The Dynamics of Information Cascades: Playing Games, Debating Differences, and Finding Common Ground

Susanne Lohmann, Professor of Political Science and Public Policy
UCLA

Project Summary

On morally charged or politically controversial topics students are often afraid to speak freely in the classroom — afraid not so much of the professor, but of other students. One solution is to have students play games under conditions of identity protection and study their own game play data. Such data revelations provoke frank in-class discussions enabling students to find common ground across political divides.

My multi-year project will develop and publicize a toolkit consisting of a game play pedagogy, sample games, and gameplay data; a theoretical framework, social science literature, and sample prompts; and tips for classroom management. The games in question related to Elisabeth Noelle-Neumann's Spiral of Silence, Timur Kuran's Preference Falsification Concept, Joseph Overton's Overton Window, Cass Sunstein's Law of Group Polarization, Floyd Allport's J-Curve Hypothesis of Conforming Behavior, Alan Berkowitz and Wesley Perkins's Social Norms Approach, and Susanne Lohmann's Information Cascades.

I used the VOICE grant ($5,000) for game development and programming. In Winter and Spring 2023 I piloted the games with a couple dozen students. In Winter and Spring 2024 they will go live for hundreds of students. Because all of the above-mentioned games are, in some form or another, herding games, they unfold interactively over the course of several class sessions. In the first class session, students express an opinion. In the second class session, they see the distribution of student opinion from the first class session, and in response they may modify their opinions in the second class sessions. This process may repeat to generate a cascade, but at a minimum it must run for two class sessions. Moreover the game play is

interactively linked across the two class sessions. This poses both programming and pedagogical challenges. To fix ideas, let me spell out an example.

Cass Sunstein's Law of Group Polarization

Extremists who are sorted into echo chambers will become more extreme as a result of hearing the opinions of people with like-minded extremist opinions. Here's how I am implementing Cass Sunstein's Law of Group Polarization as a dynamic game. Pick a morally or politically controversial question, let's say, "should trans student athletes be allowed to compete with women in the NCAA?" In the first class session, have students select their positions on this topic in an 18-point spectrum ranging from no! to yes!: no! yes! Have them explain their response free-form: The responses on the 18-point spectrum are then recorded as R9, R8, R7, R6, R5, R4, R3, R2, R1, L1, L2, L3, L4, L5, L6, L7, L8, L9. R stands for right-wing, L, for left-wing. The programming sorts the students into three groups: "conservative" (R9, R8, R7, R6, R5, R4), "centrist" (R3, R2, R1, L1, L2, L3), and "progressive" (L4, L5, L6, L7, L8, L9).

In the second class session, the programming sorts the students into like-minded echo chambers: conservatives see the free-form responses of conservatives; centrists, the free-form responses of centrists; and progressives, the free-form responses of progressives. Have the students read the responses and instruct them, once again, to enter their positions on the no!-yes! spectrum and write up a free-form response. The Law of Group Polarization predicts the following. Between the first and second class sessions the mean or modal conservative position will have moved to the right and the mean progressive position to the left; the centrist position should stay put.

Once the game is over, all students get to see all positions and all free-form responses for both class sessions. They check if the Law of Group Polarization is validated in their class, and they discuss the game play results in detail. Also, students now feel free to openly discuss the original controversial question. The discussion of the game play results has, in some sense, given everybody the permission to speak freely.