TECHNISCHE UNIVERSITÄT DRESDEN

valeu-x
Virtual Albanian European Universities eXchange

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Chair of Wirtschaftsinformatik, esp. Information Management

E-Tutor Qualification 2021

DRESDEN concept

Agenda

1. Welcome note Prof. Schoop
2. Introduction of course supervisors
3. Introduction of VCL concept
4. Introduction of task forces
5. Overview of Qualification Topics & schedule
6. Explanation of working environment on the virtual platform
7. The first task for self-paced learning (E-Tutors)
8. Pilot VCL targets & organization for academic staff and administrative staff
9. Q&A Session

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Agenda

1. Virtual Collaborative Learning (VCL)
2. Virtual Mobility & Virtual Exchange
3. VCL Design Dimensions

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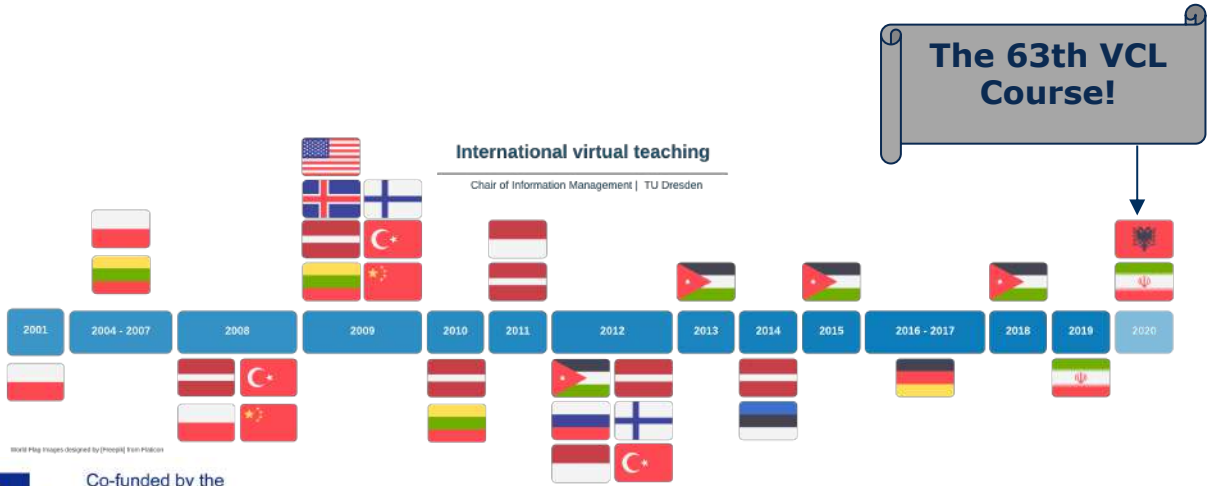
- **Virtual** = Online, using new communication channels
- **Collaborative** = In groups, benefitting from each other's experiences
- **Learning** = Gaining new knowledge and experiences



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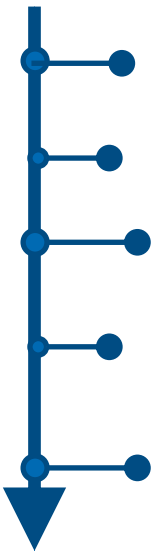
"Universities: think about what jobs your students can get if they follow your courses." (Coyne, 2008)



- The shift from manufacturing work to '**knowledge work**'
- The distribution of work over **large geographical distances**
- The increasing importance of **working from home**
- The shift from traditional vertical hierarchies to **self-managing teams**
- The rise of the **nomadic worker** which weakens the relationship between employers and employees

(Perez-Sabater, Montero-Fleta, MacDonald, & Garcia-Carbonell, 2015)

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- Modern ICT enables more flexible, interactive, attractive and user-friendly collaborative virtual exchange settings
- Allows to bring local students together with students abroad at an affordable price using virtual devices
- Social media allows active participation in virtual group learning processes, which significantly increases learning success compared to passive reception (Davies and Merchant, 2009).

- WIIM applies VCL-projects in addition to the „classic“ face to face courses since 2001
- VCL = learning in groups in the virtual classroom (Balázs, 2005; Rietze, 2019; Tawileh, 2016)

Characteristics of a VCL-project

- A case study is solved in a small group (5 members)
- Project restrictions: common goal, time (4-5 weeks), limited resources
- Within the groups: high level of self organisation and responsibility for the results, learners take over roles and stick to them
- Supported by e-tutors
- Communication and documentation with social software (e.g. forum, chat, wiki) (Balázs, 2005; Rietze, 2019; Tawileh, 2016; Clauss, Lenk, & Schoop, 2019)

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1 Virtual Collaborative Learning (VCL)

- VCL is a formal learning setting
- General learning objectives are:
  - Professional competencies in performing case studies
  - Self-competencies in organising individual and collaborative learning processes
  - Social competencies like collaborative skills through international teamwork with social software
- Formative assessment of group- and individual achievements
- Successful participation is graded with
  - 5 “ECTS Credits” equal 150 hours of individual work load
  - Credits and grades can be used in the respective local study programs/module, based on the respective local examination regulations

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Collaborative online learning settings using affordable, flexible technologies…

- Enable students to take part in an intercultural exchange which is integrated into their regular studies without having to invest additional time or money (Tawileh, 2016)
- Opening new opportunities for students who are economically or socially excluded from physical mobility, which is traditionally necessary to gain international and intercultural experience (Otto, 2018)

Virtual Mobility

"The use of information and communication technologies (ICT) to obtain the same benefits as one would have with physical mobility but without the need to travel" (van Schaik, 2019)

→ Focus on cooperation between higher education institutions and the recognition of achievements

Virtual Exchange

- Focus on interaction and communication geographically separated participant

→ exchange, competence building and interaction in small groups are in the foreground

M	O	V	E	-	I	T
Mobility preparation	Obligatory feedback	Virtual collaboration platform	Encouragement and support		Intercultural exchange	Teaching transfer

Mobility preparation: Intensive organisational preparation is essential; Ensuring ECTS recognition is crucial, otherwise the motivation will vary → increased potential for conflicts

Obligatory feedback: Especially at the beginning feedback for students is crucial; Multi-perspective feedback should be encouraged (teachers, e-tutors, practical recommendations by industry experts); Peer-feedback within the groups should be encouraged; Peer reviews between the groups are advised

Virtual collaboration platform: Enable synchronous, asynchronous, transparent communication & document editing; Mobile access is recommended; As user-friendly as possible; Industry-standard tools may help to gain media competences

Encouragement & support: Accompanied –but not guided– by e-tutors & experts; Qualification program recommended; Constant contact between teachers, e-tutors & experts

Intercultural exchange: As heterogeneous groups as possible; Language skills are necessary; include additional time for informal & intercultural exchange

Teaching transfer: Potential to transfer knowledge & didactic concepts between participating institutions; Realistic design of the case studies allows students to transfer experiences into future professional practice

(Clauss, Altmann, & Schoop, 2020)

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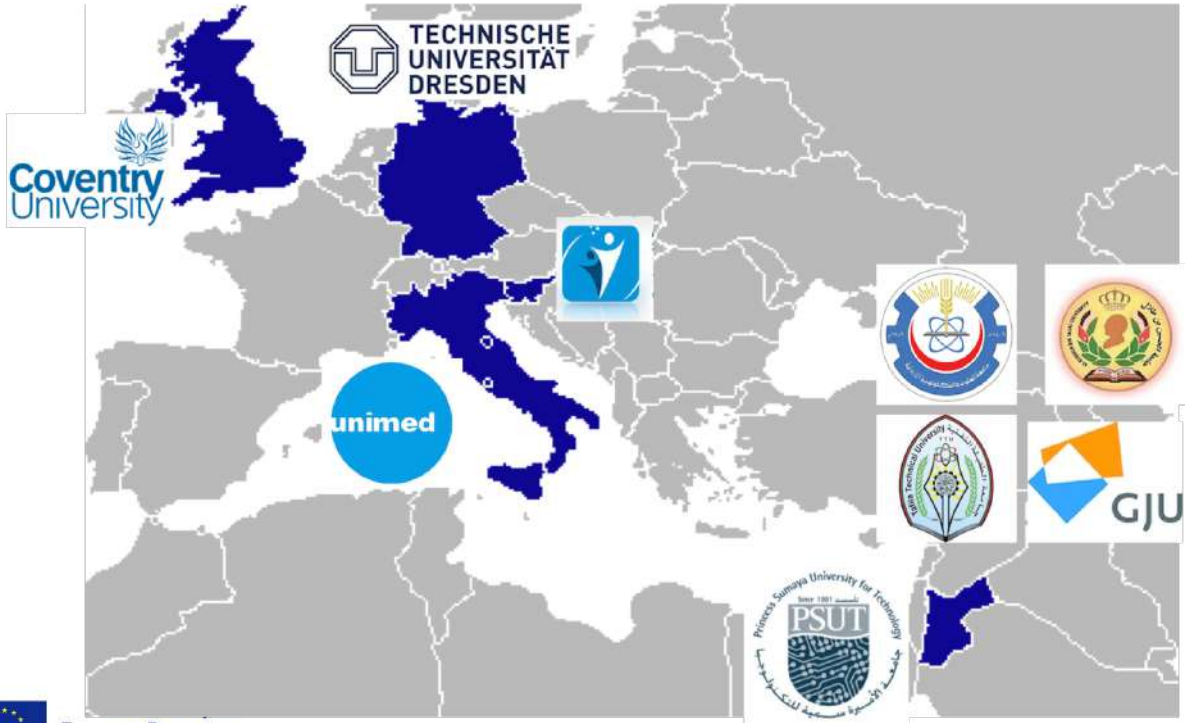
Jordan Opportunity for Virtual Innovative Teaching And Learning (JOVITAL – Erasmus+ CBHE)

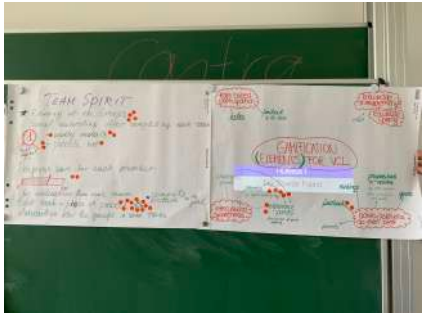


Project Kick-Off 2019
Dresden Shiraz University

On-site Workshops at TU-Dresden 30.06.2019 – 09.07.2019

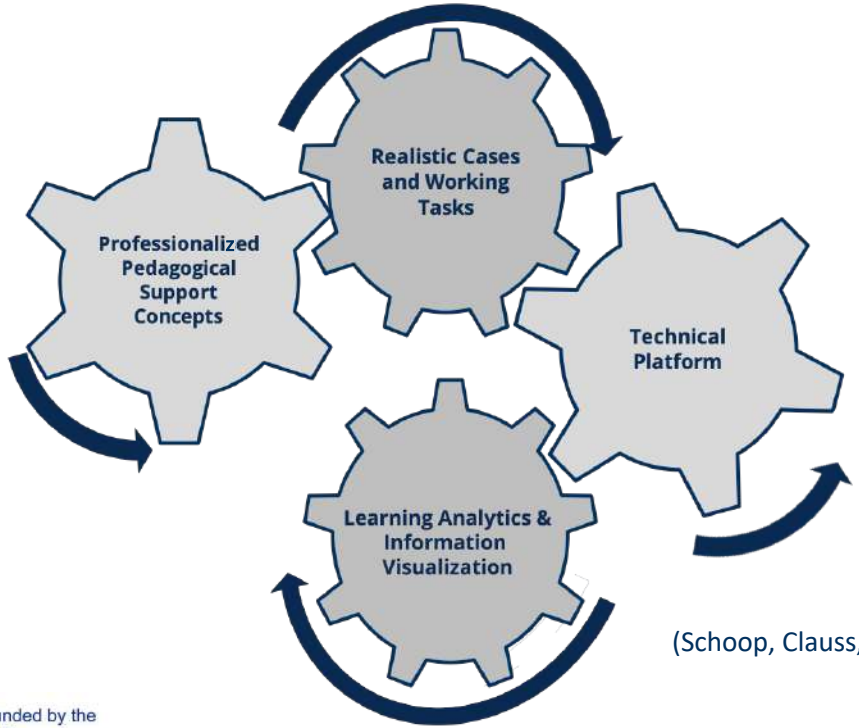
- funded by DAAD “Collaborative educational modules to promote virtual student mobility” as Study Internships for Groups of Foreign Students in Germany




For additional information and updates see: https://lswiim.wordpress.com/

Four main design dimensions, as “pivotal points” to ensure quality in our VCL settings



(Schoop, Clauss, & Safavi, 2020)

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Professionalized Pedagogical Support Concepts

„Collaborative learning per se is not successful without adequate support. […]After a half-century of advocacy associated with instruction using minimal guidance, it appears that there is no body of research supporting the technique.“ (Kirschner, Sweller & Clark, 2006, p. 83)

„The survey shows that tutor support is very important for learners in general - regardless their other preferences: Between 74,4% and 97,7% of learners in the different preference groups value tutor support in general as 'important' or 'very important'.” (Ehlers, 2004, p. 3)

Professionalized Pedagogical Support Concepts

Development of the e-tutor concept

- For many years there has been the use of student e-tutors as accompanying persons for virtually supported courses
- Extensive VCL projects required enhanced professionalization and the transfer of responsibility to the e-tutors
- Consequence: systematic qualification offer since winter semester of 2011/12

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Professionalized Pedagogical Support Concepts

E-tutors

- Main function is to support learners through functional, personal and group ordered, technical, and organizational assistance as well as to observe their learning progress
- Assist learners to achieve an effective and reflected solution for an upcoming problem and helps them to develop competencies for decision-making and responsibility
- Support the organisation of learning processes in small groups

- Are qualified in a one semester masters program

(Jödicke et al., 2012)

Professionalized Pedagogical Support Concepts
Qualification program (Jödicke, 2014)

Specialized Support

- Clarification of content issues
- Assistance with comprehension problems, ambiguities, misunderstandings
- References to literature and tips for working techniques and methods
- Guidance for learning tasks, hints for processing learning tasks
- Feedback on learning tasks and on the method)

Personal and Group-Related Support

- (Support in the) organization of learning activities
- Feedback on the learning behavior of the individual/group
- Support in conflicts
- Support in case of learning problems of the individual/group

Technical Support

- Support in dealing with collaboration tools (functionality, selection, technical problems)

Organizational Support

- Supervision of the timely processing of the task

Evaluation

- Support of the evaluation while using an evaluation instrument

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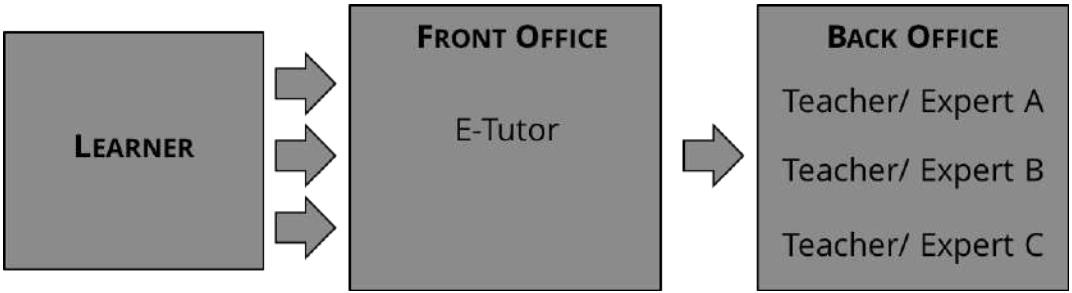
Professionalized Pedagogical Support Concepts
Organisational support



Two-level support: filter and cluster function

(Ojstersek, 2007)

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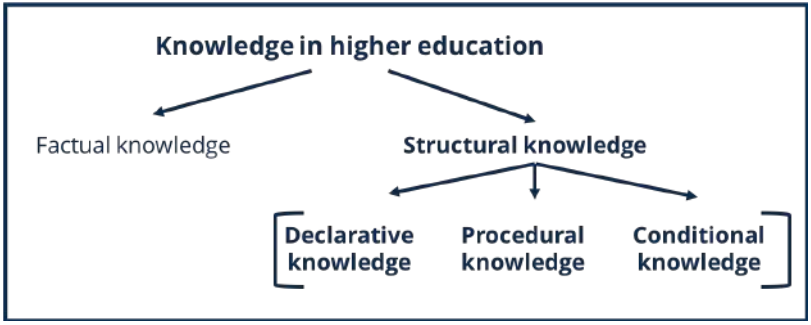
Realistic cases and working tasks



Knowledge in higher education. Adapted from (Dubs, 1995)

- Learning objectives - the participants learn…
  - to analyze the complex setting of tasks
  - to divide partial tasks among individual group members
  - to identify and/or investigate relevant information for the development of a solution
  - to compile different possible solutions in the team
  - to make a common decision in the group for solutions
  - to present and defend the chosen solutions

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Realistic cases and working tasks

Necessary characteristics of cases and working tasks

Realistic	• Provide vocation-oriented knowledge • Close connection to possible corporate problems as well as future job tasks • Characterized by open solutions that need in-depth explanation, tasks should focus on gaining new practical usable knowledge through discussion and exchange
Collaborative	• Tasks have to be solved in groups and need a multi-perspective input • Learners learn from each other • Active virtual communication is a must
Self-organized	• Self- determined scheduling and distribution of roles and tasks • Learning supporters accompany learners instead of leading them

(Schoop et al, 2020)

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Technical platform

Requirements for group work

- Communication:
  - *Asynchronous tools:* Offering structured and documented group discussions
  - *Synchronous tools:* Enabling real-time discussions and virtual group meetings, which are required for instant communication, ad-hoc agreements and urgent decisions, realized by text and voice/video chat and conferencing tools
- Work on tasks and deliverables:
  - *Groupware:* Giving the opportunity to work collaboratively on a document or structured web page, which allow to document the history of changes
  - *Shared file storage:* Offering a shared platform to host, organize and access files, which can be accessed location-independent by all group members
- Coordination:
  - *Personal coordination tools:* Allowing users to build personal networks with group members and display personal skills, professional experiences and study background as well as more informal details like hobbies
  - *Task coordination tools:* Offering possibilities to plan, assign and display assignments as well as their progress

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Technical platform

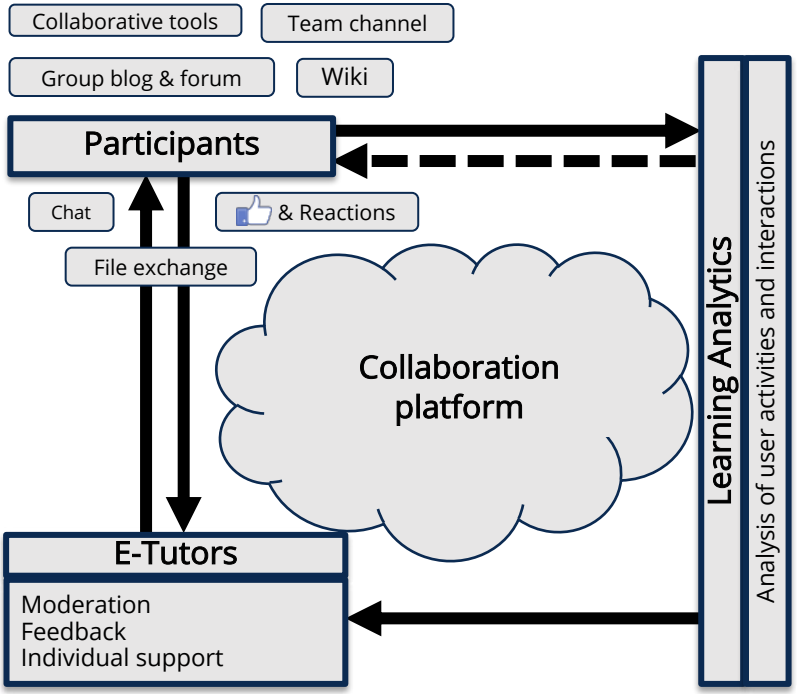
Requirements for analytics

Gateways to facilitate e-tutorial support through Social Learning Analytics (SLA)

- Focus on the semi-automated analysis of social behaviour and recurring interaction patterns that characterize effective learning and collaboration processes, by systematically measuring data output and learners' traces (Shum and Ferguson, 2012)
- Need multiple and continuous insights into learning processes to enable personalized learning support and direct feedback on learners' progress
- Include data of direct interactions - especially dialogues and indirect interactions when learners leave traces of their online activity
- User-generated data traces, which are relevant to learning objectives, must be identified, recorded, aggregated and visualized (Lenk, 2018)

Technical platform

Implementation



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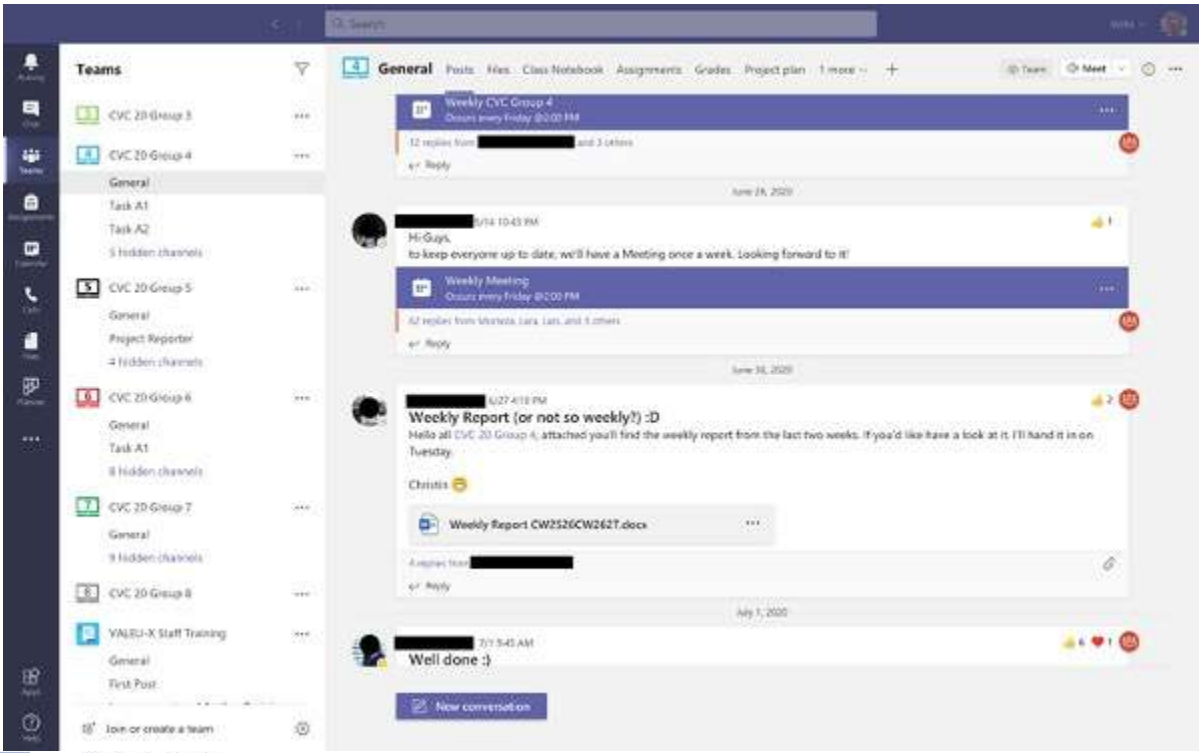
Screenshot MS Teams – International teamwork in the group channel



Technical platform

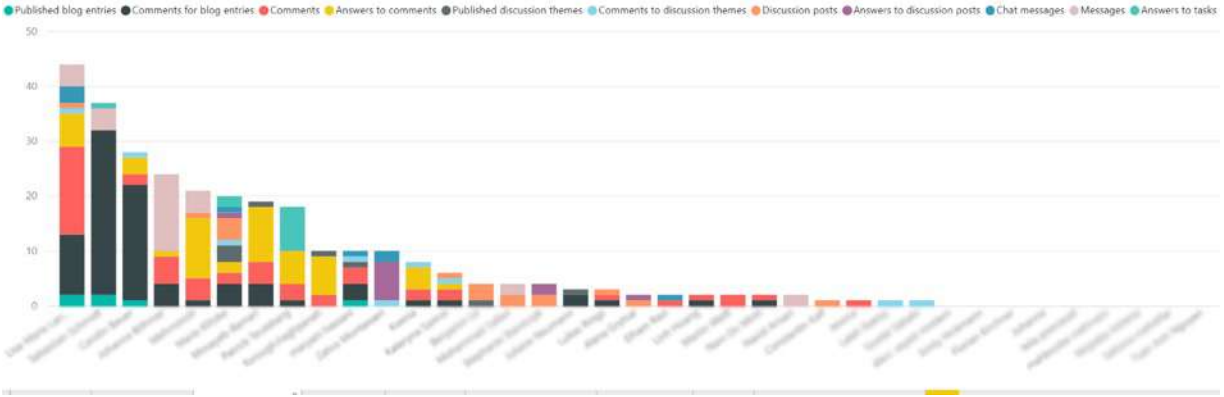
Screenshot MS Teams –Impressions from the final students presentation

Technical platform

Dashboard for communication

Communication:

Name	Communication index	Published blog entries	Comments for blog	Comments	Answers to comments	Published discussion themes	Comments to discussion	Discussion posts	Chat messages	Messages	Comments to tasks
[redacted]	4,83	2	11	16	6	0	1	1	3	4	0
[redacted]	2,91	0	4	2	2	3	1	4	1	0	2
[redacted]	1,55	1	3	3	0	1	1	0	1	0	0
[redacted]	1,47	0	4	5	1	0	0	0	0	14	0
[redacted]	1,43	2	30	0	0	0	0	0	0	4	1
[redacted]	1,34	0	1	4	11	0	0	1	0	4	0
[redacted]	1,34	0	4	4	10	1	0	0	0	0	0
[redacted]	1,30	0	0	0	0	1	0	3	0	0	0
[redacted]	1,15	1	21	2	3	0	1	0	0	0	0
[redacted]	0,87	0	0	2	7	1	0	0	0	0	0
Total	0,31	0	0	0	0	0	0	0	0	0	0



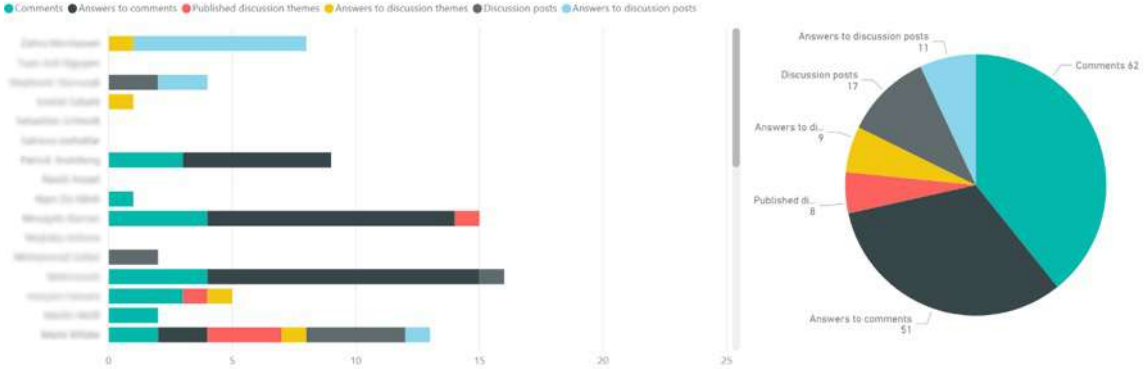
Tutor dashboard for communication screenshot

Technical platform

Dashboard for discussion

Discussion and comments:

Name	Communication index	Comments	Answers to comments	Published discussion themes	Comments to discussion themes	Discussion posts	Comments to discussion posts
[redacted]	4,83	16	6	0	1	1	0
[redacted]	2,91	2	2	3	1	4	1
[redacted]	1,55	3	0	1	1	0	0
[redacted]	1,47	5	1	0	0	0	0
[redacted]	1,43	0	0	0	0	0	0
[redacted]	1,34	4	11	0	0	1	0
[redacted]	1,34	4	10	1	0	0	0
[redacted]	1,30	0	0	1	0	3	0
[redacted]	1,15	2	3	0	1	0	0
[redacted]	0,87	2	7	1	0	0	0
[redacted]	0,75	3	6	0	0	0	0
Total	0,31	0	0	0	0	0	0



Tutor dashboard for discussions screenshot

Technical platform

User activity in MS Teams

Technical platform

Adaptive chatbots to analyze requests

Virtual Tutor Chatbot in MS Teams

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Thanks a lot for your attention.

More information about the project: www.valeu-x.eu
More information about the Chair of Information Mangement: https://tu-dresden.de/bu/wirtschaft/winf/wiim?set_language=en

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