**BATMEN Newsletter 03/2023** 

#### **THE CONTEXT**

We are living in an era where simple facts are not as simple as they seem to be at the beginning. So called post-fact era is at its beginning and nobody really knows what it will look like in the future. Fake news and disinformation are becoming mainstream and have impact on the future societies and electoral turnouts. Their main strength is the ability to adapt to the perception of online users. It's feeding the basic stereotypes and prejudices of online users. Societies are turning back from the mainstream politics and media and they are becoming less critical to the context that they are reading.

This trend was seen in the results from the Media Literacy Index 2019 and with comparison to the year 2017.

CEE countries regress most with the Czech Republic, Slovakia and Poland marked the biggest deterioration. They were followed by Latvia, Lithuania, Croatia, Hungary and Romania and Austria, Malta, and Serbia. The lack of critical and contextual thinking in the post-truth era also caused the gap and distrust between citizens.

#### **THE AIM**

The main aim of the project proposal is to debunk social bubbles that are emerging in the online sphere that are dividing our future generation. Our proposal is based on our former research project that develops a set of questions to uncover who is vulnerable to become affected by their own social bubbles created in the online sphere.

Our attention is also to develop and design an interactive web application that will help young people to check on their level of "bubble vulnerability" and to help them to understand the negative impact on them in real life.



Newsletter

03/2023

Maya woke up and rolled over to grab her phone from the nightstand. She squinted as the bright screen lit up. Before she could even think, her fingers automatically opened up Facebook. Scroll, scroll, double tap, laugh react - she breezed through her feed barely glancing at each post. But something made her pause. Her friend Sara had shared an article claiming vaccines caused autism in children. Maya frowned, knowing this wasn't true. She opened the article, ready to tag Sara and point out the inaccuracy.

But as she read through the post, the arguments seemed quite convincing. Could she have been wrong? The article was shared by others in her social circle too. Maya hesitated, then kept scrolling. Over the next few days, Maya noticed more of such articles and posts. Anti-vaxxer groups, alarmist claims about chemicals in food, even flat earth theories. Had these always been here or were they new? Maya wondered if she was only noticing them now because of her initial hesitation over Sara's post.

That's when it struck Maya - she was trapped in a social bubble, an echo chamber of her own thoughts and views. The algorithms had noticed her interest and were feeding her more of the same. And with each validating article or post, her own beliefs were reinforced.

Maya realized she needed to break out of the bubble, to seek different perspectives beyond her feed. She made an effort to read news from sources that challenged her assumptions. She subscribed to subreddits with opposite viewpoints so she could understand multiple sides of an issue.

And she learned to spot misinformation, recognize bias in others as well as herself. Maya had stepped out of the echo chamber, and gained a richer understanding of the complicated world. Her social bubble still existed, but it no longer defined her reality.

Storytteling The Social Bubble



BATMEN Newsletter 03/2023

Fake News Game torytteling

It's Saturday morning and 13-year-old Alex rolls out of bed and grabs his phone. He opens up a new augmented reality app his teacher told the class about called The Fake News Game. Alex points his phone around his bedroom and suddenly colorful creatures and objects pop up on the screen, overlaying his actual surroundings.

"Welcome to the realm of misinformation!" a voice booms. Alex's first task is to walk around his room looking for clues to spot fake news in a series of news articles that pop up in AR bubbles around him. As he reads through each headline and snippet, he has to tap whether he thinks it's real or fake news.

When he gets one wrong, a little red creature appears shaking its head. "Not quite! Watch out for exaggerated claims with no sources," the creature cautions. When Alex guesses right, a green creature does a celebratory dance and gives him a badge for being disinformation defender.

As Alex walks downstairs, the game continues, taking him through level after level of different missions to learn about biased language, doctored images, verification techniques and more. He can even play in multiplayer mode with friends and see who can spot the most fake news stories.

By gamifying the learning and bringing it to life through augmented reality, the app taps into Alex's natural motivation and makes serious conceptsinteractive and fun. Instead of just being told what to watch out for in class, Alex is actively immersed in a hands-on experience to build critical thinking habits.

And the skills apply in real-time too. Later when he sees questionable posts on social media, Alex feels empowered to analyze their credibility rather than be misled. He has leveled up in real life, gaining powers to see through the fog of misinformation.



Newsletter

Jenny swiped left on her phone, rolling her eyes at the obviously photoshopped image shared by a school friend on Instagram. "Don't they realize this is fake?" she wondered. She kept scrolling, double-tapping on familiar selfies and meme accounts.

F

M

After a few minutes, Jenny put her phone down, a gnawing sense of unease creeping up on her. Her feed was filled with the same type of posts shared within her social circle. She couldn't even remember the last time she had seen a different viewpoint or perspective. Was she trapped in a filter bubble?

The next day in class, Jenny's teacher Ms. Wilson announced an exciting new group project using augmented reality apps to identify misinformation online. Students raced to download the AR program onto their phones and tablets. When Jenny opened the app, she was greeted by a cute animated fox named Phillip. "Let's pop some filter bubbles!" Phillip said, explaining how the AR game allowed students to visually see their own bubbles and social media feeds.

As Jenny held up her phone, colorful clusters of bubbles appeared representing her online habits. Phillip helped her pinpoint echo chambers and understand how algorithms filtered her feed. To win, Jenny had to search beyond her usual sources to find credible information and diverse opinions. Over the next weeks, Jenny worked with classmates to strengthen their media literacy. They explored outside their filter bubbles, learned to fact-check sources, and discussed ways to balance their information diets.

For the first time, Jenny felt equipped to control her social media instead of being controlled by it. She realized just how vast the world was beyond her limited bubble. While still hanging out with her friends, Jenny now actively sought perspectives and voices she had never encountered before. She had leveled up her thinking.



Co-funded by the Erasmus+ Programme of the European Union

### BATMEN November 2010000

#### Newsletter

03/2023



Beyond the Bubble How Immersive Games Build Media Literacy Beyond the Bubble: How Immersive Games Build Media Literacy

A growing body of research demonstrates the power of gamification and augmented reality to engage and educate young learners. These technologies provide active learning experiences that mirror real-world skills and behaviors.

Studies show that educational games incorporate key motivators like narrative, competition, accomplishment and—most importantly—fun. This fuels participation, increases knowledge retention, and enables practice of complex cognitive skills (Cheng & Annetta, 2012).

Specifically for augmented reality (AR), a meta-analysis found that AR doubled learning gains compared to traditional teaching methods across over 50 studies (Bacca et al., 2014). AR enhances education by immersing students in 3D environments that blend digital and real-life.



# BATMENSIET

Applied to misinformation and social bubbles, these technologies offer profound advantages. Research by Gallicano et al. (2014) reveals that games build critical thinking and analysis which transfer to evaluating credibility of news and sources.

Additionally, AR content personalized to each student's interests and habits provides targeted insights into their own biases and bubbles. This metacognitive approach is more impactful than generalized warnings about misinformation (Porter & Hellsten, 2014).

Through scaffolded levels and instant feedback, games and AR give youth agency to gain competencies as disinformation investigators and responsible digital citizens. Stanford researchers found that this active problem-solving equips students to apply skills in authentic social media contexts (Kahne & Bowyer, 2017).

While traditional classroom teaching has limitations, immersive gamification offers a new path. By leveraging student engagement and closing the gap between theory and practice, it represents promising pedagogy for the digital age. More research into specific implementations is warranted to fully realize its potential.



## **BATMEN**

**BRATISLAVA POLICY INSTITUTE** Bratislava, 2023

