Practical Information
Programme
Keynote
Abstracts for Short Communications
Posters
Workshops

Conference Teaching for Active Learning

2 November 2023
University of Southern Denmark

SDU UNIVERSITETSPÆDAGOGIK

SDU

Content

Programme

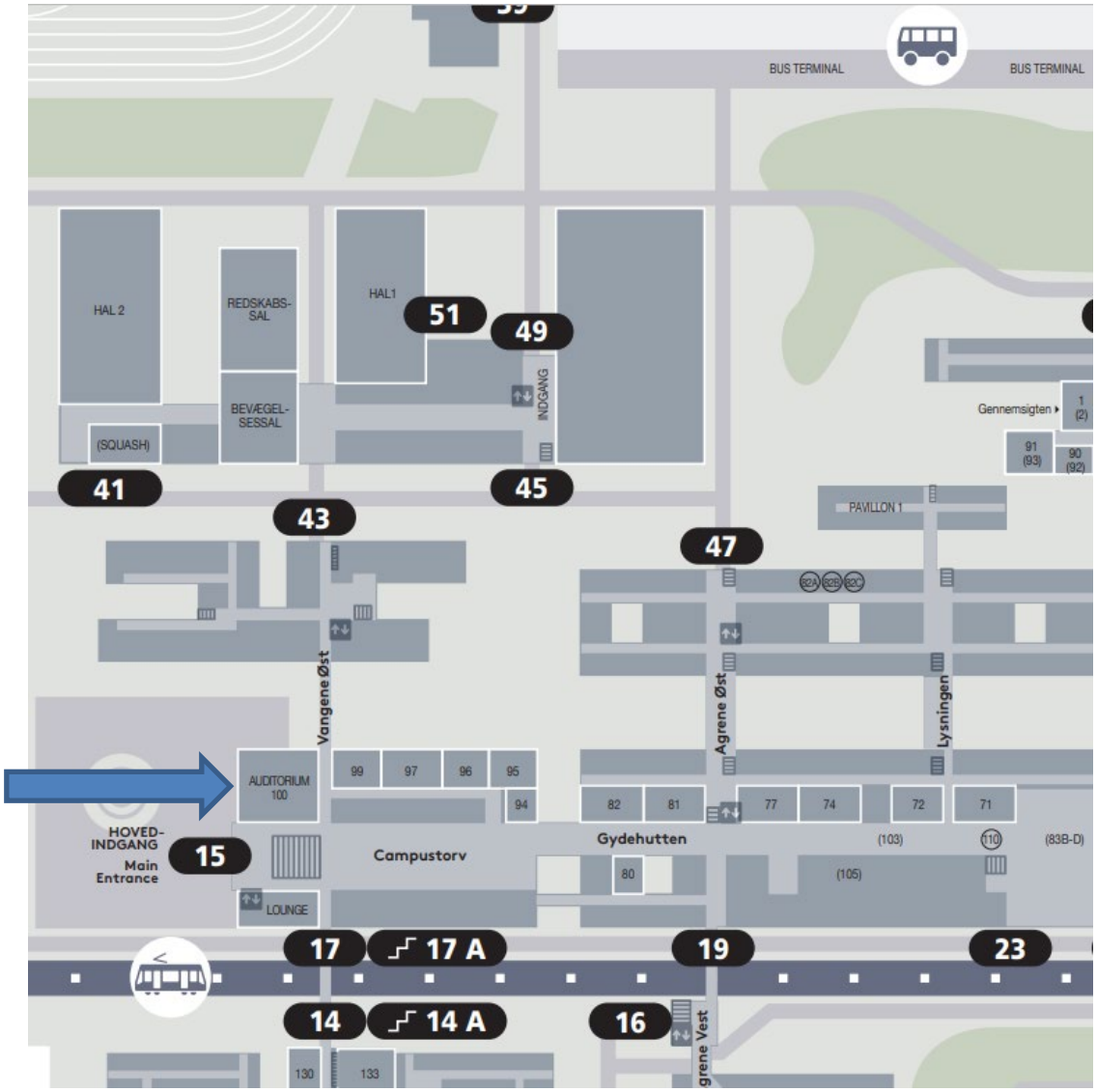
From 08.30	Registration, coffee, and rolls – Campustorvet at the main entrance
09.00	**Welcome** - Auditorium O100
09.15	**Keynote speaker** (in English): Ib Ravn ***Group work requires a facilitator*** *Appointing and training student facilitators are likely to improve group learning*
10.45	***Break***
11.05	**Parallel sessions part 1** • Short communications – conference rooms O96, O97, O99 • Poster presentations – Campustorvet • Workshops - conference rooms O94, O95
12.15	***Sandwich lunch and networking***
13.00	**Parallel sessions part 2** • Short communications – conference rooms O96, O97, O99 • Workshops – conference rooms O94, O95
14.10	***Break***
14.15	**Panel discussion** (in English) – Aud. O100 • Ib Ravn - Keynote • Dorte Frølund Kromann - Coordinator for study start and counselling, TEK, SDU • Mathias Mihkel Frost Jakobsen – 5 semester Student in English, SDU • Maria Elo - Doctor of Science in Econ., Associate Professor, Dep. of Business and Management, SDU Presentation of the 4 panelists (pdf-file) – in Danish – in English
15.30	**Closing statements – TAL2024 - Safe trip home – Aud. O100**

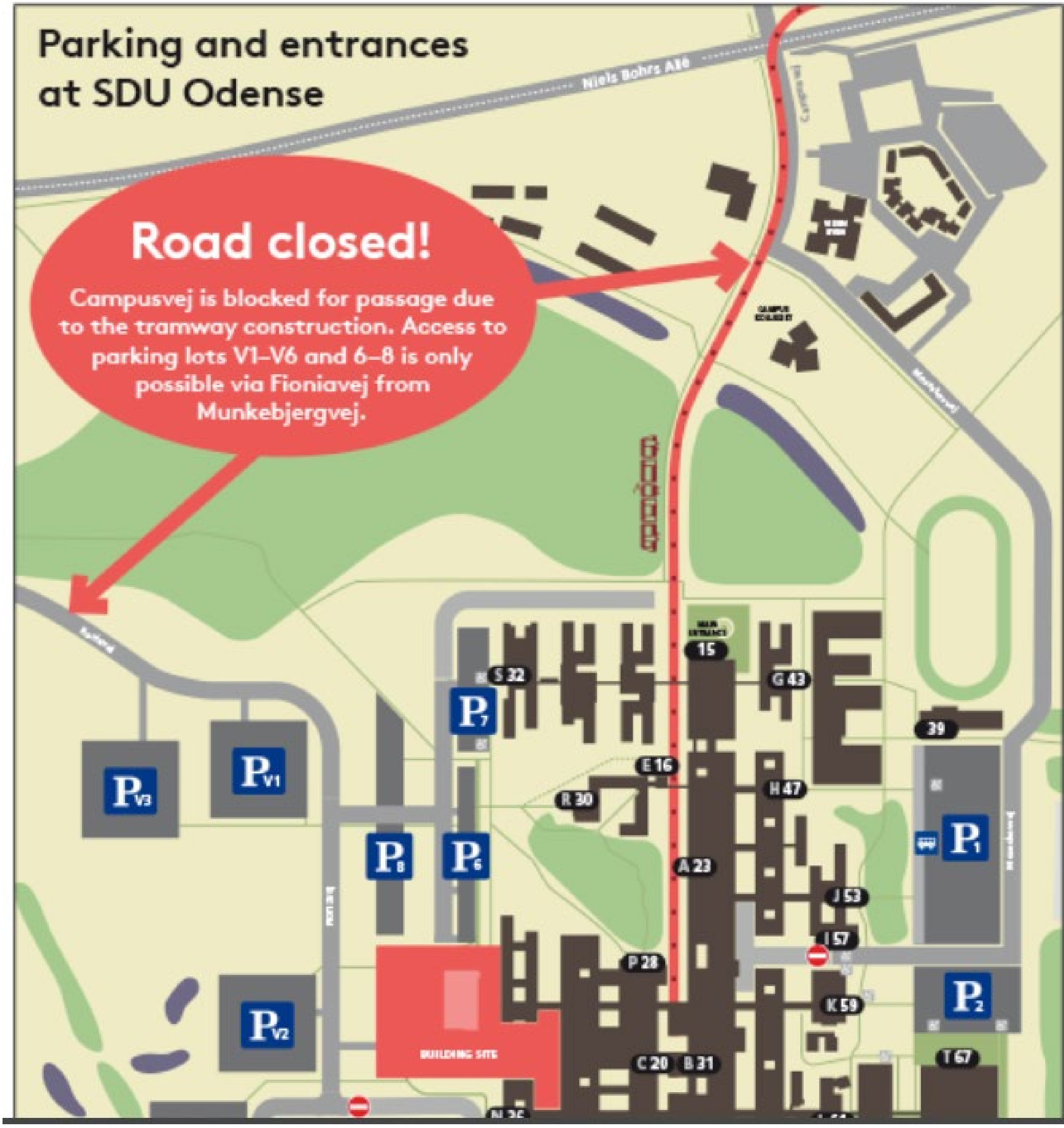
MAP – SDU, conference area and parking

University of Southern Denmark (pdf-map)
Campusvej 55
5230 Odense M

If you arrive at SDU by car, we advise you to enter by Munkebjergvej and Fioniavej and to use the parking spaces at Fioniavej (P West – PV1, PV3 …). Then head for Auditorium 100 near the Main entrance (15). Parking at P East, P1, P2 via Moseskovvej can be very difficult, and there are far more available parking spaces at Fioniavej (parking at O

If you arrive at SDU by light rail, get off at *Campus* and head for entrance 15, the main entrance. Tickets for the light rail/tram: 'Rejsekortet' is the easiest solution, alternatively use the Fynbus-app, or buy a ticket from one of the local vendors (for instance at Odense Banegård and at the book store Academic Books at SDU, Campus)





Parking and entrances at SDU Odense
Niels Bohrs Allé
Road closed!
Campusvej is blocked for passage due to the tramway construction. Access to parking lots V1–V6 and 6–8 is only possible via Fioniavej from Munkebjergvej.
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BUILDING SITE

Keynote speaker Ib Ravn

Ib Ravn – researcher, teacher, and adviser

Ib Ravn has been researching meetings and facilitation since 2002 and has over the years advised private, public, and professional organizations as well as trained managers in meeting facilitation.

Ib Ravn has for many years been an Associate Professor and lecturer in organizational knowledge processes at DPU (Danish School of Education), Aarhus University; a study coordinator at DPU for the Master's in Positive Psychology; and in his own research he has a special basis in the motivational psychology "Selvbestemmelsesteori" (Self-determination theory) (Hans Reitzel 2021). Ib Ravn has also led several research and development projects on the facilitation of meetings, conferences and study groups.

With that in mind, Ib Ravn has written several books on facilitation, including:

- "Den faciliterende underviser" (The facilitating teacher), Hans Reitzel 2023
- "Studiegrupper – samarbejde og facilitering" (Study groups: Collaboration and facilitation). Hans Reitzel, 2018 (with Lisbet Rask, Morten Birk Hansen and Anne Katrine Rask).

Overview of sessions: Short Communications, Posters, and Workshops

Morning 11:05 – 12:15 - Short communications

Each presenter will have 10 minutes to share a teaching experience and reflections, followed by 10 minutes of discussion.

Language: English **Chair:** Rie Troelsen **Room:** O99	**Language**: Danish **Chair:** Christian H. Voss **Room:** O97	**Language**: Danish **Chair:** Torben K. Jensen **Room:** O96
SC 1-1 Design thinking for entrepreneurial learning, teaching, and adventure *Su-Hyun Berg*	**SC 2-1** Vertical surfaces in university classrooms *Dorte Moeskær Larsen* *Connie Svabo* *Præsenteres på dansk*	**SC 3-1** Det akademiske bord – En metafor for vejledning i at skrive større akademiske opgaver *Sigrid Elenor Allison Rytz* *Bjarne Lind Christensen*
SC 1-2 Making STEM higher education teachers Fit4Future – towards a curriculum for active learning *Patricia Wolf* *Marianne Harbo Frederiksen*	**SC 2-2** Tavlemetodik – et fysisk artefakt som medaktør i læringsrummet *Kristine Nielsen*	**SC 3-2** Tværfaglig gruppebaseret praksisnær undervisning på Humaniora *Flemming Smedegaard*
Making STEM higher education teachers Fit4Future – **continued** …… After a break we will do a teaching design exercise based on the content of our learning platform *Patricia Wolf* *Marianne Harbo Frederiksen*	**SC 2-3** AutoSearch – the automated literature search tool *Zheng Grace Ma* Præsenteres på dansk af: *Hampus Fink Gärdström* *Henrik Schwarz*	**SC 3-3** Studiegrupper som professionelle arbejdsfællesskaber *Johanne Grøndahl Glavind* *Ditte Graversgaard Hansen*

Morning 11:05 – 12:15 – 5 consecutive poster sessions on Campustorvet

Chair: Søren Sten Hansen The 5 posters will be in one series with a 5 minute presentation of each poster, followed by 5 minute questions, and finished by a 20-25 minute discussion of all 5 posters.
Poster 1 – Presentation and discussion in ENGLISH
Poster 1 – Online supervision challenges during COVID-19 outbreak: A case-study in the Master of Publich Health *Fereshteh Baygi*
Poster 2-5 - Presentation and discussion in DANISH
Poster 2 – Sequential peer feedback to improve student activity and performance *Anne Loft*
Poster 3 – How to increase participation in group presentations? The impact of structured peer feedback *Maiken Skovrider Aaskoven*
Poster 4 – Peer feedback in real-life clinical settings *Casper Glissmann Nim*
Poster 5 – Decision making for optimizing function, formats, facilitation, and effect on learning and well-being for students' groupwork *Cita Nørgård*

Morning 11:05 – 12:15 - Parallel workshops in Danish / English

Room O95	Workshop in ENGLISH – Max. 12 people – no pre-registration **WS 1-1:** Empowering voices with virtual reality *Ïo Valls-Ratés* *Oliver Niebuhr*
Room O94	Workshop in DANISH: **WS 1-2:** Student sessions as roleplay for learning *Katrine Bergkvist Borch* *Frederikke Ejlebæk Enggaard* *Workshoppen afholdes på dansk*

Afternoon 13:00 – 14:10 - Short communications

Each presenter will have 10 minutes to share a teaching experience and reflections, followed by 10 minutes of discussion.

Language: Danish **Chair**: Vibeke Damlund **Room**: O99	**Language**: English Chair: Lotte O'Neill **Room:** O97	**Language**: English **Chair**: Sara Kvist **Room:** O96
SC 4-1 Studerende OG undervisere involveret i udvikling af nye feedbackpraksisser – potentialer og udfordringer *Dorte Lindelof* *Helle Hornhaver*	**SC 5-1** Empowering active learning: A practical approach to gait analysis instruction *Steen Harsted*	**SC 6-1** Learning while making in first year student groups *Tove Faber* *Eva Knutz* *Thomas Markussen*
SC 4-2 Peer feedback som udvikling af den enkelte kursist gennem en intensiv kursusuge *Pia Goul*	**SC 5-2** How to generate motivation and student activity through different dialogical group work formats *Tony Andersen*	**SC 6-2** Interdisciplinary and intercultural group work – ways to scaffold student learning *Donna Hurford*
SC 4-3 The (well-)functioning study group – introducing a study group reflecting tool among Master's degree students at the Public Health Education, University of Southern Denmark *Andreas Jørgensen* *Marie Broholm-Jørgensen* *Præsenteres på dansk*	**SC 5-3** My Study Group – Supporting study groups at the University of Copenhagen *Ruth Horak* *Katrine Ellemose Lindvig* *Anna Leonard Fransgård* *Maria Ansager Jensen*	**SC 6-3 – NEW!!** The HEAL project – internships in future hospitals Qualifying clinical placements – A work in progress *Vibeke Damlund* Read about the HEAL project

Afternoon 13:00 – 14:10 - Parallel workshops in Danish / English

Room O95	Workshop in DANISH – Maks. 30 deltagere – ingen forhåndstilmelding **WS 2-1:** Erfaringer fra et tænkende klasserum i matematikundervisningen på første semester *Henrik Skov Midtiby* *Dorthe Frølund Kromann* *Cita Nørgård*
Room O94	Workshop in ENGLISH: **WS 2-2:** Using reflective writing in teaching: from small seminar rooms to big lecture halls *Ane Karoline Bak Foged*

Morning - Short communications 11:05 – 12:15

SC 1-1: Design thinking for entrepreneurial learning, teaching, and adventure

Author

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Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What did you intend the students to achieve from this teaching and learning activity?
Understanding and applying design thinking phases (empathize, define, ideate, prototype and test) to initiate problem- and solution-oriented work, and to recognize entrepreneurial opportunities and use of new technologies.

Which general features of the teaching and learning activity will you share at TAL2023?
"From problem to pitch" format: seminar "technology management", which is offered as a bachelor compulsory course in the TEK/SDU, begins with an introduction of basic concepts of design thinking, before student groups identifying problems in their everyday life as anomalies and examining them from an end-user's perspective. Based on the knowledge gained, innovative ideas will be generated using various design thinking methods such as five why, crazy 8, reverse brainstorming and six hat method. These innovative ideas will be converted into prototypes using 3D printing, VR simulations, digital twins and laser cutting technologies. After learning storytelling skills and basics of pitching, student groups present their ideas/solutions as an elevator pitch form.

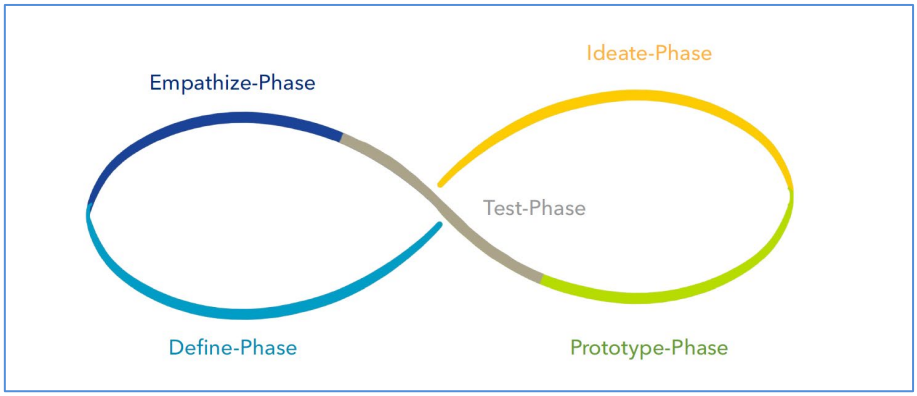

Figure 1. Design thinking phases
Source: iDEEE.schule (2023)

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?

- Entrepreneurial thinking and acting skills as a core competence to enhance employability
- Active application of new technologies and design thinking methods in interdisciplinary seminar groups
- Deep insights into innovation management, entrepreneurship, open innovation and effectuation approach
- Entrepreneurial mindset and methods of market analysis as well as positioning strategies

- Dealing with uncertainty by using diverse design thinking methods and creativity techniques
- Public speaking and storytelling skills

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

Design thinking helps teachers and students to acknowledge an iterative process of learning within the curricular programs, by allowing failures, trials and repeating. It enables us to re-think and re-define our *"failure culture"* in the tertiary education system, which sometimes hampers creative thinking and innovative acting. Each design thinking phase can be integrated into teaching regardless of study discipline since it is not necessarily sequential or linear. However, it is wise to inform the students about the process-inherent iteration beforehand to prevent a possible frustration.

SC 1-2 Making STEM higher education teachers Fit4Future – towards a curriculum for active learning

Author

Patricia Wolf, Prof. WSR, University of Southern Denmark, Dep. of Business and Management, pawo@sam.sdu.dk

Marianne Harbo Frederiksen, Associate Prof., University of Southern Denmark, Dep. of Business and Management, mha@sam.sdu.dk

Focus

- Examples of active teaching and learning in higher education

What did you intend the students to achieve from this teaching and learning activity?
FIT4Future revolves around far-future strategy development for STEM HE teachers, and it is an EU ERASMUS+ co-funded project that aims at developing an innovative curriculum for upskilling STEM HE teachers on introducing so-called Long-Term Future Scenarios (LTFS) into their regular teaching portfolios and activities. Considering developments like the climate crisis and rapid technology emergence, adding in STEM teaching the so far mostly neglected long-term (10-20 years) strategic management perspective will help improve the future employability of students in decision-making jobs.

Which general features of the teaching and learning activity will you share at TAL2023?
We will share the journey of the project, including how we

1) gathered information of the upskilling needs of STEM HE teachers via a survey (130 respondents from Portugal, Germany, Denmark, and Turkey) and follow up interviews (20 interviewees from Portugal, Germany, Denmark, and Turkey),
2) developed the curriculum, and
3) what the outcome is now.

We will present the features of the developed (draft) self-learning online environment for STEM HE teachers, reflect on its suitability for active learning, and discuss how the curriculum development journey helped us to achieve that result.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
We have not started to test the self-learning online environment yet, but we will be able to answer this question in November. What we already can say is that their involvement in the survey and the interviews created a momentum of attention and a community of STEM HE teachers who are looking forward to the results and who actively advised us during curriculum development.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Active learning requires curriculum development that is focused on the needs of the target group, and other HE teachers might gain inspiration from our approach for tailor-made development or further development of courses and programs. Further, those HE teachers interested in implementing LTFS in their teaching will benefit from being presented with the Fit4Future self-learning online environment.

SC 2-1: Vertical surfaces in university classrooms

Presentation in DANISH

Authors

Dorte Moeskær Larsen, Assistant Professor, University of Southern Denmark, Dep. of Mathematics and Computer Science, dmla@imada.sdu.dk

Connie Svabo, Professor, University of Southern Denmark, Dep. of Mathematics and Computer Science, svabo@imada.sdu.dk

Focus

- Students' professional and/or personal development through group work
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What did you intend the students to achieve from this teaching and learning activity?
In group work at the university, the norm is that students do their work in their notebooks or computers. Liljedahl (2021) has suggested that group work instead might focus on vertical surfaces. That means that the students write their reflections and work on vertical whiteboards during their groupwork. Liljedahl (2021) describes several advantages of this approach. First, student can quickly erase errors, which, for them reduces the risk of trying something new. Second, students feel less anonymous, which means, that they will have to engage more in the task. Third, the knowledge in the classroom has more mobility, which means that the students have the possibility to look around and use what other students have done as inspiration. From a teacher perspective there are also advantages to this approach. The teachers can to a greater extent see what is happening in the groups and be able to help the students thinking process by giving formative feedback.

Which general features of the teaching and learning activity will you share at TAL2023?
In an interdisciplinary module (NAT805) we have investigated this approach. We brought several whiteboards into the room, so that each group had their own whiteboard. Then we did two different group work exercises. One groupwork where the students had to write down their reflections on the day's reading. In the second groupwork, the students had to solve an engineering (STEM) problem about developing the best helicopter. After each group's work, the students presented their work to the rest of the class and in the end, we did a short evaluation.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Overall, the students were quite positive. There was a clear difference in how the board became a mediating factor in the two different tasks. In the first task, the focus was on getting a lot written down and the board became a kind of notepaper, which helped to create an overview of everything that was said in the group, so they could relatively easily present their thoughts to the class afterwards. In task two, the folding of the helicopters became the focal point, and the whiteboard receded more into the background. Here, the whiteboards were mostly used to list their process, so that they had control over which different variables they had tested in their trial and error approach.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Vertical surfaces in teaching have different positive effects in teaching and learning. It is probably

especially in problem-solving tasks that groupworks on vertical surfaces has its highest potential, for example in Mathematics.

Liljedahl, P. (2020). *Building thinking classrooms in mathematics, grades K-12: 14 teaching practices for enhancing learning*. Corwin press.

SC 2-2: Tavlemetodik, et fysisk artefakt som medaktør i læringsrummet

Author

Kristine Nielsen, lektor og arkitekt, VIA University College, Bygningskonstruktøruddannelsen, krni@via.dk

Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What did you intend the students to achieve from this teaching and learning activity?
I læringsrummet, hvor undervisere har ansvaret for rammesætningen af læringsaktiviteterne, og studerende har ansvaret for aktiv deltagelse i deres egne studieaktiviteter, kan det være mindre tydeligt, hvilke aktiviteter de studerende skal prioritere. Jeg har derfor undersøgt hvordan de studerendes brug af fysiske tavler i læringsmiljøet, kan påvirke de studerendes evne til at styre deres aktiviteter og processer samt fremme deres samarbejde og læring på tværs af projektgrupper.

Which general features of the teaching and learning activity will you share at TAL2023?
Mine egne observationer, de studerendes logbog med personlige refleksioner og noter fra dialog med underviser, finder vigtige fordele ved brugen af fysiske tavler i læringsmiljøet:

- **Umiddelbar adgang til indhold:** At have emner, mål og aftaler synlige på de fysiske tavler give de studerende en nem måde at huske og referere til vigtige oplysninger. Det skaber en mere intuitiv tilgang til at interagere med materiale.
- **Fremme vidensdeling:** Tavlerne giver en central og synlig platform for deling af viden og ideer. Alle kan nemt se og tilføje kommentarer, hvilket kan føre til en mere dynamisk og engagerende vidensdelingsproces. Dette kan føre til øget interaktion og samarbejde mellem studerende.
- **Inspirerende miljø:** Det fysiske aspekt af tavlerne kan skabe en mere inspirerende læringsoplevelse. Studerende kan skabe visuelle sammenhænge og forbindelser mellem forskellige ideer, og det kan føre til mere kreativ tænkning og problemløsning.
- **Mindre kompleksitet:** Tavlerne giver en måde at organisere og forenkle komplekst indhold. Ved visuelt at repræsentere forbindelser og trin kan studerende bedre forstå og navigere i indholdet, hvilket igen kan føre til bedre forståelse og læring.
- **Gradvis udvikling og kobling af fag**: Brugen af tavler kan hjælpe med at fremhæve sammenhænge mellem forskellige fag og koncepter. Dette gør det lettere for de studerende at se, hvordan forskellige dele af deres uddannelse hænger sammen, og det kan bidrage til en mere sammenhængende og helhedsorienteret læring.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Gennem egne observationer, de studerendes logbog med personlige refleksioner og noter fra dialog med underviser, fremstår anvendelsen af de fysiske tavler som et væsentligt element i et godt samspil mellem de studerende og læringsaktiviteter. Det opleves at de studerende træner kompetence i bl.a. at kunne reflektere over - og se kritisk på - eget og andres arbejde og på den måde vinde ny indsigt til at fremme deres eget personlige og faglige ståsted.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

- **Forskellige fagområder**: Organisering af opgaver og fremme samarbejde er vigtige aspekter på tværs af uddannelsesniveauer. Uanset hvilken uddannelse, kan brugen af tavler hjælpe studerende

med at visualisere komplekse ideer og processer. Det kan være nyttige på tværs af forskellige fagområder.

- **Innovation og kreativitet:** Brugen af tavler til at visualisere ideer og brainstorming processer kan også overføres til innovative og kreative læringsprocesser, hvor idéudvikling er afgørende.
- **Sociale og samarbejdende færdigheder: Brugen** af tavler kan også bidrage til udviklingen af sociale - og samarbejdsevner hos studerende, hvilket er en vigtig kompetence uanset hvilen uddannelse man er på.
- **Projektledelse**: Måder at organisere arbejde og opretholde overblik er afgørende for vellykket projektledelse.

SC 2-3: AutoSearch – the automated literature search tool

Author

Zheng Grace Ma, Associate Professor, Mærsk Mc-Kinney Møller Institute, Syddansk Universitet, zma@mmmi.sdu.dk

Præsenteres – på DANSK – af programmørerne bag AutoSearch:

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Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

Introduction

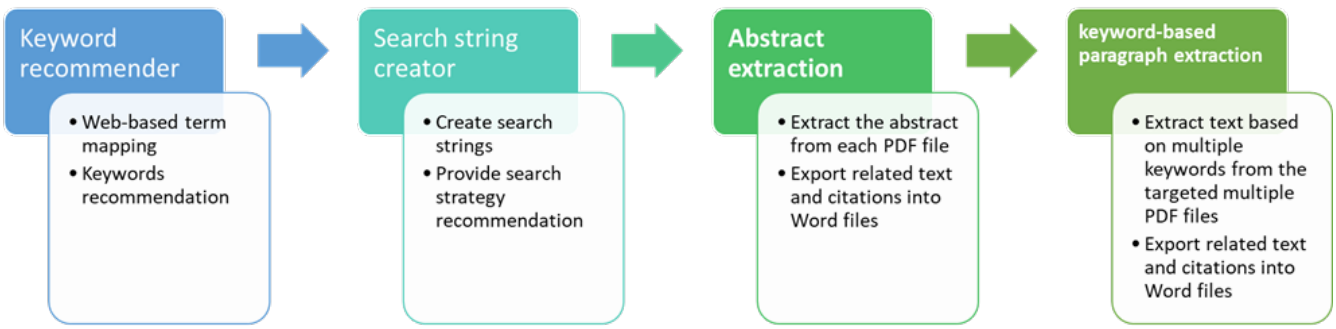
AutoSearch is designed to address the challenges students face when conducting scoping reviews. This challenge is not exclusive to students at TEK but is common across all faculties. The "Scientific Methods" course is mandatory for all master's students, meaning that both master's and doctoral students could benefit from using AutoSearch. The tool offers various functions such as keyword recommendation, search string creation, abstract extraction, and keyword-based text extraction, making it versatile for different courses. AutoSearch will undergo testing and be introduced in several courses, such as "Scientific Methods" and "Science Theory," catering to both Bachelor's and Master's students at the Mærsk Mc-Kinney Møller Institute.

What did you intend the students to achieve from this teaching and learning activity/curriculum intervention?

Many courses ask students to explore technologies or solutions alongside related business models. This is because it's crucial for students to grasp not only the non-technical facets of the primary knowledge but also to comprehend the reasons behind the course content. However, this exploration can be time-intensive and often involves manual tasks that students might find challenging. To boost student motivation and minimize the time spent on such tasks, we have developed a web-based tool called Autosearch. This tool streamlines the process of literature search and management for students.

Which general features of the teaching and learning activity will you share at TAL2023?

Autosearch includes four main elements (as shown in the table and figure below)



Element	Function
1. Keyword recommender	This tool conducts term mapping with scientific databases based on the input keywords, and recommends a list of similar and related keywords in the scientific fields
2. Search string creator	The search string creator can create search strings with the input criteria and provide recommendations of British and American spellings; and Pairs (singular and plural word forms, synonyms, and other closely related terms)
3. Abstract extraction	The tool allows to export the abstracts of the selected references and convert the abstract into a Word file with citations and a reference list.
4. Keyword-based paragraph extraction	The tool allows to extract paragraphs based on the defined keywords from the full text of the targeted articles. The citation and reference list will be extracted together with the extracted paragraphs

1. Keyword recommender

User Interface – Input (1)

Please define your scoping review research question (optional):

Note

The scoping review research question can facilitate the scope of the search and create the initial keywords for literature search

A scoping review research question is usually formed as:

What methods/technologies/aspects have been researched for the purposes in the targeted domains?

- Examples of methods/technologies: simulation, modelling, software, cloud computing, IoT, etc.
- Examples of purposes: monitoring, control, forecasting, fault/error/failure detection, maintenance, etc.
- Examples of targeted domains: machines, factories, energy, building, supply chain, etc.

User Interface – Input (2)

Please add initial keywords manually, or drag the keywords from the defined research question (compulsory):

OR/NOT Add

OR/NOT Add

OR/NOT Add

Add

Note

- At least one keyword needs to be added;
- Only one keyword should be added in each box.
- This input will result in an initial search string as: (“keyword 1 in Row 1” OR “ keyword 2 in Row 1” OR….NOT (“ Not included keyword in Row 1”)) AND …. AND (“ keyword 1 in Row n” OR “ keyword 2 in Row n” OR…. NOT (“ Not included keyword in Row n”))

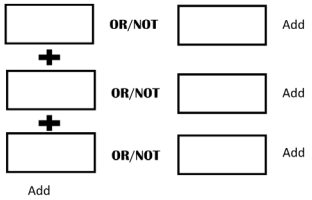
User Interface Output

('energy effici*', 11)	('energy performance certif*', 2)
('optim*', 4)	('simul*', 2)
('climate chang*', 4)	('model*', 2)
('reinforcement learn*', 3)	('wireless sensor network*', 2)
('energy consumpt*', 3)	('building energy effici*', 2)
('machine learn*', 3)	('vehicle dynam*', 2)
('environmental sustain*', 3)	('road*', 2)
('circular economi*', 3)	('rebound effect*', 2)
('lead acid batteri*', 2)	('energi*', 2)
('electric vehicl*', 2)	('optical switch*', 2)
('eco driv*', 2)	('green growth*', 2)
('optimal control*', 2)	

2. Search string creator

User Interface – Input

Please add keywords manually, or drag the keywords from the Keyword recommender:



Note

- At least one keyword need to be added;
- Only one keyword should be added in each box.

Keywords from Keyword recommender search result

('energy effici*', 11)
('optim*', 4)
('climate chang*', 4)
('reinforcement learn*', 3)
('energy consumpt*', 3)
('machine learn*', 3)
('environmental sustain*', 3)
('circular economi*', 3)
('lead acid batteri*', 2)
('electric vehicl*', 2)
('eco driv*', 2)
('optimal control*', 2)
('energy performance certif*', 2)
('simul*', 2)
('model*', 2)
('wireless sensor network*', 2)
('building energy effici*', 2)
('vehicle dynam*', 2)
('road*', 2)
('rebound effect*', 2)
('energi*', 2)
('optical switch*', 2)
('green growth*', 2)

User Interface Output

The recommended search string is:

("keyword 1 in Row 1" OR " keyword 2 in Row 1" OR....NOT (" Not included keyword in Row 1")) AND .... AND (" keyword 1 in Row n" OR " keyword 2 in Row n" OR.... NOT (" Not included keyword in Row n"))

3. Abstract extractor

User Interface – Input

Please upload your Endnote file as a **zip file**.

Note: The zip file should include the .enl file and the .Data folder

User Interface – Output

You can download the Word file here.

Note: The content in the file looks like:

Title: [1]Data science for building energy efficiency: A comprehensive text-mining driven review of scient literature

Abstract: [1] The ever-changing data science landscape is fueling innovation in the built environment cont by providing new and more effective means of converting large raw data sets into value for professional the design, construction, and operations of buildings. The literature developed due to this convergence rapidly increased in recent years, making it difficult for traditional review approaches to cover all rela papers. Therefore, this paper applies a natural language processing (NLP) method to provide an exhaust and quantitative review.

Title: [2] An Online Learning Framework for Energy-Efficient Navigation of Electric Vehicles

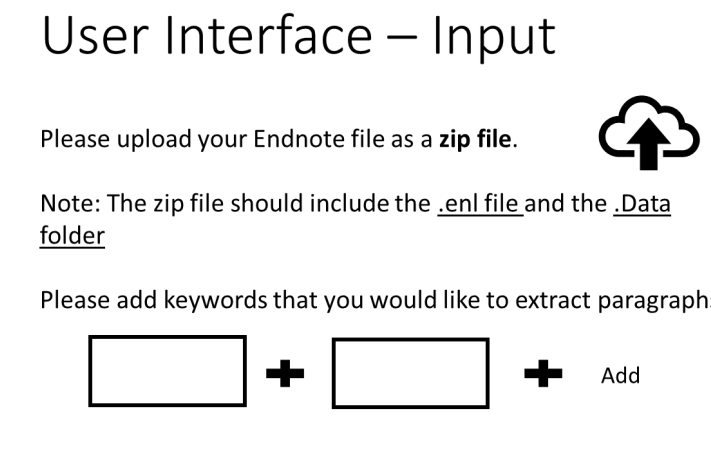
Abstract: [2] Energy-efficient navigation constitutes an important challenge in electric vehicles, due to th limited battery capacity. We employ a Bayesian approach to model the energy consumption at r segments for efficient navigation. In order to learn the model parameters, we develop an online learn framework and investigate several exploration strategies such as Thompson Sampling and Upper Confide Bound. We then extend our online learning framework to multi-agent setting, where multiple vehi adaptively navigate and learn the parameters of the energy model. We analyze Thompson Sampling establish rigorous regret bounds on its performance. Finally, we demonstrate the performance of methods via several real-world experiments on Luxembourg SUMO Traffic dataset.

References

[1] M. M. Abdelrahman, S. C. Zhan, C. Miller, and A. Chong, "Data science for building energy efficier A comprehensive text-mining driven review of scientific literature," *ENERGY AND BUILDINGS*, 242, JUL 1 2021, doi: 10.1016/j.enbuild.2021.110885.

[2] N. Akerblom, Y. X. Chen, and M. H. Chehreghani, "An Online Learning Framework for Energy-Effici Navigation of Electric Vehicles," presented at the Proceedings Of The Twenty-Ninth Internatio Joint Conference On Artificial Intelligence, 2020.

4. Keyword-based paragraph extractor



Keyword: Reguation

[1] After performing power flow using the modeled EV according to the evaluation method sequence in Section II, Fig. 5 shows the minimum voltage for each case. In a situation where about 700 electric vehicles were penetrated, the minimum voltage ofthe bus was 0.958 p.u. As the number of electric vehicles increased, the minimum voltage sequentially decreased. The gradually decreasing minimum voltage reached 0.95 when 1,120 electric vehicles were penetrated. Since 0.95 p.u. is a general distribution network voltage supply regulation, it can be seen that the number ofEVHC in the system including Seoul National University's College of Engineering is 1,120 units. The reason voltages appear in different ranges is that the bus subject to the voltage constraint is usually the weakest bus. The voltage drops especially when many EV are crowded at the charging stations near this bus. When 1,120 EVs were penetrated, the voltage was in the range of 0.95 to 0.954 p.u. and all of the 1500 EVs, the maximum number ofEVs, were penetrated, it was found to be 0.944 to 0.95 p.u.

[2] The electricity generation sector has been adopting renewable energy resources (RERs) on large scale to combat the large carbon emission, environmental pollutions and global warming [1]. RERs based interconnected microgrid (ICμG) has become a better choice than the conventional centralised power system due to its small scale, decentralised, and economic reason [2]. Moreover, ICμGs are poised to increase the reliability by sharing the excess power among the associated microgrids and also resilient to disturbances [3]. Wide acceptance of ICμGs accelerates the activities of the prosumers who attain the benefit extensively [4]. Consequent large integration of RERs into the microgrid is also due to the fact that it now cost parity with conventional generation [5]. Besides, the predominance of wind and solar photovoltaic in a microgrid, concentrated solar thermal power, particularly, dish-Stirling solar power has gained much attention as a proven technology around the world due to the modular design and maximum efficiency (~31.25%) [6]. Nevertheless, the natural dependency of RERs and consequent power fluctuations in addition to load perturbations, induce excursions in system frequency of the ICμG as it has comparatively less inertia. Maintaining stability of ICμG composed of RERs is a big concern, many research works are devoted in that direction. To this aim, an automatic frequency regulation strategy plays a key role to damp out the oscillations and ensure the better system dynamic response [7]. Previously, energy storage devices, particularly, battery (lead acid) has been the indispensable part of the renewable-based microgrid for mitigating frequency fluctuation [6]. However, the battery has some limitations, for instance, frequent maintenance requirement, short service life, expensive and dumping problems as it causes environmental hazards [8]. Fortunately, there are emerging energy storage technologies that can contribute towards mitigation of frequency excursions. Plug-in hybrid electric vehicle (PHEV) [9] has eco-friendly storage options, heat pump (HP) [10], and industrial freezer (Frz; thermostatic control) [11] have emerged as controllable loads with significant potential to provide frequency control support in the power system. However, their application for containing frequency in ICμG without battery system needs to be investigated.

[2] HP is a controllable load that can be installed in residential areas and can support frequency regulation because of large scale regulating capacity [33]. The HP transfers the heat energy through the working fluid called refrigerant. Specification of the system is shown in the Appendix. The first-order T.F model is expressed [12] as

[1] T. H. Kim, D. Kim, and S. I. Moon, "Evaluation of Electric Vehicle Hosting Capacity in Campus Microgrid Using Monte Carlo Simulation," (in English), *Int C Electr Mach Sy*, pp. 2329-2332, 2021. [Online]. Available: <Go to ISI>://WOS:000790083500436.
[2] A. Latif, D. C. Das, S. Ranjan, and A. K. Barik, "Comparative performance evaluation of WCA-optimised non-integer controller employed with WPG-DSPG-PHEV based isolated two-area interconnected microgrid system," (in English), *let Renew Power Gen*, vol. 13, no. 5, pp. 725-736, Apr 8 2019, doi: 10.1049/iet-rpg.2018.5419.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?

While AutoSearch has not been fully implemented and tested in class, a semi-automated literature search was trialed with a small group of students. The results indicate that:

- The "Keyword Recommender" efficiently suggests keywords from publications within a specific domain to students. This aids students in quickly familiarizing themselves with domain-specific terminology, making their search for publications in unfamiliar domains easier. As a result, the keywords students choose for literature searches are more relevant, making the process more organized and methodical.
- The "Search String Creator" allows students to develop a search string based on their original ideas. It also ensures they don't misuse boolean operators, which could lead to unexpected results.
- The "Abstract Extractor" feature creates Word files with the extracted abstracts, which saves students time compared to reading abstracts in Endnote or PDF files. This format also makes it easier for students to conduct an initial analysis of the literature, such as identifying focused domains, methods used, and results.
- The "Keyword-based Paragraph Extractor" can sometimes produce large files if the chosen keywords are too broad. This can make it time-consuming for students to read through. Additionally,

even though entire paragraphs are extracted, students sometimes find that they lose the broader context compared to reading the full text directly.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

AutoSearch is designed to address the challenges students face when conducting scoping reviews. This challenge is not exclusive to students at TEK but is common across all faculties. The "Scientific Methods" course is mandatory for all master's students, meaning that both master's and doctoral students could benefit from using AutoSearch. The tool offers various functions such as keyword recommendation, search string creation, abstract extraction, and keyword-based text extraction, making it versatile for different courses. AutoSearch will undergo testing and be introduced in several courses, such as "Scientific Methods" and "Science Theory," catering to both Bachelor's and Master's students at the Mærsk Mc-Kinney Møller Institute. Additionally, plans are in place to make the tool publicly available online. Since AutoSearch is a free web-based tool, anyone, even those outside of SDU, can utilize it to streamline their literature review process.

SC 3-1: Det akademiske bord – En metafor for vejledning i at skrive større akademiske opgaver

Authors

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Focus

- Examples of active teaching and learning in higher education

What did you intend the students to achieve from this teaching and learning activity?
Vejledningsuniverset Det Akademiske Bord er en visuel, mundtlig og digital vejledning i at skrive større, selvstændige akademiske opgaver. Det kan bruges af undervisere og integreres i fx bachelorforberedende forløb, og det kan bruges selvstændigt af studerende i deres arbejdsproces.

Which general features of the teaching and learning activity will you share at TAL2023?
Vi vil kort præsentere vores side på mitsdu, og herunder vise en lille bid af videoen Det Akademiske Bord. Vi vil også præsentere vores tanker bag indholdet i de "kasser", der hører med. Vi har forsøgt kort at skrive, hvad de enkelte dele i en akademisk opgave tjener til, og hvad man som studerende skal vise med de enkelte afsnit. Teksterne er skrevet som FAQ-spørgsmål, så de vidt som muligt læner sig op ad de spørgsmål studerende typisk har i forbindelse med at skrive opgaver. Teksterne vil på længere sigt blive understøttet af interviews med undervisere og vejledere.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
At skrive større selvstændige, akademiske opgaver er et håndværk. Der er ofte ikke meget tid til rådighed hos undervisere i forhold til at undervise i håndværket ved f.eks. at give feedback på opgaver og lignende. Studerende er derfor ofte overladt til at lære håndværket på egen hånd. Det kan de gøre ved f.eks. at orientere sig i ofte teksttunge og generisk skrevne bøger som "Den gode opgave" og lignende.

Metaforen Det Akademiske Bord og hjemmesiden, der hører til, beskriver i en overskuelig form det akademiske håndværk. Altså at vælge et problem og argumentere for relevansen, vælge, beskrive og argumentere for valg af teori og metode, gennemføre en systematisk og faglig analyse og diskutere fundene ud fra de valgte teoretiske rammer.

Undervisere kan bruge redskabet til f.eks. at henvise til det inden et vejledningsmøde. Underviserne kan også inddrage det som en del af undervisningen, og f.eks. diskutere om der er andre mulige svar end de svar, som bliver præsenteret i FAQ'en.

Da vejledningsredskabet er online og dynamisk, kan vi holde det opdateret, og vi kan henvise til andre relevante tilbud på SDU, fx bibliotekets ressourcer om informationssøgning, referencer og plagiat.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Vores materiale ligger online og kan derfor tilgås af undervisere og studerende fra andre uddannelsesinstitutioner.

SC 3-2: Tværfaglig gruppebaseret praksisnær undervisning på Humaniora

Author

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Focus

- Students' professional and/or personal development through group work
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice
- Interdisciplinary group work

What did you intend the students to achieve from this teaching and learning activity?
Flere af mine kurser – bl.a. fag som *HR i teori og praksis* samt *Pilen peger på en humanist: Når ledelse er kommunikation* – udbydes på tværs af humanistiske uddannelser på SDU og er bygget op om, at nogle virksomheder ved kursets start stiller nogle opgaver til de studerende. De studerende vælger sig så ind på en af opgaverne. Der sammensættes grupper på tværs af uddannelser, og de studerende arbejder sideløbende med undervisningen med de stillede opgaver gennem semestret. Undervisningen tilrettelægges i videst muligt omfang, så den støtter op om de studerendes opgaver, og der inddrages i væsentlig grad gæsteundervisere fra forskellige organisationer. Sidste undervisningsgang i semestret præsenterer de studerende deres løsninger for virksomhederne og får disses feedback. Efterfølgende kan de studerende så vælge at arbejde videre med virksomhedsopgaverne i deres eksamensopgaver, som er frie hjemmeopgaver. Denne form for undervisning giver en unik synergi mellem teori og praksis.

Which general features of the teaching and learning activity will you share at TAL2023?
Jeg vil på TAL 2023 dele mine erfaringer med at praktisere konceptet om tværfaglig gruppebaseret praksisnær undervisning, herunder præsentere et konkret kursuseksempel.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Erfaringen er, at de studerendes engagement og indsats vokser betydeligt i denne form for undervisning, bl.a. fordi den enkelte studerende er en del af en gruppe, som man er ansvarlig overfor, og gruppen er så yderligere ansvarlig for at levere en løsning til den virksomhed, som har stillet opgaven. Samtidig oplever de studerende, at de i væsentlig grad får styrket deres employabilitet samt øget deres faglige netværk.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Erfaringerne vil blive videregivet gennem oplæg på TAL 2023 og gennem konferencepublikationen herfra, ligesom jeg altid gerne stille mig til rådighed for at dele mine erfaringer med andre, som ønsker at afprøve tværfaglig gruppebaseret praksisnær undervisning. Konceptet vil uden videre kunne anvendes på de fleste videregående uddannelser.

SC 3-3: Studiegrupper som professionelle arbejdsfællesskaber

Authors

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Focus

- Students' professional and/or personal development through group work

What did you intend the students to achieve from this teaching and learning activity?
Vores præsentation er baseret på resultaterne af et forskningsprojekt (og ikke en undervisningssituation). I projektet undersøger vi betydningen af studiegrupper for professionshøjskolestuderendes integration på deres uddannelse. Projektet bygger på kvalitative interviews med 35 studerende fra seks forskellige uddannelser på VIA University College.

Which general features of the teaching and learning activity will you share at TAL2023?
Projektet bygger på Tintos (1993, 1997) begreber om social og faglig integration. Analysen af interviewdata viser dog, at de studerende ikke kun oplever, at studiegrupperne integrerer dem fagligt og socialt, men at de gennem studiegruppen også bliver integreret i professionen. Studiegrupperne udgør et professionelt arbejdsfællesskab, hvorigennem de studerende kan udvikle deres professionelle kompetencer og identitet.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Gennem studiegruppesamarbejdet træner de studerende professionsrelevante samarbejdskompetencer, ligesom de får mulighed for at udforske deres forestillinger om professionen, og hvem de selv er som professionelle. Studiegruppen bliver med andre ord et imiteret kollegaskab, hvor man er 'voksne' sammen – man samarbejder professionelt om opgaven, ligesom man også kan hygge sig sammen. Dette syn på studiegruppearbejdet kan medvirke til at nedtrappe konflikter i gruppen, da fokus i høj grad er på læring og opøvelse af professionelle kompetencer frem for på det personlige. Omvendt betyder det også, at den sociale relation til gruppen og uddannelsen for nogle studerende er svag. De møder op til undervisning og gruppearbejdet, men bruger derudover ikke studiegruppen som et socialt netværk.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Forskningsprojektets resultater kan inspirere undervisere og uddannelser ved at give en bevidsthed om, hvordan argumenterne om formålet med studiegrupperne og faciliteringen af studiegrupper kan være med til at integrere de studerende i professionen.

Morning – 5 Poster presentations 11:05 – 12:15 on Campustorvet

Poster 1 – Online supervision challenges during COVID-19 outbreak: A case study in the Master of Public Health

Presentation in ENGLISH

Author

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Focus

- The impact of online supervision on students' professional skills and supervisor's role

What did you intend the students to achieve from this teaching and learning activity?
I wish to inspire the student to rely on his knowledge that he gained on qualitative research methodology in public health during a 2-month internship. Moreover, to strength his communication weakness which is one of the necessary skills required for a better performance on his master 's thesis.

Which general features of the teaching and learning activity will you share at TAL2023?
The impact of online supervision on students' professional skills and supervisor's role during COVID-19 are the main features that I would like to share.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Overall, remote supervision was challenging for my student and me. My role shifted from a catalyst/facilitator to a strict supervisor/master based on my student's needs and our challenges. My student learnt how to improve his academic knowledge for better performance on his project. The best part of this online supervision, however, was gaining new skills (e.g., communication, time management, etc) for both supervisor and student.

We faced the following challenges:

- **Supervisor's challenges:** Home for me - as a supervisor for my student and a mom for two kids - had become everywhere and nowhere. Kids were somewhere in the background (e.g., interrupting me for help to do their online homework) when I had a meeting with my student. So, focusing and listening had become challenging for me. Therefore, my main concern was: if such challenges may impact the quality of the supervision, data gathering, and the project overall.

- **Student's challenges:** Low interaction with the supervisor when the project started was challenging for the student. However, the student's poor internet connection later made such a weak interaction more complicated for both student and supervisor. The student's low sense of relatedness to the project as well as his supervisor became an extra stressor for the student.

- **Coping with the challenges:**

    - We worked on further development of our self-management skills and capacities (e.g., time management and being more flexible, etc) to cope with challenges related to low focus and low interaction between student and supervisor.

- I had more flexibility in my role as supervisor (from transmission-oriented supervision to process-oriented supervision) to cope with the student's challenges. At starting point of the project my role was like a catalyst to facilitate the learning process by proposing alternative goals and methods. Later my role shifted to a strict supervisor/a master when he was unable to make decisions on the critical stage of the project because of high levels of stress and anxiety- as COVID-19 consequences.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

Supervision patterns should be adapted to students' needs particularly in extra ordinary conditions like COVID-19. Besides, having effective supervision, and transition from face-to-face to virtual pattern is possible with great communication between student and supervisor and high degree of adaptability with considering supervisor limitations (e.g., time pressure, back-to -back online meetings) and student needs (e.g., being more interacted to the supervisor and consequently the project).

Poster 2 – Sequential peer feedback to improve student activity and performance

Presentation in DANISH

Author

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Focus

- Examples of active teaching and learning in higher education

What did you intend the students to achieve from this teaching and learning activity?
Peer assessment is as a valuable tool for enhancing student outcomes, as it offers immediate understanding of learning challenges and provides encouraging feedback. However, the time-consuming nature of peer feedback must be managed to ensure successful implementation. The aim of this study was to enhance student activity and performance through a time-efficient peer feedback process.

Which general features of the teaching and learning activity will you share at TAL2023?
The study focused on improving students' performance for a final written assessment in an elective master course titled "Introduction to next generation DNA sequencing technology." The introduction of peer feedback was facilitated via Itslearning and in-class presentations, providing instructions and discussions of criteria and expected outcomes. Sequential peer feedback was implemented using the Eduflow online platform, with predefined rubrics followed by group work discussions. Online surveys and small group interviews were conducted to evaluate students' perception of the effectiveness and value of peer feedback, as well as their level of comfort during the process.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
The initial session of the sequential peer feedback process generally was well-received, with high participation rates. Most students found the quality of feedback in the first round to be high, but also stated that it decreased significantly in the second round. Students further felt that the first round of feedback was a sensible use of time, whereas the second round was perceived as redundant. Generally, students recognized the importance of constructive feedback and improving their work based on feedback. Comfort levels during the peer feedback process varied among students.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
The study revealed that students recognize the benefits of peer feedback and considered it worth the time investment. It further showed that the collaborative nature of the process positively impacted their motivation and engagement, and that the use of online platforms, such as Eduflow, can facilitate the peer feedback process. Therefore, the implementation of a peer feedback approach in future teaching will likely enhance learning outcomes and improve the educational experience for students. However, it is also true that the quality and relevance of feedback significantly influence students' perception of its value ('too much of a good thing'-scenario). Finally, factors such as student comfort and group dynamics should also be considered during a peer feedback process.

Poster 3 – How to increase participation in group presentations? The impact of structured peer feedback

Presentation in DANISH

Author

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Focus

- Students' professional and/or personal development through group work
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What did you intend the students to achieve from this teaching and learning activity?
There where multiple objectives with learning activity.

1. **Active students:** typically, it is only the group that presents that are prepared and participate. Therefore, the class is split into three groups: presenters, discussants, and feedbackers, so all students have an active role. Each groups role changes from class to class throughout the course.
2. **Deep learning**: the group presentation is a presentation of a scientific article related to the topic of the previous week's lecture. The presenters are 'forced' to relate and apply the content the previous topic on/to the article; the discussants are 'forced' to critically think and reflect on the article and presentation and relate it to their knowledge and own background; the feedbackers are 'forced' to evaluate the presentation and discussion and relate to the topic's learning objectives. Thus, it facilities higher-order thinking skills, enabling the students to go beyond understanding and remembering the subject. It also facilitates general reflection and encourages the students to ask questions about elements they do not understand.
3. **Practice-integrated learning**: the article relates theory to practice. It motivates the students as it reflects real-world evidence, and how the topic is applied within their field (healthcare).

Which general features of the teaching and learning activity will you share at TAL2023?
The objectives and outcomes of the learning activity. The elements that enable the learning activity to work:

1. structured reading questions,
2. feedback matrix,
3. aligning what is expected of each group (what they are supposed to do), and
4. a safe learning environment that support self-efficacy.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
All students participate in the group presentations. All / most of the students come prepared (have read the article). They ask questions, discuss with each other, and reflect on the learning objectives. They become better at presenting (what is important, layout). It seems as if they get a more in-dept understanding of the topic.

I will receive 'formal' feedback on the learning activity from the students in June, but the preliminary feedback has been positive, especially the feedback matrix

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

The format is easily transferable to other learning situations – all it requires is time. The group presentation is a good way to facilitate deep learning by 'forcing' all students to reflect and critically assess the material they learned the previous week and relate it to real life.

Poster 4 – Peer-feedback in real-life clinical settings

Presentation in DANISH

Author

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Focus

- Examples of active teaching and learning in higher education

What did you intend the students to achieve from this teaching and learning activity?

- To enhance students' communication skills during patient consultations, focus on developing a comprehensive, relevant, and structured approach to communication.
- To improve students' competences in effective communication during patient interviews. Including, effectively conveying relevant findings and assuming the role of a competent and responsible clinician.
- To foster natural and professional behavior in their interactions with patients.

Which general features of the teaching and learning activity will you share at TAL2023?

- Peer-feedback using an e-learning tool:
  - Utilization of RUBRICs for scoring
  - Virtual assessment via camera
  - Use of Eduflow
- Pros and cons of providing peer feedback in a real-world clinical setting:
  - Comparison of student vs. supervisor feedback based on PURT factors
  - Feedback provider and recipient
  - Unexpected benefits discovered

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
The project was assessed through a focus-group interview, from which two themes, Barriers, and Facilitators, emerged. These themes were further evaluated across four domains: Preparation and goal setting, Eduflow and feedback, Rubric ratings and comments, and Timing.

Across all domains, EduFlow was identified as a clear barrier. Students encountered challenges with Eduflow, leading them to employ various workarounds in order to ensure valuable and feasible peer feedback. The students expressed that peer feedback held great value for their learning. They found the content of peer feedback to be similar to that provided by supervisors, yet more detailed, easier to understand, and more direct due to the common and open language shared within peer relationships.

Peer feedback was provided immediately following the consultation, as opposed to several hours later, which was appreciated by the students. The structured feedback process, along with the familiarity of using the Rubric, helped students maintain focus on the task. Moreover, the act of providing feedback enabled students to recognize their own practice and engage in self-reflection, thereby promoting meta-cognition.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

Clinical internships are mandatory for all healthcare educations and students always “want more” feedback. This is an easy, applicable, and feasible way to activate the students in both their own and their peers learning. The Rubric is based on the Calgary Cambridge Guide, which is the standard approach of teaching a good clinical interview and this could be transferred to other healthcare professions in whatever internship (e.g., hospital, private practice).

Poster 5 – Decision making for optimizing function, formats, facilitation, and effect on learning and well-being for students' groupwork

Presentation in DANISH

Author

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Focus

- Helping staff and faculty implementing effective groupwork in different practices

What did you intend the students to achieve from this teaching and learning activity?
The poster presents a visual model which can be used or organize and plan group work. It gathers elements relevant to arranging and supporting groupwork situations for the benefit of student outcomes from group work.

Using the model faculty and staff will be guided to core decisions relevant for optimizing students´ growth in group work situations leading through categories of Learning, Facilitation, collaboration, ownership, and wellbeing.

Which general features of the teaching and learning activity will you share at TAL2023?
The model takes important conditions, prerequisites, pedagogical observations, intended learning outcome, student related issues, etc. into account and combines these with the overall framework for supporting group work like facilitation, and effect on learning and well-being. Also, the tool invites course leaders to consider resources to support any group work (including group work initiated by students themselves) with appreciative activities like feedback and logistic support.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
The model has earlier been presented to colleagues and this poster presentation will disseminate the model to help others making relevant decision regarding group work. It will bring forward important key reflections when planning future teaching with groupwork and support for student-initiated groups.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
This is a general model that can help teachers in any group work situation like introducing students to university, laboratory teaching situations, continuous and ad hoc in class group work.

Morning – Parallel workshops 11:05 – 12:15

Workshop 1-1 – in ENGLISH – Empowering voices with virtual reality

Authors

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Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What do you intend the workshop participants to achieve from this teaching and learning activity?
Good oral presentations truly are group exercises. Speakers have to team up with their audience, they rhetorically prepare, melodically structure, and emotionally color their speech content for their audience, and they interact with the audience through pauses, shared smiles, a projecting voice, and mutual body language signals. Moreover, good oral presentations create a feeling of well-being for all involved parties. Successful presenters gain self-confidence and emotional experience through their speeches, and the audience gains memorable knowledge and automatically shares the speaker's positivity through a process called emotional contagion. It is this link between group work and well-being on which our workshop is based. We will share and test with you the virtual reality (VR) application that we are developing at SDU within a funded project named VIRTUVOCE.

VR has for a long time already been successfully applied in therapeutic contexts and, thus, for empowering and increasing well-being. It has been extensively used to treat a wide range of phobias (e.g., arachnophobia, claustrophobia, fear of heights). In the case of public speaking, it offers its users, both students and researchers, the safe space to rehearse their presentations without facing a real audience. VIRTUVOCE makes speakers little by little rehearse, improve, get to know their vocal abilities and, based on that, face gamified, interactive challenges with different levels of complexity until they are ready to speak up before a real audience. VR is more and more applied in educational settings to engage students in hands-on, gamified ways of learning that enhance their willingness to communicate and rehearse orally before delivering a presentation in front of a real audience. VIRTUVOCE aims to be at the spearhead of that trend, using virtual tasks and environments that have proven to be effective.

Which general teaching and learning activity will you include at the workshop TAL2023?
The basis for the activities in this workshop is to encourage the teaching of oral skills to both teachers (like lecturers) and, in particular, students.

The aim is to make students less anxious and more skilled in communicating their thoughts, ideas, problems or feelings – and to turn lecturers into better presenters that motivate students to listen and learn. A further aim is to engage teachers and students more in group discussions and debates so that they can also train their listening skills.

The target audience for this workshop is teachers responsible for learn-intensive or talk-intensive courses.

Workshop outline: The participants will be actively involved through their participation in virtual reality settings.

According to you, what could be the impact for participants participating in the workshop?
The expected take homes will be that voice is fundamental in the way we all communicate – and for the impression we make on others. Do we attract attention? Do people remember us and what we said? Are we able to motivate people to follow our ideas, plans, and advice? For all this, the voice is a major signal. Therefore, it is necessary to train people, and students in particular, on how their voices can used very different ways depending on the communication situation. Being involved in various gamified, interactive VR voice missions and playing with the instrument "voice" in these missions is key to understanding how voice can be modulated and what the effects are that it can trigger to whoever is listening.

How could this workshop be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
We hope that the workshop makes teachers aware of the positive effect that VR has on learning oral abilities in a gamified way with the great help of customised feedback and that they wish to apply it in their institutions and courses.

Primary literature:
Pertaub, D. P., Slater, M., & Barker, C. (2002). An experiment on public speaking anxiety in response to three different types of virtual audience. *Presence, 11*(1), 68-78

Remacle, A., Bouchard, S., Etienne, A., Rivard, M., & Morsomme, D. (2021). A virtual classroom can elicit teachers' speech characteristics: evidence from acoustic measurements during in vivo and in virtuo lessons, compared to a free speech control situation. *Virtual Reality, 25*(4), 935-944

Workshop 1-2 – in DANISH - Student sessions as roleplay for learning

Authors

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Focus

- Students' professional and/or personal development through group work
- Interdisciplinary group work

What do you intend the workshop participants to achieve from this teaching and learning activity?
Intentionen med workshoppen er at introducere til studentersessioner og inspirere til, hvordan man kan arbejde med gruppearbejde og aktiv læring i naturvidenskabelige kurser, såvel som på tværs af fakulteter. Studentersessioner er et tiltag, vi har gennemført tre semestre på kurset NAT805: Fagdidaktik, fag og fagsamspil i naturvidenskab. I studentersessionerne er den studerende omdrejningspunkt. Her skal hver studerende udarbejde og udføre en selvvalgt naturvidenskabelig undervisningsaktivitet på 20 minutter.
De resterende studerende agerer gymnasieelever og giver peer feedback.

Which general teaching and learning activity will you include at the workshop TAL2023?
Denne workshop er netop en sådan studentersession, der demonstrerer, hvordan vi arbejder med aktiv læring og gruppearbejde i undervisningen. Casen for denne workshop er fra et didaktisk kursus, men metoderne er anvendelige også for universitetsundervisere med andet kursusindhold end didaktik. Undervejs vil deltagerne arbejde med at overføre metoden til egen undervisningspraksis. Vi har fornøjelsen af at en studerende fra kurset kommer og gennemfører den studentersession, som hun gennemførte. Som deltagere på denne workshop skal du dermed finde din indre gymnasieelev frem og indgå i rollespillet. Undervejs i workshoppen vil vi tage et metaperspektiv og gennemgå fordele og ulemper ved denne form for aktiv undervisning og gruppearbejde. Fordele og ulemper som vi vil demonstrere ved en anden aktivitet, vi bruger i kurset, nemlig exit tickets. Exit tickets er en formativ evaluering de studerende giver os som undervisere.

According to you, what could be the impact for participants participating in the workshop?
Vi håber at deltagere på denne workshop vil kunne tage studentersessionen som undervisningsmetode med tilbage til deres egen undervisning og benytte den som alternativ til mundtlige præsentationer og gruppearbejde – i håb om at de studerende i højere grad processerer det faglige stof via aktiv læring.

How could this workshop be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Selvom kursets indhold er undervisningskompetencegivende for naturvidenskabelige fag i gymnasieskolen, er studentersessioner en arbejdsform som vil kunne overføres til andre fagfaglige kurser i alle undervisningsformater, da studentersessionen i virkeligheden er et rollespil over en mundtlig præsentation med indbygget gruppearbejde.

Primary literature:
Loughran, J. (2012). What Expert Teachers Do - Enhancing Professional Knowledge for Classroom Practice. Taylor and Francis

Afternoon - Short communications 13:00 – 14:10

SC 4-1: Studerende OG undervisere involveret i udvikling af nye feedbackpraksisser – potentialer og udfordringer

Author

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Focus

- Students' professional and/or personal development through group work
- Student partnership in developing different group work formats
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice
- Interdisciplinary group work

What did you intend the students to achieve from this teaching and learning activity?
Bevæggrunden for at inkludere studenterperspektiver i udvikling af nye feedbackpraksisser var at kvalificere udviklingsprocessen og øge værdien af output. Endvidere var ønsket at understøtte studerendes oplevelse af at være betydningsfulde aktører i kvalitetsarbejdet på videregående uddannelser. Udviklingsarbejdet blev tilrettelagt mhp. at undersøge og dokumentere potentialer og udfordringer i en proces, der involverer både studerende og undervisere.

Which general features of the teaching and learning activity will you share at TAL2023?
Oplægsholderne har været involveret i en række gruppearbejdssituationer, der kendetegnes ved tværgående dimensioner, og som derfor rummer høj grad af kompleksitet. Hvert af disse tværgående gruppearbejder har en særlig karakter, netop i kraft af deltagernes forskellige tilknytninger til det felt, der er fokus for gruppearbejdet, og de rummer unikke potentialer og udfordringer. Oplægsholderne har bl.a. faciliteret tværgående gruppearbejder, hvor deltagerne var:

- Studerende *og* undervisere
- Studerende fra *forskellige uddannelser*, nært beslægtede (fx studerende fra odontologi og professionsbachelor i tandpleje på et kursus om bør og ungetandpleje) eller mere fjernt beslægtede (fx studerende fra antropologi, økonomi og informationsvidenskab på et kursus om kvalitative undersøgelsesmetoder)
- Studerende fra samme uddannelse, men på *forskellige akademiske niveauer* (fx førsteårsstuderende og studerende på 3. studieår)

Der dykkes ned i et tværgående gruppearbejde, hvor studerende OG undervisere medvirker til udvikling af nye feedbackpraksisser ift. studerendes læring i laboratorie og klinik. Gruppearbejdet præsenteres med fokus på deltagere og aktiviteter, efterfulgt af refleksioner over læringsudbyttet hos studerende, undervisere og uddannelsesudviklere. Udfordringer, der opstår i gruppearbejdet undersøges ligeledes. Afslutningsvis diskuteres opmærksomhedspunkter ift. til facilitering af tværgående gruppearbejde.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Gruppearbejdet, der involverede studerende og undervisere, viste sig værdifuldt på flere måder. Det medvirkede til:

- Udvikling af gensidig tillid mellem studerende og undervisere
- Udvikling af studerendes og underviseres tillid til feedback som metode til øget læring
- Intensivering, stabilisering og fastholdelse af udviklingsproces og implementering af nye praksisser.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Præsentationen har til formål at inspirere kolleger til at involvere studerende i udviklingsprocesser sammen med undervisere, hvad enten fokus er at udvikle specifikke læringsaktiviteter, generelle aspekter af undervisning eller udvikling af curriculum. Ambitionen er at inspirere undervisere, konsulenter og ledere til at udvikle en kreativ og modig tilgang til involvering af studerende i forandringsprocesser på deres uddannelsessteder.

Primary literature:
Bion, W. R. (2003) Experiences in groups. Routledge.

Peters, H., Zdravkovic, M., Costa, M.J., Celenza, A., Ghias, K., Klamen, D., Mossop, L., Rieder, M., Nadarajah, V.D., Wangsaturaka, D., Wohlin, M. & Weggemans, M. (2019) Twelve tips for enhancing student engagement, *Medical Teacher*, 41:6, 632-637, DOI: 10.1080/0142159X.2018.1459530

SC 4-2: Peer Feedback som udvikling af den enkelte kursist gennem en intensiv kursusuge

Author
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Focus
- Students' professional and/or personal development through group work

What did you intend the students to achieve from this teaching and learning activity?

- **Viden**:
  - Have viden om hvordan refleksion anvendes som redskab til egen udvikling på kurset.
  - Have viden om selvevaluering og anvendelse af læringsportefolio med udgangspunkt i egen refleksion og feedback fra medkursister og lærer.
  - Have kendskab til evaluering af læringsaktiviter og læringsforløb, herunder forskellige måde at arbejde med formativ evaluering på.

- **Færdigheder**:
  - Kunne anvende refleksion som redskab til egen udvikling af praksis på kurset.
  - Kunne anvende selvevaluering og læringsportefolio i løbet af kurset, og inddrage egne refleksioner og feedback fra medkursister og lærer.

- **Kompetencer**:
  - Kursisten skal kunne se sammenhænge mellem brug af refleksion og feedback i forhold til at identificere egne punkter til fastholdelse og udvikling, og kunne tage ansvar for at udvikle sin praksis som instruktør, ved hjælp af læringsportefolioen som redskab.

Which general features of the teaching and learning activity will you share at TAL2023?
Jeg vil vidensdele om hvordan vi på Hjemmeværnsskolens grundlæggende instruktørkursus får vores kursister til at udvikle sig gennem primært selvevaluering og peerfeedback. Kurset varer 6 dage hvor kursisterne inddeles i grupper med fem kursister i hver gruppe. Gruppesammensætningen foretages når kursisterne er møde ud fra alder, værnsgren og funktion i egen enhed. Hver gruppe har tilknyttet en fast instruktør under hele kurset.

Evalueringen af kursisterne tager udgangspunkt i John Hatties centrale tanker om feedback. Der benyttes individuelt brug af læringsportefolio, selvevaluering og peer feedback, samt sekundær feedback fra underviseren.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Evalueringsformen betyder, at kursisterne bliver meget bevidste om deres stærke og svage sider. Kursisterne bliver skarpe og ærlige i deres feedback (både selvevaluering og peer feedback, samt konstruktive. Endvidere øges deres egen bevidsthed om brugen af refleksion efter et undervisningsforløb. Kursisterne støtter hinanden mere i forberedelsen af deres lektioner, da de søger vejledning hos den medkursist som har givet feedback på noget som de gerne vil udvikle og ændre på.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

Som tidligere lektor på et University College tog jeg denne måde at give feedback med til undervisningen af 1. og 2. semester studerende på en sundhedsuddannelse i pædagogik og psykologi. Forløbet blev ikke så intensivt som det er på Hjemmeværnsskolen, hvor kursisterne bor sammen og har undervisning sammen i 6 dage. Men jeg oplevede at de studerende blev mere ærlige i deres feedback, da de arbejdede med cases. Herigennem øvede de sig i at give feedback til kommende patienter og kollegaer. Jeg tænker det kan inspirere andre som arbejder med undervisning, som skal være praksisnær.

SC 4-3: The (well-)functioning study group – introducing a study group reflecting tool among Master's degree students at the Public Health Education, University of Southern Denmark

Presentation in DANISH

Authors

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Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

What did you intend the students to achieve from this teaching and learning activity?
To resemble recommendations for intervention research, group work is an essential part of the specialization: 'Intervention and Evaluation' at the MSc in Public Health. The group work forms both practical and professional implications/purposes during the course, where the students in groups are asked to develop an intervention and plan the implementation and evaluation of said intervention. However, issues and challenges about group work are an ongoing challenge during the specialization. Thus, to ease the group work we introduced the self-developed study group reflecting tool among the students during the introduction lecture of the spring 2023.

Which general features of the teaching and learning activity will you share at TAL2023?
The study group reflecting tool consists of four predefined elements:

1. Family life
2. Leisure time and -work
3. Level of ambition
4. Geography, and optional add-ons.

The tool is designed to make the students reflect upon their own life situations and preferences regarding study-work-leisure-time balance and the elements, to accommodate their heterogeneity, and reflect upon how they, individually and group-wise, can benefit and match each other's expectations in relation to the group work during the course. Finally, after having been through all elements of the study group reflecting tool, the group is encouraged to write their co-operation and matching of expectations from their discussion, decisions, and reflection, in a formal document, for later refining and holding each other to the agreements made.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Despite the implementation of the study group reflecting tool, issues and challenges rapidly occurred during the course and in the group work. During the course evaluation, students highlighted the group work issues in the commentary track when rating their overall satisfaction with the course. However, we have not yet made a structured evaluation of the study group reflecting tool from student perspectives. Thus, we plan to evaluate how the students implemented and applied it in their study groups during the Autumn semester 2023.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

Reflecting upon and working though the tool and questions was conducted relatively unstructured, informal, and somewhat voluntary among the students. Applying a more restricted and structured format to the exercise regarding the use and application of the study group reflecting tool could promote and prevent group work challenges during the 'upfront' discussion and self-reflection prior to their actual work in groups during the course.

SC 5-1: Empowering Active Learning: A practical approach to gait analysis instruction

Author

Steen Flammild Harsted, Assistant Professor, University of Southern Denmark, Sports Science and Clinical Biomechanics, sharsted@health.sdu.dk

Focus

- Students' professional and/or personal development through group work

What did you intend the students to achieve from this teaching and learning activity?
In my development project, I explored the effectiveness of a practical introduction to gait analysis (PIG) as a precursor to conventional lectures. The PIG consisted of a 2-hour session where students recorded each other's gait. Following the recording, they engaged in a guided analysis to identify key events and phases of the gait cycle. The primary objectives of this teaching and learning activity/curriculum intervention were:

- To gauge student reception to a practical introduction to gait analysis.
- To investigate whether a PIG could enhance students' understanding of clinically different gait patterns.
- To assess if PIG increases student activity in subsequent lectures.
- To evaluate if PIG boosts students' performance in examination questions pertaining to gait analysis.

Overall, my intention was to provide students with an engaging, hands-on introduction to gait analysis, with the hope of improving their comprehension, participation, and performance in this area. By doing so, I sought to offer them a stronger foundation for their future studies and a deeper understanding of the clinical implications of different gait patterns.

Which general features of the teaching and learning activity will you share at TAL2023?

- My shift from theoretical to practical lectures in teaching gait analysis.
- The use of real-world video examples to support this hands-on approach.
- Initial findings on its impact on student engagement and performance.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
The teaching activity significantly increased student engagement, as evidenced by their requests for more hands-on learning. Additionally, it improved the quality of classroom discussions and fostered notable competence development in gait analysis. Overall, the intervention was a clear success.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
The shift from traditional lectures to a hands-on approach, as well as the integration of multimedia resources like video materials, can serve as an inspiration for other educators and institutions, promoting more engaging and application-focused teaching across various subjects.

SC 5-2: How to generate motivation and student activity through different dialogical group work formats

Author

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Focus

- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice
- Presenting a variety of different group work formats

Group work is an integrated part of the Danish educational system, and most students are well-versed in the format which often proves both motivational and rewarding. However, it can be difficult to rotate or vary the use of group work. In this short communication, we wish to present three different group work formats or learning activities. The formats focus on dialogue and student activity which is something that most teachers and lecturers find desirable but often difficult to facilitate. The aim of the learning activities is to make the students talk about, reflect on, and finally master the topics through peer discussions and peer presentations.

What did you intend the students to achieve from this teaching and learning activity?
We wish to engage and activate the students and allow them to reach of higher level of self-efficacy.

Which general features of the teaching and learning activity will you share at TAL2023?
We will present three different group work formats.

a) **The fishbowl –** five chairs are placed in a circle, four students begin to discuss the topic of the day. Anyone is free to join in by claiming the last free chair; when that happens one of the other students must leave the circle, freeing a chair. The discussion is kept alive as long as students have something to add. The lecturer functions as moderator during the discussion if needed, otherwise they only sum up the discussion at the end.

b) **The podcast** – in the podcast the students are asked to record themselves discussing and exploring a given topic within a certain time frame. The lecturer may wish to lay down different "rules" for the format such as the need for a host, the use of certain specialized vocabulary and so on.

c) **The vernissage** - a matrix organization format in which the students are divided smaller groups, each of which must prepare a topical poster with quotes, useful specialized terms etc., from which the individual members should be able to give a presentation. When the different groups meet, there are three rounds of, for example, eight minutes where the students can hear the other groups' presentations; all group members must take turns presenting their poster.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
The formats focus on making the students more active and motivated through dialogue which will lead to a larger learning outcome for the individual student. If they have to sit for an oral exam, the formats will allow them to practice presenting different aspects of a course.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
The formats are ready-to-use and transferable, so that other teachers only need to alter the design so that it fits their own specific course or topic.

SC 5-3: My Study Group - Supporting study groups at the University of Copenhagen

Authors

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Anna Leonard Fransgård, Specialist Consultant, University of Copenhagen, Faculty of Science, afr@science.ku.dk

Maria Ansager Jensen, Study and Career Advisor, University of Copenhagen, Department of Nordic Studies and Linguistics, maria@ansager@hum.ku.dk

Focus

- Students' professional and/or personal development through group work
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

At University of Copenhagen, we have developed *"My Study Group"*: an app (integrated with our LMS) that assigns students to study groups based on an algorithm. The app forms part of a larger project focused on student wellbeing. Students answer three questions and are then matched and divided into groups based on their response. The solution comes with support tools addressing frequent challenges in group work.

The app was developed by a cross-disciplinary team (student counsellors, a researcher, and an e-learning specialist/system owner of digital technologies).

The underlying, research-backed approach is that group homogeneity is not necessarily the crucial factor determining a study group's success. What has proven to be essential, however, is that the groupwork is not hampered by logistical constraints, which is why the three questions focus on practical circumstances.

The app was first tested with students in autumn 2021 and has been in use since.

The intention is to encourage groups in different settings: in courses, for project or field work, in study start modules, etcetera. The targeted group size is set to 4 by default but can be modified by the facilitator.

What did you intend the students to achieve from this teaching and learning activity?
The purpose of the approach is threefold:

- To create a safe and smooth group formation process for the students, where they are given the reasons for why to work in groups and are supported in becoming part of a group.
- To ease and qualify the group formation process for teachers and facilitators, so that the process builds on theoretically based principles, whilst being carried out almost automatically.
- To create a support structure for study groups by using tools to underpin the collaboration in the groups.

Ultimately, the overall intention has been to increase the use, quality and lifespan of study groups and thus enhance student wellbeing at our university.

Which general features of the teaching and learning activity will you share at TAL2023?
We will share the considerations behind the approach, as well as some valuable experiences we have gathered after a couple of years with the app in use.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Groups are created in an organized, automated, and non-arbitrary way. Students are given the reasons for why to work in groups and are supported in becoming part of a group, which hopefully boosts their motivation, supports academic performance, and helps them gain valuable experiences with group work. Through supporting lecturers, especially in courses with large student cohorts, and automating the process of group creation, we hope to increase the use of study groups throughout the university, so more students are offered the opportunity of working in a group.

So far, the feedback from students indicates that for My Study Group to be a positive experience, a clear framing of the purpose of study groups as well as a continuous follow-up on the group work are essential. It has also proven important to initiate group creation early on, i.e., from the onset of the course, so that students do not form their own groups in the meantime and are disrupted by the imposition of new groups later. Our evaluation indicates that where these factors have been considered, the experience has been positive for students.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
We hope to increase awareness of the importance of study groups for student wellbeing and to share our approach in order to inspire others and contribute to the discussion.

SC 6-1: Learning while making in first year student groups

Authors

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Thomas Markussen, Professor, Univ. of Southern Denmark, Department of Design, Media, and Educational Science, thma@sdu.dk

Focus

- Students' professional and/or personal development through group work

What did you intend the students to achieve from this teaching and learning activity?
The first semester course Design & Research Methods is developed as a means to introduce students to research methods in a novel and inspiring way, and by proxy, to address problems with dropouts. In the course, we have students from three humanities IT BA programs working in groups with three different cases related specifically to each program. We think of the course as a "methods-gym", meaning that students are encouraged to try out and practice several traditional and non-traditional methods to collect empirical data. To achieve this we have reconfigured the standard seminar format into a studio-based learning environment where students are interchangeably engaged in lectures on theory, collective turbo experiments, field work and group presentations. As part of the learning outcome, the students are required to design and materialize their own "methods toolbox" which they produce by using facilities in SDU Maker Lab. In addition, they create a visual academic poster in SDU Print Lab to illustrate the relation between research question, applied methods and results. At the exam the methods toolbox and poster are used to reflect critically on the research process, methods and findings. The course is designed to enable a comfortable, collective learning experience and to support students in learning through making with the intend to increase their sense of belonging in the program and also at SDU Kolding Campus.

Which general features of the teaching and learning activity will you share at TAL2023?
In our presentation we will share how a course involving collective efforts in creating physical and digital artifacts allows the students to work closely together and learn while making. Specifically, we focus on how the course is centered around the group work and the course activities are designed to enable a comfortable, collective learning experience.

According to you and the students, what was the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Through the course the students acquire hands-on experience and knowledge of how research methods need to be carefully selected and designed to make empirical inquiries within their field. They literally take with them the method toolbox for future courses and learn to disseminate knowledge in a visually clear and presentable way. But perhaps most important they learn that none of this would be achievable without their capability to collaborate and treat each other in a respectful way. The students expressed satisfaction with the course in the course evaluations. A few of them felt that it took a while to make sense of the plan for the course and some struggled with the intensiveness of the course.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?

We are constantly working on how to reduce dropouts and have developed this course using the experiences from practice-oriented design research disciplines. We hope our work with group work for first year students may serve as inspiration for others.

SC 6-2: Interdisciplinary and intercultural group work – ways to scaffold student learning

Author

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Focus

- Interdisciplinary group work
- Helping staff and faculty implementing effective groupwork in different practices

What did you intend the students to achieve from this teaching and learning activity?
The proposed example of a progression of intercultural and interdisciplinary learning activities integrated across a study programme is based on current understanding of student engagement in and learning from intercultural and interdisciplinary learning opportunities.

Which general features of the teaching and learning activity will you share at TAL2023?
Participants in the short communication are invited to critically review university course examples by drawing on what we currently understand about interdisciplinary (Millar, 2016) and intercultural learning (Mahadevan, 2014). One example includes a progression of intercultural and interdisciplinary learning activities, designed to scaffold student engagement starting with diversity at home and working towards intercultural learning about interdisciplinary topics (Killick and Foster, 2021), which could be integrated into a bachelor's programme of study.

According to you and the students, what could be the impact of the teaching and learning activity on student learning/engagement/ development of competences?
Participants will take-away ideas for designing and implementing meaningful interdisciplinary and/or intercultural learning activities in their courses. Resources supporting the development of interdisciplinary and intercultural learning activities will be accessible to participants.

How could your practice be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Whilst every course is different, the short communication offers pedagogical approaches to interdisciplinary and intercultural learning which could be adapted and transferred to diverse subjects and learning contexts.

Primary literature:

Killick, David and Foster, Monika (2021) Learner Relationships in Global Higher Education. London: Routledge.

Mahadevan, Jasmin (2014)," Intercultural engineering beyond stereotypes Integrating diversity competencies into engineering education ", European Journal of Training and Development. 38 (7), pp.658 – 672.

Millar, Victoria (2016) "Interdisciplinary curriculum reform in the changing university." Teaching in Higher Education. 21 (4), pp.471-483.

SC 6-3: NEW!! The HEAL project – internships and intercultural group work – ways to scaffold student learning - CANCELLED

Presenter

Vibeke Damlund, Pedagogical Consultant, University of Southern Denmark, SDU Centre for Teaching and Learning, vdamlund@sdu.dk

Qualifying clinical placements – A work in progress

This presentation will share experiences from an ongoing European project intending to qualify clinical placements within the health care sector.

Five different countries have made initiatives regarding learning opportunities for medical and nursing students while they are in their clinical placements.

The learning initiatives may well serve as inspiration in other higher educational settings as their core focuses are on reflection, decision making, self-awareness, and other general learning strategies.

So far *pilot projects* have been conducted, and initial result are promising. Both students and clinical staff find value in the attempts of improving learning opportunities for students' learning.

Workshop 2-1 - In DANISH - Erfaringer fra et tænkende klasserum i matematikundervisningen på første semester

Authors

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Focus

- Students' professional and/or personal development through group work
- Instruments, methods, and challenges for facilitation and for improving students' motivation and competences to work in groups in and out of class – tools and good practice

I efterårssemesteret 2023 har vi arbejdet med at implementere ideerne fra Peter Liljedahls bog "Det tænkende klasserum i matematik" i undervisningen i matematik på ingeniøruddannelserne i robot-teknologi, elektronik og elektrisk energiteknologi.

Undervisningen i "Det tænkende klasserum" adskiller sig markant fra traditionel undervisning baseret på "jeg gør, vi gør, I gør" tankegangen (en teknik demonstreres af underviseren, derefter arbejdes på et fælles eksempel, hvorefter de studerende nu selv skal anvende teknikken). Baggrunden for de teknikker, som Peter Liljedahl præsenterer i bogen Det tænkende klasserum, er, at den effektive, reflekterende undervisningstid maksimeres, idet de studerende tænker/løser relevante opgaver i det aktuelle emne og ikke kun prøver at efterligne, hvad bogen og forelæseren beskriver.

Målet i Det tænkende klasserum er at få de studerende til at arbejde aktivt med stoffet, ved at de arbejder i små grupper ved whiteboards med opgaver med stor interaktion.

What do you intend the workshop participants to achieve from this teaching and learning activity?
Deltagere skal arbejde som i "det tænkende klasserum", så de kommer til at opleve det fra de studerendes synspunkt. Vi vil derefter reflektere og sammenholde det med erfaringer fra undervisning i efterårssemestret 2023.
På den måde vil deltagerne komme til at kende til metoden ved selv af afprøve metoden i en case/opgave, som vi stiller.

Participant activity at the workshop
I et tænkende klasserum foregår en stor del af arbejdet ved vertikale, ikke permanente overflader (typisk whiteboards eller kridttavler). Arbejdet foregår i grupper på tre personer, og grupperne dannes ved lodtrækning ved starten af undervisningen. Opgaverne, der arbejdes med, er af typen "low floor, high ceiling", dvs. at opgaverne er lette at komme i gang med, samtidig med at de gradvist kan gøres sværere.

Workshoppens målgruppe er undervisere, der er interesserede i at aktivere deres studerende mere i undervisningen.

According to you, what could be the impact for participants participating in the workshop?
Deltagerne i workshoppen vil opleve, hvordan undervisningsformen kan stimulere tænkning, og de vil få inspiration til at implementere noget lignende i egen undervisning.

How could this workshop be inspirational/transferable to other teachers, students, institutions in future teaching/designs of study?
Workshoppen sætter gang i overvejelser over, hvordan vi som undervisere arrangerer aktiviteter i undervisningen. Det er vigtigt konstant at udvide værktøjskassen og afprøve nye metoder, der kunne være relevante at i egen praksis. Vi håber at workshoppen bliver engagerende og lærerig.

Primary literature:
Building Thinking Classrooms in Mathematics, Grades K-12 - 14 Teaching Practices for Enhancing Learning, Peter Liljedahl, 2021, Corwin Publishers

Peter Liljedahl: Building Thinking Classrooms, video fra NCUM Center for Udvikling af Matematikundervisning, https://www.youtube.com/watch?v=OcVpQwJW47U

Workshop 2-2 - In ENGLISH - Using reflective writing in teaching: From small seminar rooms to big lecture halls

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Focus

- Examples of active teaching and learning in higher education

Which general teaching and learning activity will you include at the workshop TAL2023?
In this workshop, I will introduce the use of reflective writing in teaching.

In reflective writing exercises, students are given a question or a prompt, followed by a few minutes to write down "in free hand" their own thoughts which will not be shared with nor assessed by the teacher or their peers. Reflective writing thus creates a safe space for students to become comfortable with reflecting independently, bringing themselves and their reflections into the classroom and becoming active participant in the learning process. Students might need to get used to reflective writing, but the barrier is low because the exercise is not about what is produced on paper, but the process of thinking, which is then "incidentially" captured in writing.

Reflective writing excels because it can be adapted to many different purposes: a safe space for reflections; the first part of think-pair-share; a point of departure for discussing different types of writing; recalling former exercises or thinking ahead to the next lesson etc. The purpose is defined by the prompts and questions given, the timing of the exercise(s) and how it is combined with other learning activities.

The workshop is based on my LTP-project in which I used reflective writing as a means to nurturing students' sense of self-efficacy and use of critical reflection.

What do you intend the workshop participants to achieve from this teaching and learning activity?
A workshop is the best way to inspire colleagues to use reflective writing. Since it is a method of experiential learning, the most obvious way to becoming familiar with this learning activity is by doing it. The workshop will include several reflective writing exercises illustrating how they can be implemented in the beginning, during and at the end of a lesson. The exercises will be combined with discussions about the participants' experiences and if/how they could include reflective writing exercise in their own teaching.

According to you, what could be the impact for participants participating in the workshop?
This workshop will: 1) illustrate the purposes and benefits of using reflective writing, 2) demonstrate that reflective writing is easily implementable in class and adaptable to most subjects and class settings, 3) highlight some of the challenges of using reflective writing and suggesting how they can be overcome, 4) provide participants with concrete ideas for how to implement reflective writing in their own class.

The target audience for this workshop is teachers from across the university.

Primary literature:

Krogh, Ellen (2009): "Potentialer og udfordringer i refleksionsskrivning". In: Haugaløkken, Evensen, Hertzberg, Otnes (red.): Tekstvurdering *som didaktisk utfordring*, Oslo: Universitetsforlaget

Kolb, David A. 2012. Erfaringslæring – processen og det strukturelle grundlag. in Illeris, Knud (ed), *49 tekster om læring*, Samfundslitteratur, pp. 283-298