



FIBAA

The Use of Learning Analytics in HEI

Mag.^a Diane Freiberger MBA | 30th May 2023

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Roadmap to Enabling Quality in Tertiary Education
2030

Nice to meet you



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FIBAA AGENCY

29 Years of Higher
Education Accreditation



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Agenda

1. Learning Analytics in teaching practice: a theoretical approach
2. Assessment of Learning Analytics: FIBAA Quality Seal „Excellence in Digital Education“[®]
3. FIBAA Learning Analytics Survey: Voices from the FIBAA network
4. Conclusions

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Learning Analytics in teaching practice: a theoretical approach



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Defining Learning Analytics

Long, Siemens, Conole & Gašević: 2011

Learning Analytics define...

“the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs”.



Learning Analytics in teaching practice

Overview of requirements:



a well-secured **data protection** concept



well-founded **ethical reflection**



complex **technical solutions**



good **approaches** for how to continue working with the results of the analysis



Learning Analytics in teaching practice

Micro, meso and macro level:

Data analyses that depict the learning process within a course describe the **micro level**

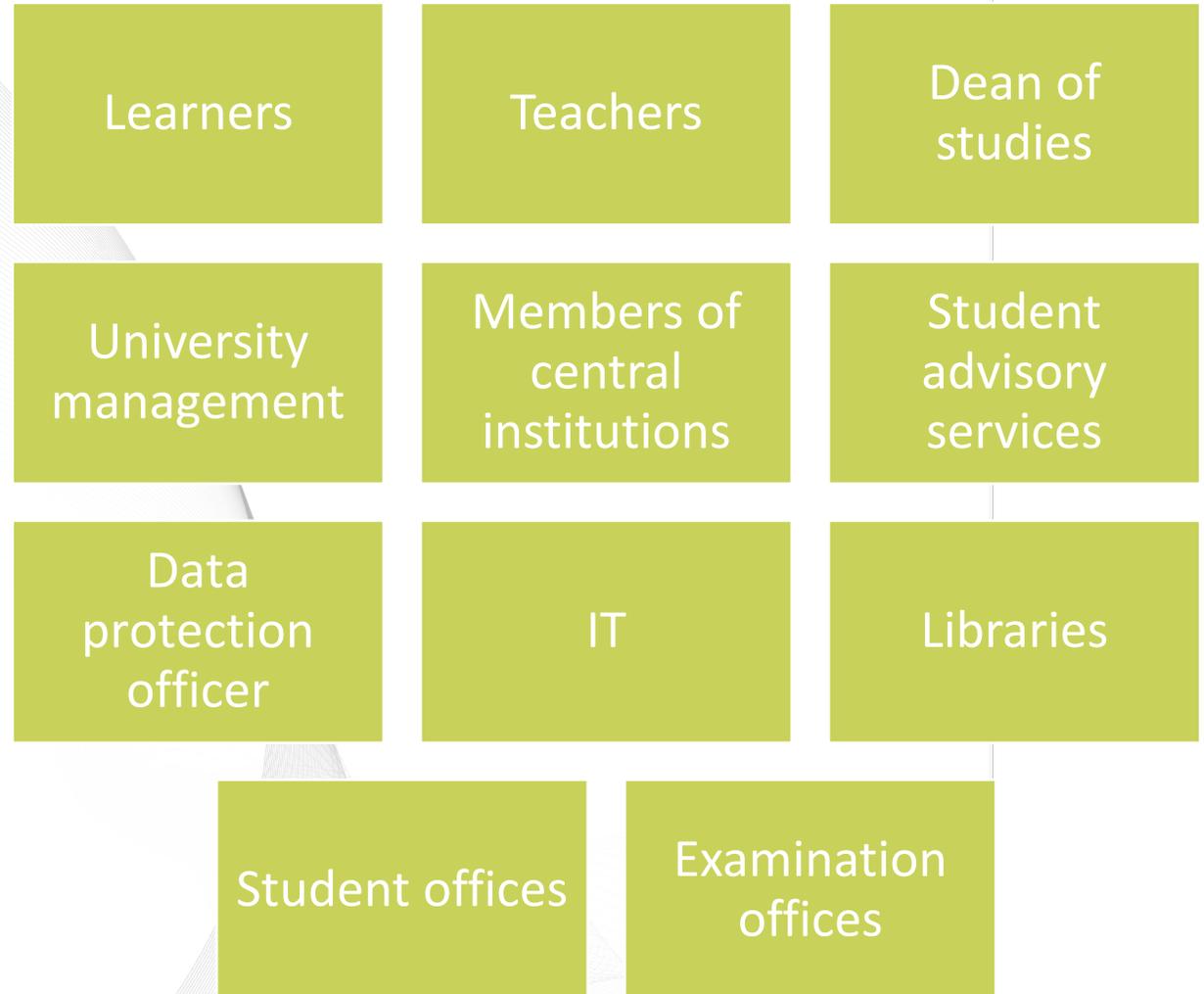
The longitudinal analysis of the data from students or student cohorts in the course of their studies describes the **meso level**

The **macro level** includes learning-related data analyses of entire institutions



Involved Stakeholders

Trust and acceptance must be created among the direct and indirect users of learning analytics.



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Assessment of Learning Analytics: FIBAA Quality Seal „Excellence in Digital Education“[®]

FIBAA Quality Seal „Excellence in Digital Education“®

FIBAA Standards

DIGITALISATION STRATEGY

- Objective
- Implementation of the strategy
- Review and measures
- Future orientation

QUALITY ASSURANCE

- Integration into the QM system
- Quality assurance of teaching
- Learning Analytics
- Quality assurance of technology
- Continuous improvement

DIDACTIC DESIGN

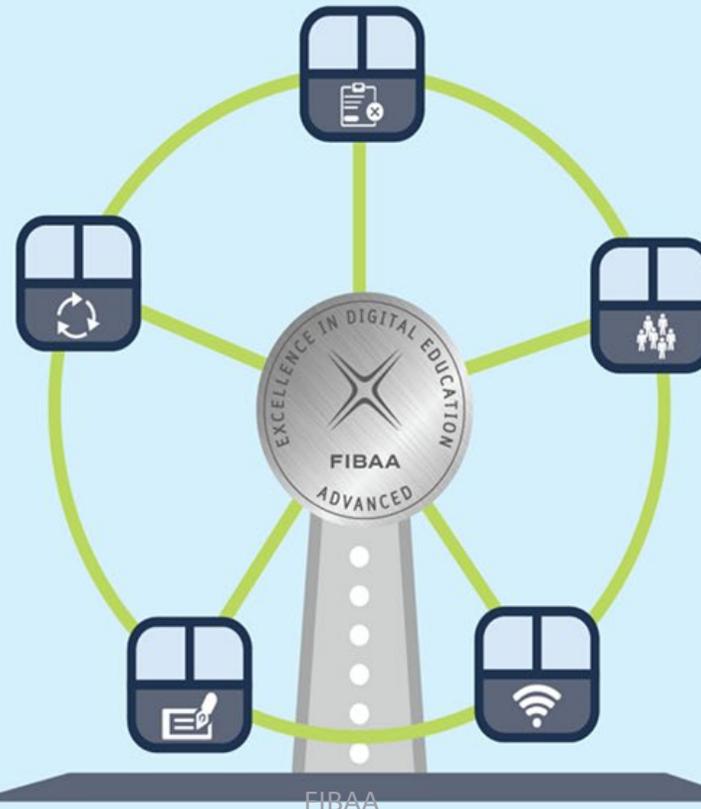
- Didactic concept
- Teaching methods
- Learning materials
- Forms of examination
- Academic support for students

STAFF

- Staffing
- Further qualification
- Support
- Knowledge management

TECHNOLOGY

- Technical organisational unit
- Technical infrastructure
- Teaching and learning platform
- Data analysis system
- Technical support for student





Standard 5: Quality Assurance

Quoting the standard:

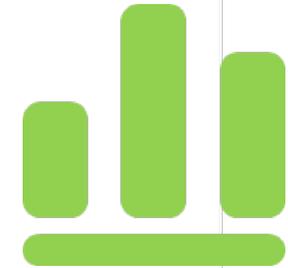
“Learning analytics can play an important role in the quality assurance of digital teaching as they provide insights into learning processes and learning environments, so that they can be better understood and optimised.”





FIBAA asks HEIs...

- **Where** is the data collection (e.g. LMS)?
- **What** student data is measured? (navigation, clicks, interaction)
- **Who** collects the data and analyses it?
- How is the person **qualified** to do this?
- How is the **knowledge** obtained through data generation used?
- How is the knowledge used to **improve** the learning environment and for the further development of the didactic concept?





Learnings from previous cases

- HEIs seem to be at very different levels of experience, some are still in the evaluation and developmental phase
- While five institutions (incl. one study programme) achieved the quality requirement, no institution exceeded the quality requirement for learning analytics so far
- Two institutions did not achieve the quality requirement
- However, all institutions were raising awareness of learning analytics issues and addressed the question of what data they intend to collect
- Expert panelists emphasised the need to clearly define learning analytics goals, the scope and processes of data collection, analysis and evaluation
- Expert panelists also emphasised that clear concepts are needed that shows how learning analytics can be combined with didactics and be used for the learners
- FIBAA plans to gain further insights into the topic of learning analytics

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FIBAA Learning Analytics Survey: Voices from the FIBAA network

FIBAA Learning Analytics Survey

- It plays a crucial role that FIBAA continuously deals with trends and developments in the field of didactics and stays in contact with universities
- Target group: private universities in Germany
- Spring 2023
- 17 participants
- Small number of participants but we can read a trend from the answers



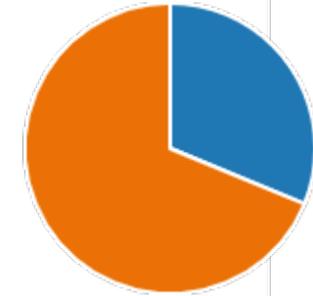
FIBAA Learning Analytics Survey - Results

Question: *Do you use learning analytics for your teachings?*

Answers:

"Yes": 35%

"No": 65%



Question: *How do you use learning analytics for your teachings?*

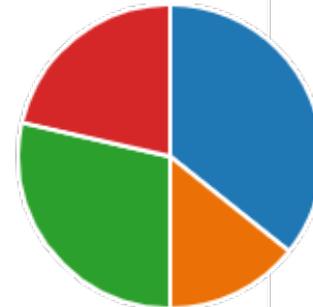
Selected Answers:

"To gain insights into students' learning processes." (37%)

"To identify 'at-risk students' or to be able to conduct risk assessments." (31%)

"For the intensification of a feedback culture." (19%)

"For the individualisation of learning processes." (13%)





FIBAA Learning Analytics Survey - Results

Question: What opportunities do you see in the application of learning analytics?

Answers:

Gain insights into...	Support...	Flexibilise...	Individualise...	Further develop...	Improve...
<ul style="list-style-type: none">• learning behaviours• student progress• competency growth• knowledge levels• over- and under-challenge in application tasks• cause-effect relationships• touchpoints within the learning journey for programme administration, students and teachers	<ul style="list-style-type: none">• self-directed learning	<ul style="list-style-type: none">• learning journeys	<ul style="list-style-type: none">• guidance for students• support for students	<ul style="list-style-type: none">• digital learning	<ul style="list-style-type: none">• learning content• learning journeys• feedback on teaching• didactic concepts• academic success



FIBAA Learning Analytics Survey - Results

Question: What risks do you see in the application of learning analytics?

Answers:

Time/resources	Legal	Ethical	Skill requirements	Focus	Costs	Fairness	Application
<ul style="list-style-type: none">• High effort for conception and implementation, which may detract from the actual time spent supporting the students.• Effort vs. benefit: At what volume does the data become usable and therefore applicable?	<ul style="list-style-type: none">• Data protection• Data privacy• Personal rights	<ul style="list-style-type: none">• Feeling of surveillance on the part of the students• Students are under forced observation in the learning process.• Students will no longer leave as growing young people with the right to shape their own learning.	<ul style="list-style-type: none">• Lacking technical competence and didactic expertise• Lack of focus on training and involvement of teachers	<ul style="list-style-type: none">• Danger of a too technical perspective• Too much focus on details may compromise the overall quality of teaching• Correlation is not causality	<ul style="list-style-type: none">• Higher IT costs	<ul style="list-style-type: none">• Less technology-savvy students have greater problems using the digital learning platform and can be disadvantaged in this way• Learning paths intended by technology are not equally motivating for all people and can therefore create negative learning experiences	<ul style="list-style-type: none">• Learners who are aware that their behavior is being monitored will adapt their learning behavior and, for example, log in more often to prove their learning progress.

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Conclusions



Conclusions

- The potential of learning analytics is impressive
- We are still at the beginning but learning analytics are expected to gain in importance in the coming years
- The diversity of risks and concerns becomes clear
- Stakeholders must be involved early onwards
- Resources are needed to meet the challenges
- Positive and negative factors should not be played off against each other
- FIBAA can help HEIs to assess where they stand and to develop further in the application of learning analytics

What is needed now, what do YOU think?



Sources

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Thank you!

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