Supporting Student Learning Community Through Study Streams

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Summary

This case study is situated in the Student Engagement team[1] in the School of Culture and Communication at Swansea University and explains how we responded to the challenges COVID-19 posed to our creation of a learning community by creating a series of online 'study streams'. A 'study stream' involves a host broadcasting themselves studying online and interacting with viewers in real time; in our case, hosts conducted a range of activities such as research, teaching preparation, and administration. We begin by explaining and contextualising our aims (principally to maintain learning community through offering new ways for students to interact with one another and with the institution) and justifying our choice of Twitch as a platform. We explain how we ran these streams and offer qualitative and quantitative data to highlight their value. Then we reflect on the project, drawing out things that worked particularly well and explaining how we dealt with challenges, before describing how we intend to develop these study streams in the future and integrate them into our student engagement offering. We hope that these final sections offer some practical tips which readers can adopt, and we stress the flexibility of this sort of activity, which can easily be adapted to suit a range of educational settings and audiences.

Description of project

Student engagement is a broad term with a variety of applications, ranging from a particular style of learning/teaching to broader conceptions of interaction and connectedness, and on to notions of staff-student dialogue, partnership, and co-creation (on this breadth of meaning see e.g. Axelson & Flick (2010), esp. p.38). While there are, therefore, a range of possible theoretical approaches to student engagement, our approach is affected by an institutional definition of the term, which gives the student engagement team a specific responsibility that is perhaps best understood as relating to the development and facilitation of student voice. We work in partnership with students to identify potential areas of improvement and to develop appropriate responses and actions. Thus we 'engage' with students literally – in the sense of involving them actively in dialogue about the future of the institution – a process which we hope increases their sense of belonging and thus of connectedness to the institution, that is 'engagement' in the sense of fostering an emotional connection. This project aimed to enhance student engagement as it is understood in our institution in two ways. First, it emerged as part of a series of initiatives designed to develop learning community, an area identified from National Student Survey returns as a key institutional target. Thus, its existence and development was shaped through dialogue with students as part of a broader aim to involve students as partners

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[1] The article is co-authored to reflect the student, professional services, and academic perspectives. Occasionally, attention is drawn to a specific viewpoint by referencing one of the authors by name, but our general approach has been to offer a consistent voice which represents the integration of all of these views.

in shaping their university experience. Second, it was a response to the enforced suspension of on-campus activities as a result of COVID-19. Traditionally, our commitment to developing a sense of community involved only on-campus activities (e.g. pub quizzes, movie nights, etc.). Our aim therefore was to replace this offering and to provide students with opportunities to interact with other students, staff, and the institution more broadly. The success of our on-campus activities was traditionally measured by the number of students who attended, as well as how far students commented on events and activities in the various surveys conducted by the university. This offered our initial parallel for evaluating the study streams.

Data provided by the School Information Office offers useful context for understanding how the pandemic was experienced by our students, and thus the potential value of study streams to supporting student learning community. The Student Information & Support Team, who manage the cases of students requiring support, reported a 59% decrease in student appointments in 2020/21 compared to 2019/2020, but noted that these cases were often more complex and required more coordination with other University services and external bodies. This highlights that students were initially engaging less often with our support services and shows the benefit of finding alternative means of communicating with them. Simultaneously, however, there was a significant increase (almost 30%) in students applying for more time to complete their assessments. This indicates the value of activities which were designed to support students studying independently, especially during assessment periods. Interestingly, COVID-19 was directly cited as a reason for these applications in fewer cases in 2020/21 than in 2019/20, though it still accounted for approximately 15% of the total. Instead, there was a massive increase (over 300%) in students citing poor mental health in their applications. We cannot demonstrate how far this is a direct result of COVID, nor discuss individual cases, but students highlighted feelings of disconnectedness, loneliness, and isolation as contributing factors to their mental health concerns. All of this helps to explain why we were keen to find alternative ways to engage with students and build a community through online activities.

As noted above, a 'study stream' sees a host broadcast themselves while studying, with viewers following along while completing their own work; viewers have the opportunity to interact with the host and with one another. We were aware of the growing popularity of these streams among GCSE and A-level students (e.g. Van Brugen & Dunn 2018; BBC Newsbeat 2019) and felt that something similar might work well for our students as they studied remotely. We hosted our streams on Twitch, an online platform used most notably by 'streamers' sharing video game content. Viewers can interact with the streamer, and one another, using a text chat function and the site therefore serves as "a platform for participatory cultures to engage with each other" (Brown & Moberly 2021, p.54). The importance of community in student learning has long been acknowledged (Vesely et al. 2007; Shea et al. 2006) and since studies have stressed that the participatory nature of Twitch as a platform, and the interaction that it encourages, creates third places which can develop and enhance notions of community (Hamilton et al. 2014), we felt that Twitch offered a vehicle for community-building activities. Additionally, many students were already using the site to watch a variety of content – gaming, cooking, sporting events, etc. – and they appreciated our use of a familiar platform. You do not need a Twitch account to watch the stream (though you do to participate in the chat), which increased the accessibility of the offering and gave students flexibility with how they engaged. This gave students an

anonymity lacking on platforms such as Zoom, which perhaps made trying the streams less daunting, and made it easier for students to dip in and out as they liked, using the streams in a manner that worked for them, rather than feeling pressurised to engage and study in a particular way. It also established the streams as something which complemented, but were clearly distinct from, regular teaching which was taking place on Zoom. Figure 1 is a screenshot from one of our early streams, demonstrating what the basic set up looks like.
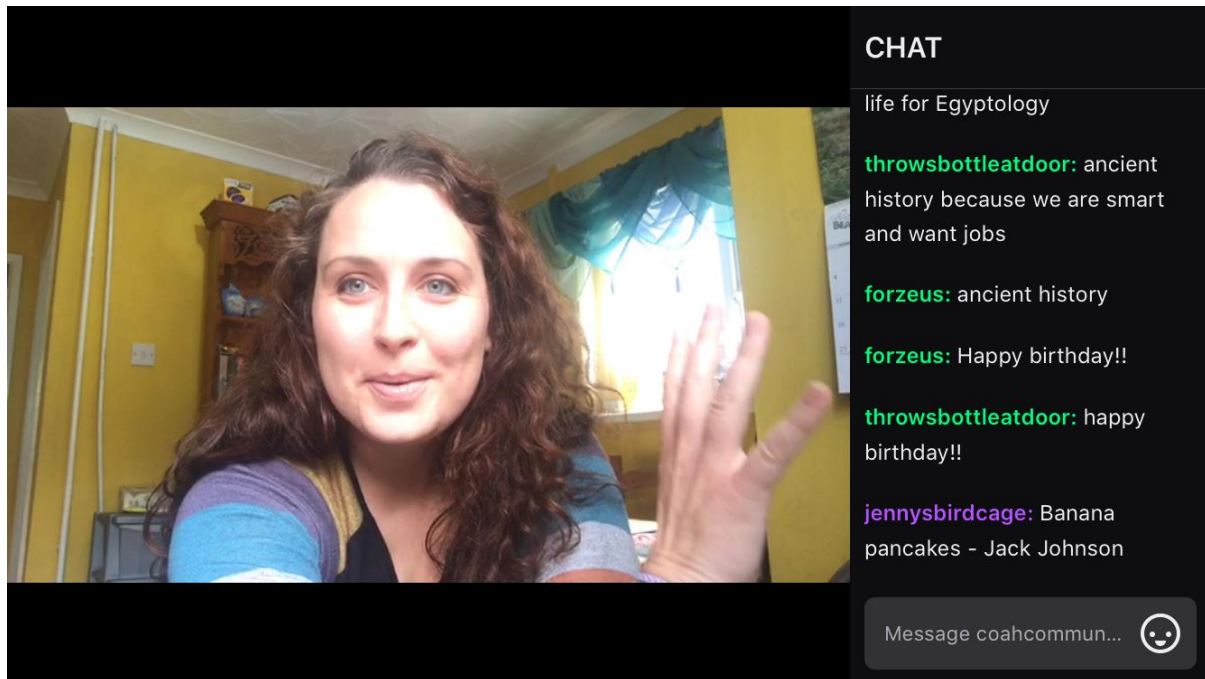

Figure 1. Screenshot of an early Twitch study stream, as seen by a viewer.

Our study streams began in April/May 2020 and ran at various occasions through until May 2021, particularly during assessment windows. Streams were usually an hour in duration and were hosted by either an academic or a member of our professional services team. We recruited hosts from a range of subjects and provided them with the necessary training. We suggested some basic structural elements – streams began with viewers being encouraged to set goals for the hour, we had a music break halfway through, and a brief wrap-up at the end – but otherwise hosts were free to guide the session however they saw fit. Some came with specific talking points, others reflected on the work they were doing, others asked viewers questions and used responses as conversational prompts. Viewers saw staff performing a range of activities, including their own research, teaching preparation and university administration, which gave students an insight into academic life 'behind the scenes'. The main focus, however, was on creating a relaxed atmosphere for communal studying, with periods of silence interspersed with interaction. The extent of this interaction was guided by viewers' contributions in the chat – some days, viewers had lots to discuss (often about things beyond studying!) and the streams were more conversational, sometimes viewers had specific questions relating to their work and were otherwise content to get on with things. This approach encouraged viewers to contribute to the creation of a community and shape it to suit their needs. A sense of the varied tone and topics can be seen in the chat comments in Figure 1 – though other conversations were much more academic!

Evidence of effectiveness and impacts

We sought to collect and analyse feedback on the project in a number of ways. For example, we used the streams themselves as a way to garner suggestions about how to improve our offering, thus embedding student voice in the development of our endeavours. Similarly, students were encouraged to send more detailed feedback and suggestions via email. This was primarily seen as a way to improve what we were offering, but it also gives us a means of reflecting on the experiences of those who participated in the streams. We were also able to take advantage of broader metrics. The University ran several internal surveys during COVID, while the National Students' Survey also took place. These were anonymous and open to any student who wished to participate; they included open comment boxes but also specific questions which asked students to identify particular highlights of their learning experience. Though only a few students commented directly on the study streams in these surveys, the very fact that the streams were mentioned at all is a powerful testament to the impact that they had on these students: when asked to evaluate their whole student experience, it was the study streams which stood out. Finally, as discussed below, Twitch generates statistical data which gives an insight into how our channel operated and offers an overview of the big picture, neatly complementing the details provided by qualitative feedback.

This qualitative feedback highlights the effectiveness of the streams. Students who commented in surveys noted that these sessions were a way to sustain their motivation and a good way to enhance communication between staff and students. Students explained the benefits of being able to get quick replies to questions and to try out ideas. Alongside feedback from the host (often a lecturer), students valued being able to see one another's responses, particularly as the streams brought together students in different years and subjects, who naturally brought different perspectives on how to approach a topic or challenge. Crucially, as Strugnell stresses, students found that the streams helped to provide a sense of community because, even though everybody was working on their own projects, interaction during the streams showed that they were not working in isolation but could still get support from their peers. Even students who could not view the streams live could still benefit from them since Twitch offers the ability for streams to be re-played for up to two weeks. Strugnell, who was herself often unable to view the streams due to work commitments, reports that despite being unable to interact with the content, the structure of the sessions (e.g. with emphasis on goal-setting etc.) was still a valuable aid when completing assessments.

This feedback highlights some of the ways in which students who attended the streams felt that they were beneficial, but one of the advantages of using Twitch is that the platform provides analytical tools to understand the effectiveness of streaming. In the 13 months from May 2020 to May 2021, we streamed for almost 50 hours with our viewers watching a combined 21,915 minutes of content. We reached 1,216 unique viewers and built a community of 154 followers, while 118 unique chatters sent some 3,486 chat messages. Average viewership for the streams tended to be around 10-15 indicating that the daily community we created tended to be quite small.

There are limitations to understanding this data. In particular, since Twitch is a public platform, because viewers do not need an account to watch content, and as those wishing to participate in the chat can create anonymous profiles, we have no way of knowing who our audience was, at least in the aggregate. Not all of the unique viewers may have been members of the community we were trying to reach. However, discussions with those chatting demonstrated that most of those participating actively were studying subjects that fall under the auspices of our School, while others were usually studying at Swansea University and had heard about the streams from their friends studying within our school. Consequently, our followers, and our unique chatters, likely represent a better indication of how far we captured our target audience, since these people opted into participation in a stream which was both branded and pitched as being targeted primarily at Swansea University students (even if we were always welcoming of others!). It is also difficult to assess these statistical outcomes against our aims or expected outcomes because this is such a new venture. As explained above, Twitch has increasingly become the focus of academic studies, while study streams have begun to be commented upon by journalists. However, the available studies say little about the data, and focus instead on the phenomenological and experiential factors. Popular "study-tubers" (i.e. those posting study streams to YouTube), like Ruby Granger, might attract more than 50,000 views on a video; these views are recorded over several months, though, rather than capturing live viewers and reflect a channel targeting a global audience. Clearly, we were not anticipating anywhere near this level of engagement, but, so far as we can discern, there were not any projects of a similar scope to our own from which expectations could be derived.

Consequently, perhaps the best comparison, and the factor which has been most influential in how we have interpreted the success of this project, is with our own on-campus activities both pre- and post-COVID, as well as the other activities we organised during the pandemic. This comparison is valuable because we can consider the same (or, at least, a similar) demographic and can allow for the specific circumstances and challenges faced by our institution. Before COVID struck, we would host pub quizzes two or three times per semester, which usually attracted roughly 80 attendees, of whom about 60 were usually students and the rest members of staff. Academic events (e.g. a dissertation symposium where third-year students share ideas about how to conduct research with second-years) attracted a smaller turnout, usually in the region of 10-20 students. A similar pattern has been observed at events since COVID, though attendance at social events has often been smaller (e.g. pub quiz attendance is now at about 40), while academic events (e.g. object handling sessions, creative writing workshops) attract 10-20 people. The study streams also performed well when assessed against other activities carried out online during COVID. For example, our student subject reps experimented with hosting Zoom chats for their peers, but this was abandoned as only one or two people were attending. Thus, from our perspective, what is encouraging is that the average number of viewers of the study streams is broadly in line with the number of students attending equivalent on-campus events, both before and after the pandemic. This demonstrates that the study streams were an effective method of replacing our on-campus offerings, which was the principal aim of the project.

Reflections on the project

Early on we were hosting streams every day, but later in the year we reduced these to two or three times per week. This seems to have been effective because students increasingly came to see the streams as a change of pace from their usual routine, whereas earlier in the year, at the height of the first UK lockdown, they appreciated the opportunity for daily contact. We also found that settling on a regular time boosted audiences. Another thing that worked well was having various regular features which helped to structure the streams. For instance, we always had a music break halfway through the stream; viewers could suggest a song (sometimes in response to a theme chosen by the host), and one would be chosen at random which everybody could listen to. This created a clear, and particularly accessible, talking point for the whole community as people shared new music with one another. This also took the pressure off our hosts to keep dialogue going, and Harrison found that this encouraged a different sort of conversation with students that broke down barriers and humanised lecturers, making them seem more approachable, without ever compromising professional boundaries. Having a specific theme (e.g.TV recommendations) was another way of developing this, which students enjoyed. This structure also enabled hosts to reiterate study tips by encouraging students to take regular breaks, and then to re-focus, setting small and achievable goals for different parts of the stream. The streams therefore became not just a community activity, but also a way of building student skills as independent learners.

Strugnell stresses the benefit of hosts showing interest in what the students were working on and asking questions. This helped students express what they were doing – a useful skill – but also invited others to comment and offer advice, enabling students to benefit from community input. Another key ingredient in successful streaming from a student perspective was having a relatively small number of hosts. This let hosts and regular viewers build a rapport with one another, while still remaining welcoming to newcomers. Again, having a structure which had studying at its heart meant that the streams remained accessible and inclusive for all of our students.

One of the inevitable challenges of using a public platform like Twitch is the potential for inappropriate behaviour from anonymous viewers unconnected with the University. Studies (e.g. Todd & Melancon 2019) and reports (e.g. Kastrenakes 2020; Gillette & Soper 2015) have revealed that female streamers are particularly likely to encounter abusive behaviour from viewers. In the early iterations of the streams, we did encounter some trolling – usually of a puerile and juvenile nature. This is best simply ignored by the host, but we found that our community was excellent at diffusing potential trolls, a benefit of pre-existing student familiarity with the platform. Twitch also enables channels to restrict interactivity with the streams reactively, by deleting comments and banning specific viewers from posting, and also proactively, for instance by requiring users to subscribe to the channel for a specific period of time before they can participate in the chat. This time period can be as much as three months, but we found that simply requiring viewers to subscribe to the channel was sufficient to prevent disruptive behaviour. Crucially, however, there are also significant positives to using a public platform. It was not unusual for students from other institutions to stumble across the stream – on one occasion, we were joined by students from California who swapped study tips and pandemic experiences with our students. Another unexpected benefit was that students who graduated in 2020 and went elsewhere for MA programmes were subscribed to the channel and often

continued to attend our study streams in 2020-2021, offering a new way to develop links with our alumni while enabling alumni to share study tips with current students. Thus, the public nature of the platform created a much broader and more diverse learning community than our students can usually access.

The other challenges that emerged were primarily practical and technical. Harrison had some prior experience with Twitch, but this was a new platform for the majority of our hosts. The basic system is quite intuitive, but we certainly made mistakes (e.g. one host forgot to press the "go live" button!). These technical concerns were ironed out through experience and training. Thus, all hosts did a training session about how to use the platform, and we sought to ensure that an experienced host watched the first streams broadcast by newcomers so that they were on hand to help deal with any unexpected scenario. Reaching new students was also difficult. We noted above that lots of students had experience with Twitch, but others did not. Now we have more experience, we will be better placed to explain to those students how to use the platform, but also why these streams are beneficial. We hope to use feedback from students, disseminated through our social media channels, as a means of attracting new audiences. Beyond this, the main challenge was working out when to schedule sessions and what to do during them. We explained above the format that we settled on – this was ultimately the product of trial and error, and engagement with the students who participated in the events. The format above might, we hope, serve as a useful starting model for anybody looking to try this sort of activity. The broader difficulty underpinning this project is establishing a causal link between these activities and various student engagement measurables (e.g. NSS scores for community). We very much viewed this as an experiment – perhaps best conceived of as a viability study – to examine whether there was mileage in this idea as a means of communicating with students. Consequently, our initial determination was simply whether enough students participated in the streams to make them worthwhile. This having been demonstrated, the next stage is to conduct a broader project with significant evaluation, hence presenting the work to date as a case study.

Follow up and future plans

As noted, the next stage of the project is to develop an even more significant evaluation of the effectiveness of study streams as a means of enhancing student engagement. Given the changing landscape, particularly as we move towards a full-time return to Campus, there will be tweaks to how a project like this fits within the academic year. In the short- and medium-term, study streams are particularly valuable as a means of bringing together students who have returned to Campus and those who are unable to do so for the moment. In the longer term (as well as more immediately), we think that these streams have potential to support students at critical moments during the academic year when there is less formal teaching. The data from Twitch shows that the streams were particularly popular during the assessment periods in January and May, so we intend to focus streams during these assessment windows. Students also believe that this is when the streams will be most effective and beneficial in the future, though we all agree that they remain an excellent response in the case of further lockdowns or alternative disruptions to on-campus provisions.

We are also keen to evolve the format. One area of exploration is to introduce student hosts (or co-hosts) for the streams rather than using only staff. This would highlight

student leadership of community activities, a broader aim within our strategic plan for enhancing learning community, and, by including appropriate training and perhaps renumeration, we can package this as part of our employability and learning opportunities offerings. Similarly, having staff and students co-host streams would create a means of showcasing staff-student partnership, while also creating a different dynamic on the streams. These brief insights into our future plans also, however, highlight one of our favourite aspects of study streams as a means of enhancing community and student engagement: their flexibility. They can easily be adapted to target different audiences, to respond to different educational contexts, and a general structure which gives identity to a Twitch channel, can be modified straightforwardly to suit the personality and the aims of the host.

Related publications and resources

Axelson, R.D., & Flick, A. (2010). Defining Student Engagement. *Change: The Magazine of Higher Learning* 43, 38-43, DOI: https://doi.org/10.1080/00091383.2011.533096

BBC Newsbeat (2019, August 22). *GCSEs: StudyTube Revision Videos Got Me Through Exams.* URL: https://www.bbc.co.uk/news/newsbeat-49419641 (accessed 23/09/2021).

Brown, A.M.L., & Moberly, L. (2021). Twitch and Participatory Cultures. In R. Kowert & T. Quandt (Eds.), *The Video Game Debate 2: Revisiting the Physical, Social, and Psychological Effects of Video Games* (pp.53-65). Routledge.

Gillette, F., & Soper, S. (2015, November 19). How Twitch Turned Video Game Voyeurism Into big Business. *Bloomberg Businessweek*. URL: https://www.bloomberg.com/features/2015-the-big-business-of-twitch/ (accessed 23/09/2021).

Hamilton, W.A., Garretson, O., & Kerne, A. (2014). Streaming on Twitch: Fostering Participatory Communities of Play within Live Mixed Media. *CHI '14: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems,* 1315-1324. DOI: https://doi.org/10.1145/2556288.2557048

Kastrenakes, J. (2020, June 25). Twitch Reckons with Sexual Assault as it Begins Permanently Suspending Streamers. *The Verge*. URL: https://www.theverge.com/2020/6/25/21303185/twitch-sexual-harassment-assault-permanent-bans-streamers (accessed 23/09/2021).

Shea, P., Sau Li, C., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet & Higher Education*, 9, 175-190. DOI: http://dx.doi.org/10.1016/j.iheduc.2006.06.005

Todd, P.R., & Melancon, J. (2019). Gender Differences in Perceptions of Trolling in Livestream Video Broadcasting. *Cyberpsychology, Behaviour, and Social Networking* 22, 472-476. DOI: https://doi.org/10.1089/cyber.2018.0560.

Van Burgen, S., & Dunn, E. (2018, April 6). Meet the 'Study Tubers': The YouTubers Making Studying Cool. *BBC News Online.* URL: https://www.bbc.co.uk/news/av/entertainment-arts-43643299 (accessed 23/09/2021).

Vesely, P., Bloom, L., & Sherlock, J. (2007). Key Elements of Building Online Community: Comparing Faculty and Student Perceptions. *MERLOT Journal of Online Learning and Teaching* 3, 234-246.