

Community-based media literacy interventions in Blaenau Gwent: Social media algorithms and echo chambers.

Project Report

Prepared by ProMo-Cymru April 2024

EXECUTIVE SUMMARY

Project Background

The project aimed to improve online media literacy among young people aged 11 to 14 in Blaenau Gwent. Employing a service design methodology, ProMo-Cymru started by conducting research to understand young people's online behaviours and gaps in media literacy.

Collaborating with Boys and Girls Club Wales and Blaenau Gwent Youth Service, a steering group of three 14 to 18-year-olds was formed to co-design and co-deliver workshop activities. These activities aimed to address concerns identified in the research phase of the project, focusing on social media algorithms and echo chambers with TikTok as a key platform. Research has shown that 'young people with low algorithmic awareness in particular tended to downplay the effect of their own behavior on the algorithm' (Swart, 2021). The aim of this project was thus to help young people understand key concepts like social media algorithms and echo chambers as well as some ways in which they can take back some of the control over what they see online.

An algorithm is a set of instructions that a computer program follows to perform a specific task. There are different types of algorithms, but on social media, the list of instructions decides what content to show to users. Algorithms do this by learning from users' interaction with other content, such as through likes, comments and shares.

Social media uses algorithms to keep users engaged on their platform by providing relevant and interesting posts. This is similar to how websites collect cookies to show users advertisements relevant to them.

An echo chamber is a situation where people only see information that supports their current beliefs and opinions.

Social media echo chambers work by 'hiding' content that is irrelevant based on the algorithm. This is content that users swipe past, don't interact with or block on their feed.

However, the content users don't see may help create a balanced view of the world. So, not seeing this content may create confirmation bias where content users see confirms their beliefs with giving different points of view.

The steering group, engaged through weekly online and in-person meetings and team-building activities, received training on media literacy and contributed to intervention development using tools like Jamboards (online whiteboards). Workshops were tested online and in-person before delivery to ensure effectiveness.

By the end of the project, we had co-delivered interventions to 85 young people across 5 youth clubs in Blaenau Gwent, involving the use of short form TikTok videos made by

the young person steering group and game-based activities (social media algorithm Bingo and Snakes and Ladders)

The project was designed to not only empower young people with the knowledge and skills to navigate the digital landscape in a positive and informed way, but also to contribute to Ofcom's broader Making Sense of Media body of work by evaluating best practice in the creation and delivery of media literacy initiatives to share within the community.

Evaluation Methods

Our evaluation involved a variety of tools aimed at capturing a complete picture of the project's impact. We used pre and post-intervention surveys with the young people participating in the workshops; interviews with youth workers at the end of the project; and a focus group with the steering group. By combining these methods, we were able to get a complete picture of the outcomes but also gathered different perspectives from various individuals involved in the project.

Main Findings

Overall, the workshops were largely successful. The sessions, including delivery and resources created, had a positive effect on the target group in enhancing their understanding of social media algorithms and echo chambers. The pre-workshop survey indicated that only 8% of participants understood the concept of social media algorithms, which increased sharply to 92% in the post-intervention survey. Moreover, 78% of participants reported a shift in their perception of social media content due to the workshops. Feedback from both young people and parents praised the workshops' engaging and interactive format. One parent said 'My kid wishes you would come back every week!'

Collaborating with the youth steering group was also highly successful. They contributed valuable insights and assistance to the design and delivery of the workshops and also benefited greatly from the experience. One member said 'This project improved my confidence to present and talk in front of people. It also added to my future goals. I know I want to work in media, it helped to work with people with different roles in the same industry.'

The project also positively influenced youth workers, who gained a better understanding of algorithms and echo chambers through their participation. This

experience also made them consider co-designing future activities with young people, fostering a more collaborative approach.

Key Learnings and Recommendations

Prioritising engagement is key. It can easily be achieved by making activities fun, easy to understand, interactive, and competitive and incorporating game elements and incentives/rewards to foster participation.

Thorough research of existing media literacy levels and gaps in knowledge amongst the target group in the area is needed before designing interventions. It is important to ascertain areas with a gap in understanding rather than assuming what information is necessary for the target group.

Constant evaluation, iteration, and development of your interventions is also essential. This can be achieved by following the service design methodology through the Discover, Define, Develop, and Deliver phases.

Other factors to consider are sustainability and adaptability. The workshops were designed to be easily replicable, ensuring their positive effects extend beyond the initial interventions. Their affordability, using inexpensive materials and games allows implementation with limited financial resources.

To facilitate replication, comprehensive resources were created, including detailed scripts and session plans, providing step-by-step guidance for consistent delivery without extensive training. Additionally, interventions in community settings can be characterised by the uncertainty around varying participant numbers week by week, especially in youth clubs. Therefore, any interventions need to be made to work with varying participant numbers, and easily adapted to different settings.

PROJECT BACKGROUND

Overview of the project

Commissioned by Ofcom as part of their Making Sense of Media programme, the aim of this project was to address the specific needs and challenges faced by young people (aged 11 to 14) in Blaenau Gwent regarding online media literacy; empowering them (and professionals) with the necessary skills and support to improve their digital experiences, promote safe and responsible online behaviour, and navigate the digital landscape positively and effectively.

Making Sense of Media is Ofcom's programme of work to help improve the online skills, knowledge and understanding of UK adults and children. This project was one of thirteen projects commissioned in December 2022 to improve media literacy skills across four cohorts:

- Older adults
- People living with disabilities, learning disabilities or cognitive impairment
- Children and young people
- Communities experiencing financial disadvantage

Using a service design methodology, ProMo-Cymru first gathered insights into young people's online behaviours, knowledge, and concerns through online surveys and an in-person focus group to identify gaps in their media literacy needs.

Based on the findings presented in the Discovery Report (July 2023) (See appendix 1) and in collaboration with Blaenau Gwent Youth Service and Boys and Girls Club Wales, ProMo-Cymru recruited a steering group of three young people aged 14 to 18 to help co-design educational activities and workshops for the target group to meet these needs and co-deliver activities and workshops across Blaenau Gwent. By involving 14-18 year old young people in the steering group, the project was able to tap into the insights and perspectives of an age group closer to the target audience while still allowing them to take on substantive roles in co-designing and co-delivering the workshops.

The purpose of the steering group was to help us create, refine and test the interventions, ensuring they aligned with the desired online media literacy outcomes and fitted the target audience, while continuously evaluating and iterating to improve the interventions.

The project was intended to empower the steering group by involving them in the co-design process, whilst also contributing to a wider body of Ofcom's work assessing and evaluating media literacy initiatives and sharing best practice across the sector.

Rationale

There is growing evidence that algorithmic systems are having a profound impact on the experiences, perspectives and wellbeing of young people in the digital age.

Key drivers for the project that were identified through discussions with youth workers and young people, as well as desktop research, included:

- A lack of "algorithmic literacy" among youth, according to the Children's Media Use and Attitudes Report from Ofcom (2022). Young people have limited understanding of how algorithms curate the content they see online.
- Concerns that algorithms can amplify "echo chambers", reinforcing extremist views, political polarisation and conspiratorial misinformation as they optimise for engagement. (Törnberg, 2018).
- The risk of young people becoming passive consumers, with algorithms prescribing their exposure to ideas, information and worldviews in opaque ways.
- A knowledge gap among professionals working with youth around the role and impact of algorithmic systems influencing the online experiences of young people.
- Evidence that the more time spent consuming algorithm-curated content, the more our individual perceptions of the world can be shaped and distorted by these artificially personalised lenses.
- Business models of major social media platforms that depend on maximising user attention through algorithms designed to capture engagement, often prioritising sensationalism, outrage, and virality over quality information. (Costello N, Sutton R, Jones M, et al., 2023)

In this context, there is a pressing need to empower young people with better algorithmic literacy and critical thinking skills. This project aimed to raise awareness, build understanding, and equip young people and the professionals supporting them with resources to navigate social media algorithms in more conscious and intentional ways.

For further details of the problem we were addressing and our approach, see the Evaluation framework in Appendix 3.

Understanding the community

Levels of poverty and deprivation are longstanding issues that have impacted educational outcomes in Blaenau Gwent for many years. Many areas of the region rank among the most deprived in Wales based on factors like income, employment, education and health. Blaenau Gwent had the highest percentage of school leavers in Wales in 2021/22 with no approved qualifications at 2.4%. This is well above the Welsh average of 0.8%. The cyclical nature of poverty, low skills and lack of employment opportunities have created entrenched socio-economic challenges that are impacting education and attainment levels for young people in Blaenau Gwent. (See Estyn (2023) and South Wales Argus (2023).

Working in a community like Blaenau Gwent, which faces significant socio-economic challenges and educational attainment issues, had important implications for the project. Given the lower educational attainment levels in the region, the project needed to prioritise building foundational knowledge and skills around algorithms and echo chambers. Additionally, the content, delivery methods, and messaging of the project needed to resonate with the unique experiences of young people in Blaenau Gwent.

The service design methodology

This service design methodology, created by the British Design Council, is a well-defined approach that ensures that the end deliverables truly work for their users (in this case, young people aged 11 to 14). The approach is split into four stages: Discovery, Define, Develop, Deliver.

The first step of this methodology is the Discovery phase. During this phase, a piece of research is conducted in order to fully understand the needs, behaviours and experiences of the target audience of the project. This can be done through desktop research, interviews, focus groups, questionnaires, etc. The Discovery Report (July 2023) was the result of this first phase (see Appendix 1).

In the Define phase, the information, data and evidence gathered in the discovery phase are analysed in order to decide what's most important to focus on.

In the Develop phase, potential solutions are developed and tested on a small scale. Data is gathered throughout this phase in order to learn about what works and what doesn't work in the solutions tested.

Finally, in the Deliver phase, ideas that have been iterated throughout the develop

phase are launched on a bigger scale. Although this is the last phase, the service or solution chosen should be constantly adapted based on feedback to ensure it continues to meet users needs.

Developing workshops

Define phase

One of the key insights emerging from the Discovery phase of the project is that algorithms are a complex subject largely misunderstood by young people. Our findings demonstrated that young people rarely stop to critically analyse the presence of algorithms further, resulting in them feeling somewhat powerless in shaping their online space and stopping them from engaging in ways to take back some control.

During the Define phase, and together with the steering group, we decided to focus our project on social media algorithms in particular and especially so around Tiktok, which was the app young people told us they use the most. However, we still recognised the importance of developing an intervention that would teach transferable and critical thinking skills applicable across a variety of apps and when online.

Working with the steering group in the Design and Deliver phases

To ensure sustained engagement and collaboration within the steering group, we established a weekly meeting schedule, alternating between online sessions and in-person gatherings. These meetings served as platforms for not only brainstorming ideas but also fostering camaraderie among the group members. Team-building activities were meticulously integrated into the agenda to cultivate a cohesive and supportive environment.

Recognising the importance of foundational knowledge, we dedicated sessions to educating the group on various aspects of media literacy. Specifically, efforts were made for them to have a chance to conduct their own research and get familiar with the Discovery report, to promote their understanding of the mechanisms underlying online content dissemination as well as helping them gain confidence to deliver workshops to younger peers.

Utilising tools such as Jamboards (online whiteboards) and interactive activities, the steering group actively contributed to the design and development of media literacy interventions. Collaborative brainstorming sessions facilitated the generation of

creative ideas, while practical exercises honed their skills in crafting impactful strategies.

Prior to delivery, we tested the workshops online first, and then in person to ensure smooth delivery and allow the members of the steering group to get comfortable delivering, as we recognised the daunting nature of delivery to others, particularly this specific age group of young teenagers in an energetic youth club setting. We also conducted a preparatory session where we familiarised the steering group with concepts such as youth work principles, addressed their worries and questions regarding workshop delivery and had a youth worker present to offer insights into the youth club environment.

Workshops session plan (co-designed and co-delivered with the steering group)

Time	Activity
15'	Introductions and pre-intervention questions
8'	Screening Youtube resource videos and videos created by the steering group
15'	Social Media Algorithm Bingo (with prizes)
20'	Giant Snakes and Ladders (Algorithm question and answer based). (with prizes)
10'	Post intervention questionnaire
-	Pizza

EVALUATION AIM AND SCOPE

The aim of the evaluation is to assess the effectiveness both in regards to the process and the impact of the media literacy interventions co-developed and co-delivered in collaboration with the steering group from Blaenau Gwent. This evaluation seeks to provide insights into the extent to which the interventions have achieved their intended goals and objectives, as well as to identify areas for improvement and further development.

Our evaluation approach was comprehensive, using a variety of methods to understand the project's impact. We conducted surveys before and after the workshops with the young participants, interviewed the youth workers after the interventions, and held a focus group with the steering group. This mix of approaches allowed us to get both quantitative and qualitative insights from everyone involved in the project.

Key evaluation questions

The evaluation encompasses various dimensions of the media literacy interventions, including:

- Effectiveness: Were young people better able to understand and shape their online space? What were the strengths and weaknesses of the interventions' design and implementation, and what could be done to improve future projects?
- **Impact**: To what extent have the interventions improved young people's critical understanding of algorithms? How has the project improved the way professionals working with young people understand algorithms?
- **Engagement**: What did we learn were the most effective methods of keeping young people engaged throughout the duration of the project?
- Working with a steering group: How has the co-design and co-deliver method impacted the outcomes of the project? Was it the right course of action?
- **Sustainability**: How economically-viable are the interventions? Are they easily replicable? What other lessons can we take forward to improve our work with young people and professionals in the future?

For the impact evaluation, we set out to measure the following outcomes:

Immediate outcomes

- Young people have an increased awareness that algorithms are at work
- Young people have an increased understanding of algo-literacy
- Young people have an increased algo-literacy and critical thinking skills

• Professionals are better informed about algorithms and have a better understanding on how to support young people to have a positive experience online

Medium term outcomes

- Young people employ critical thinking skills more regularly
- Young people have greater control over their online space
- Increased use of reliable sources of information

For more detail on evaluation scope and methodology, see Appendix 4.

PROJECT OUTPUTS

We delivered 5 workshops to 85 young people across Blaenau Gwent in 5 different youth clubs (3 in Tredegar: Kidz R Us, The Pavillion and Stocktonville Hall, Abertillery Youth Centre and Rassau Youth Club). They were co-designed and co-delivered with 3 young people forming the steering group, a youth worker involved in the project throughout, and our ProMo project team.

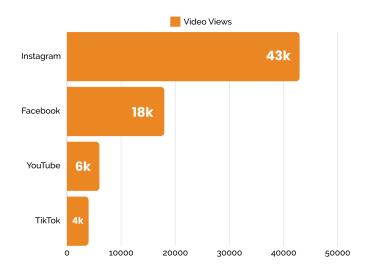
Discovery Report

A key output of the project was a Discovery Report (see Appendix 1) that captured insights into young people's online behaviours, knowledge, and concerns through online surveys and an in-person focus group to identify gaps in their media literacy needs.

A focus group, an online survey, and desktop research were used to gather data for the Discovery Report. The focus group was conducted at a Tredegar Youth Club meeting with two young girls aged 11 and 12. The online survey questionnaire was carefully designed to cover key aspects of the research topic and was relayed to 51 young people aged 11 to 14, all living in Blaenau Gwent.

Resources

The project also produced 6 short length (TikTok-style) videos aimed at raising awareness and providing information on social media algorithms and echo chambers for young people and professionals. They were created by the young people on our steering group for their peers in Blaenau Gwent and shown during our interventions in youth clubs. From the data we collected at the interventions, we found the videos (their style and content) were incredibly effective in educating young people and professionals on the concepts of social media and echo chamber literacy. We then shared these resources across our social media channels to further the reach of our project. They were posted across three of our social media accounts on multiple platforms, including ProMo Cymru, Ebbw Vale Institute (our community and cultural centre located in the heart of Blaenau Gwent), and The Sprout (our blogging, information, and campaigning platform for 11-25's in Wales). Combined, these videos were viewed 71k times over the course of the project.



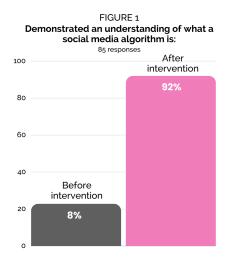
Additional printed materials were created and used during the workshops, including Bingo draw cards, playing cards, information posters, session scripts for those delivering the sessions, and a Q&A resource for the Snakes and Ladders activity. (See appendices 5, 6, 7, 9 and 10)

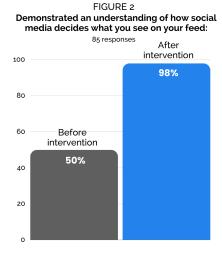
RESULTS AND FINDINGS

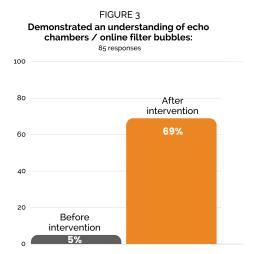
On impact

Impact on target group

Overall, the project had the desired impact on the target group. Before the workshops, only 8% of participants showed an understanding of what social media algorithms were, compared to 92% after the workshop (Figure 1). 50% of participants demonstrated some understanding of the way social media platforms curate users' feeds before the intervention, rising to 98% after the workshop (Figure 2). Only 5% of young people could explain what an echo chamber was before the workshop, whereas 69% of them could after the workshops (Figure 3).

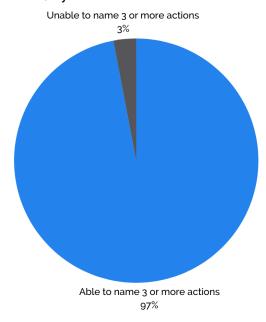






By the end of the interventions, 97% of young people were able to identify at least 3 actions that influence what they see on their social media feeds.

Young people able to name 3 or more actions online that influence what they see on their social media feed, by the end of the intervention:



Here are the actions they cited:

Cross App Interaction 0%

Percentage Occurrence of Actions Cited 85 responses

Liking 67% 67% Sharing Commenting 50% 25% Sending Posts 19% Saving Posts 18% Hashtag Tracking 14% Tagging Friends 13% Re-Play Videos Unfollow / Block Accounts 13% 11% Scrolling Past Content 11% Click on Ads TikTok Not Interested 10% Following Accounts 10% 10% Spending Time on Content Typing in Search Bar 8% Screen Time Breaks 5% 5% Filtering Keywords Watching Stories Clicking on Links 3%

20

60

80

100

These results were not too surprising to us, as liking, sharing, and commenting could be considered to be the three most basic and easy to remember / well known actions on social media. We were pleased that young people still cited these however, as these actions represent fundamental behaviours online that significantly influence what young people see on their feed.

After each workshop, we analysed this data to identify any concepts that young people were not naming or grasping well, and then we made sure to emphasise these concepts in the subsequent workshops through our activities. We focused particularly on the less identified actions also for our steering group to create an additional three video resources for online sharing.

By the end of the intervention, **92**% of participants demonstrated an understanding of how social media settings work and how they could filter keywords and how to set time breaks.

97% could correctly identify at least one way in which they could make their social media feed more positive. Here is a selection of some of their answers:

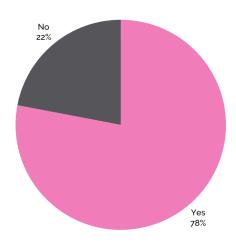


Their answers consisted of the tips suggested in our TikTok video resources, which were created by our steering group and shown at the beginning of the workshops. This demonstration indicates that these resources and their style were effective in achieving their goal of sharing advice for young people to make their time scrolling more positive. The TikTok-style video format, featuring their peers from the same

area as them, was clearly effective in engaging young people and making information memorable.

78% of young people said the workshops changed the way they think about what they see on social media.

Did the workshop change the way you think about what you see on social media?



Overall, the impact on the target group of 11 to 14-year-olds was highly positive, as evidenced by the successful improvement of their understanding of algorithms and echo chambers and the excellent feedback from parents and participants.

More quotes from the young people who participated in the workshops:





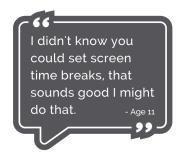








The workshop made me think of ways I can change what I do on social media.





Impact on professionals

The project not only had a positive impact on the target group of young people but also influenced the youth workers involved.

ProMo conducted interviews with them following the delivery of the workshops and one significant outcome was a better understanding of algorithms among the professionals themselves.

Through their involvement in the workshops, they gained deeper insights into the mechanics and implications of social media algorithms and echo chambers. One youth worker said:

Prior to this project, my understanding of media literacy and algorithms was limited. I have been learning and increasing my knowledge as the project has progressed. Through regular meetings, as well as hands-on experience during project delivery, I have been able to further develop my understanding of media literacy and algorithms in my role as a youth worker and now believe I have a comprehensive understanding of the topic.

When asked about the impact of the interventions after the event, a youth worker described the workshops as having a 'a massive impact' on some of the young people and informed us of their observations;



One youth worker interviewed said that they and their team would "definitely" feel confident in delivering this workshop to future groups, independent of the support from ProMo Cymru, based on the strength of the resources produced and provided;



Additionally, the project made the professionals wonder why they do not engage in co-designing and co-delivering activities with young people more often. Boys and Girls Club stated that;



This highlights the successful collaboration with young people in this project and how the project has already started to disseminate learnings and knowledge within the sector.

On process

Workshop feedback

The feedback received from both parents and the young people themselves was overwhelmingly positive. They found the workshops to be fun and interactive, and they did not perceive them as strictly educational, as the format was significantly different from their usual school environment. Here is a word cloud (the more similar answers, the bigger the font) on how we could improve the workshops according to the participants:



This shows that the project was well-received and valuable from the perspectives of both the participants and their parents. The suggestions to make it longer and add more games demonstrated that the young people did not find the workshops tedious, rather, they didn't want them to end!

Working with youth workers/youth clubs

The project involved collaborating with youth workers and youth clubs, which presented both challenges and opportunities. On the positive side, youth workers played an active role in keeping the young people engaged throughout the workshops, due to their experience in the environment and working with young people, as well as their pre-existing relationships and familiarity with the young people attending. This hands-on involvement from the youth workers contributed positively to the overall success of the project.

However, gaining access to youth clubs proved to be challenging, requiring significant effort and perseverance, mostly regarding communication and response rates from youth club leaders. It required management intervention to get timely replies. It is worth considering that youth workers may have limited availability for correspondence due to their part-time roles, possibly impacting their ability to check and respond to emails. This highlights the importance of building strong relationships and establishing trust with youth clubs.

Additionally, new youth clubs were being formed throughout the timescale of the project, and others postponed indefinitely. For example, to our disappointment we were unable to conduct any sessions in the Brynmawr area of Blaenau Gwent due their ongoing difficulties securing a venue for their youth club. Alternatively, we were able to attend a new session that wasn't in our original delivery plan due to its recent formation, in Ebbw Vale. The constantly evolving landscape of the youth clubs available to young people and for us to attend was tricky and time consuming to navigate, and required constant research and correspondence throughout the project to achieve our goal of reaching as many 11-14 year olds in Blaenau Gwent as possible.

Another aspect we had to consider regarding youth clubs was the variety of venues, which required us to adjust our workshops accordingly. This involved factors such as available space, presence of screens, venue layout, and the number of young people attending. While sometimes we could enquire beforehand about space, layout, and screens to prepare for the session, due to the voluntary participation nature of youth clubs, youth workers had no way of knowing how many young people would attend on any given day. Fortunately, we co-designed the workshops to be highly adaptable, allowing for customisation to meet the specific circumstances of different youth club

environments. For instance, our workshops could effectively engage anywhere from small groups of two young people to 30. Between the five youth clubs we attended, the number of young people in attendance varied from 8 to almost 28.

Engagement of young people also varied between youth clubs, which we and youth workers attributed to other activities being available at the same time. For example, the majority of youth clubs didn't put out any other activities as they usually do (e.g. table tennis and pool) to avoid distractions. As our session was therefore the sole activity of the evening, engagement was incredibly high with all in attendance. However, in another location, there were a variety of activities available, such as a sports hall to play football, and fixed pool tables. Therefore, we found that some participants who had opted out initially of taking part, wanted to get involved later on, and vice versa. This therefore presented its own challenges in terms of engagement and evaluation.

Despite the challenges encountered, youth clubs were overall welcoming of initiatives like this one. The youth clubs recognised the value of engaging young people on topics like social media algorithms and echo chambers, especially using a game-like format and prizes like sweets and pizzas which is not something youth clubs can provide the young people on a regular basis as they operate on an extremely limited budget (as identified by youth workers in their interviews).

It was mentioned that restricted funding available to the youth clubs meant that the workshops in future would need to be adapted in order to be more cost effective for them. Nonetheless, one youth worker believed this was easily achievable, "seeing how engaging and fun the young people found the activities, I think the workshop would be equally effective without the gift vouchers and pizza at the end, just using low cost prizes, like the sweets."

Overall, while working with youth workers and youth clubs presented a variety of obstacles to navigate, the project highlighted the importance of building strong partnerships, maintaining flexibility, and tailoring workshops to meet the diversity in youth clubs. Conducting the project in youth club settings provided a rich learning experience for ourselves which we are eager to share (see learnings).

Service design methodology

By adopting an iterative and responsive service design methodology, we continuously looked to improve and refine the workshops based on ongoing evaluations and feedback.

Rather than waiting until the very end of the project to assess the workshops' effectiveness, we reviewed evaluation forms and feedback received by youth workers and young people after each workshop session.

This proactive approach allowed us to identify areas for improvement and make necessary adjustments before conducting the next workshop. It also allowed us to track trends, outcomes, and possible variations in literacy and understanding across different geographical areas within Blaenau Gwent. Across Tredegar, Abertillery, and Ebbw Vale, we found a consistent level of media literacy pre and post-intervention.

One notable example of this iterative process was the addition of large printed definitions during the later workshops. We recognised that the participants were struggling to grasp the concept of "echo chambers," a crucial term in the context of social media algorithms. By introducing visual aids with clear definitions, and referencing them throughout the workshop, we addressed this gap in understanding. As a result, by the final workshop, participants demonstrated a significantly improved ability to explain the concept of echo chambers.

Additionally, some of the feedback we received after the initial workshop was that the videos were a little too long and that the volume was insufficient. Consequently, adjustments were made to shorten the videos slightly and ensure better sound quality by bringing a speaker in following workshops. Following this, we had no other significant suggestions for improvement.

Moreover, this methodology emphasised the importance of conducting thorough research before designing any workshop (see Discovery Report, Appendix 1). This preliminary research phase ensured that we had a clear understanding of the most important topics to focus on and avoided duplication of existing initiatives. By grounding the workshop design in comprehensive research, the project was able to provide a more targeted and relevant educational experience for the participants.

Co-design and co-delivery with young people

The project adopted a co-design and co-delivery approach, actively involving 3 young people aged 14 to 18 (the steering group) in the development and facilitation of the workshops. This collaborative model received positive feedback from both the steering group members themselves and the youth workers involved.

Young people have unique experiences, perspectives, and insights that can greatly inform and enrich projects aimed at their peers. By involving them in the co-production process, their voices and viewpoints are incorporated, ensuring greater relevance and

resonance with the target audience. The steering group members also reported that they felt their media literacy and understanding of social media algorithms improved after the project. They gained better awareness and knowledge of the terminology used, as well as concepts like echo chambers and how social media algorithms work.

In order to make collaboration easier, we used a mix of online and in-person weekly meetings. This setup made it easy to connect virtually, making it convenient for everyone to attend while still enjoying the benefits of meeting in person when possible and needed e.g. school half term. One member said:

The balance between online meetings and in person meetings was good. You can bounce ideas off each other in person and get a lot done, but at the same time online was really practical to make it work around college. It also made in-person meetings more exciting because it wasn't every week.

Another stated that the in-person get-togethers, 'gave them something to look forward to."

Furthermore, the project found that a WhatsApp group chat was an effective communication tool when working with young people. This platform proved to be more engaging and responsive compared to traditional email communication, aligning better with the steering group's preferences. One member said:



The co-design and co-delivery process also pushed the young people out of their comfort zones, fostering personal growth and confidence. Creating the TikTok videos was a particularly challenging task for the steering group. One of them said:

I don't like filming myself. But at the same time, it was really good because it got me out of my comfort zone and I did it. Listening back to my own voice wasn't great. It was challenging, but not boring. It was super interesting to make the script and do my own little research on the topic.

Another member said:

Filming the videos and having to watch them was the most challenging part. Editing them was also quite tricky. I would feel more comfortable doing it now though, we're pros now. It's good though because I can add that to my portfolio as I'm on a media course.

By taking on roles as co-designers and co-facilitators, the steering group members had the opportunity to develop practical skills and gain exposure to a professional setting. One of them said:



The steering group's involvement in the project has already started to contribute to their future goals and aspirations. For instance, two of the group have included their work experience from the project in their university applications and personal statements. They have both since been offered their desired places to study Journalism and Multimedia, and Film and TV, at the end of the year. Another stated how useful it was to include as a reference when applying for an IT Apprenticeship.

Additionally, the steering group members were paid the Living Wage (£12/hour) for their contributions to the project, however they have all stated at the end of the project that they still would have taken part on a voluntary basis;



LEARNINGS

What worked well

Videos and game-based learning

One of the key elements that contributed to the project's success was the use of videos, particularly TikTok-style videos, and game-based learning activities, namely the Social Media Algorithm Bingo game we created and an adapted game of Snakes and Ladders.

By presenting complex concepts such as social media algorithms and echo chambers through short form videos created by their peers from the same area and engaging games, the workshops were able to capture the attention and interest of the young people participating.

This interactive approach not only made the learning experience more enjoyable but also facilitated a deeper understanding about how young people can regain control over what they see online and have a more positive scrolling experience.

We also noticed that young people remembered concepts discussed in the Bingo game when asked about them during the Snakes and Ladders segment, as we made sure that both activities linked in with one another.

By adapting and creating our own 'Social Media Algorithm' versions of classic and well-known games, the activities were very quick to explain and easy to understand, which we found a crucial factor in maintaining engagement in the energetic and sometimes chaotic environment of the youth club.

Also, by adapting the Snakes and Ladders activity to a Q & A style (where young people had to correctly answer the question to be allowed to roll the dice and move forward), it also gave facilitators the chance to ensure the young people were familiar and had understood the key concepts of social media algorithms and echo chambers presented throughout the intervention, in a memorable and engaging way.

Use of incentives

The use of incentives in the form of prizes led to continued engagement and subsequent positive learning outcomes in our intervention. Offering sweets and £15 gift vouchers engaged young people from the beginning, fostering eagerness to

participate and friendly competitiveness among the group. Providing pizza as an incentive to complete the workshop also proved effective.

Iterative development

The iterative service design methodology ensured that the workshops were as engaging and effective as possible. Moreover, the service design methodology stresses the importance of conducting thorough research before developing services, workshops or solutions. By putting effort into this research upfront, we ensured that the workshops would address the actual gaps in young people's media literacy and avoid duplication of existing initiatives.

Co-design and co-delivery

Additionally, the co-design and co-delivery approach not only enriched the project's content and delivery but also provided valuable opportunities for the young people involved in the steering group. By working closely with them, the project helped them improve their skills, grow personally, and feel more ownership over the project. It also allowed us to benefit from their unique perspectives and experiences, making the workshops more meaningful and impactful.

What could be improved

While the project was successful, there are opportunities for improvement that can further refine future initiatives.

Partnership and collaboration

Collaborating with partners presented its own set of challenges. Delays in delivery were encountered when Boys and Girls Club lacked the capacity to recruit and co-produce with the steering group as well as meet other deliverables as originally intended in the project plan, ultimately requiring ProMo to take on these responsibilities.

This experience shows the importance of being able to adapt plans and be flexible where necessary to mitigate potential roadblocks in the project timeline. Moreover, creating resources, conducting research, and working with the steering group proved to be a long process.

Alternative incentives

Additionally, we recognised that while the provision of sweets and pizza was well-received by the young people and the youth clubs, the inherent appeal of the games and activities might have been enough to make them interested and engaged. A different approach to incentives could therefore be explored.

Targeting under 18s on social media

One last challenge we faced was the difficulty in targeting young people on social media with our six short form videos created by the steering group, due to recent legal changes that now forbid targeted advertising to young people under the age of 18. This shift in regulations, (despite being a change that we, as an organisation, welcome) which occurred after the initial project bid, made it harder to connect with the audience we were trying to reach online.

Evaluation surveys

Lastly, the evaluation questionnaires designed for young participants created challenges in terms of completion and capturing medium-term outcomes. Some young people were able to complete the forms on their own, but in many cases ProMo and the youth workers had to support them to complete the forms.

Due to the delays in delivery and the nature of voluntary participation in youth clubs, it was impossible for us to revisit the youth clubs and assess the medium-term impact within the designated project timeline. While anecdotal evidence from two individuals who attended multiple workshops suggested an increased understanding compared to their previous participation, we were not able to effectively prove these longer-term outcomes.

LEGACY AND SUSTAINABILITY

The project had a positive impact on the target group of 11-14 year olds. Over 3/4 of participants said the workshops changed how they think about social media. Moreover, the youth workers involved also gained a deeper understanding of algorithms and media literacy through their participation. When planning the workshops, we made sure that the design and implementation could be easily replicated and sustained, so that its positive effects can reach far beyond the first interventions.

One important reason why the workshops can be easily replicated is because they're very affordable. By using inexpensive materials and fun games like snakes and ladders, the workshops can be done with a limited amount of money. This budget-friendly aspect makes it easy for other groups or communities to copy and tweak them, no matter their financial limitations.

To facilitate easy replication, the project team has created a comprehensive set of resources, including detailed scripts and session plan (see Appendix 10). These materials serve as guides, providing step-by-step instructions and ensuring consistency in the delivery of the workshops. With these resources available, any interested party can confidently implement the project, minimising the need for extensive preparation.

Notably, the Boys and Girls Club, a pan-Wales organisation, has already expressed interest in delivering the workshops again. This early adoption by a key stakeholder shows the project's potential for sustainability.

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APPENDICES



Community-based media literacy interventions in Blaenau Gwent

Discovery report

Prepared by ProMo-Cymru

July 2023

1. Introduction

A. Overview of the project

Commissioned by Ofcom, the aim of this project is to address the specific needs and challenges faced by young people (aged 11 to 14) in Blaenau Gwent regarding online media literacy; empowering them (and professionals) with the necessary skills and support to improve their digital experiences, promote safe and responsible online behaviour, and navigate the digital landscape effectively.

Using a service design methodology, ProMo-Cymru has gathered insights into young people's online behaviours, knowledge, and concerns through online surveys and an in-person focus group to identify gaps in their media literacy needs.

Based on the findings presented in this report and in collaboration with Blaenau Gwent Youth Service and Boys and Girls Club Wales, ProMo-Cymru will recruit a steering group (young people aged 14 to 18) to help co-design educational activities and workshops for the target group to meet these needs.

The steering group will help us refine and test these interventions, ensuring they align with their desired online media literacy outcomes and fit the target audience. Continuous evaluation and iteration will improve the interventions.

Finally, the refined activities and workshops will be carried out across Blaenau Gwent to provide media literacy support to young people.

The project will empower the steering group by involving them in the co-design process, whilst also contributing to a wider body of Ofcom's work assessing and evaluating media literacy initiatives and sharing best practice across the sector.

B. The service design methodology

This service design methodology, created by the British Design Council, is a well-defined approach that will ensure that the end deliverables truly work for their users (in this case, young people aged 11 to 14). The approach is split into four stages: Discovery, Define, Develop, Deliver.

The first step of this methodology is the discovery phase. During this phase, a piece of research is conducted in order to fully understand the needs, behaviours and experiences of the target audience of the project. This can be done through desktop research, interviews, focus groups, questionnaires, etc. The present report is the result of this first phase.

In the define phase, the information, data and evidence gathered in the discovery phase are analysed in order to decide what's most important to focus on.

In the develop phase, potential solutions are developed and tested on a small scale. Data is gathered throughout this phase in order to learn about what works and what doesn't work in the solutions tested.

Finally, in the deliver phase, ideas that have been iterated throughout the develop phase are launched on a bigger scale. Although this is the last phase, the service or solution chosen should be constantly adapted based on feedback to ensure it continues to meet users needs.

2. Research Methodology

The methods used to gather data in this discovery phase include a focus group, an online survey, and desktop research.

The focus group was conducted at a Tredegar Youth Club meeting with two young girls aged 11 and 12. The session was structured to encourage open discussions and explore diverse perspectives.

The online survey questionnaire was carefully designed to cover key aspects of the research topic and was relayed by Boys and Girls Club as well as Blaenau Gwent Youth Service to 51 young people aged 11 to 14, all living in Blaenau Gwent.

3. Desktop Research

Throughout the research around young people's media literacy, the themes of algorithms and online space kept resurfacing, prompting us to undertake a more comprehensive exploration.

Algorithms play a role in the spread of disinformation online. Young people with poor media literacy sometimes comment on, like or share fake content they mistake as reliable, contributing to the spread of that content online (by triggering the algorithms to recommend the content to other users). Young people also comment on some of this content to signal the disinformation to others: 'Our *News Consumption Survey* found that 15% of 12-15s said they would leave a comment on a piece of misinformation identifying it as 'fake news', and 14% would share it with people to tell them it was not true. By doing this, children may unwittingly be spreading this potentially harmful content further.' (Ofcom, 2022).

When trying to protect themselves and their privacy online, young people can do more wrong than good. 'When asked which measures they used to protect themselves online, more than a third of children aged 12-17 (35%) reported using measures which might in fact have put them more at risk, because they could enable them to come across potentially harmful content. This included a fifth who had surfed in incognito mode (21%), had deleted their browsing history (19%), and one in twenty who had circumvented parental controls put in place to stop them from visiting certain apps and sites (6%), or used a proxy server to access particular apps and sites (5%)' (Ofcom, 2022).

Algorithms are what shape young people's online space, which is an important part of their daily lives. 'Data from CHILDWISE showed that children aged 7-16 estimated they spent an average of just under three and a half hours a day online in 2021' (Ofcom, 2022).

While our recent time spent in lockdown started changing perspectives regarding the potential benefits of spending time online, 'reports on teens and social media continue to highlight "harms" and "vulnerabilities", and the flurry of interest in social media as a benefit during lockdown has subsided. In fact, debates over the impact of social media on teens - and on teen girls in particular - are growing increasingly heated, with platforms such as Instagram repeatedly described as "toxic". They are blamed for teen girls' vulnerability to depression, anxiety and low self-esteem' (Apter, 2023).

However, young people's online space have both positive and negative repercussions on their mental health: 'Our research found that more than half of 13-17-year-olds agreed that being online was good for their mental health (53%), with 14% strongly agreeing with this, and a minority felt that being online was bad for their mental health (17%). Respondents were also twice as likely to say that they felt more relaxed online (43%) than they did offline (21%). Similar proportions said that being online made them feel better about themselves or improved their self-esteem (38%), while less than half of this group said that being online made them feel worse about these things (17%)' (Ofcom, 2022).

Social media and young people's online space has proven to have some positive effects on their life, if used more mindfully. For instance, 'Disrupt Your Feed revealed that changing or 'disrupting' the homogeneity of what teens consume on social media via the introduction of new, diverse female role models into the social media feeds of girls aged 14 to 18 yrs - rather than just restricting social media usage - lead to many positive outcomes.' (Apter, 2023). The project has shown that 'by offering teen girls a diverse range of female role models to follow, aligned with personal interests and career aspirations, it positively impacted their experience of and reaction to social media' (Apter, 2023).

Still, trying to take control of social media feeds, and understand algorithms and how they work can be difficult. Algorithms operate behind the scenes and research has shown that

'users are unlikely to notice algorithms in their everyday use, until they start producing unexpected, irrelevant, or uncanny results. However, when algorithms behave as expected, they blend into the background, making them difficult to distinguish' (Swart, 2021). Understanding and knowledge around algorithms differ highly from one young person to another, 'some had never heard of the word "algorithm" at all; others could describe categorization, profiling, and personalization processes in detail' (Swart, 2021). Interestingly, research also shows that young people's understanding and perception of algorithms change from one platform to another, from one feature to another and according to the type of content. 'Somewhat surprisingly, high algorithmic awareness in one context does not necessarily make users more conscious about potential algorithmic curation in other situations' (Swart, 2021). This lack of understanding of how algorithms work can discourage young people to try and challenge them. 'Young people with low algorithmic awareness in particular tended to downplay the effect of their own behavior on the algorithm' (Swart, 2021).

4. Online Surveys Results

Our survey was distributed to 51 young people aged 11 to 14 living in Blaenau Gwent. 26 of them identify as male, 25 as female. 8 of them are 11 years old, 16 of them are 12 years old, 16 of them are 13 years old and 11 are 14 years old.

The first two questions regarded how young people felt after spending time scrolling online. 47.1 % reported never (25.5%) or rarely (21.6%) feeling down or sad after spending scrolling. 17.6% reported feeling sad all the time (7.8%) or often (9.8%). 35.3% said sometimes.

23.5% reported never (3.9%) or rarely (19.6%) feeling happy and energised after spending time scrolling. 49% reported feeling happy all the time (7.8%) or often (41.2%), 27.5% said sometimes.

We also found that the older the respondent, the more negative they felt after spending time scrolling online. Amongst those young people, those who felt negatively were more likely to be male. The younger the respondent, the less negative they felt after spending time online. Younger respondents who did feel negatively about spending time online, were much more likely to be female.

When asked about the amount of time they wished to be spending online, 35.3% of young people said they wanted to spend the same amount of time online they already do. 31.4% reported wanting to spend less time online, 9.8% wished they would spend more time online and 23.5% said they weren't sure.

17.6% of young people reported feeling like they had no control or little control over what they saw online. 47.1% felt like they only had some control, 25.5% a lot of control. Only 9.8% felt like they had 100% control of what they saw online. We found that 11 year olds were significantly less confident than other age groups in the amount of control they have over what they see online.

28% reported never thinking about why influencers post the content that they post and 61% said they do so only sometimes. 12% reported wondering about the why very often. 32% said they never or rarely take time to think about whether the content they come across online is fake and 45% said they only think about this sometimes.

Regarding algorithms, the majority of answers to our questions were 'I don't know'. That includes questions about what an algorithm is (70.6%), who creates them (39.2%), the activities impacted by algorithms (45.1%), what has an impact on their feeds (43.1%) and how to escape algorithms (70.6%).

14 year olds were significantly more confident than younger age groups in what they thought algorithms were, however a portion of these did incorrectly identify what algorithms were. 11 year olds were the least confident in their knowledge of algorithms, however only 12 % gave wrong answers.

Although algorithms are a complex subject largely misunderstood by young people, they proved to have at least some understanding of certain mechanisms behind them. For instance, 35% correctly identified the time they spent on a video as influencing what they would later see in their feed. The same goes for commenting, liking, saving or sharing posts (29.9%) and what accounts they follow (29.4%).

5. Findings from Focus Groups

The focus group started with questions about what social media the participants use (TikTok, YouTube, WhatsApp, Messenger and Snapchat) and if they knew what an algorithm is.

Similar to the online survey, the participants stated not knowing what an algorithm was nor had heard of the word in the context of online presence before. They also hadn't heard of echo chambers nor online bubbles. However, they showed an understanding of what made some content appear first in their social media feeds rather than other content (they mentioned topics they had searched previously, other people recommending that content and the number of views on a video/post). 'If you watch videos where people are cooking pasta, then more videos about making pasta will pop up in your feed'.

When asked why the content at the top of Google search was at the top, they responded that it was the content that Google was recommending to them. They also noticed that some apps (Spotify and YouTube) have a 'recommended for you' feature which they reported finding helpful at times.

When asked if they ever felt happy or energised after spending time online, the answer was yes. One of them expanded: being online allowed her to learn new dances, how to skateboard and new recipes (like learning how to make Oreo cakes). When asked if they ever felt sad or worried after spending time online, the answer was also yes. One of them described videos of a dog falling off a skateboard and the other one more disturbing videos where animals were hurt. They stated this sort of content kept being shown to them and when asked why they thought that was, they said it was because they had watched it when it was first presented to them. The 11 yo said she was happy that Tiktok kept showing her videos of recipes and dance. The 12 yo said it was good when she was being shown things she had had an interest in before, but that she sometimes got annoyed at seeing too much of the same content.

The 11 yo said she sometimes posts dancing videos on Tiktok, and that she gets nice comments as well as nasty ones from random people which make her feel sad sometimes. She doesn't know how to stop that, she said she blocks and reports these comments but not all the time. She does not want to turn off the comments function altogether as she does not want to stop people leaving nice comments.

Both participants were aware that not everything they see online is true. They gave us an example of people who acted like Addison Rae's cousin. They said these videos would pop up in their social media feeds because a lot of people had watched them. When asked why they think people do that, they said to get famous and to make money. Both went on to explain that people can make money off views on their videos, and that when someone reaches 1000 followers on Tiktok, that person can then go live and people online can send them money during the live. Both participants said they had never sent money to anyone on Tiktok.

One of the participants said she felt like a lot of what she sees online is fake, but then if she saw that a lot of videos were made about the same topic then she usually started to think it was real. She also mentioned that another way she was checking if the content was real or not was by checking what was in the caption.

The discussion moved on to the level of control young people had over what they saw online, the 11 yo said she didn't feel like she had any control at all, while the 12 yo said she felt like she had some level of control, she mentioned privacy settings and how things were different with different apps.

Regarding the time they spent on their phone, the 11 yo said she averaged 5 hours per day of screentime and wanted to spend more time on her phone. She said she enjoyed the things she could do with her phone (like cooking), but she was actually glad she didn't bring it to the youth club that day as she was enjoying the club's activities more than usual. The 12 yo averaged 3.5 hours a day of screentime and thought that was too much time. Her phone had been broken for the past week and she noticed she had more time to allocate to her schoolwork, and was less distracted while completing it. She added she had more time for other activities as well, such as being active. She also stated she would like to spend less time on her phone and more time being active.

Finally, participants mentioned workshops they attended with school where they learned about internet safety (firewalls, cyber security, etc.) and digital footprint (these were workshops from an external provider in the area). They reported that these workshops changed some of the things they do online - for instance, they are now aware that it's best not to add strangers as their 'friends' on social media and they are more careful about what they share online. 'When you post something, even if you delete it, people can still find it. It's always there.' They demonstrated high levels of knowledge about internet safety due to these workshops and expressed an interest in learning more about their online space through further workshops etc.

Notes

Due to the number of participants and to ensure the best possible engagement from the young people, the youth workers (5 in total) were encouraged to participate in the discussion, but instructed to only participate after the young people had answered first. The majority of youth workers seemed engaged with the topics and keen to learn more.

The youth workers didn't have high levels of knowledge around algorithms/echo chambers and were more knowledgeable about online safety (as were the young people). However, they had higher levels of media critical thinking than the young people.

6. Key findings

A. Being online can be beneficial for young people

Young people's online space is an important part of their lives, and this can both positively and negatively affect them. The Internet is a free way for them to connect with others, entertain themselves, and learn. For these reasons, rather than stopping or reducing online time or social media usage, it is crucial for young people to develop critical thinking skills

around algorithms and their online space. This will empower them to take more control over what they see online and enhance their online experiences.

B. Young people have some understanding of what algorithms are, but it's limited

Although algorithms are a complex subject largely misunderstood by young people, they proved to have at least some understanding of certain mechanisms behind them, despite not always being able to use and recognise the exact terminology. For example, the majority of young people were not able to define or guess specifically what an 'algorithm' was, however some did demonstrate awareness that their user habits and preferences were customising their online experience. This understanding however is limited and varies from platform to platform, according to the type of content, and age of respondent. Our findings demonstrate that these young people rarely stop to critically analyse the presence of algorithms further, resulting in them feeling somewhat powerless in shaping their online space and stopping them from engaging in ways to take over some control.

C. Workshops and interventions can have a positive impact on young people's lives

Interventions and workshops show promising results in terms of positive impact on young people's lives. Participants in the focus group stated that they had attended a workshop in their school on Internet safety (including digital footprint, firewalls, privacy settings etc) and said that it had a positive impact on their online behaviour. They consequently demonstrated high levels of knowledge about internet safety. Likewise, The Disrupt Your Feed project reported a long lasting positive impact on young girls' lives and aspirations. 'Participants from the original project described a lasting impact on their relationship with social media. Three specific outcomes continued long after the intervention ceased:

- Participants became more aware of how social media was affecting their mood and, as a result, were more careful users.
- The effect was long lasting but was tied to the specific social media platforms upon which they had applied Disrupt Your Feed (the intervention).
- Their career goals became more aspirational.
- They were using social media less overall' (Apter, 2023).

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 $https://www.thefemalelead.com/_files/ugd/05606b_fea474c9456f4a79b280a330c6fd7294.\\pdf$

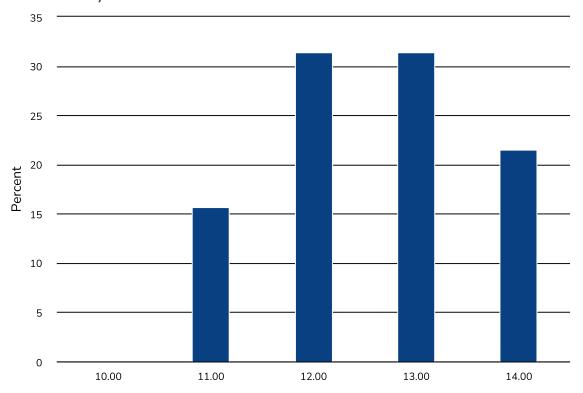
Appendix 2: Discovery Survey Results

Report for Ofcom - Online media literacy survey



Totals: 51

1. How old are you?



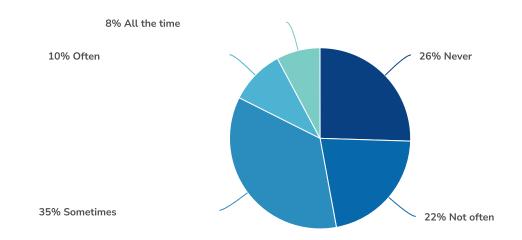
2. Your gender

ResponseID	Response
1	Male
2	Female
3	Make
4	Male
5	Male
6	F
7	Male
8	Female
9	Male
10	Male
11	Male
12	Male
14	Male
16	Female
18	Female
21	Female
22	Male
23	Female
26	Male
28	Male
29	Female
30	Male
31	Female

ResponseID	Response
32	Male
33	Female
34	Male
35	Female
36	Female
37	Female
38	Femal
39	Female
40	Male
41	Male
42	Male
43	Male
44	Female
45	Female
46	Female
47	Female
48	Female
49	Female
50	Male
51	Female
52	Female
53	Male
54	Male
55	Male

ResponseID	Response
56	Male
57	Female
58	Male
59	Female

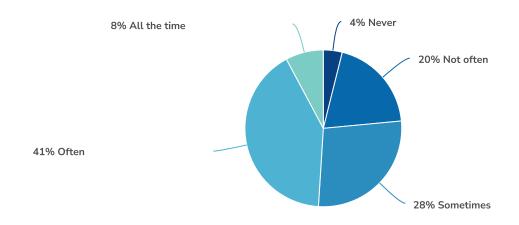
3. How often do you feel sad/down after spending a lot of time scrolling online?



Value	Percent	Responses
Never	25.5%	13
Not often	21.6%	11
Sometimes	35.3%	18
Often	9.8%	5
All the time	7.8%	4

Totals: 51

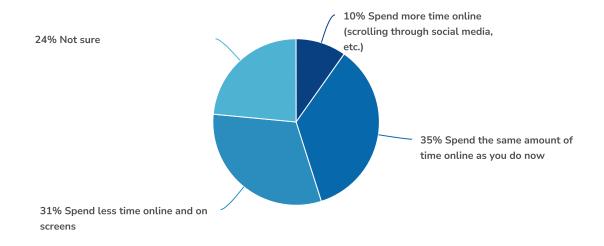
4. How often do you feel energised/happy after spending a lot of time scrolling online?



Value	Percent	Responses
Never	3.9%	2
Not often	19.6%	10
Sometimes	27.5%	14
Often	41.2%	21
All the time	7.8%	4

Totals: 51

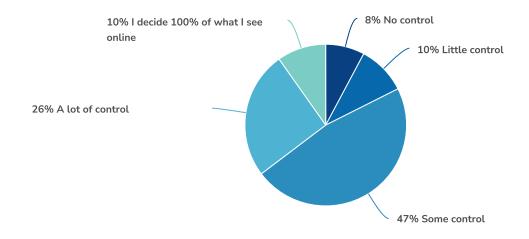
5. Do you want to:



Value	Percent	Responses
Spend more time online (scrolling through social media, etc.)	9.8%	5
Spend the same amount of time online as you do now	35.3%	18
Spend less time online and on screens	31.4%	16
Not sure	23.5%	12

Totals: 51

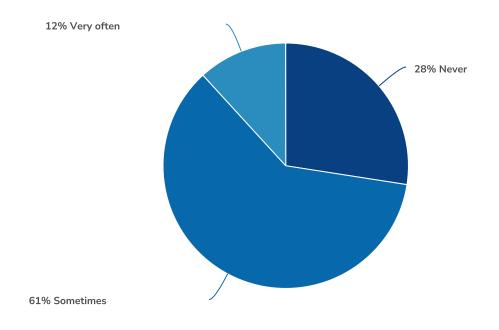
6. How much control do you have over what you see online?



Value	Percent	Responses
No control	7.8%	4
Little control	9.8%	5
Some control	47.1%	24
A lot of control	25.5%	13
I decide 100% of what I see online	9.8%	5

Totals: 51

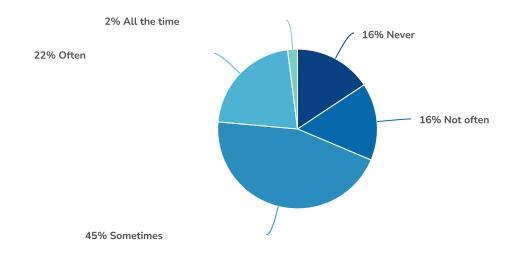
7. Do you ever wonder why influencers post the content that they post?



Value	Percent	Responses
Never	27.5%	14
Sometimes	60.8%	31
Very often	11.8%	6

Totals: 51

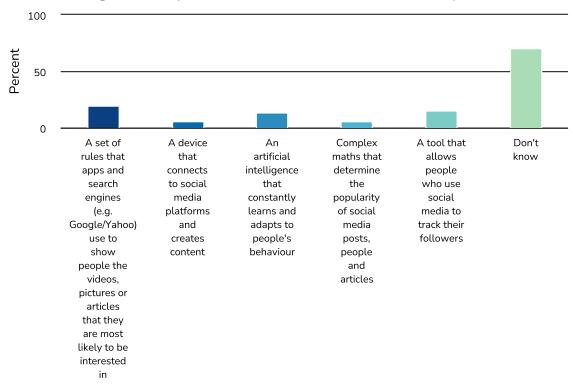
8. Do you take time to think about whether what you are seeing/reading/watching/sharing online is true or fake?



Value	Percent	Responses
Never	15.7%	8
Not often	15.7%	8
Sometimes	45.1%	23
Often	21.6%	11
All the time	2.0%	1

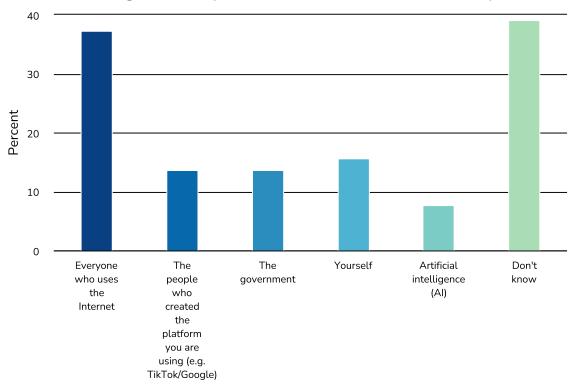
Totals: 51

9. What is an algorithm? (You can tick more than one box)



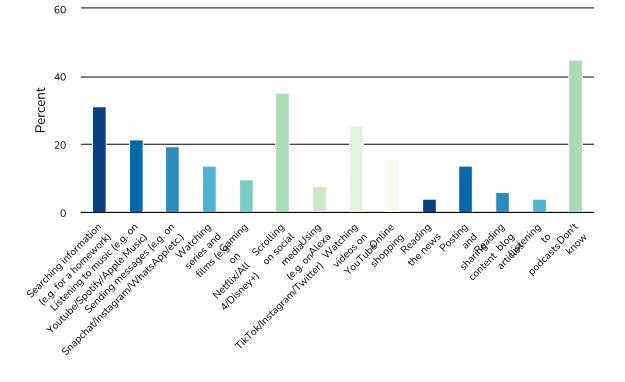
Value	Percent	Responses
A set of rules that apps and search engines (e.g. Google/Yahoo) use to show people the videos, pictures or articles that they are most likely to be interested in	19.6%	10
A device that connects to social media platforms and creates content	5.9%	3
An artificial intelligence that constantly learns and adapts to people's behaviour	13.7%	7
Complex maths that determine the popularity of social media posts, people and articles	5.9%	3
A tool that allows people who use social media to track their followers	15.7%	8
Don't know	70.6%	36

10. Who creates algorithms? (You can tick more than one box)



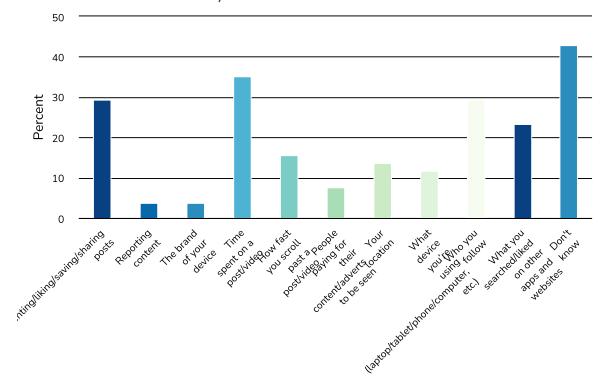
Value	Percent	Responses
Everyone who uses the Internet	37.3%	19
The people who created the platform you are using (e.g. TikTok/Google)	13.7%	7
The government	13.7%	7
Yourself	15.7%	8
Artificial intelligence (AI)	7.8%	4
Don't know	39.2%	20

11. When online, which of your activities are impacted by algorithms?(You can tick more than one box)



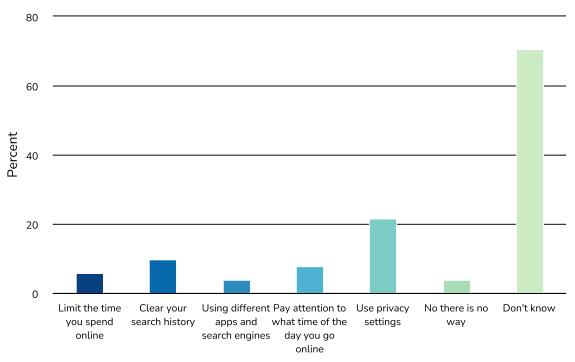
Value	Percent	Responses
Searching information (e.g. for a homework)	31.4%	16
Listening to music (e.g. on Youtube/Spotify/Apple Music)	21.6%	11
Sending messages (e.g. on Snapchat/Instagram/WhatsApp/etc.)	19.6%	10
Watching series and films (e.g. on Netflix/All 4/Disney+)	13.7%	7
Gaming	9.8%	5
Scrolling on social media (e.g. on TikTok/Instagram/Twitter)	35.3%	18
Using Alexa	7.8%	4
Watching videos on YouTube	25.5%	13
Online shopping	15.7%	8
Reading the news	3.9%	2
Posting and sharing content	13.7%	7
Reading blog articles	5.9%	3
Listening to podcasts	3.9%	2
Don't know	45.1%	23

12. What has an impact on your social media feeds/online searches?(You can tick more than one box)



Value	Percent	Responses
Commenting/liking/saving/sharing posts	29.4%	15
Reporting content	3.9%	2
The brand of your device	3.9%	2
Time spent on a post/video	35.3%	18
How fast you scroll past a post/video	15.7%	8
People paying for their content/adverts to be seen	7.8%	4
Your location	13.7%	7
What device you're using (laptop/tablet/phone/computer, etc.)	11.8%	6
Who you follow	29.4%	15
What you searched/liked on other apps and websites	23.5%	12
Don't know	43.1%	22

13. Is there a way to escape algorithms online? (You can tick more than one box)



Value	Percent	Responses
Limit the time you spend online	5.9%	3
Clear your search history	9.8%	5
Using different apps and search engines	3.9%	2
Pay attention to what time of the day you go online	7.8%	4
Use privacy settings	21.6%	11
No there is no way	3.9%	2
Don't know	70.6%	36

Appendix 3: Evaluation framework

Define the problem

- → Young people are not algo literate (Children's Media Use and Attitudes Report, Ofcom Report 2022)
- → Echochambers (extremism, polarisation of political views etc.) are amplified and made worse by algorithms
- → Young people are passive consumers of content
- → Professionals working with young people are not informed about algorithms
- → Algorithms are influencing the way we perceive the world, and the more we consume (screentime), the more we are influenced
- -> Social media companies using algorithms designed to capture and maintain people's attention, ultimately generating profit

What are we doing about the problem and with whom?

We're testing and iterating these interventions, we're learning and sharing the results with other professionals working with young We're talking and listening to young people to better understand how they understand algorithms and co-design interventions with them.

What difference does your initiative make?

Participants have learnt strategies/coping mechanisms to increase their personal online resilience. Young people are more algo literate and are taking control over their online space.

How could these differences contribute to wider societal change?

Young people and professionals working with young people are more educated on algorithms and their impact, resulting in young people being better equipped to navigate and shape their online space.

A: Details of inputs,	Inputs	Activities	Outputs	Immediate outcomes	Medium outcomes	Long term outcomes
activities, outputs, outcomes	Funding from Ofcom	Conduct surveys and focus groups	A discovery report capturing the learning	Young people have an increased awareness	Young people employ critical	Better informed young people
	Project Staff	Recruit a steering group of 14-18 vo and	of focus groups and the number of young	work	more regularly	Better informed professionals
	Partnership with Boys	co-design interventions with	people taking part in focus groups)	Young people have an increased understanding	Young people	working with
	and Girls	them	The solution of T	of algo-literacy	control over their	0
	CIUD Wales	Delivery and testing of	people attending the	Young people have an	Offille space.	
	Partnership with BG	interventions and workshops	workshops	increased algo-literacy and critical thinking skills	Increased use of reliable sources of	
	Youth Service	-	The number of young)	information	
	Previous	Iteration of interventions and	people on the steering group	Professionals are better informed about		
	research shared by	workshops	Number of times the	algorithms and have a better understanding on		
	Ofcom	Capturing learning	resources were viewed	how to support young		
		Discovery report)		people to have a positive experience online		

B: Who are the relevant target groups?	11-14 year old (referred to as young people throughout this document) 14-18 year old (referred to as steering group throughout this document) Professionals working			
C: What relevant data do you need?	for BGC Awareness Skills Understanding Behavioral change	Awareness Skills Understanding Behavioral change	Awareness Skills Understanding Behavioral change	
D: What methods will you use to collect the data?	Desktop research Focus Groups Online surveys Interviews	Focus Groups Online surveys Interviews	Focus Groups Online surveys Interviews	
E: What factors beyond your control might confluence this stage?	Low survey response rates Lack of engagement			

Appendix 4: Evaluation scope and methodology

Evaluation scope

The scope of the evaluation will encompass the following key areas:

- Impact evaluation: Evaluate the extent to which the objectives outlined in the project proposal have been met, including improvements in young people's online media literacy skills.
- **Process evaluation**: Assess the process of intervention development, implementation, and delivery, including the effectiveness of the service design methodology employed, the involvement and engagement of the steering group, and the overall execution of workshops activities.
- Participant feedback: Gather feedback from young people who engaged in the interventions, including their understanding of social media algorithms after the workshops and their suggestions for improvement.
- Youth workers perspective: Obtain insights from youth workers involved in the project, including professionals from Boys and Girls Club Wales, and other youth workers who helped deliver the interventions. Assess their perspectives on the project's outcomes, collaboration efforts, and areas for future development.
- **Steering group perspective**: Gather feedback from steering group members regarding their experiences, challenges encountered, and perceived impact of their involvement in the project. Explore their perspectives on the effectiveness of the interventions, the value of their contributions, and any suggestions for improving future collaboration efforts.
- Recommendations: Provide actionable recommendations based on the evaluation findings to improve future media literacy initiatives and further support the digital empowerment of young people in Blaenau Gwent and similar communities.

Methodology

Our evaluation methodology employed a comprehensive approach to assess the impact and effectiveness of the project.

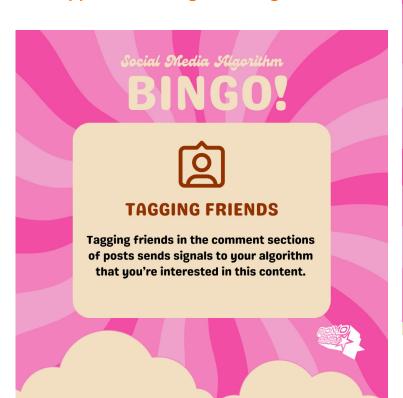
We utilised pre and post intervention surveys to gather data from the young participants, allowing us to measure changes in their knowledge, attitudes, and behaviours before and after the intervention. (see appendix 7)

Additionally, we conducted interviews with youth workers at the end of the project, providing valuable insights from those directly involved in the implementation process. Their firsthand experiences and observations offered a deeper understanding of the project's successes, challenges, and areas for improvement.

Furthermore, we facilitated a focus group with the steering group at the conclusion of the project. This group discussion allowed them to share their perspectives, discuss the project's outcomes, and provide feedback on the overall execution and achievement of the project's goals.

By triangulating data from these multiple sources – surveys, interviews, and the focus group – we aimed to obtain a comprehensive and well-rounded evaluation of the project's impact, ensuring that diverse viewpoints and experiences were captured and taken into account.

Appendix 5: Bingo drawing cards

















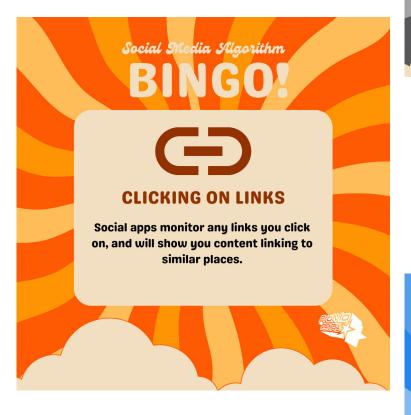
















UNFOLLOW / BLOCK ACCOUNTS

Unfollow or block accounts that post content you don't enjoy, and watch the unwanted vanish from your feed.

Bye!



Social Media Algorithm BINGO!



RE-PLAYING A UIDEO

Every time you re-play a video, a positive signal is sent to your algorithm, making similar content appear as you scroll.













CARD 2

Social Media Algorithm

BINGO!

ALL THE BOXES BELOW ARE ACTIONS THAT INFLUENCE WHAT YOU SEE ON YOUR FEEDS!





CARD 3

Social Media Algorithm

BINGO!

ALL THE BOXES BELOW ARE ACTIONS THAT INFLUENCE WHAT YOU SEE ON YOUR FEEDS!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





CARD II

Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm

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Social Media Algorithm

BINGO!





Social Media Algorithm

BINGO!





Social Media Algorithm Appendix 7: Snakes and ladders questions

SNAKES & LADDERS!

Before a player rolls the dice, they must first answer a question correctly!

Correct answers are in pink.

- I. What is a social media algorithm? a/a type of computer game b/ a set of rules that decides what content you see based on what you like and watch c/ virtual friend on social media
- 2. What do social media algorithms do? a/ Predict the weather b/ Decide what posts to show us c/ Create recipes
- 3. Who influences what you see on your social media feed? a/the prime minister b/you c/your teacher
- 4. True or False: Algorithms remember what you like and dislike. TRUE
- 5. How can you tell TikTok you don't want to see something? a/Shout at your phone b/ click not interested button
- 6. Yes or No: Does everyone have the same 'For You' page on TikTok? NO
- 7. True or False: If you share, watch, or comment on fake or negative posts, you will see more of it on your feed. TRUE
- 8. What's another word for filter bubble? a/Cloud b/ Filter square c/ Echo chamber
- 9. Yes or No: Can being in a filter bubble make it hard to know about different opinions? **YES**
- 10. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- II. How do you find the 'not interested' button on TikTok? Hold down or long click on video
- 12. Why does setting screen breaks help? a/ stops you from scrolling too much b /helps you block content.
- I3. What is the "Explore" page on Instagram and TikTok for? a/ shows popular posts b/suggests posts based on what you like c/ Both a and b
- 14. Yes or No: Is your social media feed the exact same as your friends? NO
- 15. True or False: Sending a video to a friend affects your algorithm. TRUE 16. True or False: Sending a video to a friend affects their algorithm. TRUE
- 17. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- 18. Yes or No: Can social media algorithms learn what you like over time?
- 19. True or False: You cannot control what you see on social media through settings. FALSE
- 20. True or False: Social media algorithms are designed to make you spend more time scrolling on the app. TRUE
- 21. Yes or No: Do algorithms play a part in which videos go viral? YES





Social Media Algorithm

SNAKES & LADDERS!

- 22. What is an echo chamber or filter bubble on social media? a/ a space where everyone says the same thing b/ a space where people share different thoughts
- 23. On TikTok settings, where do you go to type and filter certain keywords / hashtags out of your feed? a/content preferences b/screen time
- 24. True or False: If you replay a video, similar videos will show up as you scroll. TRUE
- 25. True or False: The longer you spend watching a video, the less likely similar videos will appear on your feed. FALSE
- 26. True or False: Social media apps remember what ads you click on. TRUE
- 27. True or False: Algorithms on social media show everyone the same posts at the same time. FALSE
- 28. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- 29. Why does social media use algorithms? a/to make posts disappear b) to show you content you might like so you stay on the app longer c/ to send you messages from your friends.
- 30. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- 31. What can happen if you always like posts about dogs on social media? a/you will be given posts about cats b/the algorithm will show you more posts about dogs c/ you won't see any animal posts anymore
- 32. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- 33. Yes or No: Do algorithms help social media platforms show you ads based on what you watch and like? **YES**
- 34. TRUE OR FALSE: What you like and watch on one app can affect what you see on another. TRUE
- 35. If you quickly scroll past content you will a/see more of it b/see less of it
- 36. What can you do if you don't like what an account is posting or sharing? any of these accepted unfollow / block (you can also report)
- 37. What is doom scrolling? a/watching lots of dance tiktoks b/endlessly scrolling through depressing and negative stuff
- 38. What is a filter bubble a) a magical bubble that protects your phone b/ a way of organizing your photos c/ a situation where you only see information that agrees with your beliefs
- 39. Name one action from the bingo cards that affects what comes up on your feed (see bingo cards).
- 40. How would you describe an algorithm? a/a type of computer b/ a set of rules that decides what content you see based on what you like and watch c/ a popular video game





Appendix 8: Post intervention questionnaire

Name:

Social Media Algorithm

MINI QUIZ

Fill out this super quick mini quiz to claim your prizes / pizza!

Age:
I. How would you describe what a social media algorithm is?
2. Can you name three actions that affect your social media algorithm and what you see on your feed? (think back to the bingo game squares!)
1.
2.
3.
any more?
3. Where can you go on apps to set screen time breaks and filter out keywords/hashtags you don't want to see?



Social Media Algorithm

MINI QUIZ

Fill out this super quick mini quiz to claim your prizes / pizza!

4. How can you make your social media feed and the content you see more positive?

5. Did the workshop change the way you think about what you see on social media? Please circle: YES / NO

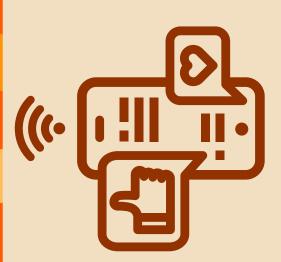
If yes, how?

6. How would you describe an online filter bubble / echo chamber?

7. What was your favourite part about the workshop?

8. How could we make the workshop better?

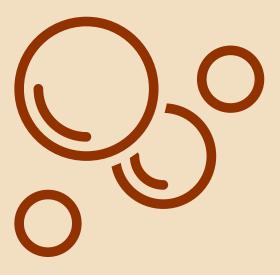




SOCIAL MEDIA ALGORITHMS

A social media algorithm is like a behind-the-scenes secret agent who learns from your likes, comments, and actions online to show you posts on your feed it thinks you'll like.





ECHO CHAMBERS / FILTER BUBBLES

An echo chamber or online filter bubble is like living in a bubble algorithms show you familiar content on your feed, making it where you only see and hear the same stuff. Social media tough to explore different views or learn new things.



Appendix 10: Workshops script

Equipment:

- X2 snakes and ladders mats with dice
- Projector (with adaptors)
- Speaker
- Sticky notes and pens
- Prizes
- Bingo playing and draw cards
- Bingo pens
- Mini quiz
- Snakes and ladders q's
- Cones

Script:

Set up:

- Set up projector and videos ready
- Get youth workers to arrange the Dominos with Meg's card.
- Stick up social media algorithm definition
- Remember to get pictures throughout (blur faces)

Start - 5mins

Hi guys! {introduce all our names} We're here today to play some fun games where you can win prizes like bags of goodies and gift cards that you can spend in loads of different shops, restaurants, online, gaming and more - and you'll learn a bit about how you can make your time on social media happy and positive rather than all depressing and negative, and learn why you see what you see on your social media feeds. After all this, we'll have a yummy Domino's pizza munch!

Post-its - 10mins

So super quickly before we start, we're just going to ask you three quick questions to see what you already know. So write your name in the corner of three of these sticky notes - and we're going to ask you the questions. If you answer yes, go to this side of the room, and if you don't know, go to this side. It's not a test - you won't have to read out your answers. It's okay if you don't know and it doesn't affect anything for the rest of the session.

- Q1. Have you ever heard of 'social media algorithms'? YES / NO - If yes, what do you think they are? If not, what do you guess?
- Q2. Do you know how social media decides what you see on your feed? YES / NO now write how you think they do / or have a guess.
- Q3. Have you heard about "echo chambers / online filter bubbles" before? YES / NO If yes, what do you think they are? If not, what do you guess?

Videos - 8mins

Now we're going to watch some super quick videos. Pay really close attention to everything they're saying and remember what they say as this will help you win the prizes in the next two rounds!! (not everyone will win a prize so it's quite competitive! Then we'll get stuck into the good stuff.

(Combined video in order of showing)

- 1. Why We Can't Stop Scrolling
- 2. Millie TikTok hashtags
- 3. George TikTok settings
- 4. Filter Bubbles https://www.youtube.com/watch?v=pT-k1kDIRnw
- 5. Evie TikTok not interested button

Bingo - 15 mins

- 1. Hi everyone, I'm {your name}, and today, we're going to play a special version of Bingo, where each square represents a different action that people do on social media that influences what you see on your social media feeds.
- 2. As we go through the game, you'll discover how algorithms work on social media.
- 3. Each card has a 5x5 grid and the goal is simple: taking turns, you're going to come up here and randomly draw a card from this table and everyone can mark off that action on their Bingo grid with your special bingo pens.
- 4. The first person to complete a row (in a horizontal line across only, not vertical (going down) or diagonal), shouts "Bingo!" and wins a bag of goodies.
- 5. Then, the first person to complete their whole grid shouts 'House' and wins a £15 gift voucher that can be spent in loads of restaurants like Nandos, loads of different shops (clothes & sports etc), online games, and more. If more than one person shouts at the same time, then we'll go into a tiebreak game!
- 6. Pay attention to all the squares too, as they will help you to win the next game of snakes and ladders.

Tiebreak games:

- Who can name the most bingo cards?
- One of us draws one card from the bingo. Then they have to define it. They make up their own buzz word also.

Snakes and Ladders - no longer 20mins - go with the flow with rules etc. To roll, they must first answer the question correctly, and then you can roll and move your cone. First to reach the end, or the furthest along the board when the timer ends will win!

Mini Quiz. We're not going to check your answers today but just try and put as much as you remember on them. 5 - 8 mins

Pizza Time!

Total time: roughly 1 hour