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What's In a game? A game-based approach to exploring 21st-century European identity and values

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This article focuses on the early stages of an international project on gamifying national identity. It examines the production of the content required for developing a sophisticated and engaging approach to pedagogical innovation in education, through gamebased learning. This will encourage individuals to think about both European and national identity, specifically within the context of the European Union (EU). At a time when the EU faces significant challenges, a better understanding and appreciation of the role of national and supra-national identity and belonging in Europe is clear. RU EU? - an Erasmus+ funded project - aims to develop an innovative online game to help students and others enhance their understanding of their own national and European identities and challenge attitudes and prejudices. The content development of the game has brought together experts with socio-political knowledge, pedagogical understanding and technical expertise. This article discusses the early stages in the content development process, during which we amassed material from literature reviews, academic interviews and student focus groups and surveys. We sought to ensure that the content of the game reflected the issues raised within the game development lifecycle and our article describes our engagement with this material and its integration into game content.

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Introduction

Identity issues are never far from the forefront of everyday politics, and both the current European, and wider global, political climates, indicate that we may well be re-entering a political era driven by national rather than international imperatives. We have seen increased nationalism as a political force in the major powers of the world, such as China, Russia, and the United States, while in Europe, the EU has been challenged by

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the rise of nationalistic or populist parties within several member states. Thus, the issue of identity is clearly one that requires not only attention, but better understanding.

In recent years, there has been an increase in the creation and use of educational games. Unlike games whose purpose is entertainment or social interaction, educational games primarily seek to promote learning on topics within specific subject areas, usually with the aim of personal or professional development, or even changing of individual attitudes (Boyle, Connolly, Hainey, & Boyle, 2012, 2016; Lerner, 2014; Seaborn & Fels, 2015). Research on the use of educational games suggests that they can have a positive impact in motivating students (Boyle et al., 2012) and helping them to learn (Boyle et al., 2016). Thus, educational gaming provides active, problem-solving, situated and social forms of learning, where learners reflect on their own experiences by receiving immediate and differentiated feedback. These features suggest that gaming can provide a useful method for learning about and understanding issues of national and supra-national (specifically European) identity.

It is in light of both the increased political significance of national identity, and the increasing use of educational games, that our work takes place. Our research is funded by an Erasmus+ grant with the specific objective of developing an innovative online game (entitled RU EU?). The aim is to create an educational platform that will allow students and other players across Europe to develop a firmer and clearer understanding, not only of their own national and European identities and values, but also those of others. We seek to create a learning environment within which individuals will be able to consider and reflect upon their own identities and also find themselves challenged about their personal attitudes and prejudices as they seek to navigate the game itself, engaging with tasks centred on the ideas of national and European identity. The use of games for the learning of issues such as history, culture and identity has become much more widespread in recent years (Drosos, Alexandri, Tsolis, & Alexakos, 2017).

The European project is currently being challenged as never before (with Brexit perhaps the most visible but not the only example). It is our belief therefore that the RU EU? game will be one in which European students and young people can explore and examine some of the contentious issues that arise when considering identity in the modern Europe. This anticipation is based on the argument that games can assist when dealing with ill-defined problems (Jamaludin & Hung, 2017) while their application to issues in the 'real world' can foster effective learning (Stetson-Tiligadas, 2018).

An additional benefit of the game is that it provides opportunities for young people to collaborate with others in different countries to tackle problems and make difficult decisions. Allport (1954) proposed the contact hypothesis, also known as Intergroup Contact Theory, which states that, under appropriate conditions, interpersonal contact is one of the most effective ways to reduce prejudice between majority and minority group members. At a time of rising tensions in Europe, establishing contact with others of different nationalities, political views and beliefs in a controlled way is important.

In this article, we report on our game development lifecycle, as we create the RU EU? game. We begin by discussing the lifecycle before moving on to consider different stages in the process of creating the game. We explore some of the literature on European identity as this helps us to identify a number of the socio-political issues with which



players will need to grapple and we also identify existing resources in this area, which will help to inform our work. As part of the game development process, we undertook focus groups and an online survey of students, to ascertain what they would wish to see the game contain. Finally, we discuss the early stages of the actual construction of the game.

The game development lifecycle

The process of game development has several generally agreed stages. For example, Hendrick (2009) proposes five stages, namely the prototype phase involving working on the initial design of the game, followed by the pre-production stage of creating the design document, the production of the game, the undertaking of sufficient beta testing prior to the game being released and then finally the stage where the game goes live. In contrast, an iterative approach towards game design has been proposed by Doppler Interactive (Aleem, Ahmed, & Capretz, 2016) where the development stage of the life cycle is predominantly dictated by the evaluation of the game; if the build for the game is not satisfactory then it is redeveloped and re-evaluated. Hunicke, LeBlanc, and Zubek (2001) provide an overview of differing perspectives on how a designer and player view a game. They posit that designers should initially focus on the aesthetics of a game then work backwards towards the dynamics and mechanics. In contrast, players at times view games via their experience of the mechanics, dynamics and aesthetics implemented by the designer.

In the context of game design and development, it can be argued that there are four fundamental elements that constitute a game namely: aesthetics, mechanics, story and technology – the 'elemental tetrad' game design framework (Schell, 2015). The aesthetics of a game relate to how the game looks, in terms of layout and design of levels and assets. This is an important aspect of game design as it can relate directly to the player's immersive gameplay experience and the RU EU? game will be designed to ensure that there is a high degree of immersion and flow within the game. Gameplay is a fundamental component of game design and can be defined as 'the overall experience of playing a game' (Gregory, 2014, p. 847). In conjunction with the aspect of gameplay is the notion of game mechanics that define the rules of games, the objectives of the players and the criteria for success and failure (Adams, 2014; Gregory, 2014). Story relates to the sequence of events that unravels during the course of a game and can be pre-scripted, branching or emergent (Schell, 2015). Technology relates to the various media that make the game possible to play. For example, this could include the computer itself, in addition to input and output devices.

The RU EU? game is still in the earlier stages of development and, following Hendrick's (2009) five-stage process, our focus has been on carrying out the initial design activities for the game: the literature review, the resource review and the user requirements analysis. These early design activities have focused primarily on developing the game content, identifying issues relating to national and European identity and values that are of most concern to the potential players of the game. It has also been important to consider features of the game and the main game activities and to contextualise the game development.



Understanding identity: European and national

The EU is a confederal Union, one that has grown since its conception in the 1950s to its present (pre-Brexit) 28 member states. The Maastricht Treaty of 1993 established its current form, creating a firm relationship between member states, built around social, political and economic frameworks. However, the EU is now clearly under challenge from a range of political parties for national reasons, many with the stated aim of loosening the ties that bind members together. It is important, therefore, that our game content is derived from an understanding of the nature of identity and especially European and national identity today.

It is generally accepted that our sense of identity is a process of construction of meaning on the basis of cultural attributes that take priority over other sources of meaning (Castells, 1997). Our national identities provide us with both place and space in the contemporary socio-political sphere and most analyses of identity acknowledge the work of Anderson (1983) in seeking to pin down what we mean by the nation and how, for most of us, it is an 'imagined community'. In short, our national identity is the group within which we place ourselves and which accepts us as a member. Individuals have various levels of identity, however, and Bruter (2005), looking at the idea of what it is to be European, considers these as a series of concentric rings, moving from the individual at the centre, through locality, region, and country to Europe, a notion referred to as nested identities. But another way of conceptualising these multiple identities is that of the marble cake, where the various components of an individual's identity cannot easily be separated; rather they influence each other, mesh and blend (Risse & Grabowsky, 2008).

While individuals have various components which make up their identity, the literature suggests that 'European-ness' is a relatively weak one (Dabrowski, Stead, & Mashhoodi, 2017). The development of a European identity has, however, been taking place since the 1950s, so that it is increasingly becoming normalised within the lives and imaginings of its citizens; 'being European' may now be part of everyday life (Cram, 2012). But, although being European may be 'normalised' there are different ways of belonging to Europe. Kaelble (2009), for example, believes that there has been an increase in identification with European lifestyles and values and that, unlike a national identity, which is primordial, being European is part of an 'ensemble' of identities. This relates back to the idea of the marble cake, and that of concentric rings.

Distinctions between an essentialist approach to identity, driven by culture, and a constructivist approach more concerned with politics are often made (Demossier, 2007). Specifically, European identity is often presented as having a strong civic component and Habermas argues that it must rest on 'constitutional patriotism', a form of civic identity emphasising democratic citizenship as the integrative force (Mendez & Bachtler, 2016). Bruter (2004) tried to explore in more detail what citizens actually meant by 'feeling European' and found a similar distinction between civic and cultural identifiers.

Although, or perhaps because, there is no clear agreement on what a European identity actually is, there appears to be a growing consensus that it is about cosmopolitanism and diversity. To a large extent, this consensus has emerged because the common identity reference points associated with identity formation in nation states are generally absent in Europe. Thus there is no common language, cultural geography or territorial symbolism (Mendez & Bachtler, 2016). Delanty (2002, 2005), however, does not see this as problematic and suggests that one of the features of European history has been the constant negotiation of difference and out of this has come a more cosmopolitan culture. It means, he says, 'the recognition of living in a world of diversity and a belief in the fundamental virtue of embracing positively the values of the other. While this was once an identity of the European elites, there is some evidence that it has become a more general identity for all Europeans' (Delanty, 2005, p. 18).

Other phrases which have been used to describe European identity are 'unity in diversity' (Triandafyllidou & Gropas, 2016) and a 'union among peoples' (Weiler, 1997). It is, as Duchesne (2008) notes, a 'work in progress' as the EU itself changes but she suggests that the novelty of the EU as a political community and of European citizenship create a feeling of belonging to the Union. But it is important to note, especially in light of this project, that European identity varies according to age, class, gender, ethnicity and religion. Thus, being European is bound up with who you are, how you live and how you were brought up. As Risse (2010) states, if you are young, well-educated, rich and upper middle class, then there is a strong chance that you are 'European'. There is also a correlation with having cosmopolitan attitudes, positive attitudes to immigrants and being politically left of centre. The 'non-Europeans' or those who hold to an exclusive national identity are those with an opposite background and beliefs.

It also has to be remembered that European identity intersects with national identity and Delanty (2003) believes that all national identities contain to some extent a European element. But the research on identity and the sense of belonging and European-ness among some member states illustrates the limitations of the growth and acceptance of that European-ness among one of the most 'awkward' of partners, the United Kingdom (Leith & Soule, 2012; Maccaferri, 2017; Risse, 2001), and indicates that identity remains often based in the wider national feeling rather than the European one. The EU itself recognises the challenges and issues involving identity and the need to 'further the discussion' on what the people of Europe want Europe to be (Europa, 2018).

Our analysis of the literature on European Identity has therefore indicated that identity remains an elusive and difficult concept, one in which regional, national and European identities overlap and engage on a variety of levels, which often differ from individual to individual and from time and place. Members of the RU EU? game research team identified four key components around the issue of European and national identity that must inform the content of any such game. The first of these, the functional/instrumental considerations, focus on the costs and benefits of EU integration and membership. The second, value-based considerations, relate to the shared ideas and beliefs and the norms that are expressed through socio-political institutions. The third component comprises the cultural considerations and the more emotive ideas of Europe and individual member-states as a group or individual cultural entity. The final component is built around the more biological/geographical considerations of identity, which often underpin the more ethnic-focused aspects of identity – be it national or European.

Thus, whatever the actual content or structure of our RU EU? game – and any other games dealing with similar issues of identity - the literature clearly identified core conceptual issues that must inform content and components around which the game structure could coalesce. We now move on to discuss another element within this first (prototype) stage within the game development lifecycle, namely existing educational and game resources.



Educational and game resources

Our review of existing resources sought to identify, collate and consider those materials that were already extant in terms of educating students, young people, and the wider population in terms of identity – both national and European – as well as other issues such as values, norms and socio-political behaviour. We sought out a wide range of information not solely from academic sources, but including newspapers, radio and television, online video and audio, and alternative media and online platforms. The resource review also focused heavily in the areas of existing games, both entertainment and educational-related. It must be noted that the EU itself produces significant educational resources on the subject of Europe and the EU and these are translated into all official languages.

Our review produced wide-ranging examples, with the material available ranging from traditional classroom-based simulations, to more contemporary online engagement. For example, a number of EU member states, and sub-state regions provide ongoing 'real-life' simulations. In Scotland, the Scottish Youth Parliament is a forum which produces reports, and whose members engage with the wider socio-political sector. Members are elected, serve terms and produce impact relevant material, but they are, of course, also a running simulation, creating potential leaders for tomorrow. A number of universities also engage in similar activities, with simulant bodies ranging from sub-state assemblies to the wide-ranging Model UN (https://www.una.org.uk/get-involved/learn-and-teach/model-un-portal). It is interesting to note here that there is also a European Youth Parliament (https://eyp.org/), but it does not seem to have the same coverage or level of engagement as the Model UN within member-state universities.

Other examples include such games as *Democracy*, which is a government simulation game where players take the role of ministers and control specific resource areas, and *Papers Please*, a puzzle-based game around the role of a border control official (Kelly, 2018). More recent online games such as *Bad News*, bring together contemporary issues such as 'fake news' and social media misinformation (Roozenbeek & van der Linden, 2018).

There are some limiting considerations around the issue of learning resources, especially e-learning resources, and these generally relate to concerns about privacy and individual protection. This can often limit educational engagement with some sources. In addition, we found that, unsurprisingly, a majority of materials are in English, with material in other languages often being produced by official bodies, such as the EU or member-state governments. Croatia, for instance, has a population of just over 4 million and thus a limited internet space. Since it is the newest EU member-state, joining in July 2013, educational resources and games predominantly consist of the translation of existing EU materials.

Our review of existing resources led us to some initial conclusions. First, popular media and academic sources tend to problematise the relative benefits of the EU itself. While most mainstream sources tend to present balanced views, there are a number of social activities that display more confrontational views (both pro and anti) in regards to Europe. In general, academic focused resources tended to adopt a more positive approach towards the EU.

This led us to our second conclusion, namely the need to ensure balance and also to seek engagement from participants. While many simulations, both in-person and online, tend to emphasise the issues of resource management, or ideological (sometimes, single-issue) driven discussion, others tend to focus more on information provision or

education about potential concerns and pitfalls in the contemporary socio-political environment. Thus, any game content, must seek to be both balanced and fair, and this should be the goal of any educational game, especially one dealing with the individual and contentious issue of identity. The RU EU? game seeks to differentiate itself from other existing material, but it must also acknowledge the strengths and weaknesses of material.

Education professional and student input

The third element within this first (prototype) stage of our lifecycle was an analysis of user requirements. We sought to include both staff interviews, staff and student focus groups and a student survey. The resultant qualitative and quantitative data would allow for a realistic structure to the game that would ensure it included issues and content that would engage young students and young Europeans, and other potential key stakeholders. The various project partners conducted 18 interviews with staff, focus groups with 15 staff and 18 students, and (at the time of writing), a further 130 students have completed an online survey.

Turning first to our interviewees and focus group participants, then perhaps unsurprisingly, given the educational pool from which they were drawn, the majority of interviewees (14 out of 18) said that they felt very positively about Europe. Many had been born and brought up in one country but had moved around for study, work, or other reasons. For most, it was normal to feel a sense of belonging to both their country of residence and of birth; both were 'home' to them in different ways.

Participants mentioned key benefits of EU membership, about which they felt strongly, such as freedom of travel; the ability to work and study across borders; the prevention of conflict; the sharing of values; openness in terms of social, political and economic developments; solidarity among the member states; and diversity between the cultures, languages and people. Although a majority of the participants were positively influenced by the EU, they were also aware of the bureaucracy that accompanies it. Some believed the EU had taken away sovereignty from member-states and influenced decisions within them while others emphasised the good work they thought the EU had done during the past decades. For eight people, their views about the EU had not changed, but for the other 10, there had been some change of view, tending towards a more sceptical position.

When asked about European identity and its components, participants spoke of democracy; freedom and equality in terms of gender, religion, ethnicity and human rights; shared culture, history and political background; shared geography; and diversity of languages and norms. Some spoke of the 'beauty' of having multiple identities, their sense of belonging, having an open mind-set, and the ease of travelling for both work and leisure. Many participants also highlighted their feeling of being part of a greater network and the opportunities to develop better understandings of diversity. Core issues also included tolerance and harmony as a crucial component of European identity, as it was thought that this helped to maintain peace across the continent.

In terms of geographical belonging to Europe, participants were divided as to the importance of place of birth, but all agreed that it was important to have long-term residence in Europe in order to develop a European identity. Biological influences, such as family and ancestry were also believed to be important in terms of having a European identity, with participants suggesting that family influences while they were growing up had been important.

The benefits of European integration were mostly highlighted through the economic developments that had made Europe more cohesive over the decades. It was felt that the support provided to the less developed regions had made significant change in the development of people's income and living standards and this might lead to further political integration. People from different countries and regions believed that, after being a part of EU, they were sharing many common beliefs, culture and norms and this was also seen as important.

The vast majority of our interviewees (15 out of 18) had no problem with having both a complementary national and a European identity and did not believe that this created any tensions – although the relative strengths of each identity depended on the context in which they found themselves. Most participants believed that the balance of EU and national identity differs across different regions of Europe and their sense of 'being European' is highly influenced by how much they engaged with or 'practised' their European identity.

Reflecting about the EU more widely, participants suggested that the EU did more good than harm, although many criticised a lack of a transparent European bureaucracy. Most felt a sense of pride as a European, although many admitted that they had not previously thought about the question of identity in any detail. Our interviews and focus groups therefore forced them to think and reflect and this is important in terms of game development and the production of an engaging game content. As we seek to raise awareness regarding the EU, and yet ensure we accommodate people with different perspectives, we must seek to maintain that the goal is to induce critical thinking while providing players with relevant information.

We turn now to discussing the results of our online student survey. The survey was conducted online, on the basis that those who would engage with it would be those tempted to engage with an online game.

Student survey

There were two parts to the student survey. The first aimed to gather broader quantitative information about the themes and issues thought to be most relevant in regard to Europe and European identity or belonging, as this would inform the content scenarios contained within the game. The second part sought to gather information about participants' game playing habits, and their preferences for different aspects of gameplay. The target sample of the questionnaire was students at European institutions who represented the population most likely to take part in the game, and we encouraged responses from both undergraduate and taught postgraduate programmes across all partner institutions, and including both Erasmus and other international students.

The content section of the survey contained 15 questions in which we asked respondents about their sense of national and European belonging, the factors they considered important or unimportant to their sense of European membership, their knowledge and general attitudes towards European membership, and the degree to which they considered aspects of European membership to be positive or negative. The results suggested that all but nine saw themselves as European to a greater or lesser extent, although most placed their national identity ahead of their European one. Respondents tended to be

neutral in regard to their attachment to the EU, pessimistic to neutral about its future and generally did not feel particularly well informed about it. But when asked to consider the factors that were important to their sense of being European, the highest scores were for shared values and beliefs, security, geographical belonging and shared cultures. The areas on which the EU had impacted the most were thought to be freedom of travel, free trade and the protection of human rights.

The gameplay section contained 10 questions aimed at informing the gameplay element of the RU EU? game itself. Although serious educational games are effective learning tools they are typically not enjoyed as much by players as 'fun' games. This is because they tend not to be as interesting or engaging to players, lacking the flow, absorption, and immersion of more traditional video games (Brockmyer, Fox, Curtiss, McBroom, & Burkhart, 2009; Garris, Ahlers, & Driskell, 2002). In order to identify the types of games our target audience enjoy, and specifically the aspects of these games that appeal to them, we asked about their gaming habits and about their experience of playing 'serious' games. We further asked about the aspects of the games that they played which they liked or did not like and which of these they thought might work in potential educational game.

On average, our student respondents played 5.35 h of games per week, and their preference was for knowledge testing and strategy games. The features which were most preferred were the leader board and competition between players. When asked specific questions in relation to the proposed RU EU? game, the topics thought to be most relevant were peace between member nations, and student exchange programmes such as Erasmus; the latter is clearly an area with which students could easily engage. The mean preference for game length was 43 min, which fits well with our intention to create a game to be played within a one-hour seminar slot, and the vast majority of respondents believed that the game should be replayable.

The data obtained from our literature review, our review of existing resources and the needs and preferences of potential users will all inform our game development in the next stages. Once the game is operational, we consider it essential to address its impact on players, and we have considered how this should be measured. While this is not a formal aspect of the content per se, and is a more structural question, it is important to consider. We aim therefore to assess player attitudes towards the EU at two specific time points - before they play the game (to establish a baseline) and after they play the game to assess the impact of game itself. This will allow us to address the impact of the game on individual attitudes, both implicit and explicit.

The next steps

At this point, we have effectively completed the first stage within the game development lifecycle and we are moving on to the second (pre-production) stage, fleshing out the original proposals and considering how the learning outcomes for the game will be mapped onto appropriate game mechanics and activities.

The main educational objectives for the game are first, the extension of knowledge about Europe, its customs, values and traditions; second, an examination of attitudes to national and European identity; third, the solving of challenging problems surrounding issues rooted in notions of identity; and fourth, the need for players to collaborate in tackling the problem solving and decision-making scenarios.

The suggested overarching narrative for the game is that of a research journalist working on a local newspaper. The journalist's brief is to look at European identity and values and to carry out a number of assignments reporting about various issues that local readers of the newspaper are struggling with. These issues will correspond to the scenarios in the game and, for every issue, the journalist will carry out research to write a short article at the end of mini-game play. As a good journalist, pros and cons from various resources will be reflected in these articles. In writing the articles the journalist has access to a range of resources, including statements from interviewees, audio and video clips, twitter-feeds, magazine headers and television headlines.

At this stage, our thinking is to work on five of these 'issues' or scenarios, namely the balance between national and EU identity; the question of who is or is not 'European'; the rights of EU citizens to work across Europe through freedom of movement; changes in EU identity over time; and the challenge of immigration. In each scenario, we envisage the journalist addressing the issue by interviewing a range of stakeholders, such as politicians and other public figures, local community leaders, and members of the public, about their views. The journalist will have conversations with non-player characters and will examine audio and video extracts as well as twitter accounts to compile the material for his or her report. The aim is to present a report which explores all aspects of the European debate.

Conclusion

This article has described the first phase of our journey on a game developmental lifecycle; the processes by which we have sought to inform the content and structure of a serious educational game. We began by reviewing the academic literature on the issues of European and national identity, highlighting the key conceptual arguments and bases by which identity is formulated and held.

Many social science concepts are elusive, 'fuzzy' and contextual and so 'operationalising' them in a game setting is challenging. The challenges presented by this game are perhaps particularly significant – partly because identity itself is a slippery concept as we have demonstrated in our review of the literature. But also because the game is intended to be played across different countries and socio-political contexts will vary considerably across Europe; the game may in fact come to reflect the EU's own motto of 'unity in diversity'. We must handle these issues with care, considering emotions carefully, both in terms of content, but also in terms of how individual game players would interact with the game too.

Our consideration of existing educational games and resources indicated a wealth of material, at least in terms of numbers, if not balance. It illustrated that more popular sources tend to problematise issues, while others may be more limited in terms of reach - tending to produce more elite focused output, and perhaps not reaching the mass audience that identity-based considerations require. We also highlighted the generally positive attitude that academia has towards the EU, and that this is a key point for consideration in game content. The game is not intended to make players 'more European' but to encourage them to consider why they hold the views that they do concerning national and European identity.

When engaging with our academic colleagues and our target audience of students we clearly illustrated that the key concepts which arise from an analysis of the theoretical and academic literature are mirrored in the thoughts and minds of education professionals and students within the EU itself. As we noted, identity remains an elusive concept for them too - only considered when challenged on it. For our game, to raise awareness would certainly be an immediate and easily achieved goal, but it must also ensure that that awareness was raised within a critically challenging and yet firmly supportive environment.

The key concepts asides, we have highlighted that our content must reflect both the good and the bad, the negative and the positive that is the contemporary socio-political European sphere. Furthermore, our game must do so within an informed and critical space, where individual player assumptions (explicit and implicit) are both accepted and challenged. If our game is to meet its objectives, the content must reflect the thoughts and concerns of the target audience, but also ensure it remains an informed, educational, serious and, above all, focused activity.

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References

Adams, E. (2014). Fundamentals of game design (3rd ed.). San Francisco: New Riders/Pearson Education.

Aleem, S., Ahmed, F., & Capretz, L. F. (2016). Game development software engineering process life cycle: A systematic review. *Journal of Software Engineering Research and Development*, 4(6), 1–30. Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus Books.

Anderson, B. (1983). Imagined communities. London: Verso.

Boyle, E. A., Connolly, T. M., Hainey, T., & Boyle, J. M. (2012). Engagement in digital entertainment games: A systematic review. *Computers in Human Behavior*, *28*(3), 771–780.

Boyle, E. A., Hainey, T., Connolly, T. M., Gray, G., Earp, J., Ott, M., ... Pereira, J. (2016). An update to the systematic literature review of empirical evidence of the impacts and outcomes of computer games and serious games. *Computers and Education*, *94*, 178–192.

Brockmyer, J. H., Fox, C. M., Curtiss, K. A., McBroom, E., & Burkhart, K. M. (2009). The development of the game engagement questionnaire: A measure of engagement in video game-playing. *Journal of Experimental Social Psychology*, 45, 624–634.

Bruter, M. (2004). On what citizens mean by feeling "European": perceptions of news, symbols and borderless-ness. *Journal of Ethnic and Migration Studies*, 30(1), 21–39.

Bruter, M. (2005). Citizens of Europe? The emergence of a mass European identity. Basingstoke: Palgrave Macmillan.

Castells, M. (1997). The power of identity. Oxford: Blackwell.

Cram, L. (2012). Does the EU need a navel? Implicit and explicit identification with the European Union. *Journal of Common Market Studies*, *50*(1), 71–86

Dabrowski, M.; Stead, D. and Mashhoodi, B. (2017). *Towards a regional typology of EU identification*. Delft, Cohesify Research Paper 6

Delanty, G. (2002). Models of European identity: Reconciling universalism and particularism. *Perspectives on European Politics and Society*, *3*(3), 345–359

Delanty, G. (2003). Is there a European identity? Global Dialogue, 5(3/4), 76–86.

Delanty, G. (2005). What does it mean to be a European? *Innovation: The European Journal of Social Science Research*, 18(1), 11–22

Demossier, M. (2007). The political structuring of cultural identities in the European Union. In M. Demossier (Ed.), *The European puzzle: The political structuring of cultural identities at a time of transition* (pp. 49–66). New York: Berghahn.

Drosos, V., Alexandri, A., Tsolis, D., & Alexakos, D. (2017). *A 3D serious game for cultural education*, Conference Paper, https://ieeexplore.ieee.org/document/8316442/



Duchesne, S. (2008). Waiting for a European identity: Reflections on the process of identification with Europe. *Perspectives on European Politics and Society*, *9*(4), 397–410

Europa. (2018). Teachers corner. http://europa.eu/teachers-corner

Garris, R., Ahlers, R., Driskell, J. E. (2002). Games, motivation, and learning: A research and practice model. *Simulation and Gaming*, 33(4), 441–467.

Gregory, J. (2014). Game engine architecture (2nd ed.). Boca Raton: CRC Press.

Hendrick, A. (2009). Project Management for Game Development. Available from: http://mmotidbits.com/2009/06/15/project-management-forgame-development/

Hunicke, R., LeBlanc, M. and Zubek, R. (2001). MDA: a formal approach to game design and game research. Available: https://www.cs.northwestern.edu/~hunicke/MDA.pdf

Jamaludin, A. and Hung, D. (2017). Problem-solving for STEM learning: Navigating games as narrativized problem spaces for 21st century competencies. *Research and Practice in Technology Enhanced Learning*, 12(1). https://telrp.springeropen.com/articles/10.1186/s41039-016-0038-0

Kaelble, H. (2009). Identification with Europe and politicization of the EU since the 1980s. In J. Checkel, P. Katzenstein (Eds.), European identity (pp.193–212). Cambridge: Cambridge University Press.

Kelly, M. (2018). The game of politics: examining the role of work, play and subjectivity formation in papers. *Games and Culture*, 13(5), 459–478.

Leith, M. S., & Soule, D. (2012). *Political discourse and national identity in Scotland*. Edinburgh: Edinburgh University Press.

Lerner, J. (2014). *Making democracy fun: How game design can empower citizens and transform politics*. Cambridge, MA: MIT Press.

Maccaferri, M. (2017). British intellectuals and the European idea after the Suez crisis (1956): narrating Europe between history and politics. *Journal of British Identities*, 1, 1–18.

Mendez, C., & Bachtler, J. (2016). European identity and citizen attitudes to cohesion policy: what do we know? Glasgow: Cohesify Research Paper 1.

Risse, T. (2001). A European identity? Europeanization and the evolution of nation-state identities. In M. G. Cowles, J. Caporaso, T. Risse (Eds.), *Transforming Europe*, (pp.198–216). Ithaca: Cornell University Press.

Risse, T. (2010). A community of Europeans? Transnational identities and public spheres. Ithaca: Cornell University Press.

Risse, T., & Grabowsky, J. K. (2008). European identity formation in the public sphere and in foreign policy. RECON online working paper 2008/04. Oslo: University of Oslo.

Roozenbeek, J., & van der Linden, S. (2018). The fake news game: Actively inoculating against the risk of misinformation. *Journal of Risk Research*.

Schell, J. (2015). The art of game design: A book of lenses (2nd Ed.). Boca Raton: CRC Press.

Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. *International Journal of Human-Computer Studies*, 74, 14–31.

Stetson-Tiligadas, S. (2018). Designing for active learning: A problem-centred approach. In A. Misseyanni, M. Lytras, P. Papadopoulou, & C. Marouli (Eds.), *Active learning strategies in higher education: Teaching for leadership, innovation and creativity* (pp. 45–74). Bingley: Emerald.

Triandafyllidou, A. and Gropas, R. (2016). European identity: what kind of diversity into what form of unity? In *Cultural Base*. http://culturalbase.eu/european-identity-what-kind-of-diversity-into-what-form-of-unity/

Weiler, J. H. H. (1997). The reformation of European constitutionalism. *Journal of Common Market Studies*, 35(1), 97–130.