

## Objectives

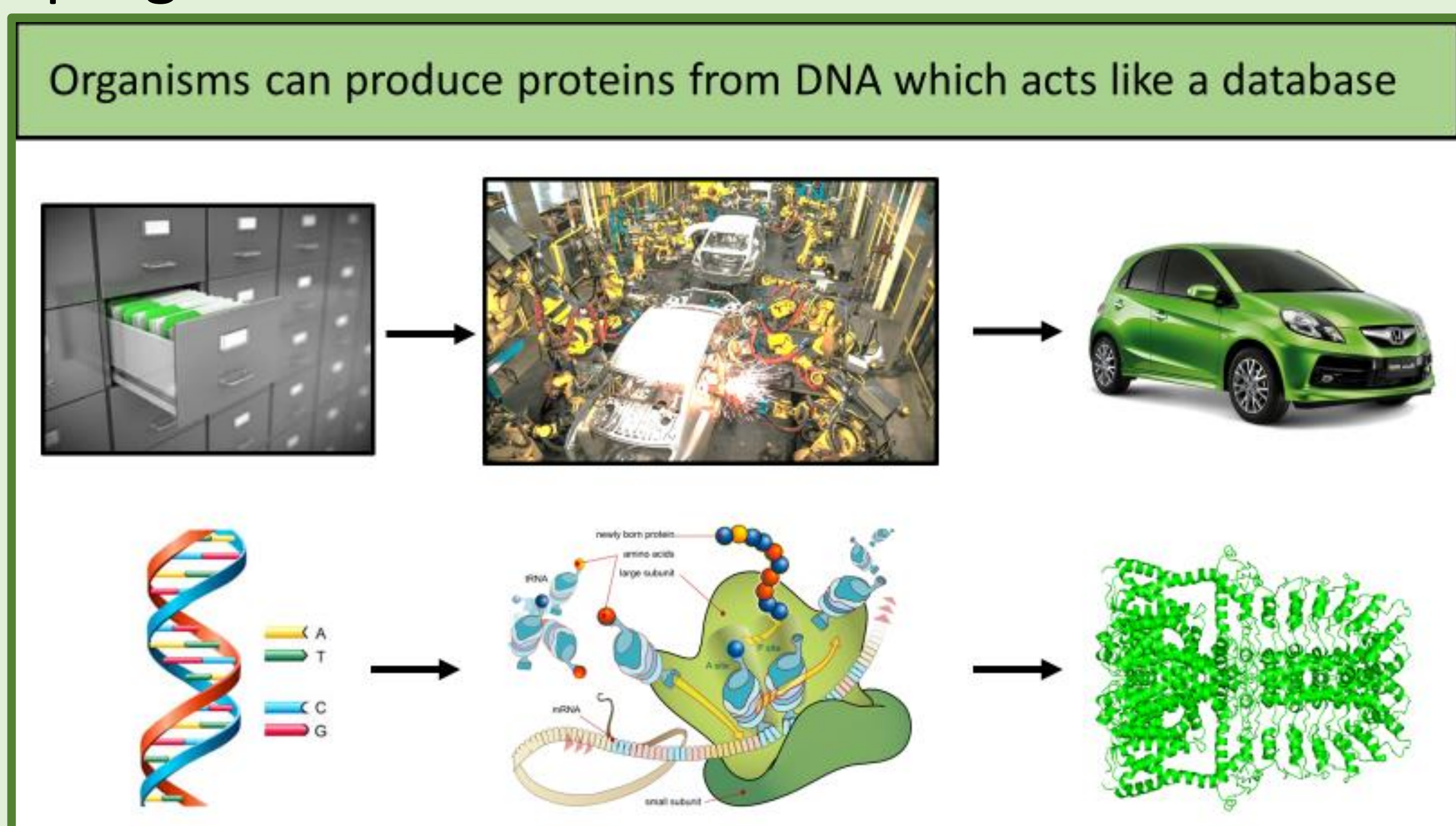
- Produce educational scientific material for first year “batxillerat” students
- Make science accessible to people of different backgrounds
- Comparative evaluation of video and *in-situ* presentations effectiveness

## *In-situ* presentations aimed at first of “batxillerat” humanities and sciences students

All information gathered at the research stage was condensed into two parallel 10 minutes presentations aimed at students with different backgrounds to study how to adapt materials to different audiences

### Considerations about the presentations

Metaphors were used to ease understanding about protein construction from amino acids and how information is encoded in DNA. The same metaphors were later used to briefly explain restriction enzymes and programmable nucleases.

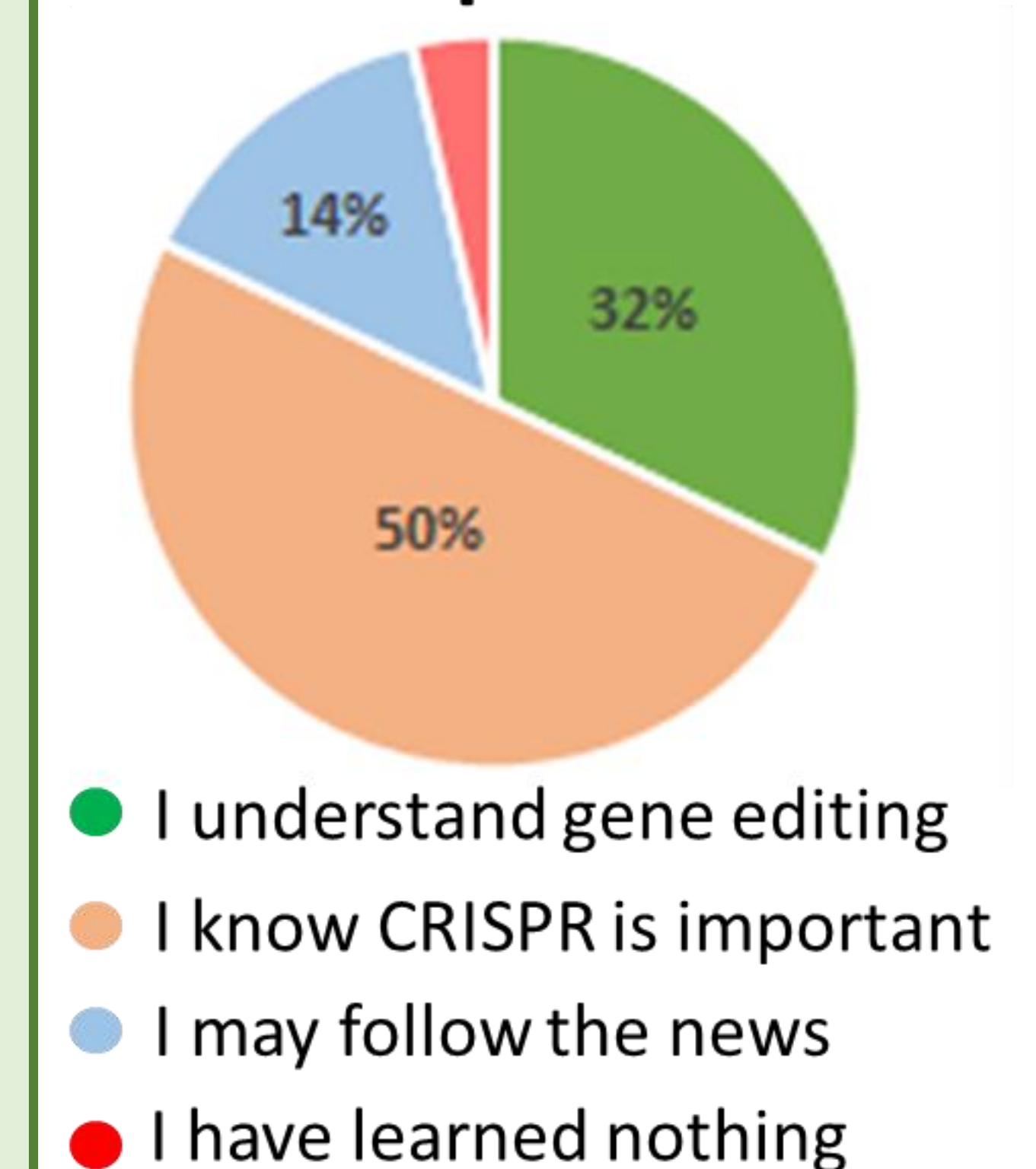


### Surveys about the presentations

Students were surveyed before and after the presentations to assess their outreach efficiency and student perception.

Results show that both science and humanities students found the presentation understandable and interesting. Significantly, humanities students gave a higher score.

#### After the presentation:



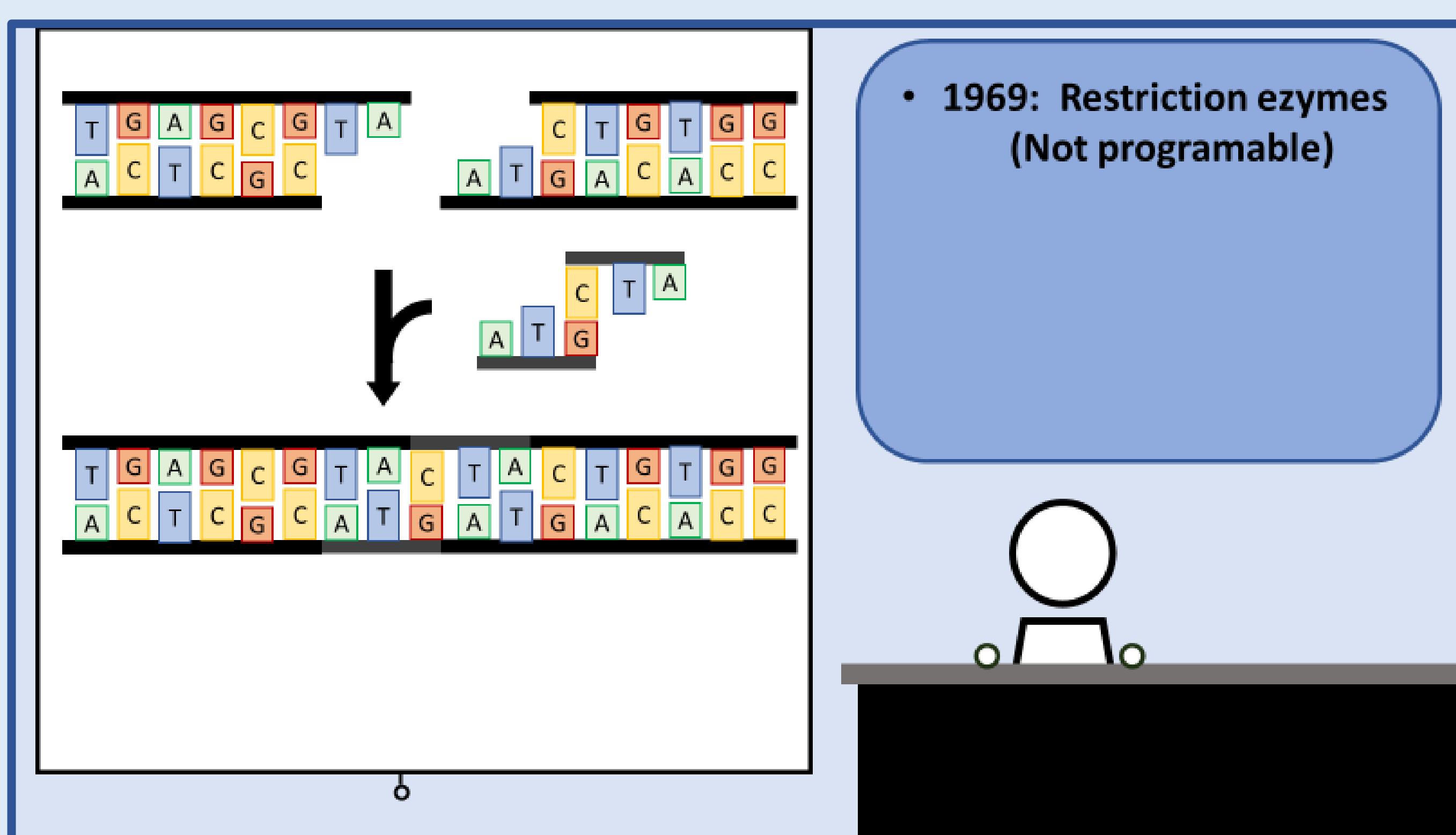
	Accessibility	Interest
Sciences	8.1	8.6
Humanities	9.1	8.8

## Educational videos aimed at the same audience as the presentations

Survey results about the presentations were used to create two 4 minutes animation videos which condensed all the information in the presentation. The videos were presented in another high school

### Considerations about the videos

All slides were separated into two parts, one housed all the content and the other acted as a reminder of key terms that carried over between slides. An avatar was created to cover the lack of a human presenter.

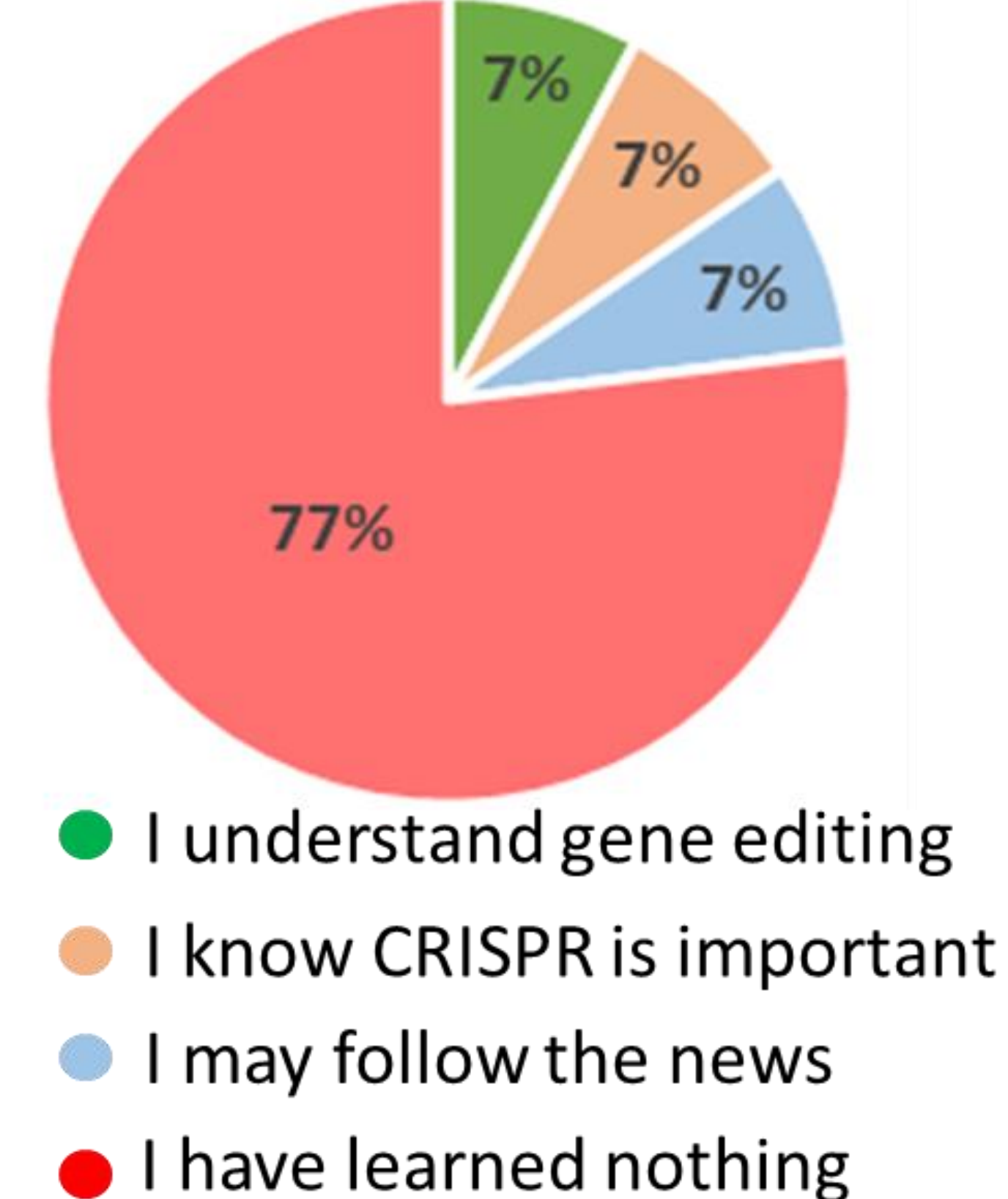


### Video Surveys

The videos were evaluated using the same surveys as the *in-situ* presentations.

The low ratings can be explained by a complete lack of introduction preceding the videos when shown to students. To avoid this lack of comprehension of the educational material additional material is required along with the videos.

#### After the video:



	Accessibility	Interest
Sciences	4.2	3.7
Humanities	5.9	2.4

## Conclusions

- *In-situ* presentations were able to teach and appeal to both humanities and sciences
- To reach multiple audiences it is necessary to adapt the material
- Videos require supplementary educational material to ensure their effectivity

