

# Students' Attitudes toward Personal and Learning Data Usage in Aptitude Project Learner Taxonomy

**Adelina Aleksieva-Petrova**  
*Technical University of Sofia*



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

# Introduction

## *Aptitude project*

Designs the platform for adaptation and recommendation of learning contents and activities based on learning and gaming analytics.

- Data studies
- Methodology definition
- Semantic modelling
- Data analysis
- Learning courseware enhancement and platform development
- Validation



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

# Paper Goal

To study students' attitude towards utilizing personal data and data generated as part of their learning activities for the goals of improving learning content and activities.



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

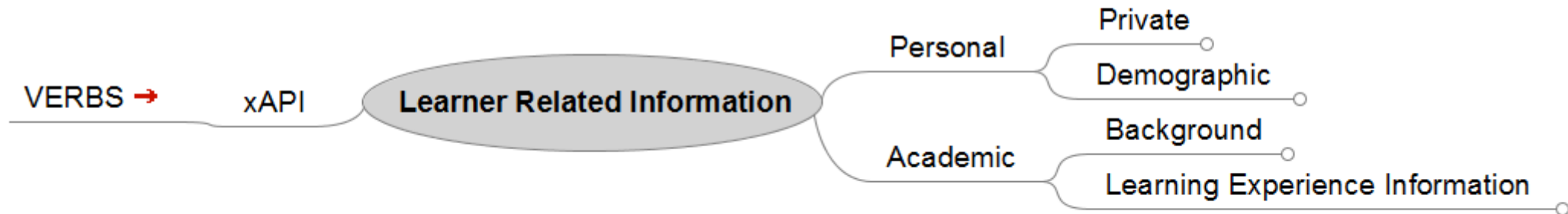
# Learning analytics - challenges

- the legal protection of students
- ethical and privacy issues
- measurements

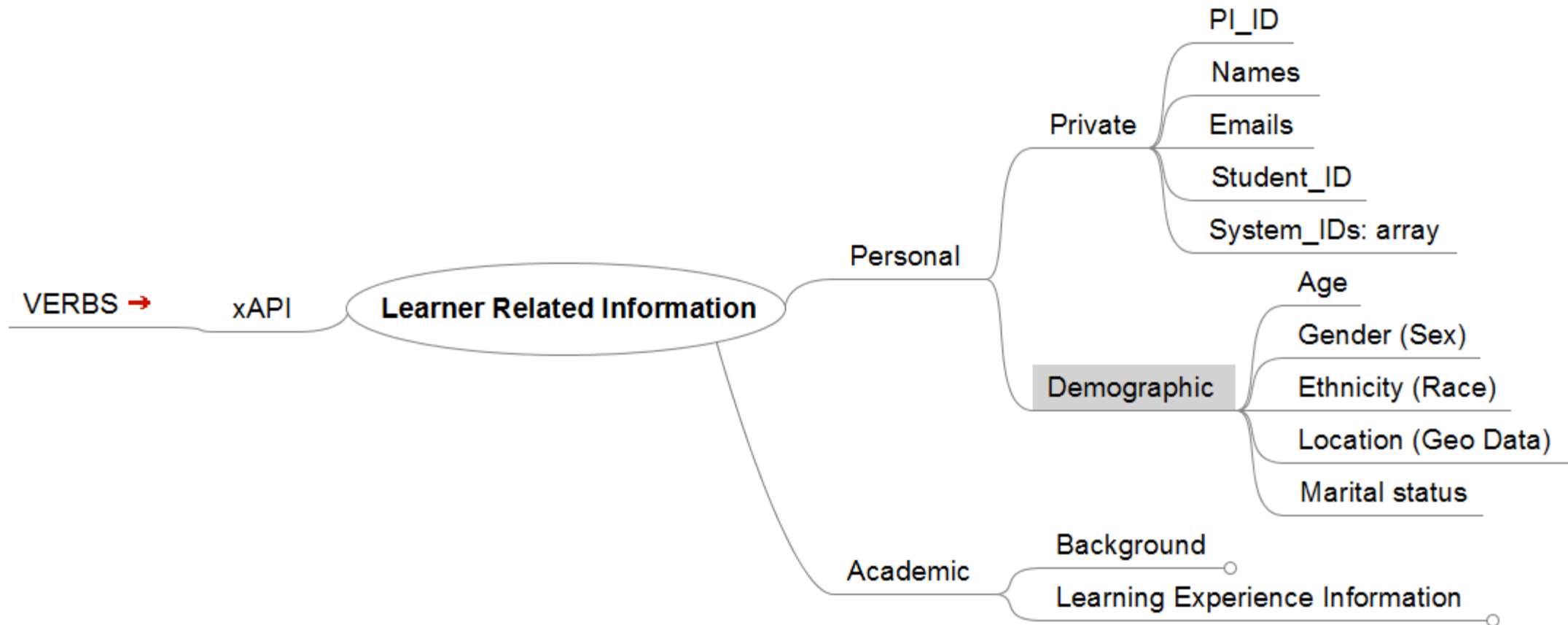


*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

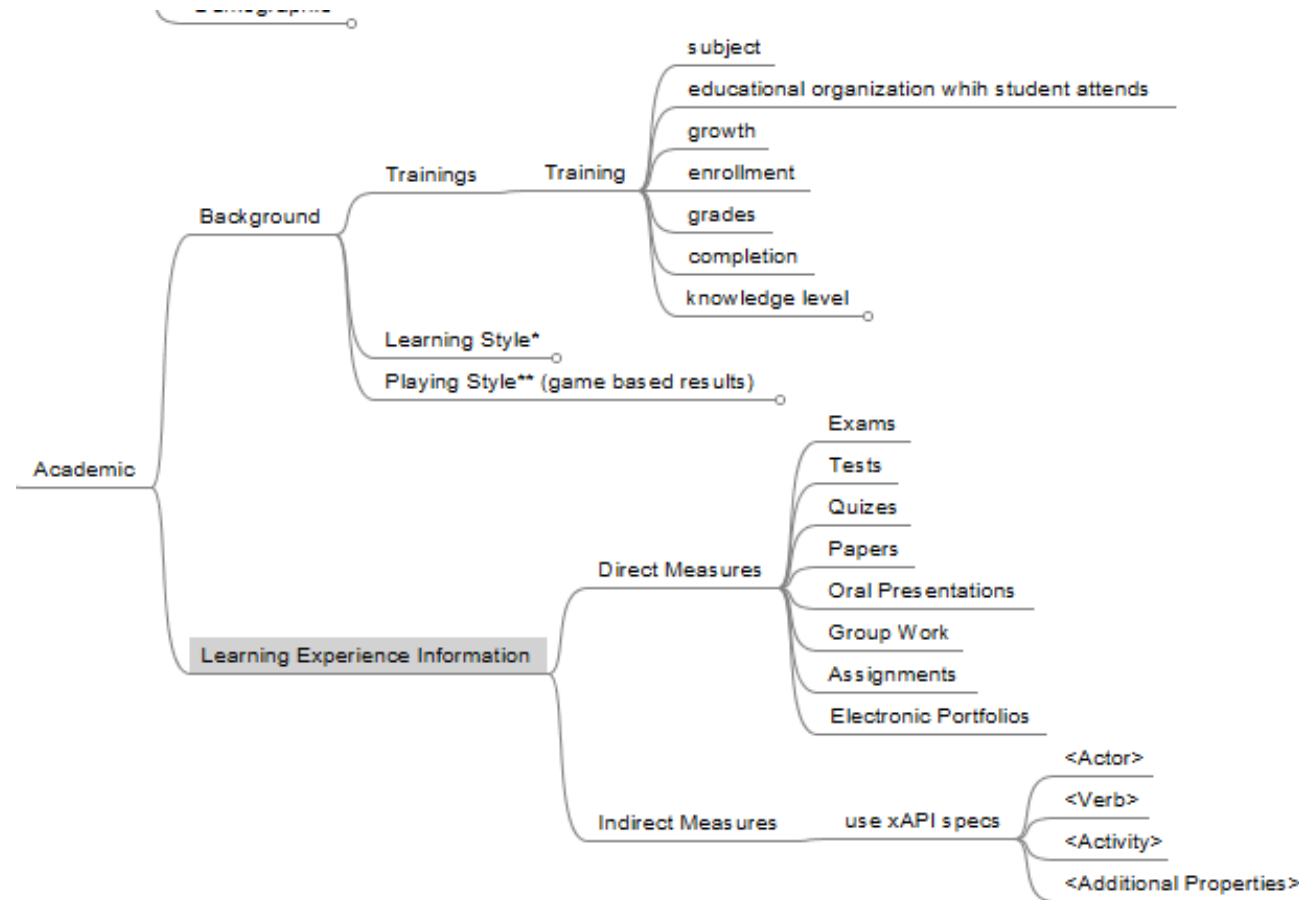
# Aptitude Learner Taxonomy (1/3)



# Aptitude Learner Taxonomy (2/3)



# Aptitude Learner Taxonomy (3/3)



*The 14-th conference on Information Systems and Grid Technologies  
 May 28-29, 2021 Sofia, Bulgaria*

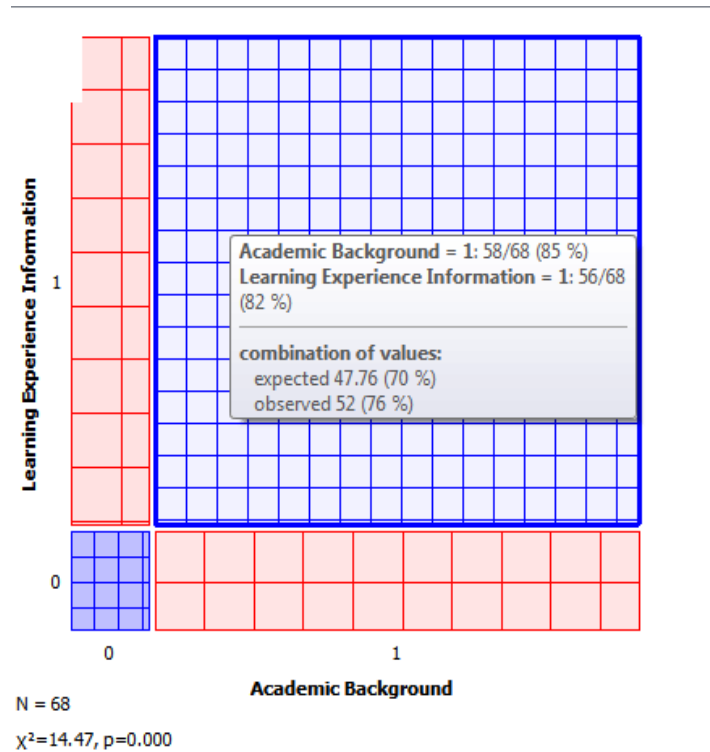
# Survey for the Attitude to Using Personal and Learning Data for LA

- the design of the survey:
  - personal information
  - academic background
  - learning experience information
  - other learner data
- the target group of the survey
- a questionnaire delivery

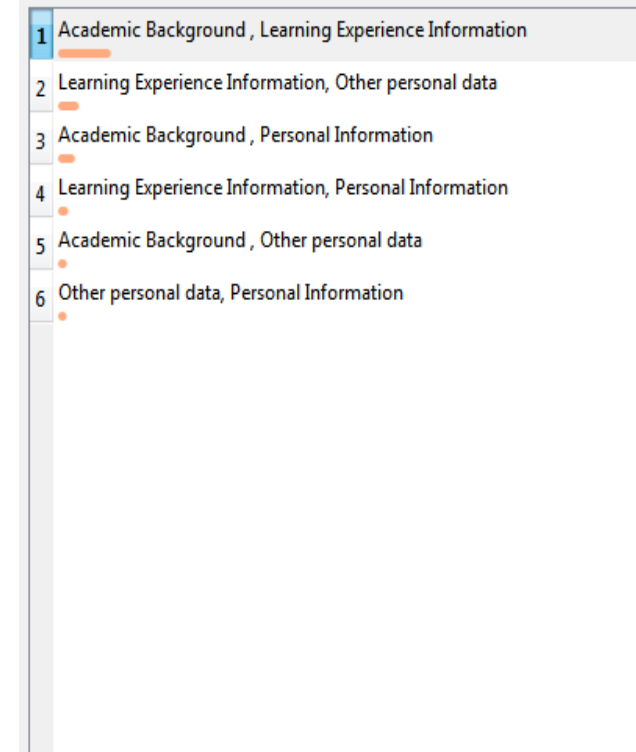




# Results and Discussion (1/3)



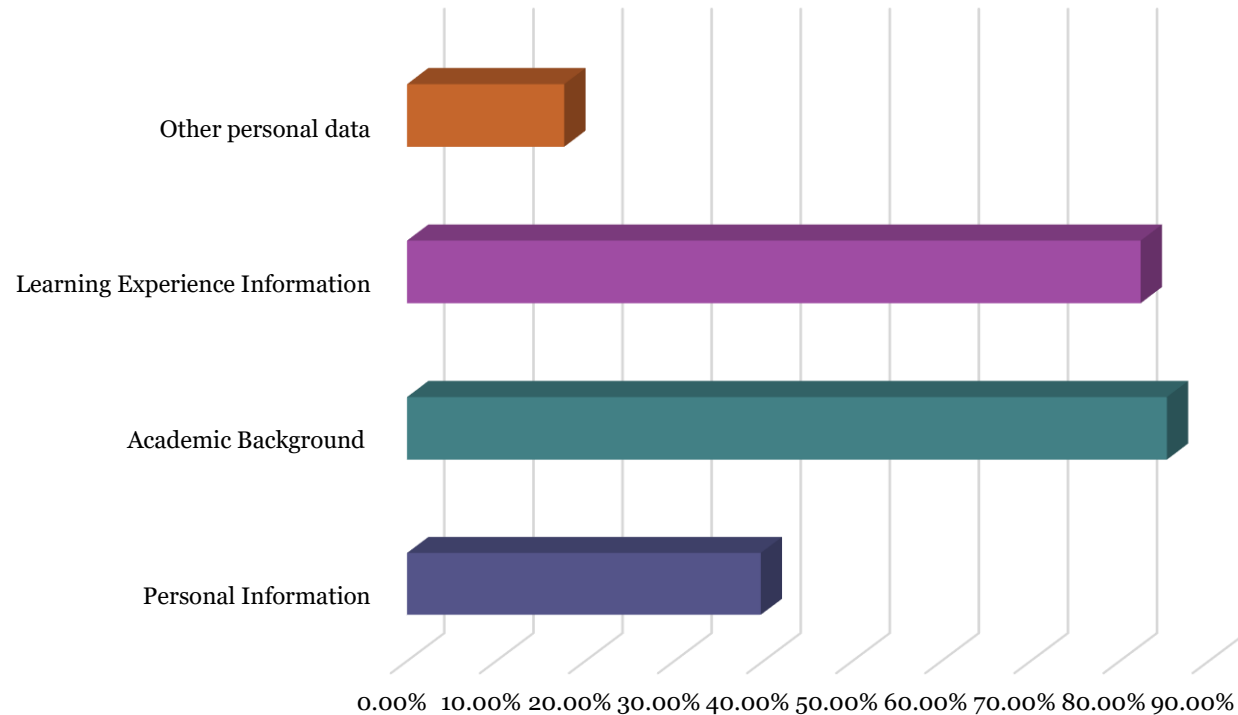
Sieve diagram for the survey set



Score combinations for the survey set



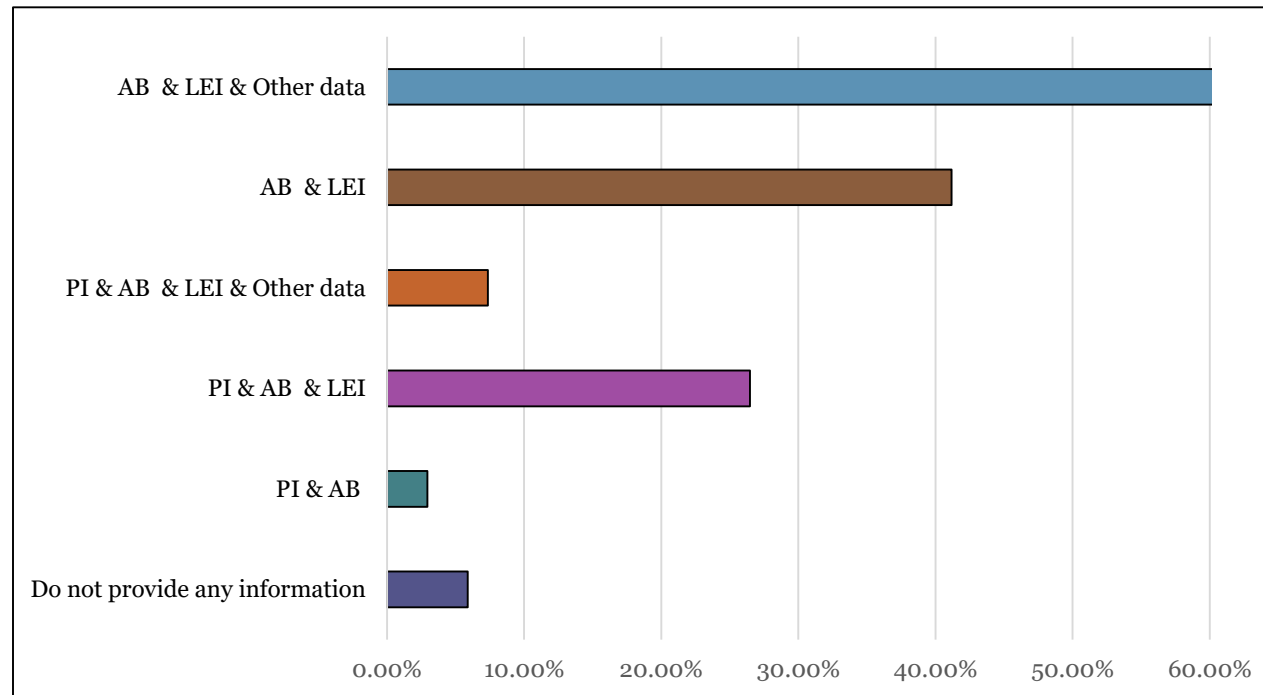
# Results and Discussion (2/3)



Percentage of approve for the provision of separate data



# Results and Discussion (3/3)



Combinations of participants' answers and their percentages



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

# Conclusion

- The survey among students shows that a few of them are agreed to provide their private personal data (as names, emails and etc.) in order to receive adapted training with the possibility of recommendation.
- Most of them tend to provide information such as academic background and learning experience information to achieve this, but while maintaining their anonymity.
- A taxonomy is developed for the purposes of the survey that helps classify the types of student data to be shared.



# Acknowledgment

The research reported here was funded by the project “An innovative software platform for big data learning and gaming analytics for a user-centric adaptation of technology enhanced learning (APTITUDE)” - research projects on the societal challenges – 2018 by Bulgarian National Science Fund with contract №: KP-06OPR03/1 from 13.12.2018.



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*

# Thank you!

- **E-mail:** [aaleksieva@tu-sofia.bg](mailto:aaleksieva@tu-sofia.bg)



*The 14-th conference on Information Systems and Grid Technologies  
May 28-29, 2021 Sofia, Bulgaria*