



# What's the State of Play?

NOVEMBER 2017

A SUMMARY OF THE EIGHT KEY AREAS EGAMING AND ONLINE SAFETY INTERSECT



# Table of Contents

<b>Executive summary</b>	<b>3</b>
<b>eGaming and eGamers today</b>	<b>4</b>
<b>Why does eGaming matter to online safety?</b>	<b>5</b>
<b>Levelling the playing field</b>	<b>6</b>
1. Sportsmanship and player conduct	6
2. Games as life education	6
3. Mixed reality	7
4. Crime crossover	8
5. Addiction and overuse	9
6. Ingame bullying and harassment	10
7. Ingame purchases and costs	11
8. Gamifying online safety	12
<b>Opportunities to collaborate</b>	<b>14</b>
<b>References</b>	<b>15</b>

## About Netsafe

Netsafe is an independent non-profit organisation focused on online safety. Netsafe provides online safety education, advice and support to people in New Zealand. Netsafe's confidential free helpline is open seven days a week on 0508 NETSAFE. A variety of resources and services are available at [www.netsafe.org.nz](http://www.netsafe.org.nz).

## Executive summary

Advances in technology and higher bandwidth internet connections has increased the ability for people to connect, driven improvements in productivity, helped social inclusion, enhanced innovation and introduced new ways to play and be entertained.

Nowhere is the rate and impact of this change felt more than eGaming.

The interactive games and entertainment industry is one of the fastest growing in the world. This is because the evolution of the gaming landscape makes it easy and attractive for gamers of all ages to play at anytime, anywhere and with anyone.

The variety of choices available and the range of motives for playing are encouraging an increasing number of people to become 'gamers'. Although, like any aspect of life, it does come with some risk.

This paper explores the challenges and opportunities that come with eGaming and the ways it intersects with online safety. The aim is to identify areas of focus and potential partnership that will ultimately empower gamers to have a safer and more engaging experience.

## eGaming and eGamers today

eGaming is now a prominent and well-established facet of the online environment. As the number of players grows, and the scope of its appeal expands, so do the challenges and opportunities available for gamers, industry and online safety.

A discussion around eGaming, when focused on online safety, must encompass the communities and the engagement it fosters. It should also consider the dynamic of the interpersonal relationships created, however short lived they may be. This is particularly relevant as people experience the positive potential of interconnectivity while navigating the pitfalls of unfiltered, uncensored contact with relative strangers.

It is important to understand, and acknowledge, that the traditional stereotype of a 'gamer' is no longer representative of the individuals who identify with this community. The results from the latest Interactive Games & Entertainment Association (IGEA) reports show many similarities between Australia and New Zealand gamers.

The IGEA Digital New Zealand 2018 Report reveals that 73 percent of players are 18 years of age or older. The average age of players is 34 years old and female players make up 47 percent of the total number. The report also showed that 51 percent of parents play with their children in the same room and 79 percent of households have more than one eGaming device<sup>1</sup>.

According to the key findings of the IGEA Digital Australia Report 2018, 77 percent of players are 18 years of age or older. The average playing age is 34 years old and 43 percent of those aged 65 or older also reported they play eGames<sup>2</sup>.

This increasing diversity will help encourage social change in a community that was developed in a relative vacuum, away from the influences that shaped other categories of digital products.

eGaming is no longer a fundamentally separate category of online activity. Games now boast social interaction, ingame messaging, recommendation engines, trading systems to rival social media, messaging apps and ecommerce sites. The added functionality has introduced corresponding opportunities and challenges.

## Why does eGaming matter to online safety?

The internet and digital technology is an integral part of economic and social activities and a vast communication, information, education and entertainment resource. With the proliferation of devices, faster internet speeds and always on connection it has allowed eGaming to become a popular pastime for people of all ages.

There are many positive aspects that come from gaming including relaxing, learning, bonding with family and employment opportunities. However, the outcome is not exclusively positive as eGaming creates a new set of online challenges and evolves some of the existing ones.

A multitude of providers, with contrasting approaches to player safety, currently make up the interactive gaming and entertainment industry. Some companies work hard to create positive player experiences, but unfortunately, investment in trust and safety, approaches to promoting positive gameplay and processes for managing social interaction vary wildly.

This means people can have disparate experiences. It is difficult to predict the risk profile associated with any game. This inconsistent experience is a challenge for gamers, parents and educators alike.

This is where the work the online safety industry does comes in.

Online safety encourages people to take advantage of online opportunities by empowering them with information and expertise to make their experience safer and more enjoyable - while reducing fears about the risks. Put simply it helps users understand the benefits and risks so they know how to minimise and prevent their own online challenges.

But even then, problems can arise from risk-taking behaviour, an error in judgement or being targeted regardless of the precautions put in place.

Netsafe believes an effective solution to each problem can be achieved through partnerships that distribute responsibility and actions between industry, online safety agencies, law enforcement, government and regulators.

The key to understanding who should do what begins by recognising the specific challenges that exist with the eGaming landscape.

# Creating a level playing field

eGaming and online safety intersect in many aspects. The following list identifies eight key areas that impact a gamer's experience.

## 1. Sportsmanship and player conduct

The social dynamic between players during an eGaming session can draw many parallels with traditional games and sports. A great team environment increases a player's enjoyment of the game.

The most obvious solution is to create game mechanics that deliberately reward good sportsmanship. There are further opportunities to create better experiences by managing how eGaming teams are selected.

Traditionally online multiplayer games optimised their match-making systems to connect the most technically compatible players. Some within the eGaming industry are taking steps to help improve player experiences by adjusting the match-making criteria.

There is a popular eGame genre called 'multiplayer online battle arena' (MOBA). These games connect two teams, generally comprised of five players per team, in each new instance of the game which lasts about an hour. As these games require strong cooperation between teammates, who are often not known to each other, MOBA can be particularly vicious towards new players<sup>3</sup>.

To help address these conflicts, a MOBA game called 'Dota 2' has implemented a new player friendly match-making system.

Players are given the opportunity to review and rate how friendly or helpful their partners have been. The updated system matches new players with more experienced players who have a higher rating<sup>4</sup>. As the difference in skill level between team mates is often the cause of conflict, allowing new players the opportunity to play with more patient partners reduces the likelihood of a conflict escalating to online harm.

## 2. Games as life education

Many games have been designed as a virtual approximation of challenging situations in the real world. There has been long standing debate about how much influence a game might have on vulnerable, impressionable people as they act out virtual acts of violence, crime and warfare.

It is generally accepted that there is no causal relationship between violent game play and violent behaviour outside the game. It is also widely accepted that games can be a powerful tool for social change. If games can influence the way players think, the way they are approached and how controversial content is presented is important.

A game released in 2013 called *Papers, Please* put the player in the role of an immigration official working at the border of a fictitious socialist country during the Cold War<sup>5</sup>. The challenges the player faced during their playthrough encouraged strong suspicion and scrutiny of foreigners.

South Park's 'The Fractured but Whole' game adjusts the difficulty setting by changing the skin colour of the character<sup>6</sup>. Although it could be a light-hearted take on social issues, it could also be seen to reinforce negative stereotypes.

When taken at face value, not all themes explored are fairly represented or morally balanced. This aspect of eGaming is no different to other types of fiction that are imagined in the first person.

Many strategies have looked to reduce the risk of younger players modelling inappropriate behaviour and taking ethical instruction from eGaming.

The IGEA Digital New Zealand Report 2018 report on internet use in New Zealand showed that 33 percent of parents who choose to play video games with their children, choose to do so to help educate them<sup>7</sup>. There has also been an emphasis on standardised rating systems with age restrictions for eGaming content.



### 3. Mixed reality

In recent times, the emergence of a new mode of digital interaction termed 'physical crossover' platforms has become popular. These platforms include 'augmented reality,' where digital elements are placed on top of a real view of the player's surroundings, and 'virtual reality,' where the entire scope of the user's vision is taken over by a digital display.

It is easy to see how real, if not serious injuries can be sustained by gamers with their heads in virtual reality devices. Minimising the risks to people chasing virtual creatures around their neighbourhoods is more challenging.

Since 2012, dedicated hardware has been created to facilitate this new medium. Initially, due to the prohibitive cost and limited availability of the Oculus Rift headset, it fostered a small but dedicated community of early adopters. Its reach within the eGaming space was not widespread at that time<sup>8</sup>.

In 2017, there has been a transition away from dedicated hardware to amalgamating the functions of physical crossover devices with smartphones.

Both Apple and Android have begun deploying the framework for a new generation of physical crossover media that aims to remove the need to purchase dedicated devices. The developments will see hundreds of millions of devices, already in the hands of consumers, able to engage with this new platform<sup>9</sup>.

Pokémon Go has exemplified the efficacy of physical crossover media. According to one study, Pokémon Go is estimated to have added a cumulative 144 billion steps to total physical activity in the United States over a period of just three months<sup>10</sup>.

An article published in the Journal of Medical Internet Research in 2016 highlights, “Mobile apps combining game play with physical activity lead to substantial short-term activity increases and, in contrast to many existing interventions and mobile health apps, have the potential to reach activity-poor populations.”<sup>11</sup>

Some commentators have raised concerns around augmented reality and virtual reality when it extends to eGaming. This is because physical crossover platforms encourage players to visit places in the real world they may not be familiar with. It can be challenging to assure the safety of more vulnerable players when the numerous locations they are led to are only periodically vetted.

#### 4. Crime crossover

Many games now contain items of significant value. Where there are items of value, there will be people who will try and steal them. This is why protecting the valuable items in games requires the application of practices drawn from the cyber security industry and cybercrime enforcement.

The eGaming industry has been moving towards monetising ingame assets by selling optional cosmetic upgrades. A leading eGaming platform called Steam, which acts as a digital marketplace for games, even has a dedicated auction house for their members to sell and trade these items.

Steam accounts can be used to hold a library of purchased digital games as well as their corresponding ingame items. The accounts themselves have become a type of portfolio for digital assets which has attracted the attention of cyber criminals who attempt to hijack them.

Kate Kochetkova, a leading eGaming commentator, wrote “the problem is that Steam is designed for entertainment. This service will always have to balance between safety considerations and ease of use.”<sup>12</sup>

Ingame items with a speculative cash value can also be traded in ways that would be prohibited or age restricted for traditional currency. For example, the latest iteration of a popular game called Counter Strike has a huge number of ingame items valued at over \$100. These items were used by



some tech savvy teenagers to create an ad-hoc payment system for online gambling that had no age restrictions.<sup>13</sup>

Outside the monetary value of the in-game assets and the games themselves, sensitive personal information is also held within these accounts. There is a need for the level of security available to eGamers to be appropriate for what it is protecting and for its users to understand the importance of their data.

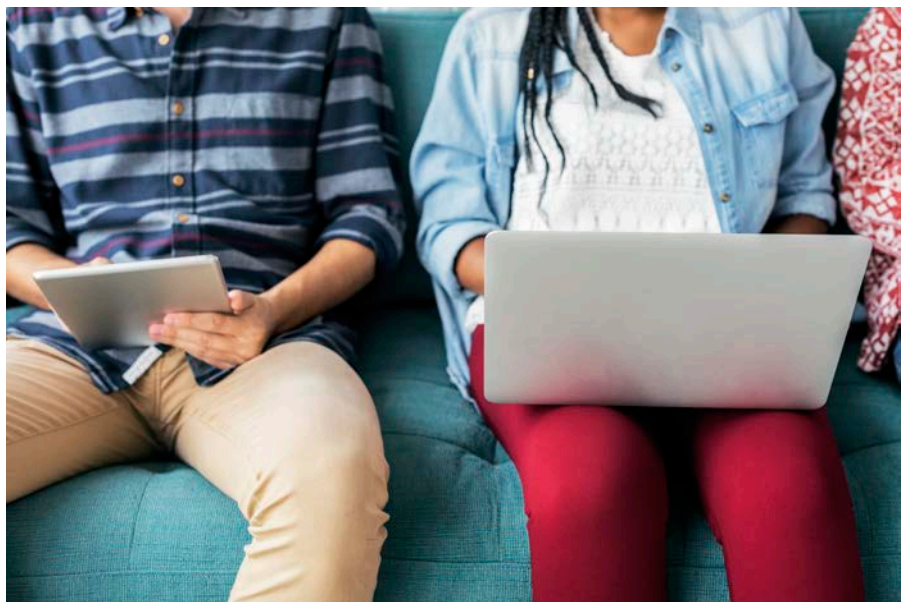
## 5. Addiction and overuse

Just like other leisure activities, eGaming can be a fun way of relieving stress and winding down. As eGaming becomes more immersive and engaging, the amount of time a player is willing to dedicate to it is also on the rise. eGaming is not inherently detrimental to its participants but its overuse can have tangible negative side effects.

There is no option to officially diagnose a person as addicted to gaming, but few would argue that some people's lives are negatively affected by the time they dedicate to it.

In 2009 a couple in South Korea were arrested when their three-year-old daughter died from starvation<sup>14</sup>. Their daughter had been left unattended as her parents dedicated an ever-increasing amount of their day to raising a virtual child online. This extreme example highlights eGaming's ability to provide an appealing escape from reality.

Self-help tools have been created by eGaming developers to give players the option of setting restrictions on their habits. An increasing number of eGaming titles are allowing their players (and parents) to set time limits on their eGaming sessions before they are side-tracked by a virtual adventure. This feature has been implemented in popular eGaming titles such as games Honor of Kings from Chinese developer Tencent<sup>15</sup>.



There have been efforts to quantify 'gaming addiction' and establish it as a clinical diagnosis. The 'Problem Video Game Playing Questionnaire' (or PVP Questionnaire) was developed by researchers

Dr. Ricardo Tejeiro-Salguero and Dr. Rosa María Bersabé-Moran to help create a tool that can evaluate a person's eGaming use and assess a level of likely harm<sup>16</sup>.

Although there has been a mixed response to efforts to recognise eGaming as a distinct form of compulsion, it is a growing area of research. A more in-depth understanding of how to assess eGaming use, as well as refining the structures to manage the risk to its participants continues to develop within the online safety community.

## 6. Ingame bullying and harassment

eGaming can create situations that bring together participants from a range of backgrounds. The communication between players in eGaming is often a mixture of both written and verbal, even during a single eGaming session. While this can lead to positive interactions, it can add a layer of complexity to understanding and addressing the potential for social harm.



Verbal communications, or ingame voice chatting, are not always monitored in real time. Many online services such as Skype or Discord also allow the participants to communicate outside of the game itself.

For many platforms, reports of abuse or other concerning communications require proof - often a recording of what was said. It is unlikely that a target of abuse would pre-emptively record the verbal interactions, leaving those affected with limited recourse.

To overcome this, Hearthstone from Blizzard Entertainment, whose players number in the tens of millions, only allow their players to use pre-set reactions and messages<sup>17</sup>. Players cannot adlib their response and this has practically eliminated potentially harmful communication during their games.

Parallels can be drawn between communications in eGaming and other online services. It can be challenging to pre-emptively isolate the producers of harmful digital communication and near impossible to

eliminate entirely. The distant and often short-lived nature of the player relationship in eGaming means participants are not always invested in a long-term partnership.

Although not all traditional online safety messaging will crossover to eGaming, there is still overlap. The varying permanence of the different communication methods can offer new avenues to reduce harm.

As most eGaming relationships only exist online, conflicts in eGaming are unlikely to have been caused by events outside the eGaming dynamic.

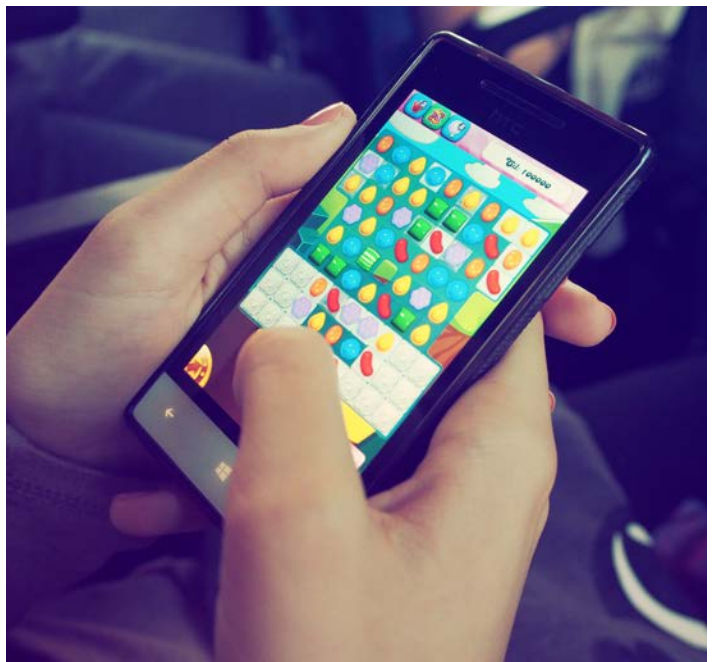
This gives eGaming participants more freedom to be selective about who they communicate with. The threshold for how much negative commentary an eGamer is willing to subject themselves to before they block contact from the other party is much lower. The pressure to remain active and present in a social discussion is practically non-existent compared to other online platforms.

## 7. Ingame purchases and costs

To maximise income and to combat issues such as eGaming piracy, eGaming developers have begun monetising their services in different ways. Some of these practices are quite innovative and have tested traditional consumer protection laws and practices.

The major app and gaming platforms have provided tools that make it relatively easy to prevent young people accidentally running up large bills. Yet there are no tools or rules to govern if ingame purchases represent 'fair' transactions.

A growing trend in the eGaming space has been to include ingame/in-app purchases to allow the game itself to be sold for a low price or for no money up front<sup>18</sup>. There are two main models for how this can be structured. One is to have a catalogue of items with static prices that can be purchased individually. The other is to offer a package or 'loot box' that gives the player a chance to 'win' specific items. In the eGaming community, these packages are known as 'loot boxes.'



There have been calls from within the eGaming community to have these 'loot boxes' recognised as a form of gambling.<sup>19</sup>

This is not to have further regulations added to eGaming, but to send a message to game developers that this type of mechanic is unwanted and inappropriate. If these 'loot boxes' were to be recognised

as a form of gambling, it is likely the games would be subject to higher age ratings, limiting their appeal<sup>20</sup>. This is something game developers are eager to avoid.

Formal recognition of 'loot boxes' as being a form of gambling would encourage developers to remove this mechanic all together.

Gamers have a desire for the mechanics of game progression to be merit based and fair. Online safety advocates want to reduce the amount of potentially habit-forming gambling mechanics eGamers are encouraged to play through. There are clearly areas of eGaming development where online safety advocates and the eGaming participants have overlapping interests and can work towards a common goal.

## 8. Gamifying online safety

Most eGaming titles have been developed purely for entertainment while others have become accidental educational tools like SimCity and Civilisation. Age of Empires demonstrates an age appropriate, and relatively accurate, depiction of significant events throughout history.<sup>21</sup>

Attempts to deliberately gamify education, or to educate through games have had mixed results. Not every topic lends itself to creating gameplay that is educational and entertaining. Good online safety and security behaviours are about making good choices, and games are a great way to present choices and consequences.

Reframing online safety and security lessons through eGaming is a developing opportunity.



Google's 'Be Internet Awesome' project has produced a game called 'Interland' to help young people learn about online safety and security. Real situations that young people will encounter while using the internet have been recreated in an entertaining simulation where the underlying gaming mechanics emphasise how to make good decisions online.

Gamifying education can be straight forward when the topic provides a strong basis for a compelling narrative. The online safety community has the ongoing challenge of finding an effective synergy between entertaining games that can hold a player's attention and adding practical educational value to them.

There are also opportunities to gamify online safety and security in the workplace. Training can be more effectively tailored by gamifying the scenarios employees would navigate. As opposed to purely

hypothetical exercises, memorising what to do and what not to do by introducing an element of entertainment and competition can increase engagement for all age groups.

As the scope of technology at home and in the workplace expands so does the need for online safety and security education to be relevant to a broader audience. When one of the major concerns is that participants would disengage from the learning material, gamification can be a strong foundation for continued learning and interest.

## Opportunities to collaborate

There is no doubt that eGaming is now a mainstream activity that has changed the way people play, learn and work. It has become a major source of entertainment as well as something that has created new industries and revenue sources.

While eGaming presents fabulous opportunities, it is equally as important that gamers understand and guard against the risks they may be exposed to. This is because many of the challenges can be alleviated, minimised or managed by simple behavioural changes that gamers can do themselves.

Online safety skills need to be continually honed, and this is especially true for gamers given the environment is always evolving.

However online safety is a shared responsibility. It requires the commitment of industry, government, community, non-government organisations, academics, educators and users to address online risks and to develop measures that promote online safety.

There is no solution that creates a totally safe online environment, but by working together the various stakeholders can empower people to feel safe while gaming and know where to get support if they need to. Specifically, by partnering to achieve the following outcomes:

- Invest in research to better understand the risks and opportunities for gamers of all ages as well as the behaviours that will lead to a more trusted experience
- Develop awareness initiatives to empower gamers to minimise their own online risks
- Create practical responses in partnership with the ICT and game and interactive entertainment industry to the challenges faced by gamers

As a leading online safety organisation, Netsafe is committed to working in partnership with the entertainment and gaming industry.

It welcomes the opportunity to engage with a variety of partners to progress the outcomes it has identified and welcomes anyone with an interest in being involved to contact [outreach@netsafe.org.nz](mailto:outreach@netsafe.org.nz) for further discussion.

# References

1. Brand, J. E., Todhunter, S. & Jervis, J. (2017). *Digital New Zealand 2018*. Eveleigh, NSW: Interactive Games & Entertainment Association
2. Brand, J. E., Todhunter, S. & Jervis, J. (2017). *Digital Australia 2018*. Everleigh, NSW: Interactive Games & Entertainment Association
3. Pawlik. (2014). *Mobbing in MOBA*. Retrieved October 18, 2017, from: <https://www.gamepressure.com/e.asp?ID=23>
4. (2017, July 28). *Welcoming New Players*. Retrieved October 18, 2017, from <http://blog.dota2.com/2017/07/welcoming-new-players/>
5. Gallagher, R. (2017, September 25). *If they are to understand our digital world, MPs should play videogames* | Rob Gallagher. Retrieved October 18, 2017, from: <https://www.theguardian.com/commentisfree/2017/sep/25/mps-play-videogames-tech-gaming-industry>
6. Winslow, J. (2017, October 09). *The darker the skin, the harder the game: How South Park pretended to care about race*. Retrieved October 18, 2017, from: <https://www.polygon.com/2017/10/9/16435592/south-park-race-difficulty>
7. Brand, J. E., Todhunter, S. & Jervis, J. 2017. *Digital New Zealand 2018*. Eveleigh, NSW: Interactive Games & Entertainment Association
8. Rubin, P. (2014, May 20). *The Inside Story of Oculus Rift and How Virtual Reality Became Reality*. Retrieved October 18, 2017, from <https://www.wired.com/2014/05/oculus-rift-4/>
9. Merel, T. (2017, October 07). *How ARKit will make more money than ARCore or Camera Effects (for now)*. Retrieved October 21, 2017, from <https://techcrunch.com/2017/10/07/why-arkit-will-make-more-money-than-arcore-or-camera-effects-for-now/>
10. Althoff, T., White, R. W., & Horvitz, E. (2016). *Influence of Pokémon Go on Physical Activity: Study and Implications*. Journal of Medical Internet Research, 18(12). doi:10.2196/jmir.6759
11. Althoff, T., White, R. W., & Horvitz, E. (2016) published in the Journal of Medical Internet Research, also highlights “*Mobile apps combining game play with physical activity lead to substantial short-term activity increases and, in contrast to many existing interventions and mobile health apps, have the potential to reach activity-poor populations.*”
12. Kochetkova, K. (2016, March 15). *Steam on the firing line: how cybercriminals steal gamers' Steam accounts*. Retrieved October 18, 2017, from <https://www.kaspersky.com/blog/stealing-steam-accounts/11560>
13. Brustein, J., & Novy-William, E. (2016, April 20). *Virtual Weapons are Turning Teens Gamers into Serious Gamblers*. Retrieved October 18, 2017, from <https://www.bloomberg.com/features/2016-virtual-guns-counterstrike-gambling/>
14. Tran, M. (2010, March 05). *Girl starved to death while parents raised virtual child in online game*. Retrieved October 18, 2017, from <https://www.theguardian.com/world/2010/mar/05/korean-girl-starved-online-game>
15. Shah, S. (2017, July 04). *Tencent tackles mobile game addiction with time limits for kids*. Retrieved October 18, 2017, from <https://www.engadget.com/2017/07/04/tencent-tackles-mobile-game-addiction-with-time-limits-for-kids/>
16. Salguero, R. A., & Morán, R. M. (2002). *Measuring problem video game playing in adolescents*. Addiction, 97(12), 1601-1606. doi:10.1046/j.1360-0443.2002.00218.x
17. Kuchera, B. (2014, April 18). *Blizzard silenced Hearthstone players, and it made the game amazing*. Retrieved October 18, 2017, from <https://www.polygon.com/2014/4/18/5625802/hearthstone-chat-Blizzard>
18. Luis Marín De La Iglesia, J., & Gayo, J. E. (2008). *Doing business by selling free services*. Web 2.0, 1-14. doi:10.1007/978-0-387-85895-1\_6
19. Petition to UK Government and Parliament. (2017, October 04). *Adapt gambling laws to include gambling in video games which targets children*. Retrieved October 18, 2017, from <https://petition.parliament.uk/petitions/201300>
20. Kain, E. (2017, October 12). *The ESRB Is Wrong About Loot Boxes And Gambling*. Retrieved October 25, 2017, from <https://www.forbes.com/sites/erikkain/2017/10/12/the-esrb-is-wrong-about-loot-boxes-and-gambling/>
21. Wainwright, A. M. (2014). *Teaching Historical Theory through Video Games*. The History Teacher, 47(4), 587.