

LIFE-WORLD ORIENTED EDUCATION IN TIMES OF THE COVID-19 LOCKDOWN. TWITCH.TV AS PEDAGOGICAL TOOL

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Abstract

The rapidly enforced lockdown and school closures in many countries have shaken up school and university life from one day to the other. Educational institutions which, due to geographical circumstances, focus on adult continuing education or are by charter defined as pilot schools, have been able to react quickly to these new circumstances. However, the majority of the traditional educational institutions seem to have had great difficulties and there was no digital teaching, learning or assessment strategy ready to be implemented. And if that wasn't already enough, a massive controversy broke out regarding which school subjects are more important than others. In particular, the Art lessons were criticized for being not important and that children should not be burdened with this "rubbish". This is of course the wrong approach, because Art in all its many facets plays an important role in the way society is defined and operates. And Art, such as music, film, books and comics, played an essential role in the Covid-19 situation and particularly during lockdown periods. Art lessons and home-schooling or distance learning, are not necessarily opposites or an antithesis. Increasingly, students are using apps in their daily life where the connection to art and cultural studies is only a click away. This conference contribution would like to put teaching through Twitch.TV up for discussion and take up the cudgels for modern Art teaching and learning.

Keywords: distance learning, home schooling, streaming, Twitch.TV, YouTube, social-media, challenges.

1 INTRODUCTION

The rapidly enforced lockdown and school closures in many countries have shaken up school and university life from one day to the other. Educational institutions which, due to geographical circumstances, focus on adult continuing education or are by charter defined as pilot schools, have been able to react quickly to these new circumstances. However, the majority of the traditional educational institutions seem to have had great difficulties and there was no digital teaching, learning or assessment strategy ready to be implemented. And if that wasn't already enough, a massive controversy broke out regarding which school subjects are more important than others. In particular, the Art lessons were criticized for being not important and that children should not be burdened with this "rubbish". This is of course the wrong approach, because Art in all its many facets plays an important role in the way society is defined and operates. And Art, such as music, film, books and comics, played an essential role in the Covid-19 situation and particularly during lockdown periods. Art lessons and home-schooling or distance learning, are not necessarily opposites or an antithesis. Increasingly, students are using apps in their daily life where the connection to art and cultural studies is only a click away.

On the one hand, Art challenges have spread - almost virally - in which famous scenes from films or pictures are re-enacted with the things one finds in homes. On the other hand, the nominations of your 10 favourite films or music pieces on social media platforms are also a piece of unintentional Art education. Even short videos on Tik-Tok, privacy concerns aside, is a creative tool. In this conference contribution, the authors would like to focus on Twitch.TV and similar streaming services. Originally designed to stream "Let's Play" experiences and esports directly into our homes, these portals are now known for their great way to bring musical performances, such as streaming a band rehearsal, or a DJ session directly from the DJ's apartment. Apart from music, Twitch.TV seems also particularly suitable for teaching handcraft skills such as pottery, knitting, comics-drawing, painting, writing or

digital art. Twitch.TV is part of the Amazon Group since 2014. The platform was acquired by Justin TV inc. for 970 million US \$.¹

2 RELATED RESEARCH

While there is a lot of research on Twitch.TV and for instance its impact on the games and broadcasting industry, its specific use in education is still relatively unexplored. The authors would like to present some key papers on Twitch.TV.

In their paper “The Socio-Technical Entanglements of Live Streaming on Twitch.TV.” [1], Johnson and Woodcock describe the different aspects around the perception and usage of the platform. They point out that many streamers start streaming because they think that one can make easy money through such media. In reality the opposite is true, whereas making money on Twitch.TV is hard work over a long period of time. Moreover, the authors list what users particularly love about Twitch, topped by the sense of immediacy of the user to the streamer via the chat functionality. They also show the volume of data that is available on the platform with over a million years of continuous video content. In terms of the educational aspect, it is important to know why producers and consumers choose Twitch.TV as their preferred medium.

In his book chapter “Toxic Communication on Twitch.TV. Effect of a Streamer”, Poyane [2] researched the organisation of spectators’ communication in personal Dota 2 stream chat rooms on Twitch.TV. The study showed that the effect of streamers’ characteristics and stream settings on chat communication is significant. Being female and having a webcam available affects positively the in-chat communication. Also, being from South East Asia, North America and the Middle East affects communication in-chat positively as well. On the other hand, having mature settings ‘On’ affects the in-chat communication negatively. This is particularly relevant for the research on Twitch.TV in the education sector, in order to determine whether discriminatory factors can be identified.

Johnson and Woodcock [3] have also investigated the impacts of live streaming and Twitch.TV on the video game industry. A crucial aspect in relation to the school context, in this case programming and design, is the trend to actively teach skills via the streaming platform:

“On such channels, the streamer broadcasts a live feed of the programs and desktop on their computer whilst they program or otherwise design a game (or, more rarely, a non-game piece of software). This will often mean broadcasting live video of the streamer developing the program’s code, testing new versions of the software being developed, and thereby showing viewers the process of developing, refining, testing and iterating on the code of a game or other piece of software.”

Faas et. al. [4] address exactly this topic in their conference contribution “Programming Mentorship Communities on Twitch.TV”. The following interesting aspect has been observed:

“[...] we find that Twitch.TV’s game development and programming channels frequently form learning-focused communities supported by several types of mentorship. The streamer and their community often develop their skills in tandem.”

Faas and colleagues also state that more research is needed with regard to Twitch.TV as an online learning tool, especially from an applied pedagogical perspective.

The 2019 study by Thielen [5] (not yet published) indicates that the use of Twitch.TV spans across many age groups of children and teenagers up to post-retirement. The survey showed that the audience has also adopted the topic in an area of Germany that is not traditionally considered a metropolitan area. The usage behavior of children and adolescents as well as the assessment of the teaching and educational staff show that “Let’s Play” and game streams can already be regarded as an independent media and in their own instance an entertainment format in themselves. This insight is essential for the work of the authors of this conference contribution, since it shows that Twitch.TV is now accepted in countries such as Germany, both nationwide and across age groups

¹ Wikipedia contributors. (2020, September 23). Twitch (service). In Wikipedia, The Free Encyclopedia. Retrieved 20:04, September 23, 2020, from [https://en.wikipedia.org/w/index.php?title=Twitch_\(service\)&oldid=979824216](https://en.wikipedia.org/w/index.php?title=Twitch_(service)&oldid=979824216)

3 RESEARCH QUESTIONS

Students being enthusiastic about Twitch.TV in general seems to be out of question, but ...

- How do we get educators and decision-makers on board as well to use such tools?
- How can didactic concepts be created, based on different streamers and their videos and how can teachers themselves become streamers, or how can students jointly operate a Twitch.TV channel as a project?
- Will students watch other content, besides gaming?
- And can we go so far that streaming replaces the classic homework?

4 METHODOLOGY

This conference contribution would like to put teaching through Twitch.TV up for discussion and take up the cudgels for modern Art teaching and learning. To achieve our research goal, we conducted a focus group discussion with 4 participants. Table 1 details the gender and respective background of each participant. The core question of the discussion is the same as the research questions described above. The realization of the focus group is based on the method of the problem-centered interview following Witzel [7], while the evaluation of the key statements was conducted according to Mayring's [6] approach with regard to content-analyses.

Note: All participants of the focus group needed to learn about Twitch.TV by watching 3 selected Twitch.TV channels besides the classic gaming content. The participants were also asked to search Twitch.TV for content that they considered problematic for young people. In order to be able to express an informed opinion in the discussion.

Table 1. Participants of the Focus Group

| Person | Gender | Background |
|--------|--------|------------|
| 1 | f | student |
| 2 | m | teacher |
| 3 | f | artist |
| 4 | f | parent |

We would now like to introduce the three channels that the participants of the focus group were asked to take a look at in advance:

1: <https://www.twitch.tv/achnina>:

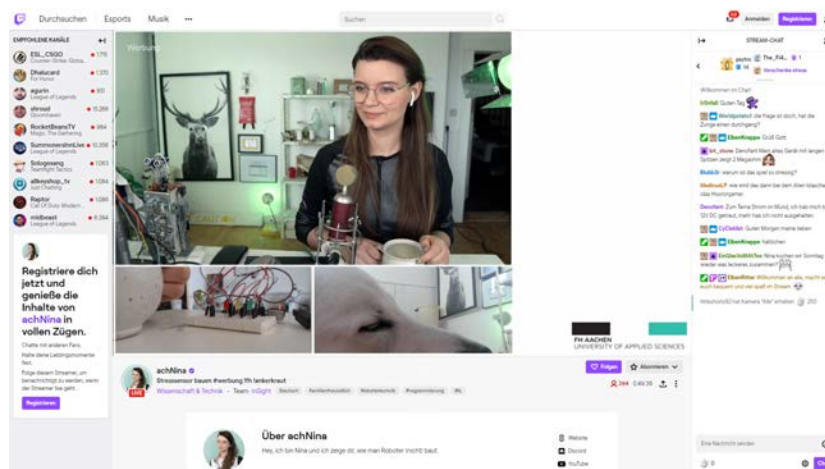


Figure 1. Twitch.TV channel <https://www.twitch.tv/achnina>

From the authors' point of view, the Twitch.TV channel <https://www.twitch.tv/achnina> is a best practice example of how STEAM teaching on Twitch.TV should look like. Nina is a student at the University of Applied Sciences Aachen. She designed her channel lifeworld oriented towards her target group of teenagers and provided a lot of different interactive elements. Her videos reach up to 15,000 viewers measured over a period of one month. She primarily wants to demonstrate how robotics works. A very recommendable video is for instance the instruction for building a robot cat.

2: <https://www.twitch.tv/timremmers>:

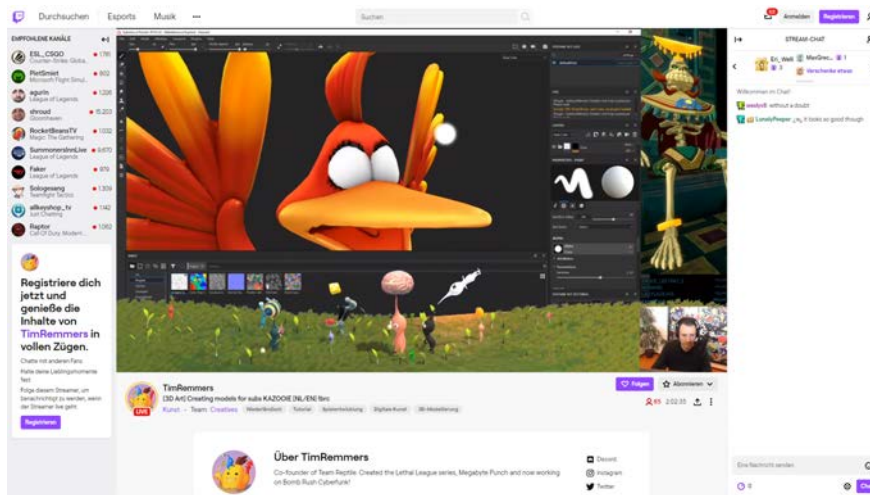


Figure 2. Twitch.TV channel <https://www.twitch.tv/timremmers>

The second channel is run by Tim Remmers, Co-founder and Managing Director of “Team Reptile”. His company is producing games for relevant consoles like the Nintendo Switch, PS4 or XBOX. In his videos and streams he explains how to create 3D Graphics. His reach is in the low hundreds, which could in turn be explained by the fact that his topic is very specific. However, the content is of high value for those who like to learn how to create professional characters for games or animations.

3: <https://www.twitch.tv/witlock>:

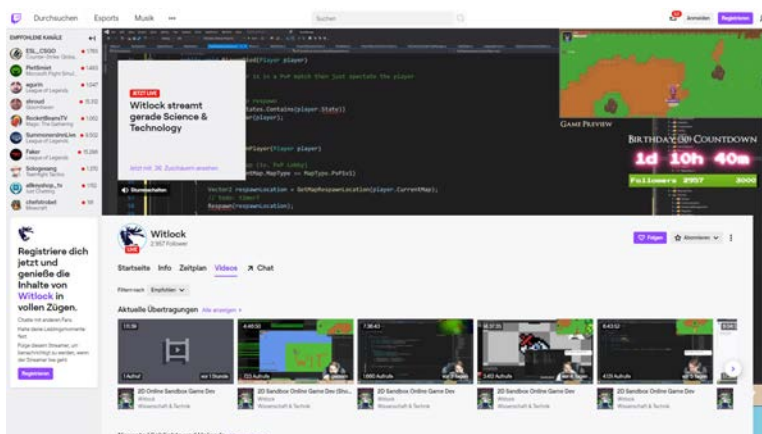


Figure 3. Twitch.TV channel <https://www.twitch.tv/witlock>

The third channel is called Witlock and is run by Sander, a 29 year old professional game developer who is currently working on the 2D game Overthrown as lead developer. He streams different kinds of things. But primarily he wants to show the viewers different tricks and procedures in the field of 2D game development. His videos reach between several hundred and several thousand viewers, depending on the topic.

5 RESULTS

The authors will now summarize the focus group's answers to the research questions.

5.1 How do we get educators and decision-makers on board as well to use such tools?

To get decision-makers and a majority of educators on board, various aspects must be considered. First of all, Twitch.TV is of course still primarily associated with gaming. While this is not a problem per se for the focus group participants, there is a consensus that 'gaming' and 'school' evoke negative associations with some parents, teachers and officials, but even with pupils from time to time. Secondly, Twitch.TV is not curated and the menu is also focused on gaming and music. Gaming shows mostly classic "Let's Play" videos and sport broadcasts. In the music section, young artists have the chance to stream music. This is however also a possible strong tool for possible online music teaching classes. In order to find the content, like the best practice videos that the focus group participants watched in advance, one has to use keywords and some luck to find suitable content. In order to get the majority of educators and decision-makers on board, it would be necessary to pre-curate content that is displayed within the conventional learning management systems. As a first step, the content would not have to be based on live streams but on videos that have been watched and curated by the educators themselves. This would take away some of the decision-makers' fear of using these novel tools. One participant in particular referred to the API calls Twitch.TV offers and the Austrian project League of Girls (Netidee). Here, no pre-curated videos are shown on an external platform, but the live streams are pre-filtered using keywords and a simple AI to provide valuable content for the young ladies. Other important aspects raised during the focus group discussion are the fear and the prejudices of teachers and decision-makers and the lack of a suitable navigation menu to quickly find explicitly valuable content in the school system.

5.2 How can didactic concepts be created, based on different streamers and their videos and how can teachers themselves become streamers, or how can students jointly operate a Twitch.TV channel as a project?

One of the fears mentioned earlier is the availability of live video from individuals who are not associated with the school system and are not trained teachers, and therefore have no explicit teaching expertise. Besides the already discussed proposal to use only pre-recorded and curated videos, it is also sensible to create lessons via Twitch.TV. For this, educators would have to join forces and start to prepare and upload different topics, according to the curriculum of the respective country. According to the focus group participants, a similar approach was taken during the Covid-19 lockdown in various countries, via national television and their official institution video channels. Unfortunately, all these hundreds of hours of excellent learning videos seem to be lost if you look for them months after the first lockdown. In the same way that educators join forces, there should also be didactic scenarios how students can collaboratively run a Twitch.TV channel. For instance, one member of the focus group suggested that there could be a roster of students responsible for weekly uploads on different thematic areas. An issue worth considering here is the private and public nature of the videos. In the junior years, one would require explicit permission from the parents, whilst in high school, the consensus of each student is necessary. Another issue pertains to the availability of the required technologies. Schools would have to provide students with equipment on hire (for free of course), including good mobile internet access, delivered contactless to students by teaching staff, especially during lockdown periods. Repeatedly, focus group participants bring in the topic of the didactic scenarios and the setting up of a community of practice, which is intrinsically motivated to create life-world-oriented content directly by the teachers assisted by media experts.

5.3 Will students watch other content, besides gaming?

The whole group clearly answered this question in positive. This can also be seen from the case studies that were examined in the previous sections. The problem lies in the fact that students need to be nudged to look at other content on Twitch.TV besides the usual games and music section. One participant in the focus group referred to the work of Constance Steinkühler with regard to interest-based learning. For Professor Steinkühler, Twitch.TV is the perfect opportunity to start and let the teachers live the newly required role of being a learning companion, rather than a mere transmitter of knowledge.

5.4 Can we go so far that streaming replaces the classic homework?

Especially in high school, it already seems to be possible to give up homework based on streams from Twitch.TV. A perfect example is the classical tutorial to program the "hello world" exercise available on multiple channels. Here Twitch.TV takes on the role of the more classic learning video platforms, but with cooler branding and possibly more appealing speakers. The streaming itself is of course also possible, under pre-set conditions with regard to the right to one's own image and voluntariness to (semi-) public show oneself.

5.5 Other factors that came up during the discussion:

In some cases, things that had already been mentioned or further aspects that were repeatedly raised were discussed again. When using Twitch.TV as a learning tool, students might click on other videos that are not suitable for them. Some streamers say that their content is intended for adults. But with one click on the confirmation button everyone can watch such content anyway. A recent case of a German streamer that has millions of followers was also mentioned. To the horror and criticism of media educators around the world, this person is said to have recently been on vacation to Malta, doing livestreams of people around him, especially girls and young women, and commenting live on their physical appearances, exemplifying an unethical, anti-social and unacceptable use of the medium.

According to the focus group participants, Twitch.TV can also be used as a teaching tool for open-education. It was also noted that Twitch.TV is not a non-profit platform but is owned by Amazon, a global corporation. The participants of the focus group did comment on this issue as being necessarily positive or negative, but the authors feel that it is important to emphasize this fact. And last but not least, it is important to mention that most of the content is produced in English. The participants of the discussion are therefore convinced that the most reasonable step would be to work with teachers on content in different languages and to upload on Twitch.TV with appropriate keywords and descriptions. Furthermore, a tool is required to connect Twitch.TV with learning management systems in order to generate individual teaching and learning units.

6 CONCLUSIONS AND FUTURE RESEARCH

The discussion resulted in some interesting learning for the authors, which should be integrated into future research and especially into applied projects. It is important to explore the fears of educators when using Twitch.TV in the educational sector and to find solutions how to take these fears into consideration or, if they are legitimate, to eliminate or mitigate them as much as possible, with the help of technical aids. Interfaces to existing learning systems are essential and must be established to provide the videos in a safe environment for both students and teachers.

Furthermore, a coordinated action to shape Twitch.TV as a teaching tool seems necessary; on the one hand to produce suitable high quality content and on the other hand to curate existing content as well as develop relevant didactic material. In this sense, Twitch.TV could also be a good tool to create live lessons due to the excellent possibilities of interaction with the participants. However, the personal rights of the students and the teachers, as individuals and as a group are to be protected and respected at all times. In this sense, exciting times are approaching and maybe teachers, whom do not yet know of the existence and potential of Twitch.TV, can explore and understand how teaching their content at a distance using Twitch.TV can break new uncharted grounds.

ACKNOWLEDGEMENTS

The authors like to thank all educational streamers doing such great pioneer work. And the participants of our focus group for their time and efforts to help us with this paper.

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