# Adaptive Learning and Argumentation

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Misuse Argumentation:
- Support wrong arguments
- Support arguments that make a point that I want to
- If I am a leader and want to make others spread my opinion, for example in news articles…
- Recognises arguments and decides which support my point and which don't and recommends based on that

How to misuse Adaptive Learning
- Teach wrong things
- Spread lies, misinformation
- Make learning slower
- Discriminate - for some the best way, for others the worst way
- Make students feel lonely and stupid
- Skip important things and call it "specialized learning"
- Recommend wrong learning style to some individuals and good to others, more discrimination, yay!

Data
- Where is the student stuck
- Learning patterns,
- Progress
- Performance
- Preferences
- Behaviour in general
- Also usually name, age, gender, country of origin…

Can reveal a lot of information about students

If the data got out, could be misused by selling to for example universities to change the student's reputation

- If assignments are auto-graded, this could discriminate groups of people of my choosing to get bad grades

Legality/ Likelihood of getting caught
- As long as I'm not selling the collected data, it's legal.
- Unless somebody targets and checks the system, it's unlikely that I would get caught.

Damage
- Mostly social
    - Mentally destroy specific groups of mostly young people
    - Unfairly change the starting line for people using it (discrimination again!)
- Economic

- If the system was globally used, it could inconvenience groups of people, making it harder to find jobs and so on

Most vulnerable to my plan
- Learners, mostly young or easily manipulated people

Who benefits
- People who want to spread their own versions of the truth
- People who want to discriminate against groups of people
- But basically, the people who made the system/people who pay the people who made the system, so in the end still the people who made the system

Prevent from heroes
- Just keep it not so obvious, so we don't get publicly called out. As long as we are not selling the data, they don't have anything on us.

[1] https://blog.google/outreach-initiatives/education/adaptive-learning-technology/

[2] https://www.linkedin.com/advice/0/what-risks-bias-privacy-adaptive-learning-ai

[3] Wambsganss, T., Niklaus, C., Cetto, M., Söllner, M., Handschuh, S., & Leimeister, J. M. (2020, April). AL: An adaptive learning support system for argumentation skills. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (pp. 1-14).