Author’s online course on medieval Italian culture: development model

Vera A. Volynkina* (a)

(a) Moscow City University, 129226, Moscow (Russia), 4-1, 2nd Selskokhoziastvenny Ploezd
Volynkina-196@mgpu.ru

Abstract
This paper focuses on exploring possibilities for the future development of online courses at the university level. The working model of an online course on Italian Medieval culture and art will be analyzed, and possible directions of further research will be determined. This work will present the development phases of an online cross-curricular course prototype. This study explores existing e-learning design strategies that enhance intrinsic motivation and engagement. It also offers possible solutions optimizing language learning with appropriate and convenient interventions. The author presents a number of grammar structures in the Italian language represented in the course prototype and a detailed description of lesson structure, the logic behind their order, and examples of creative assignments. The authors also determined the connection between the tasks and game elements as well as the logic behind the choice of plot elements and key characters. The author formulates possibilities for implementing layered storyline mechanisms to create a more personalized and engaging learning experience.

Keywords: online course, gamification, Italian language, Medieval culture, course prototype, motivation, storyline.

© 2021 Vera A. Volynkina
This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Published by Moscow City University and peer-reviewed under responsibility of TSNI-2021 (Textbook: Focus on Students’ National Identity)

Introduction

In the context of the constant development and rapid evolution of online education, the first versions of MOOCs (Massive Open Online Courses) were not perfect, although they were, without any doubt, a breakthrough in education. The positive points of online education are numerous and valuable, especially
during the global pandemic. Moocs continue to evolve, they have become more and more complex, efficient, yet, they still have several issues, among them a lack of human contact, low motivation, and a high number of dropouts. The issue of low completion rates is both a result and a clear demonstration of MOOC users’ lack of engagement and goal setting (Antonaci, Klemke, Specht, 2019). Numerous innovative developments and concepts were created to address the problem of engagement levels in online education. It is worth noting that among some of the most popular strategies of engagement boost is gamification. It was discovered that the integration of gamified elements could produce greater engagement with students’ remarkable contributions (Bouchrika, Harrati, Wanick & Wills, 2019). However, basic gamification techniques such as PBL (Points, Badges and Leaderboards) are now being reconsidered. The fact that PBL influences the extrinsic reward system, which could destroy students’ intrinsic motivation to learn, should be taken into account (Deci et al., 2001). Nevertheless, no effects of badges were found on students' intrinsic motivation; it was still proposed to apply gamification in a more sophisticated way than just PBL (Antonaci, Klemke, Specht, 2019). Positive aspects of video games are now being recognized and game structures are being actively implemented in various educative apps, so some researchers have suggested that an online course could benefit from implementing some of the video games design elements too.

Purpose and objectives of the study

This study's primary purpose was to explore the impacts of designing an online course using a storyline mechanism as a technique for enhancing students’ involvement and intrinsic motivation. The course on Medieval Italian culture and art and is aimed at higher education institutions students who learn the Italian language. Past studies suggested that implementing game design mechanics and creating a more gamified and learner-centered experience has created more active and more highly motivated learning environment in online courses. However, it is doubtful that the storyline may become an effective mechanism for enhancing intrinsic motivation and providing a more engaging experience. This study addresses the following research questions:

1: How does an online course in which storyline plays an important role and determines the format of the course itself as well as of assignments and structure impact the number of students dropping out without even starting the course or completing at least 50 percent of the course content?

Another weak point of a game-like course structure is that it can lack effectiveness compared to similar courses with no gamification enhancement.
2: How will the test results of online students enrolled in a storyline based online course compare to the results of students who studied the same course in a non-gamified context?

**Literature review**

In the online environment, studying becomes another way to exercise the will power. Isolation and extended feedback loops can be overcome by gamification that includes regular rewards and avatar upgrading (Kaufmann, 2018). While a possibility to acquire a certificate or a mark is a decisive motivating factor, it is still an extrinsic motivation stimulation, and it is just not enough to resolve the lack of engagement problem. Intrinsic motivation in learning can guarantee much more involvement and persistence, determination to succeed. Although intrinsic motivation is a powerful inner resource, in difficult situations, even strong motivation is not enough in itself. People still get exhausted by constant battles; they stumble and even give up. The success of ‘Re-Mission’, a video game created to prevent the cancer relapse among children caused by skipping the doses of medication, demonstrates how even the most potent motivation – the will to survive, can appear insufficient. Even though the patients are aware of medication necessity, the game practice has improved medication intake accuracy. Game format has changed existing motivation, transformed it into a resource that is called self-efficacy. This type of confidence in having the necessary skills and abilities to face and overcome a particular problem is an exhilarating feeling, a mindset, it will not vanish, and it can be developed. Game format stimulates us to increase self-efficacy as we work towards our goals by trying, failing, learning and trying again. Game turns out to be work, but a pleasant one, that we have chosen to do, and that can make us happy unlike other activities that help us "to kill time." Playing the game, the person is deeply engaged, highly motivated, and fully involved in the process. This kind of a high level of engagement is called a flow, and it is a golden standard that teachers have been aspiring to, for centuries (Mcgonigal, 2015).

Video games were used in the educational process before. Although games, especially e-learning ones, are sometimes neither believed to be worthy of attention nor the result of serious work (Plump, LaRosa, 2017), it was demonstrated that playing video games can have a positive effect on communicability, adaptability, and resourcefulness, suggesting that video games have a role to play in higher education (Barr, 2017). Video games support concept exploration and add fun to the classroom, which results in increased comprehension and motivation (Plump, LaRosa, 2017). Instead of implementing the whole video game, the video games' elements should be used in the course structure to create an engaging experience. Intrinsic motivation is a natural part of gameplay; it has the potential to reward students not only with an engaging experience but also with vital cognitive benefits, such as positive feelings, collaborative social connections with peers, and personalized value they find in the work (Pike, 2015). The way the material is presented,
the lessons order, types of the assignments, and the peer-to-peer relationship construct should be reconsidered. The right start would be to make the learning process more enjoyable, provide more choice, and create the tasks that are "optimally challenging" (Deci et al., 2001). There is still limited research on how much an effect caused by gamification of the course will last (Bouchrika, Harrati, Wanick, Wills, 2019) and which form of online education is the best (Palvia et al., 2018).

Implementing such elements as Randomness, Discovery, Playfulness, Emotional Entailment, which are key for a successful Gamification design (Gallego-Durán et al., 2019), match well with adding another fundamental game-designing element – a plot or a storyline. The mechanics should be accompanied and influenced by a story, an essential issue in game structure (Schell, 2008). Mr. Schell states in his book "The Art of Game Design" that every high-quality game, even chess, has a plot, a storyline and the most popular games, especially for girls, are the role-play/action-adventure games (Annetta, 2008). The variety of storylines in different video games confirms that most of them can be successfully implemented in designing the online course (Timasheva, Volynkina, 2019). This study addresses the possibility of using the storyline as an educational tool in online cross-curriculum education.

**Methodology**

The author's online course model, "Romantic Middle Ages," is focused on Medieval Italian culture and art. All the course materials, including lectures and numerous assignments, are in Italian since they target students studying this language at the university level.

The course consists of seven chapters or lessons. The first one is introductory and serves to introduce students to the course plot and goals. Six main chapters are named after one of the most prominent city-states in Medieval Italy: Salerno, Ravenna, Siena, Assisi, Pisa, and Nonantola. Each chapter has four basic content elements:

- Each chapter targets specific vocabulary and one of the grammar topics for intermediate and upper-intermediate level of language, such as Congiuntivo, Trapassato Prossimo, Passato Remoto, Periodo Ipotetico.

- Introducing a female historical figure associated with the city and essential for the storyline and students’ goals.

- Introducing a particular aspect of medieval culture, such as medieval symbolism, social and political characteristics, and medieval medicine.
The chapter also focuses on a city itself, giving students a chance to get acquainted with the medieval history of a particular place and its main attractions.

The storyline includes two layers. First is set in the present times and includes a guide, a character archetype named Monica. Her character's background is that she is a friend, a museum worker, who right now prepares an exhibition "Women in Middle Ages" and needs assistance. The premise is as follows: "Working in the archives, I accidentally discovered a map which suggests that four Virtues images described by Christine di Pizan were inspired by real people whom she met during her journey through medieval Italy." Students' goal is to help Monica find out the truth by completing various tasks. Her character narrates all lectures, hence providing students with necessary information.

Figure 01. Setting for the first layer of the plot.

The second layer is set in the Middle Ages and focuses on how a French writer of Italian origin, Christina di Pizzano goes on a fictional journey through Italy. Her book "The City of Ladies," where she describes a
vast number of diverse historical female characters, was taken as the plot basis. The additional imagery is added throughout the course content to make the experience seem more anchored to the real life.

Figure 02. A map featuring key locations

This introductory chapter plays a significant role in targeting students' intrinsic motivation, as it brings the elements of surprise, playfulness and forms a "mission," a mechanism vital for any quest-like game, as it helps to form clear intrinsic goals. The introductory chapter implies that, at the end, students will discover the truth behind four mystery characters of the past and help discover the whereabouts of a fictional "treasure". Doing language-based exercises stops being a goal and becomes a useful tool to achieve the final goal. That way, gamification and game design elements are used more sophisticatedly, and an intrinsic motivation becomes extrinsic.

Each of the six lessons, dedicated to cities, presents a few video–fragments; the information is focused on the lesson's topic. For instance, the videos from Assisi chapter are about Clara of Assisi and the symbolism of the colors, the Siena chapter video is focused on the Contrada system, and the Pisa chapter videos are about Bona of Pisa and Maritime Republics. All the chapters in the course are not in the right order, and students are supposed to follow directions and hints in the narrative to choose the next chapter. Several additional images are included in each lesson contents in order to improve the students’ perception of the city, and create a more defined, complete picture.
Chapter "Nonantola" is the first one, according to the plot. This chapter presents a video dedicated to Christina de Pizan and a fictional letter from Catherina di Siena. It is addressed to Christina de Pizan and serves as a link between the two chapters. The letter is in modern Italian. The chapter also includes the image of Catherine’s real letter, as she was famous for her vast and influential correspondence, and the photo of the house where she lived. This chapter's prevailing grammar construct is the Indirect (formal) Imperative, its usage with pronouns and historisms, particularly architecture vocabulary in the Italian language.

In the second chapter, "Siena," new vocabulary, such as philosophical terms and historisms concerning crafts and animals, is introduced through mini games.

The third chapter, "Ravenna," focuses on bestiaries' phenomena, animal imagery symbolism, and heraldry. The new vocabulary is introduced through the video and a mini game. Assignments for this chapter include an emblem creation, as well as creative writing. To proceed to the next chapter, students need to read the ciphered 14th-century poem by Compiuta Danzella.
Since the course tells the students about the most famous women of the Italian Medieval period, in the next chapter, the focus is on St. Clara of Assisi. The Remote Past Tense or Passato Remoto is the "Assisi" chapter's grammar structure. The assignments for this course include creative writing. To guess the name of the next chapter, students must solve the code.

"Pisa" chapter informs students about Italian maritime republics, specifics of traveling by sea in this period, as well as pilgrimage practices and the Patron saint, Bona di Pisa. The variation of forms in the Subjunctive mode and the sequence of tenses are the advanced grammar structures presented in this lesson. Assignments for this chapter include a quiz and a creative writing assignment.

According to the storyline, the "Salerno" chapter is the last one. It is dedicated to medieval medicine practices and introduces vocabulary on diseases, plants, herbs, and precious stones. As for the Italian grammar, in this chapter, students will get acquainted with conditional clauses or Periodo Ipotetico.

The last section of the course, its last lesson serves as the conclusion for the storyline. Students should complete the final quiz to reveal the truth and discover the "treasure." The last sequence also includes the section with additional materials, such as recommended reading and video lectures.

Results

In this study, the author developed a model of an online course where Italian grammar topics are introduced through a storyline element. A variety of creative assignments were implemented to meet learning objectives of the course. This course's significant feature is its interdisciplinarity, with the primary
focus of attention split equally between medieval arts, geography, historical events and places, and the Italian language. The narrative in the course prototype mostly focuses on powerful women of different social statuses. This perspective was explicitly chosen to highlight the importance of heritage female figures of our past left to future generations. The framework of elements and mechanics used while developing this course could appear useful for the future creation of similar online education products targeting language education at higher-educational institutions.

Discussions

The author notes that this theoretical format of research is a limitation, and further experimental studies are needed to fully understand the impacts of designing an online course using a storyline as a motivational asset. Studies with larger samples would be helpful. Future studies may also win from direct survey of students taking such a course regarding their thoughts on course format. A more detailed framework of necessary steps and used elements crucial for building a similar course model could be developed.

Conclusion

Personalized learning intervention could effectively improve students' learning behaviors, attitudes, motivation, and academic performance (Zhang et al., 2020). To implement various learning styles, assignments in this course incorporate various elements from reading, creative writing to the creation of imagery and podcasts. While creating an online course, it is also crucial to remember that generalizing game elements for learners without understanding the educational institutions' context or users' background is a guarantee for gamification failure (Ofosu-Ampong, 2020). Gamification as a method of enhancing participants' motivation is a powerful instrument. However, it is also worth noting that gamification amplified with such factors as a personalized approach, the inclusion of creative and interdisciplinary elements could prove to be a more effective, essential element of successful education, especially for intrinsic motivation.

Acknowledgements

Our thanks to Vladimir Potanin's Charity Fund for supporting the study.

References

Leonard A. Annetta (2008) Video Games in Education: Why They Should Be Used and How They Are Being Used, Theory Into Practice, 47:3, 229-239, https://doi.org/10.1080/00405840802153940
Antonaci, A., Klemke, R., & Specht, M. (2019). The Effects of Gamification in Online Learning Environments: A Systematic Literature Review. *Informatics*, 6(3), 32. https://doi.org/10.3390/informatics6030032

Barr, M. (2020). A cross-sectional study of video game play habits and graduate skills attainment. *Research in Learning Technology*, 28. https://doi.org/10.25304/rlt.v28.2326

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again. *Review of Educational Research*, 71(1), 1–27. https://doi.org/10.3102/00346543071001001

Gallego-Durán, F. J., Villagrá-Arnedo, C. J., Satorre-Cuerda, R., Compañ-Rosique, P., Molina-Carmona, R., & Llorens-Largo, F. (2019). *A Guide for Game-Design-Based Gamification*. *Informatics*, 6(4), 49. https://doi.org/10.3390/informatics6040049

Bouchrika I., Harrati N., Wanick V. & Wills G. (2019) Exploring the impact of gamification on student engagement and involvement with e-learning systems, *Interactive Learning Environments*, https://doi.org/10.1080/10494820.2019.1623267

Zhang, J. H., Zou, L. C., Miao, J. J., Zhang, Y. X., Hwang, G. J., & Zhu, Y. (2020). An individualized intervention approach to improving university students’ learning performance and interactive behaviors in a blended learning environment. *Interactive Learning Environments*, 28(2), 231–245. https://doi.org/10.1080/10494820.2019.1636078

Kaufmann, D. (2018). Reflection: Benefits of gamification in online higher education. *Journal of Instructional Research*, 7, 125-132. Retrieved from https://cirt.gcu.edu/jir/documents/2018_v7/reflection_benefits_of_gamification_in_online_higher_education_kaufm

Mcgonigal, J., (2015). *SuperBetter: A Revolutionary Approach to Getting Stronger, Happier, Braver, and More Resilient*. Penguin Books: New York.

Ofosu-Ampong, K. (2020). The Shift to Gamification in Education: A Review on Dominant Issues. *Journal of Educational Technology Systems*, 49(1), 113–137. https://doi.org/10.1177/0047239520917629

Plump, C. M., & LaRosa, J. (2017). Using Kahoot! In the Classroom to Create Engagement and
Active Learning: A Game-Based Technology Solution for eLearning Novices. *Management Teaching Review*, 2, 151-158. https://doi.org/10.1177/2379298116689783

Pike, M. (2015). Gamification in the Latin Classroom. *Journal of Classics Teaching*, 16(31), 1-7. https://doi.org/10.1017/S205863101500001X

Schell, J. (2015) *The Art of Game Design: a Book of Lenses. Second Edition*. Boca Raton: CRC Press.

Shailendra Palvia, Prageet Aeron, Parul Gupta, Diptiranjan Mahapatra, Ratri Parida, Rebecca Rosner & Sumita Sindhi (2018) Online Education: Worldwide Status, Challenges, Trends, and Implications. *Journal of Global Information Technology Management*, 21:4, 233-241.

Timasheva, O. V., Volynkina, V. A. (2020). Ispolzovaniye slozhnykh mekanik geimifikatsii I geimdizaina v soznании onlai-n-kursa [Using complex gamification mechanics and game-design to create an online course]. *Molodoj uchyoniy*, 26 (316), 312-317. Retrieved from https://moluch.ru/archive/316/72199/