CHAPTER IV

WHY WON'T THEY JAM? THE REASONS FOR GENERAL UPPER SECONDARY SCHOOL STUDENTS FOR NOT ATTENDING A GAME JAM.

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Abstract

This short paper charts why potential participants decide not to participate in game jams. Specifically, we aim at finding reasons for adolescents, specifically Finnish general upper secondary school students, for not attending game jam events. In November 2018, we arranged a game jam in Tampere, at the University of Tampere, where the participants were students from three schools. From the possible pool of over 800 pupils, we had measly twelve registrations and due to cancellations, we only had eight participants, aged 17 and 18, in the jam. Although the jam event itself was successful, we wanted to know why only a fraction of invitees participated. Furthermore, we wanted to map the possible barriers to entry that prevented students from getting involved. To address this we conducted an online survey of all invitees in December 2018. Of the all possible participants 218 replied. This paper analyzes those results and discusses the implications of the results to future educational use of game jamming in formal education.

Educators have in recent years tried to better teach the so called 21st century skills and competencies, which have been deemed essential for the new era (see e.g. Dede, 2007; Ananiadou & Claro, 2009). An increasing number of studies has shown that the skills acquired in game jam events closely resemble the 21st century skills: STEAM/STEM related and inter- and intrapersonal skills. Thus, it is also important to see if the game jam method could be applied to formal learning in schools.

With this end in mind, we have organized several game jams in Finnish schools, namely in general upper secondary schools. The results are promising, showing that the benefits of game jams can indeed be transferred to formal learning. The number of the involved students has been small, which affects both the research and the goal we are trying to reach: spreading the benefits of game jamming to a larger audience. In this article, we aim at finding reasons for non-attendance.

Key words

game jams, education, general education, adolescents, attendance, non-attendance

Introduction

Game jams are accelerated game creation events where a game is created in a limited time frame, usually working in groups, and the results are shared (Kultima, 2015). Game jam events, which were first used in game development education and game industry, have become a rising trend in the past few years, and they are attracting more attention from researchers as well. Existing research shows that game jamming has several beneficial effects that are relevant in learning and education (e.g. Fowler et al., 2016; Meriläinen et al., 2019), but despite of that, game jams have not been widely used in general formal education. Game making in schools has been studied (e.g. Kafai & Burke, 2015) but game jam events have not yet entered the school system. Furthermore, adolescent game jammers have not been in the focus of game jam research. While game jammers and their motivations have received attention (Arya et al., 2013; Fowler et al., 2013; Meriläinen & Aurava, 2018; Preston et al., 2012; Smith & Bowers, 2016; Wearn & McDonald 2016), there is only little research on non-jammers (e.g. Wearn et al., 2014).

This paper is part of a larger research initiative conducting whether game jamming could be introduced in formal education as a new method for learning. We are focusing on the general upper secondary school students, who in Finland are mostly between 16 and 19 years old. In this paper, we specifically aim at identifying the possible reasons why a student in general upper secondary education would choose not to attend a game jam event, and discuss what could be done in order to lower their barriers to entry.

Research process

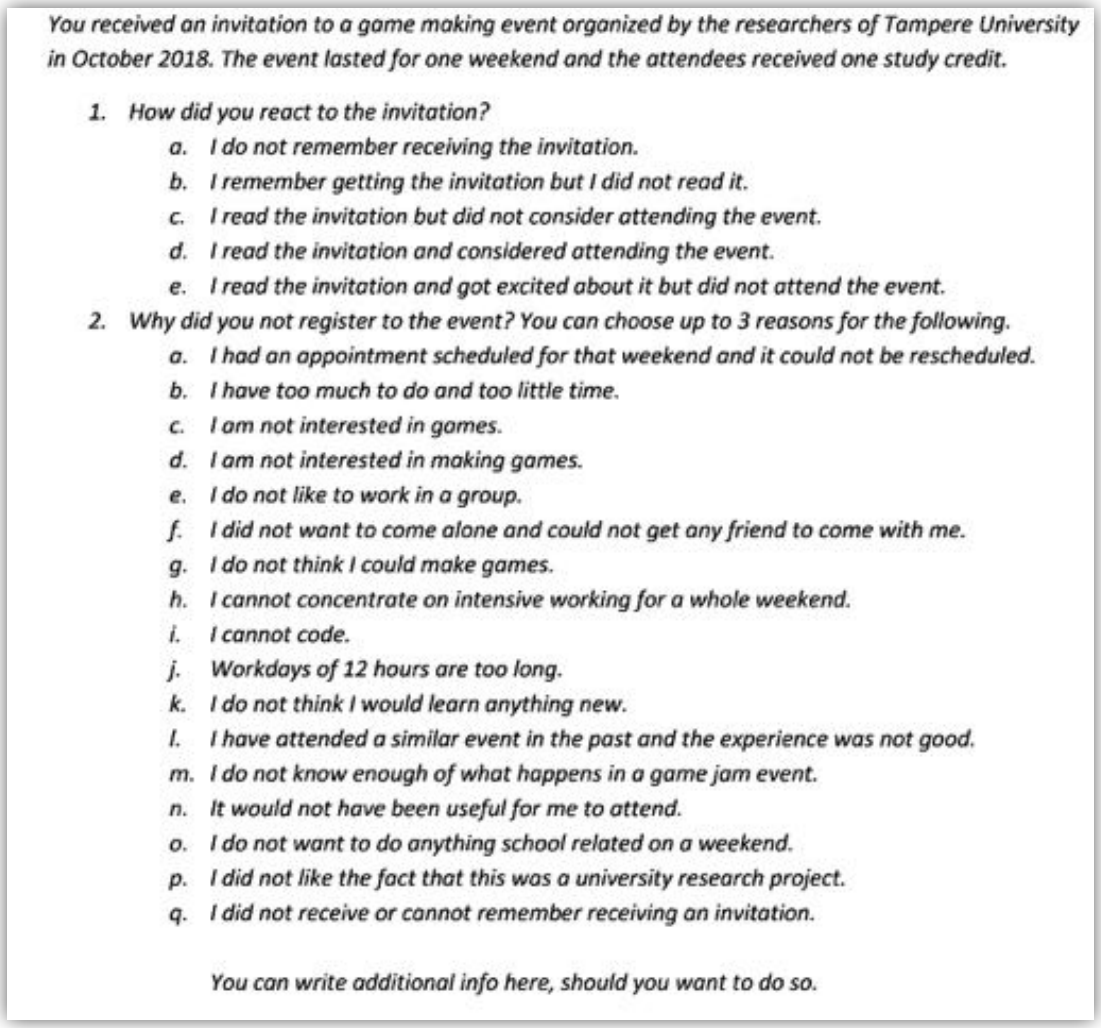
In October 2018, we sent an invitation to three general upper secondary schools in the city of Tampere, Finland. The invitation (appendix 1) was sent as an email to the principals of the attending schools, who in turn forwarded it to their teachers and students. The students registered through their respective schools, and the organizers got the contact information of the students from the principals.

The organizers then sent further emails to the students welcoming them to the event and asking them to fill out a short survey with their background information and hopes and wishes for the event. The event itself was carried out in November 2018 for eight participants. The event started on Friday afternoon and ended Sunday afternoon, with mandatory breaks at night when the jam site was

closed. The event was successful, with three games made and mainly positive feedback from the attendees.

As this was only the first pilot of an experimental game jam event in a larger research project, we wanted to improve our own skills as both organizers and researchers. From our perspective, the event seemed like a fun and relatively easy way to get study credits, and we were somewhat disappointed with the small number of participants. For the research project to be successful, we need to find out what we could do to make this voluntary course more attractive.

Since only 1% of the potential students participated, we decided to attempt to find out why almost everyone had chosen not to participate. In December 2018, we sent out a short online survey to the students of the three schools. The survey consisted of only two questions because we knew the students only had a couple of minutes to take the survey. The link to the survey was sent to the principals, who forwarded it to teachers and they in turn had the students answer our survey. The questions were as follows:



You received an invitation to a game making event organized by the researchers of Tampere University in October 2018. The event lasted for one weekend and the attendees received one study credit.

1. *How did you react to the invitation?*
   a. *I do not remember receiving the invitation.*
   b. *I remember getting the invitation but I did not read it.*
   c. *I read the invitation but did not consider attending the event.*
   d. *I read the invitation and considered attending the event.*
   e. *I read the invitation and got excited about it but did not attend the event.*
2. *Why did you not register to the event? You can choose up to 3 reasons for the following.*
   a. *I had an appointment scheduled for that weekend and it could not be rescheduled.*
   b. *I have too much to do and too little time.*
   c. *I am not interested in games.*
   d. *I am not interested in making games.*
   e. *I do not like to work in a group.*
   f. *I did not want to come alone and could not get any friend to come with me.*
   g. *I do not think I could make games.*
   h. *I cannot concentrate on intensive working for a whole weekend.*
   i. *I cannot code.*
   j. *Workdays of 12 hours are too long.*
   k. *I do not think I would learn anything new.*
   l. *I have attended a similar event in the past and the experience was not good.*
   m. *I do not know enough of what happens in a game jam event.*
   n. *It would not have been useful for me to attend.*
   o. *I do not want to do anything school related on a weekend.*
   p. *I did not like the fact that this was a university research project.*
   q. *I did not receive or cannot remember receiving an invitation.*

You can write additional info here, should you want to do so.

We have survey results from 218 students who did not attend the jam event. By analyzing their answers, we discerned different groups of people who had different reasons for not attending a game jam.

Results

The main reason for not attending the jam event was the lack of information: 46% of the students reported that they did not remember receiving the invitation. There is a gender difference with more females reporting they did not get the invitation or not remember getting it (52%) than males (38%). We do not know whether they had not received the invitation or forgotten receiving it. To shed more

light on the process of inviting students, we would still need to interview the principals of the attending schools, as the authors sent the invitations to the principals who then forwarded them to teachers and students of their perspective schools. It is clear, however, that the marketing issue needs to be addressed if game jams should be further used in education.

The second main reason for not attending a game jam was the lack of interest in games (36%) and in game making (39%). This aspect was strongly gendered, with females reporting less interest in games (48%) and game making (45%) than males (14% and 26%). However, we can speculate how the respondents understand games and what they consider as 'game making'. Although analog games were allowed at the jam, the respondents might have been thinking about digital game development.

The third main reason (27%) for not attending a game jam, "I have too much to do and too little time", seems to relate to scheduling of the jam event and the time restrictions; the students of general upper secondary schools just do not have extra time on their hands. A gender difference can be seen here as well, with more males (36%) than females (23%) choosing this as one of the main reasons for not participating the jam.

One significant group of students are those who were initially interested in the event but who still did not participate. Fifteen students of the 218 who took the survey (7%) reported that they had considered attending or were enthusiastic about it. Their reasons for not attending differed greatly from the rest. The main reasons for this group of possible new game jammers were:

- a prior engagement on the weekend of the event (50%, compared to the 7% of those who were not interested),
- they were afraid to come alone and could not find a friend to come along (44%, compared to the 4% of the not interested students),
- they had too much to do and too little time (38%, compared to the 27% of the not interested students).

Discussion

The general upper secondary school has a wide variety of students, and not all of them are interested in games or game making. According to Finnish Player Barometer, 69.8% of Finnish people between ages 10 to 19 play some digital entertainment game at least once a week (Kinnunen et al., 2018). This aligns with our our results, where 36% of respondents said they are not interested in games. Of those that are interested, only some would be interested in game jamming. 'Games' are here interpreted by the students themselves as we did not specify the term. As the average general upper secondary school student might not have a clear idea of what 'game making' entails, we can only speculate on these results. The survey was meant to be short, so it would take only a couple of minutes to fill in: therefore, we did not define the term. In hindsight, this might have been a mistake since it is now hard to know how the respondents had understood 'game making'. The connotation of digital games might have been prevalent in respondents' minds.

We need to decide which groups of students we are focusing on, as the reasons for not attending a game jam vary greatly. However, for many respondents, they main issue was lack of time, either because of other engagements, or they were prioritizing other issues. This is in line with what Wearn et al. (2014) found as the main reasons for university students not participating in Global Game Jam, although the reasons for limited time might have been different, like need to work, or family commitments. As game jams also further general skills not specific to game making culture or game industry (e.g. Meriläinen et al., 2019), we propose even the students not interested in games in general could benefit from attending game jams.

To increase the overall number of students attending game jams, we would need to focus on the way in which the students are invited to the event. The system we used in this experimental jam was not efficient, as the students received the information of the event through their teachers and principals. In this model, we had no control over how and when the students were informed of the event -- and how the invitation was contextualized. Furthermore, the students had to register through their teachers and principals, which most likely rose the barriers for some, which can already be quite high for first-time jammers (see Meriläinen & Aurava, 2018). In the future, we need to think of new ways for both spreading the invitation more efficiently and making the registration process easier.

The difference that can be seen between females and males in whether or not they had received or remembered receiving the invitation needs to be researched further. Is it possible that the educators in schools had directed the game jam invitation to males or framed games and game jamming as something that would be interesting to males only? Is the word 'game' in the invitation enough to make female students immediately forget receiving the invitation?

A weekend-long game jam event has become a norm in jamming culture, much due to the popularity of Global Game Jam event (see Global Game Jam, 2019). We also chose that format for our game jam experiment, but the event was too long for a significant number of students. It needs to be noted that the school system in Finland generally has very strict time limitations. The school year in a general upper secondary school in Finland consists of five periods, each lasting from six to seven weeks. A student usually studies from five to eight different subjects in each period, and normally has from four to six 60-75 minutes long lessons during a day. The system does not offer time to concentrate on any given subject for a whole day, let alone 24 or 48 hours. The 48 hours long event therefore differs greatly from what the students are used to and does not fit the strict schedules with ease.

It must also be considered, that games are not interesting at all to some people, and as such, they also have no interest in game jams, no matter how low the barrier. Thus, a good approach could be to focus on the group of students who were already interested in game making, and try to lower the barriers for them. With these students, it would be essential to improve the scheduling of the event and make it more flexible. We could try to gather a group of interested students first and then try to find a time that would suit as many as possible, or we could try to organize several game jam events during the school year, so that they could choose the one that best suits them. Getting the invitation to the jam event as early as possible would also make it easier for the students to organize their schedules around the event. This might also make it easier for the students to persuade their friends to attend the jam.

Game jamming as a method furthers the skills needed in many areas other than just game making (Smith & Bowers 2016). As such, it might be beneficial to involve more students in game jam events. The next step in our research is to use the findings of this experimental jam, the survey and our own experiences as game jam organizers to create more game jam events. We need to develop new ways to combine game jamming and the everyday practices in schools and to improve our own skills as event organizers. With more jam events and more research done on them, we aim to better understand the challenges and restrictions but also the benefits and possibilities that schools set for game jamming.

In addition to the students, there is work to be done in educating the educators on game jamming. At least in Finland, the game jam literacy amongst teachers and principals is scarce. If the educators who work with the students on a daily basis are not familiar with the concept, they cannot promote it or encourage students to jam. One part of our project is to invite teachers to game jam events and educate them on the subject.

Practical recommendations

Our results suggest that it might be beneficial to introduce game jams in smaller portions. For example, to organize minor game jams during a regular school day, which does not require as much commitment, from both students and the teacher, as full weekend of game development. This approach would also be more subtle as it might not scare away those less enthusiastic about game making, allowing them to learn little by little about game making, and through this could lower the barrier to entry (see Meriläinen & Aurava, 2018).

The process of informing the students about the possibility of participation was too complicated, with too many intermediaries. School as an environment introduces complications, (e.g. limited time frames, large background organization, underage participants etc.) in the organizing process that need to be taken into account when planning a game jam. Organizing a game jam apart from the other (already planned) activities can thus be difficult. When introducing a new concept like game jams, it would be beneficial to minimize all extra effort from students' part, and instead focus on direct advantages, like extra credits, that they could get by participating in the event. Introducing the jams as a part of a course could be a solution here as well.

Students often have very full schedules, and it is difficult for them to fit any extra activities in them, especially if they do not perceive the direct benefits towards their longer-term goals. As such, they should receive information well ahead of the desired date in order to organize their schedules. One solution would be to organize several jam events at different times, to allow more variance in scheduling.

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