

## **Investigating social networks algorithms with journalism students**

One of the many challenges that journalism education faces in today's changing news environment is the rise of the influence of infomediaries (Smyrnaio, 2017) - amongst which the GAFAM - and their algorithms. Social networks algorithms in particular can be considered as "actants" in news work (Lewis and Westlund, 2015). Their influence on the distribution and visibility of news is a challenge for media and journalists. They have an impact on what the audience sees and in doing so, can have an impact on both the formation of opinions amongst the audience and the economic health of news media. The public finds itself trapped in a "filter bubble" and the media are facing a "filtered audience".

If it wants to address current challenges, journalism education has to take these new actants into consideration. But how can these issues be effectively integrated into a university program? How can journalism students be led to apprehend the impact of algorithms on news consumption and distribution? Can a learning by doing approach enable a better understanding of the issues at stake?

This communication discusses a teaching experiment on Facebook and Instagram algorithms conducted three years in a row (2017, 2018 and 2019) by the authors together with journalism students in three universities from Belgium, France and Switzerland.

The experiments consisted in the creation of new Facebook (2017 and 2018) or Instagram (2019) profiles managed by the students during a four to six weeks period. Each profile had to follow a list of news media and adopt a conduct coherent with a pre-defined ideal-type (an interest in conspiracy theories, a political tendency or a passion for sports news, for example). The students were then encouraged to test both general hypothesis and their own hypothesis on how the Facebook algorithm works in relation with news media content distribution. The students recorded their observations and screenshots of their newsfeeds in a virtual notebook. At the end of the experiment, feedback sessions were organized allowing teachers and students to compare their results and confront them with scientific literature and position papers.

First, we propose a qualitative analysis of questionnaires and focus groups held with the students at the end of the first experiment in order to understand their strategies and to assess the educational outcomes of the experiment. Then, we analyse further developments of the experiment in 2018 and 2019 as well as the limitations and challenges we faced.

The results of the analysis bring to light that the educational device enables an awareness amongst the students. They acquired a much more detailed and personal knowledge of these mechanisms by being directly confronted with them. If the findings about the algorithms were partly known, they weren't the main focus of the experiment. It was rather a question of finding a way of making students apprehend the issues raised by these new "actants" and the impact they have both on their own daily uses and on the journalistic field.