanley Parable (Galactic Café, Davey Wreden, 2013)* is an experimental, interactive metafictional game in which the player moves the protagonist around according to the narrative.
Despite the non-collaborative environment, it can be used independently by language learners for following-instructions practice. Language focus is on form while there is lack of linguistic output.

*Scribblenauts Unlimited (5th Cell, 2012)*. This is an emergent action-puzzle-game in a fictitious set.

![Figure 13](image)

It scores high in almost all criteria. It allows some active language production, it places focus on form and communication and thus, it can be easily integrated into an EFL class despite its limited post-task window. It supports the sandbox element and allows the teacher to direct hybrid tasks.

6. SUMMARY AND CONCLUSIONS

Despite their strong fictional aspect most VGs examined retain possible integration in an EFL classroom. The TBLT approach provides a solid background setting for this purpose as learners may be asked to perform various on-line language tasks. By that respect, the first hypothesis has been provided with adequate evidence in the criteria grid. The following graph shows the overall integration score.
Most VGs tested score above the 50% level as they are strong on digital narrative focusing on message and containing narrative aspects for the sake of gameplay ludologist’s perspective (Mateas and Stern, 2007; Kokkonis, 2015). On the other hand, a) none of the VGs reached a close to the 100% integration score which indicates that considerable thought has to be placed before integration and significant effort to link it to a specific syllabus, which remains to be made by the teacher, b) language production practice remains considerably behind than any other skill despite the advances in computational linguistics, c) the integration score alone says nothing about true integration. This is only an initial approach for further investigation. Supplementary materials clearly need to be prepared by the teacher before and after their use. Finally, the above scores are given by the two researchers only. By that respect this remains in the shortcomings of this study.

The procedure that was followed is at its infancy, however it could provide an evaluation road (a predictor) for the teacher to use as a first approach to scrutinize a VG before its adoption for use. By this token, this procedure may be enriched with more data to become an accepted tool should it be offered electronically. This first attempt remains at the level of a proposal for discussion for such a development rather than a
source which would provide answers to the many questions raised. The relative confirmation of our hypotheses does not guarantee, and does not prove that every VG will return with the same average scores, and therefore will be a prospect tool for EFL instruction through the TBLT. Thus, the procedure lacks external validity.

REFERENCES


