

Pettersen, Eirik Bjørnsønn

«How does gaming affect oral and written L2 English proficiency in young English learners?»

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Supervisor: Vulchanova, Mila

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Abstract

Playing videogames, or *gaming*, has gone from being an irregular leisure activity to becoming the dominant leisure activity for youths. This text will examine the relationship between the extramural English in *gaming* and L2 English proficiency and acquisition. It is established that most video games have English audio and interface, and the studies in this text are mainly Scandinavian. Written proficiency is often measured through vocabulary and the frequency of advanced words while oral proficiency is measured real-time and fluency, vocabulary, prosody and articulation. The link between better grades in L2 English and *gaming* is established with frequent gamers. There is also found a tendency that frequent gamers have lower grades in L1 Norwegian and mathematics, because a lot of time is spent on *gaming*. Frequent *gamers* are heavily invested in *gaming* and interest seems to have an integral role in L2 English acquisition they acquire from *gaming*.

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Introduction

This assignment will try to answer if gaming among English-learners in any way affect their oral and writing proficiency. As gaming, and especially online gaming, is a relatively new phenomenon, there is not a lot of science either backing or disproving this claim, but the science that has been done is very interesting. Gaming is now one of the main leisure activities among youth and the vast majority of youth engage in playing some sort of video game, to a greater or a lesser extent. There is also an indication that video gaming has gone from an irregular leisure time activity to becoming the dominant leisure time activity amongst youths today, which should incentivise more studies relevant to this topic. (Brooks, Chester, Smeeton & Spencer, 2015, p. 36-37.)

As English is the dominant language of the internet and the lingua franca of the world with nearly 2 billion English learners, it is now more than ever easier and more important to acquire English as a second language. (Brevik, 2019, p.1) From my own experience in teacher practice and from hearsay from other teachers (in a lower secondary school), frequent gaming (defined as 14 hours or more per week by Sundqvist & Wikstrøm, 2015, p.69-70) has a positive influence on their English oral proficiency. If there is a positive, or negative, effect on the written proficiency the teachers are more unsure of, but it is something that will be researched in this text. Even though there is a rise of girls who can call themselves frequent gamers, boys are about three times as likely to be frequent gamers (Brooks et al. 2015, p.38). The students I taught that identify with being frequent gamers are boys only, but they are a varied group of students, from the ones who acquire good or very good grades in the English subject to those who have grades on the other side of the spectrum and are showing behavioural issues as well. The students that have poor grades in English are often referred to as “under-achievers” and they struggle to motivate themselves academically, even though they show a higher grade of oral English proficiency than their grade would suggest. Many of my students in teaching practice were not very eager oral participants, and those students who were, were generally resourceful students. The current subject curriculum “Kunnskapsløftet (LK06)” operates with two individual English grades, one for oral proficiency and one for written proficiency. (Utdanningsdirektoratet, 2013). For students who are a shy or have problems performing orally in front of other students, this may feel unfair as they could have an excellent written performance. This is partly why under the new subject curriculum,

Fagfornyelsen(LK20), there is only one final grade for the English subject and it is meant to better reflect the students' overall English proficiency (Utdanningsdirektoratet, 2020). This means that the grade will perhaps better reflect the students' overall English proficiency.

Brevik (2019, p. 2) points out that in a Scandinavian context, youth that are frequent gamers have lower grades in L1 Norwegian and mathematics but higher grades in L2 English and also read better in L2 English than in L1 Norwegian and have a better English vocabulary than in L1 Norwegian. Although, there is evidence that those who commit the majority of their leisure time on video games could experience negative consequences related to their educational success. (Brooks et al. 2015, p.47) The text will highlight some areas that may help to bridge this gap between students that are proficient in English, but the “wrong” kind of English. Sundqvist and Olin-Scheller (2015, p. 55) suggest that there is a gap between school English and extramural English, and that this mentioned gap leads to a motivational dissonance. What kind of vocabulary one attains depends on what kind of text you read and what type of audio you listen to; there is a difference between the English that is written and spoken in school and the English you encounter in extramural English, either if it is through gaming, watching movies, reading books etc. This text will explore if there is a positive (or negative in that matter) relationship between gaming and English proficiency, both written and orally.

Literature

Introducing second language acquisition

In this text literature and studies related to gaming and second language acquisition will be especially relevant. It is also useful to look at how other extramural English activities can play a part in an English learner's language acquisition. There is also a need to establish how second language acquisition traditionally is taught where the mentioned studies mainly took place. That would be Sweden and Norway, or Scandinavia in general. Whereas most other countries in Europe usually dub their tv-shows, movies and video games into their own language, the countries in Scandinavia use subtitles unless it is catering to young audiences that does not comprehend English yet. This exposure to “raw” English does have a positive effect on their English comprehension and vocabulary (Sundqvist, Olin-Scheller, 2015. p.55) This is interesting as, depending on what kind of game you play, listening and reading is often a substantial part of interaction with either online teammates in online games or non-playable characters in single player games. As mentioned before, in the Scandinavian countries we dub

tv-shows and movies to a very small degree, and this also rings true for video games. On Steam, the world’s largest online video game retailer, out of a total of 36 513 games only 810 games have an adapted Norwegian interface and Norwegian subtitles, which would mean that only a handful of games on that platform will have a Norwegian audio track. For reference, 35 539 games have either English subtitles or English audio, so Norwegian gamers are most likely to play a game with both English subtitles and an English audio track, meaning they will get exposed to a lot of English both in terms of listening and reading and often both simultaneously. If they are playing a game which requires text messaging your teammates, there can be a lot of writing as well, depending on the game. This is also the situation for the other Scandinavian countries as well, most video games have an English interface and audio track. (Steam, 2019). Brevik (2019, p. 6) provides a table where 21 students answer the question “What do you read in Norwegian and English outside of school?”

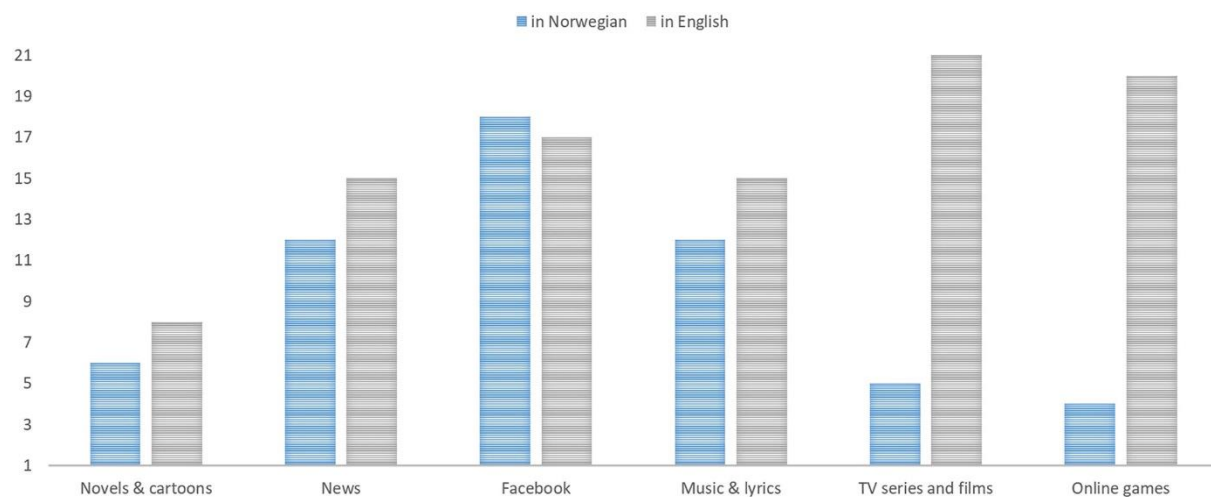


Figure 1 The outliers’ (N=21) survey responses to the question: What do you read in Norwegian and English outside of school?

Although it is a relatively small sample of students, it may be an indication of how much English youth today encounter English and how much unrealised potential there is in exploiting students’ extramural English.

What is oral and written English proficiency and how do we measure it?

Sundqvist(2009, p.39) uses *The Longman Dictionary of Language Teaching and Applied Linguistics* when defining *language proficiency*: “The degree of skill with which a person can use a language, such as how well a person can read, write, speak or understand language.”. It is not a given that you are a good and proficient English speaker even though you have a large vocabulary of both basic and advanced words, you would need to use your knowledge in an

actual conversation to come across as a good English speaker. Because of this, Sundqvist (2009, p. 39) defines oral proficiency as “the learner’s ability to speak and use English in actual communication with an interlocutor”, which is the definition that will be used in this text also.

In order to measure how proficient an English learner is in speech and writing; we need to know what to measure. What often is done, is that we measure the vocabulary of the English learner as this gives us an idea of how much the students knows of the language. We differ between the vocabulary used when writing and the vocabulary used when speaking, since the vocabulary we use when we speak often differs from the vocabulary we use when writing. (Sundqvist. 2009, p.57) When we write we are in a bounded and static place, which means we can use time to think about what we are going to write and we then often produce a more advanced language without the all grammatical errors that usually comes when a learner speaks English. To measure how advanced an English text is, Sundqvist & Wikstrøm (2015, p.67) suggests using a measure of lexical sophistication; measuring the percentage of advanced words used in a text where advanced words are then defined as polysyllabic words (three syllables or more). Although not all polysyllabic words are advanced, frequency studies of the English lexicon show that the majority of words in the core vocabulary are monosyllabic and thus polysyllabic words are a part of the advanced vocabulary. (Sundqvist & Wikstrøm, 2015, p. 68). There is also an indication that learners that are more proficient in a L2 tend to write longer texts than their peers, and there is found a correlation between higher grades and advanced vocabulary. (Sundqvist & Wikstrøm, 2015)

Speech is on the other hand typically spontaneous, time bound and dynamic. When we speak, we must plan what to say instantaneously, it happens in real time with another part or parties listening and this often leads to what we call normal dysfluency. (Sundqvist, 2009, p.41-42) Examples of normal dysfluency are hesitations as “um, er, so” and small phrases we say whilst planning what to say next. We also face normal dysfluency in our mother tongue, so it is not a strictly language attainment phenomenon. Thus, one can perhaps entertain the thought that if the speaker has a wider vocabulary and is used to produce speech under pressure (i.e. in online games with several teammates), the use of normal dysfluency would perhaps be less frequent. So, in terms of measuring speech amongst English learners, we teachers must observe what is spoken in the classroom. And there are several types of speech we look for, in an open-classroom question where the teacher asks the whole class a question, we generally

look for the meaning bearing part, but also pay attention to fluency, vocabulary and articulation.

A brief introduction to the oral and written mode

We can divide the language into four traditional language skills, and there are two skills related to the oral mode and two to the written mode. Speaking and listening both fall within the oral mode, and the skills reading and writing fall within the written mode. (Sundqvist, 2009, p. 39-40) Speaking is something we can measure instantaneously in direct performance, whereas listening is something we must measure non-directly. The speaking part of the oral mode is referred to as the productive part and thus listening will be the receptive part. As listening contain a certain amount of productivity which involves paying attention, understanding and decoding the message, we can assume that listening affects the overall oral comprehension. (Sundqvist, 2009, p. 40).

Oral proficiency contains several traits of language which means that a wide range vocabulary and interactional skills are only parts of an oral mode that also lays weight on grammar, pronunciation, prosody and fluency (Sundqvist, 2009, p. 40). For an English learner it is perhaps impossible to actively learn every skill at once, it takes time to master all of them and especially all of them at the same time. There was a difference between when my students spoke out loud in the classroom and when they interact with each other. When answering a question asked by the teacher, they often scanned their mind for the accurate meaning bearing words on the expense fluency in the answer. When they got discussion exercises, the pressure of relaying a correct answer in front of the whole class was gone, and the fluency was perceptibly better.

As stated before, the written mode includes reading and writing. Traditionally, students learn most of the written mode through school-related work but as Sundqvist & Olin-Scheller (2015, p.54) points out, many students find that there is a gap of authenticity between the English they meet at school and extramural English. Brevik (2019, p.2) states that only half of L2 reading performance is accounted for with 20% of L2 reading performance related to how well we read L1 and 30% connected to knowledge of the L2, whilst the remaining 50% is categorized as unexplained variance. The unexplained variance is presumed to be related to personal factors such as engagement, interest, motivation, knowledge and strategies. This would mean that there is a lot of potential of learning in extramural English activities, with one of them being gaming. Brevik (2019, p.5) suggests that a gamer can use up to 8 hours a

day behind the screen gaming online, and offline for that matter, and they would have to interact, analyse and infer using mainly English. The same study (Brevik, 2019, p.7) shows that the students used English to skim game instructions (32%), close-read in-game instructions (15%) and participate in oral (15%) and written (38%) chat with other gamers. Here they are using reading strategies for different purposes and they might be able to transfer the use of reading strategies to reading in school-related work, in which they are fulfilling a whole reading comprehension competence aim from the subject curriculum. (Melby, 2009).

Discussion

This text addresses if there is any advantage in L2 language acquisition derived from gaming. The text is based on mainly Scandinavian studies, countries that have fairly similar languages, school system and social structures. As stated in the introduction, the playing of videogames, or *gaming*, has become a dominant leisure activity among youths today (Brooks et al. 2015, p.36-37) and Sletten, Strandbu & Gilje (2015, p. 1-2) finds that over 20% of 15-16 year old boys play 4 hours or more in a regular weekday. It is interesting to see if this time-consuming activity which involves a great deal of extramural English (Brevik, 2019, p. 6) has a positive effect on the gamers' English L2 skills. Though, as Brooks et al. (2015, p. 47) points out, committing the majority of their leisure time to gaming may have a negative effect on their academic performances and this claim is supported by Sletten et al. (2015, p.1-2) when they point to population studies that show that students that game a lot (more than 3 hours a day) have slightly worse grades overall than non-gamers. Brevik (2019, p. 2) also points to that the frequent gamers in her study had lower grades in Norwegian L1 and mathematics, but higher grades in English L2 compared with non-gamers. Committing the majority of your leisure time to gaming on the expense of doing schoolwork have, not surprisingly a negative effect on your grades. The gaming experience may function as a temporarily escape from reality and the relative hardship of being a teenager and all that ensues with it. Sletten et al.(2015, p.14) finds that the frequent gamers' lower grades in mathematics and Norwegian L1 can be attributed to a higher level of behavioural issues such as concentration and a disconnect in their relationship to school. . Rønneberg & Støle (2014, p. 172) suggests that it is beneficial for struggling students to work with material they have a prior knowledge of and have an interest in. Although school is supposed to be somewhat uniform there is a lot of potential of using the extramural interests of students in adapted education, a guiding principle in the Norwegian classroom.

The students who identify themselves as gamers, playing more than 14h a week (Sundqvist & Wikstrøm, p.69-70) or 4h+ a day (Sletten et al. p. 1-2) are not only confined to gaming as a leisure activity, Brevik (2019, p.9) finds in her study that the *gamers* were the only group of students who read printed novels voluntarily and as she states “books invite a deep lasting interest in text while enhancing vocabulary”(p.10). As we can see on figure 1, apart from on Facebook, over half of students reading outside school is in English, and overwhelmingly so when it comes tv-series, film and gaming. As Sundqvist & Olin-Scheller (2015, p. 55) states, students may not find the English they encounter in the classroom relevant to the reality they encounter on the outside of school. Course books are relied upon in the English classroom and 18% of the teachers in school (both primary and upper secondary) and state that they either “strongly agree” or “totally agree” that they are free to choose which course book they want to use. (Waagene & Gjerustad, p.19). In teaching practice, we seldom used the coursebook and our teacher supervisor stated that the coursebook was rarely used and was more of an obstacle than an opportunity for good learning. The reasoning for this was that the book felt outdated (printed in 2016) and had few texts and few tasks that were relevant for the students. Brevik (2019, p.10) suggests that the unexplained variance in second language reading proficiency is related to the interests of the students and one example of this is that the gamers were the only group of students who read books(the books were mainly related to videogames) on their leisure time (Brevik, 2019, p.9).

When it comes to actually measuring if gamers are more proficient than their peers, Wikstrøm & Sundqvist (2015, p.72-74) found that those who identified with being gamers (14h a week or more) scored the strongest results for all the vocabulary tests, where it was particularly interesting that they had the highest mean score for polysyllabic words of the groups tested. They also found that the same group got the highest essay grades, and this can be an indicator which backs up the claim that there is a positive correlation between gaming and L2 English acquisition. In the Wikstrøm & Sundqvist (2015, p.72) study they only found a correlation between the frequent gamer and L2 English, the overall grade was much the same as the rest of the groups tested. Brevik (2019, p.9) also found a positive correlation between gaming and L2 English, but perhaps at the expense of grades in other subjects as they score below average in L1 Norwegian reading to a degree that statistically would consider them at a risk of dropping out. These students did however exceed in L2 English.

There is a concern that some of those who spend a lot of their leisure time playing videogames are doing so on the expense of schoolwork and that it is therefore we see the

lower than average grades in L1 Norwegian and mathematics among those who identify as frequent gamers. (Brooks et al. 2015, p. 47. Sletten et al. 2015 p.14-15, Brevik, 2019. p.9). What is interesting, Sletten et al. (2019, p.2015) finds that students that have poor grades but are not frequent gamers have poor grades in all of L2 English, L1 Norwegian and mathematics, while students with poor grades that are frequent gamers have similar grades as the other students, but have stronger or stronger than average grades in L2 English. Not surprisingly, there is an indication that when the students commit a great deal of time on gaming at the expense of doing schoolwork, it affects their grades negatively.

Conclusion

More and more of the youth spend time playing videogame as a leisure activity, and they are playing predominantly games with an English interface and English audio. It is a time-consuming activity and we found that over 20% of 15-16 year olds play 4 hours or more each and every weekday. (Sletten et al. 2015, p. 1-2). Through gaming they encounter several modes of the English language: they are writing to their teammates, orally interacting with their teammates, reading game instructions and reading lore that adheres to the game. They use different reading strategies for different purposes in-game which shows that, either consciously or unconsciously, they adapt how they read depending on what information they want to get. (Brevik, 2019, p.7) To know of and how to use reading techniques is a competence aim in the current subject curriculum and a valuable resource in higher education. Students who are identified as frequent gamers are found to have a larger vocabulary, which can be a measure of L2 proficiency. They also use advanced words (here: polysyllabic words) in a higher degree than their peers, which also indicates a higher degree of L2 English proficiency. (Wikstrøm & Sundqvist, 2015, p.72-74). From Brevik's study (2019, p.9), we can see that the frequent gamers exceed in L2 English, whilst doing bad in L1 Norwegian and mathematics. This could be an identity trait because when you spend the major part of your leisure time online and gaming, where the lingua franca is English and you use English to speak to friends, teammates and the gaming community, they might not see any good reasons or have a lack of interest in L1 Norwegian and mathematics. The point that the gamers were the only group found to read books of their own free will in their leisure time (Brevik, 2019, p.9) might also be an indication that there is a correlation between interest and L2 learning as they only read English books. This text also shows a correlation between frequent gaming and lower grades at school, which may be attributed to schoolwork being neglected in order to *game*. (Sletten et al. 2015, p14-15, Brevik, 2019, p.9). But that is not always the case as

Wikström & Sundqvist (2015, p.72) finds that the grades between the different groups were similar, but that the frequent gamers showed a higher grade of L2 English proficiency than the other groups represented. There is a need for more research on this area, but with some caution there is evidence to suggest that *gaming* does have a positive effect on L2 English proficiency and acquisition. It seems to be a correlation between interest, identity and L2 language acquisition. Sletten et al. (2015, p. 14) points out that since English is the main language while gaming, it is plausible that youth that game a lot will be

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