

Keynote (9:15-10:15)

Storsalen

Contextualised disability and neurodiversity professional services: University of Cambridge

John Harding and Helen Duncan

In the years following the UK Equality Act of 2010, universities' approaches to supporting disabled students in higher education have evolved from a legal obligation to provide reasonable adjustments to an anticipatory approach rooted in inclusive design principles that prioritise inclusive curricula and environments, minimising the need for individual adjustments.

At the University of Cambridge, a discipline-based model for Disability/Neurodiversity Advisers was introduced in 2023. This model fosters collaboration between advisers and academic colleagues, ensuring context-specific recommendations and promoting inclusive practices. Embedding advisers within departments enhances their understanding of academic disciplines and strengthens their professional competencies.

This presentation will start by exploring the model's success, documented in peer-reviewed articles, and its alignment with the University's broader goals, including a partnership with the Cambridge Centre for Teaching and Learning to address awarding gaps. The presentation will then detail the practical implementation of the discipline-based model.

A case study will be used to illustrate the model's application, highlighting successful strategies and outcomes for students. By sharing the practical aspects and real-world application of the disciple-based model, the presentation will demonstrate how embedding disability advisers within departments promotes a culture of inclusivity and collaboration within the academic community.

John Harding is the Head of the Accessibility & Disability Resource Centre, at the University of Cambridge.

Dr. Helen Duncan is a Senior Neurodiversity Adviser, at the University of Cambridge.

Parallel Session I (10.45 to 12.15)		
Location	Topics and Presenters	
Storsalen	Workshop Innovation for Inclusion: Design thinking for educators Miroslav Bachinski, Vegard Bolstad	
Søndre Allmenning 1	Inkluderende undervisning, tilhørighet og trivsel Inclusive teaching, belonging and wellbeing	
	Psykologisk trygghet i høyere utdanning – En litteraturgjennomgang med eksempler fra en studie ved UiB Gry Ane Vikanes Lavik, Ingunn Johanne Ness	
	Why do they leave? Understanding attrition at the Faculty of Mathematics and Natural Sciences Sehoya Cotner, Oddfrid Førland	
	Lære sammen: Utvikling av inkluderende undervisningskompetanse i farmasiutdanning gjennom et Collaborative International Online Learning (COIL) kurs Emelia Tveitå, Trym Sæther, Marie Vander Kloet, Lone Holst, Reidun L. S. Kjome, Aase Raddum, Mirey Alfarah	
	The impact of Imposter Syndrome: an unmet need in education of healthcare personnel? Omar Hikmat, Ida Marie Heggem, Gabriela Wale Soto, Hans Jørgen Guthe	
Søndre Allmenning 2	Lokalisert, lokalt og materielt: Undersøkelser av våre undervisningspraksiser Situated, Local and Material: Investigating our teaching practices	
	Balancing Superego and Ego: Addressing Student's Self-Care in Higher Education Chi-Yen Chang	
	"The HIKE podcast – how to combine hiking and legal education"	
	The Nordic Prior Knowledge Test in Programming Sondre Bolland	
	Beyond the Digital: Fostering Creative and Inclusive Learning through Analogue Games Fride Klykken, Ingunn Johanne Ness, Rosaline Barendregt, Barbara Wasson	

Nordre Allmenning 3	Motivere studenter gjennom interaktive undervisningspraksiser og teknologier
	Motivating students through interactive teaching practices and technologies
	En prinsippbasert tilnærming til introduksjonsvideoer for bruk i omvendt undervisning Vegard Gjerde
	ChemView360 – et interaktivt læringsverktøy for bachelorstudenter på kjemilaboratoriet Jonathan Soulé, Monica Jordheim, John Georg Seland, Bjørn Grung
	Pasientsentrert kommunikasjon ved gynekologisk undersøkelse – kan bruk av VR- teknologi gi medisinstudenter et bedre innblikk i kvinnens perspektiv? Gunnar Tschudi Bondevik, Endre Visted, Signe Hjelen Stige, Monika Kvernenes
	Games and Game-Like Elements in Teaching
	Ragnhild Gya

Parallel Session II (13:00 – 14:30)		
Location	Topics and Presenters	
Storsalen	Workshop by Helen Duncan:	
	Equity or Advantage? The effect of receiving access arrangements in university exams on students with specific learning difficulties (SpLD)	
	Helen Duncan	
Fellesområde	Poster session	
	Implementation of a new study plan at a decentralised location in medicine Audun Osland Vik-mo, Svein Joar Johnsen, Hartwig Kørner, Simon Dankel	
	Receptive and productive oral vocabulary knowledge of low- and high-educated adult L2 learners of Norwegian	
	Athanasios Karathanasis, Vadim Kimmelman, Ann-Kristin Hellan Gujord	
	How co-creation changes learning at the Geophysical Institute	
	Kjersti Birkeland Daae, Mirjam Sophia Glessmer, Mahaut de Vareilles	
	Bingo boosts: enhancing fieldwork engagement through playful learning Francesco Saltalamacchia, Kjersti Daae, Mirjam Glessmer, Linda Latuta, Taraneh Westergerling	

Curriculum vs non-curriculum methods learning

Pål Ringkjøb Nielsen, Jan Magne Cederstrøm, Benjamin Aubrey Robson

Improving students' programming skills through Collaborative Scientific Python Julien-Pooya Weihs, Daniel Oddmund Lid

Prosjekt for mer programmering i fysikk

Augustin Winther, Vegard Gjerde, Johan Alme, Martino Marisaldi

Generativ kunstig intelligens i universitetspedagogikken: Erfaringer fra et UPED-kurs Robert Kordts, Belinda Muñoz Solheim

A Comparative Study of Initial Teacher Education Programs (ITEPs) and Global Citizenship Education (GCE) in Italy and Ireland
Guilia Filippi

Videreutvikling av arbeidspraksis for disiplinstudenter ved å støtte praksisveilederne Kristin Holtermann, Jonathan Soulé, Sehoya Cotner

Søndre Allmenning 1

Forskningsbaserte og inkluderende evalueringer av undervisning og emnedesign

Research informed and inclusive evaluations of teaching and course design

AI-nt all bad – leveraging the power of generative AI as a partner in scalable and domain-agnostic course evaluations – giving you more time for what really matters Magnus Svendsen Nerheim, Pernille Eyde Nerlie, Sehoya Cotner

The benefits of a research based embedded system for student evaluation of teaching Roy Andersson

Exploring the Consequences of Single-Assessment Grading in Higher Education Sondre Bolland

Hvordan lage inkluderende emnedesign? Cecilie Boge, Tane Holm Høisæter

Søndre Allmenning 2

Koble arbeid og læring: Utvikling av ferdigheter og relevans for arbeidsliv Connecting work and learning: Skill building and work-life relevance

Does work-practice matter? Student perspectives on the longer-term impacts of discipline-based work-practice

Kristin Holtermann, Jonathan Soulé, Sehoya Cotner

	Å lære å skrive juss Ikkje-juristar sitt møte med skriving av juridiske tekstar Ingrid Halvorsen Barlund, Guri Lindblad Praktisk prosedyretrening i juristutdanningen Henriette Tøssebro Integrating practical skills and work-life relevance in Geoscience Education through internships: Insights from GEOV298 GeoPraksis Kenneth Mangersnes, Jarle Børve Sleire, Thomas Hagen Thuesen
Nordre Allmenning 3	Tilknytning, kreativitet og partnerskap i undervisning og læring Connection, Creativity and Partnership in Teaching and Learning
	Learning about data through social connection: Game-based strategies in a continuing education workshop Fride Klykken, Rosaline Barendregt, Ingunn Johanne Ness, Barbara Wasson
	Transversality: What is it and how does it speak to higher education? Simon Gilbertson
	The Same, But Different: Teacher and student experiences of partnership Gerald Decelles III, Catherine Bovill, Anders Mattias Lundmark
	Infusing motivational factors into teaching and learning activities Jorun Nylehn, Kjersti Lea

Panel discussion with keynote speakers and UiB guests (14:50 – 15:45)		
Storsalen	Creating more inclusive teaching and learning communities at UiB	

Konferansesammendrag

Conference Abstracts

Workshop 1

Innovation for Inclusion: Design thinking for educators

Miroslav Bachinski, Vegard Bolstad

10:45-12:15, Storsalen

Are you ready to transform the University of Bergen into a more inclusive and empowering space for all students?

Join us for an engaging 90-minute workshop where you'll discover the creative and collaborative framework of Design Thinking, and how it applies to real and complex challenges within our own academic environment. This interactive session serves as both a crash course in Design Thinking and a practical workshop tailored for educators eager to make a difference in their own fields or domains.

What to Expect?

- Immerse yourself in the Design Thinking process, gaining hands-on experience with a versatile problem-solving toolkit to take back to your workplace.
- Work with fellow educators and students to identify obstacles, generate innovative ideas, and find actionable solutions in key areas impacting inclusivity.
- The workshop culminates in a panel discussion where we'll share our insights, reflect on solutions, and explore strategies for implementation.

Why Attend?

We hope to leave you with:

- A deeper understanding of Design Thinking principles and how to apply them.
- Practical and free resources, strategies and tools to enhance inclusivity within your own academic contexts.
- The confidence to tackle real-world challenges small and large, and to foster an environment where both student and educator thrives.

We hope to innovate inclusion at the University of Bergen using Design Thinking, and need your help. Together, we can contribute to an academic community where everyone feels supported and empowered to succeed.

Miroslav Bachinski is an associate professor in Human-Computer Interaction at the University of Bergen, specializing in computational user modelling and data-driven methods applied to post-desktop user interfaces. Using these methods, he develops and improves ergonomic and assistive technologies for application in various domains.

Vegard Bolstad is a master's student in Media and Interaction Design at the University of Bergen with more than 20 years of experience from technology, media and design. A firm believer in Design Thinkings ability to address complex challenges by involving users at every stage. His current research focuses on digital cognitive assessment, emphasizing inclusive and universal design principles to cater to diverse users groups and varied needs.

Inkluderende undervisning, tilhørighet og psykologisk trivsel Inclusive teaching, belonging and psychological wellbeing

10:45-12:15, Søndre Allmenning

Psykologisk trygghet i høyere utdanning – En litteraturgjennomgang med eksempler fra en studie ved UiB Gry Ane Vikanes Lavik, Ingunn Johanne Ness

Bakteppet for presentasjonen om psykologisk trygghet i høyere utdanning, er flere nedslående rapporter om det psyko-sosiale miljøet ved norske universiteter. Mange studenter opplever mangel på tilhørighet og er ensomme (Baksaas, 2022). Ifølge en undersøkelse utført av FHI har en tredjedel av studentene i Norge psykiske helseplager (Svarstad et al., 2023). Vi spør derfor: Kan mer kunnskapsbasert organisering av samarbeid, med psykologisk trygghet, være med å skape større følelse av tilhørighet og dermed motvirke ensomhet?

Psykologisk trygghet er et begrep om læring - nærmere bestemt den læringen som skjer i grupper av individer som løser oppgaver sammen. Begrepet har røtter tilbake til 1965 med Schein og Bennis' forskning på organisasjonsendring (Newman et al., 2017 p. 522). Edmondson (1999) videreutviklet begrepet og fremhevet betydningen for læring. Psykologisk trygghet er knyttet til aktiviteter som aktivt å oppsøke tilbakemelding, dele informasjon, be om hjelp, snakke om og innrømme feil og være utforskende - en type adferd som i bunn og grunn handler om å tørre å være seg selv.

Den tette koblingen mellom læring og trygghet gjør begrepet interessant i utforskning av utfordringer i studiehverdagen. Vi skal i denne presentasjonen gi utdrag fra en litteraturgjennomgang som viser hvilke typer studier som er gjort om psykologisk trygghet i høyere utdanning -samt vise hvordan psykologisk trygghet og kreativ læring henger sammen basert på en studie ved UiB (Ness, 2020). Vi ønsker å nå andre undervisere og tilretteleggere av studenters hverdag, og ser for oss å bruke en aktiviserende presentasjonsform, som for eksempel The Cephalonian Method, for å aktivisere publikum (Izenstark & MacDonald, 2012).

Baksaas, J. M. (2022, august 16). *Mange norske studenter føler seg ensomme*. Psykologisk.no. https://psykologisk.no/2022/08/mange-norske-studenter-foler-seg-ensomme/

Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2), 350–383. https://doi.org/10.2307/2666999

Opportunities, Challenges and New Horizons. *Creativity Research Journal*, 32(1), 1–3. https://doi.org/10.1080/10400419.2020.1712167

Izenstark, A., & MacDonald, M. (2012). Create Your Own Cephalonian Method Adventure: An Interactive Session.

Ness, Ingunn Johan**ne** (2020) Polyfoni og kreative vidensprocesser i klasserummet og i videregående uddannelser. In: Dialogisk pædagogik, kreativitet og læring. Danmark: Forlaget Klim ISBN 9788772044323. pp. 113-143

Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, *27*(3), 521–535. https://doi.org/10.1016/j.hrmr.2017.01.001

Svarstad, J., Mikkelsen, S., & Bjørgan, E. H. (2023, september 19). *Hver tredje student har en psykisk lidelse:* — *Jeg trodde jeg skulle dø*. https://khrono.no/hver-tredje-student-har-en-psykisk-lidelse-jeg-trodde-jeg-skulle-do/810549

Why do they leave? Understanding attrition at the Faculty of Mathematics and Natural Sciences

Sehoya Cotner, Oddfrid Førland

High dropout rates in science, technology, engineering, and math (STEM) dramatically impact our efforts at training enough scientists to meet current and future societal needs (Sithole et al., 2017). Further, these rates can vary based on student characteristics (e.g., gender, nationality, generation in college) unrelated to their cognitive capacity to succeed in STEM (Seymour et al., 2019). At the faculty of mathematics and natural sciences at UiB, we lose over 35% of our incoming bachelor's students between year one and year two, despite over 85% of them initially asserting a strong commitment to completing a STEM degree. Thus, we know that something happens during the first year that prevents students from continuing. What, exactly, is it?

A core project of the new STEM Education Research Center is Gjennomføring, in which we are investigating the experiences of new students in the faculty. With our first iteration, "Gjennomføring 2023" (n = 200,) we have learned what students most value during the start of their study program (fadderuke, mentor program, and their new friends), and what they are most concerned about (making friends, study habits, and math courses). We have also been able to track and characterize a cohort of students who either stayed in the faculty after year one, or who left. We plan to share a summary of our initial findings with our colleagues and use these findings to lead a discussion on how we can work together to help our students remain in MatNat.

Seymour, E., Hunter, A. B., & Harper, R. P. (2019). Talking about leaving revisited. Sithole, A., Chiyaka, E. T., McCarthy, P., Mupinga, D. M., Bucklein, B. K., & Kibirige, J. (2017). Higher Education Studies, 7(1), 46-59.

Lære sammen: Utvikling av inkluderende undervisningskompetanse i farmasiutdanning gjennom et Collaborative International Online Learning (COIL) kurs

Emelia Tveitå, Trym Sæther, Marie Vander Kloet, Lone Holst, Reidun L. S. Kjome, Aase Raddum, Mirey Alfarah

Undervisere på farmasiutdanningen må forberede fremtidige farmasøyter til å arbeide effektivt og inkluderende med både pasienter og kolleger. Frem til nå, har det vært få muligheter til å utvikle kompetanse i inkluderende undervisning i dette fagfeltet (Ho et al., 2023). Mange farmasistudenter i Norge har innvandrerbakgrunn, og mange farmasøyter i Norge har fullført sin utdanning utenfor Norge (Iqbal, 2022). Både farmasiundervisere og farmasøyter deler en bekymring for at farmasiutdanningene i dag, mangler ferdigheter og kunnskap relatert til interkulturell kommunikasjon, inkluderende farmasipraksis og forståelse av hvordan forskjeller former tilgang til helsetjenester, og erfaringer og resultater på dette området.

Denne presentasjonen fokuserer på et undervisningsinitiativ til bruk i kompetanseutvikling av underviserkollegiet på temaet inkluderende farmasiutdanning. Undervisningsinitiativet er et felles samarbeid mellom 4 land, og prosjektet skal resultere i opprettelsen av et Collaborative International Online Learning (COIL) kurs for farmasiundervisere med fokus på inkluderende undervisning. Selv om generiske aktiviteter for utvikling av inkludering i i utdanning er tilgjengelige for akademisk personale, er det sjelden å ha fagspesifikke muligheter for profesjonell læring. COIL tilbyr farmasiundervisere en spesialisert mulighet til å engasjere seg i profesjonell utvikling og produsere åpne utdanningsressurser med fokus på inkluderende farmasiutdanning, og læring med internasjonale kolleger.

Denne presentasjonen vil gå gjennom kartlegging av dagens situasjon om inkludering i farmasiutdanning og tidlige resultater fra undersøkelser med studenter og akademisk personale. Deltakerne vil bli engasjert gjennom avstemning og diskusjon om inkludering og fakultetsutvikling.

Ho, A., Minshew, L., & McLaughlin, J. E. (2023). Pedagogical Tools and Strategies for Developing Cultural Intelligence in Pharmacy Students and Educators. American Journal of Pharmaceutical Education, 87(5), 100031. https://doi.org/10.1016/j.ajpe.2022.10.007 Iqbal, S. (2022). Push and pull factors for migration of foreign pharmacists to Norway: An interview-based qualitative study. The Arctic University of Norway and the University of Oslo: MSC Thesis.

The impact of Imposter Syndrome: an unmet need in education of healthcare personnel?

Omar Hikmat, Ida Marie Heggem, Gabriela Wale Soto, Hans Jøregn Guthe

Objectives:

Imposter syndrome (IP) is a psychological phenomenon where individuals doubt themselves and their achievements, and fear exposure by peers as a fraud. The prevalence of Imposter syndrome among health professionals has not been investigated in Scandinavia. We aimed to assess the frequency and the degree of the severity of the IP in healthcare personnel from Western Norway.

Methods:

A cross-sectional descriptive study in which consultants and physicians in training were recruited from both a clinical and a laboratory department at Haukeland University Hospital. Nurses were recruited from a clinical department, while nurses in sub-specialization were recruited from Western Norway University of Applied Science. A standardized and validated questionnaire (Clance Imposter syndrome scale-CIPS) was implemented. Mean CIPS score was compared between different categories (gender, length of experience, residents, consultants, clinical and laboratory fields, and nurses) using t-test.

Results:

One-hundred and six health personnel were recruited, 62 physicians and 54 nurses. The majority (89%) had moderate to intense degree of IP. Females were significantly more severely affected than males. Both physicians and nurses were almost equally affected. Physicians in training had a significant higher degree of IP as compared to consultants, and the degree of IP severity decreased with increased experience.

Conclusions:

Imposter syndrome is an important psychological phenomenon associated with emotional exhaustion and burnout. IP is common in healthcare personnel and need to be addressed both at pre-and post-graduate education of healthcare personnel.

Lokalisert, lokal og materiell: Undersøkelser av våre undervisningspraksiser

Situated, Local and Material: Investigating our teaching practices

10:45-12:15, Søndre Allmenning 2

Balancing Superego and Ego: Addressing Student's Self-Care in Higher Education

Chi-Yen Chang

Social shifts, austerity measures, and technological advances in modern society have led to a loss of resonance among individuals, culture, and nature, subjecting people to unprecedented levels of pressure and anxiety (Rosa, 2019). Notably, this challenge is apparent in healthcare education and profession, where practitioners like nurses and music therapists face escalating burnout and leaving their careers (Decuir & Vega, 2010; Bruyneel, et al., 2023; Meadows, et al., 2024).

This prompts reflection on the intersection of environment, healthcare, and education. The presentation uses music therapy as an example addressing the question: Where is the space to facilitate self-care in music therapy education? It draws from my research project "Participatory Action Research: Fostering Self-Care Cultivation in Music Therapy Education," which collaborates closely with students at the University of Bergen to explore self-care practices during their training.

The theoretical disclosure examines how 'superego education' models may lead to emotional repression, anxiety, and self-alienation among students and educators, leading to dehumanization (Barnet, 2018). In my research project, I employ a feminist educational research method and an 'ego education' model, shifting the traditional power structures to foster authenticity, autonomy, and creativity in students learning. My intention is not to deny the importance of the 'superego' but to apply the psyche's structural theory to higher education, with a focus on balancing the 'superego' and 'ego'.

In my presentation, I will provide audio-examples and visual work produced by music therapy students from the pilot self-care research group to highlight sensory and artistic experience as crucial aspects for students' self-care and well-being.

Decuir, A. A., & Vega, V. P. (2010). Career longevity: A survey of experienced professional music therapists. The Arts in Psychotherapy, 37(2), 135-142.

Rosa, H. (2019). Resonance: A sociology of our relationship to the world. John Wiley & Sons.

"The HIKE podcast – how to combine hiking and legal education"

Melanie Regine Hack, Ingrid Halvorsen Barlund

Point of departure

From 2022 we are course-coordinators for a 10 ECTS elective/LLM course on EU and EEA internal market law.

We identified several teaching challenges. One key challenge concerns the composition of students: The course is taught both on bachelor's and master's level. Additionally, it is offered to national and international students. The student group is diverse, both in terms of educational level and of different legal cultural backgrounds. Most students are ERASMUS-students, with knowledge about EU law, but facing difficulties with EEA law. These difficulties are exacerbated for students coming from beyond the EU, where knowledge about EU- and EEA-law is lacking.

To deal with these challenges, we started the HIKE-podcast, a podcast inspired by the seven mountains surrounding Bergen.

The HIKE podcast

To bridge the knowledge gap, we wanted something easily accessible. The idea is that the students explore Bergen and get a grasp of the key legal concepts of the course at the same time. Each episode is dedicated to one mountain and one legal key concept. Some episodes are joined by guests. The episodes are published on MittUiB together with relevant teaching material.

Podcast as a learning tool

Podcast as a pedagogic instrument has gained importance as a learning tool, inter alia its role in a collaborative learning experience and in lowering the students' threshold for further active engagement in class has been stressed. [1] In addition, it allows students to access their learning resources easily. [2]

Pedagogy, Podcasts, and Politics: What Role Does Podcasting Have in Planning Education? - Thomas Moore, 2022 (sagepub.com) Education Sciences | Free Full-Text | Enhancing Collaborative Learning in Higher Education through Podcast Production: An Experiential Approach with Anthropology and Tourism Students (mdpi.com).

Podcasting in education: What are the benefits? Available here https://www.thepodcasthost.com/niche-case-study/ [last accessed 24/6-2024].

The Nordic Prior Knowledge Test in Programming

Sondre Bolland

With recent updates to national curricula in Norway [1] and Sweden [4], programming has become mandatory in K-12 education. This shift has led to more students entering higher education with prior programming knowledge, potentially having a significant impact on ICT teaching at universities. If students already grasp basic programming concepts, instruction can advance to more complex topics sooner. However, it's crucial to verify if students truly possess this knowledge.

The quality of programming education varies significantly [3]. Teachers' programming expertise ranges from formal education in computer science didactics to no programming experience. Thus, assessing the extent of students' prior knowledge is essential.

To address this, the Nordic Prior Knowledge Test in Programming was developed. It assesses students' skills in fundamental programming elements taught in introductory courses at universities in Norway and Sweden. The goal is to evaluate students' knowledge levels, regardless of their secondary education, enabling instructors to better tailor their courses.

The test was first administered in 2023 to 2,093 students across various Norwegian higher education institutions [2]. In 2024, it will be distributed in the fall semester at seven institutions in Norway and two in Sweden, with an expected participation of 3,500 to 5,000 students.

Results will include performance data across various educational backgrounds, detailed analyses of knowledge in specific programming concepts, a comparative analysis with the 2023 cohort, and an assessment of the current programming competence of incoming higher education students at the University of Bergen, as well as in Norway and Sweden as a whole.

- 1. Kunnskapsløftet 2020. https://www.regjeringen.no/no/dokumentarkiv/regjeringen-solberg/aktuelt-regjeringen-solberg/kd/pressemeldinger/2018/fornyer-innholdet-i-skolen/id2606028/?expand=factbox2606064, retrieved: 2024-06-10
- 2. Nasjonal forkunnskapstest i programmering. https://programmeringstesten.no/, retrieved: 2024-06-10
- 3. Frantsen, T.: Å vere lærar i programmering utan å kunne programmere. Master's thesis, OsloMetstorbyuniversitetet (2019)

4. Skolverket: Curriculum for the compulsory school, preschool class and school-age educare. (2019)

Beyond the Digital: Fostering Creative and Inclusive Learning through Analogue Games

Ingunn Johanne Ness, Fride Klykken, Rosaline Barendegt, Barbara Wasson

In an era where digital technology often dominates the educational landscape, the educational potential of analogue learning games remain significant. These traditional, non-digital games, offer a tactile and inclusive approach to learning that is both unique and impactful. Unlike their digital counterparts, analogue games require physical presence and direct interaction, which bring benefits to the educational process (Ribeiro, 2019).

In this presentation, we report from a study on continuing education students using analogue games. This paper addresses the RQ: "How do analogue learning games influence creative learning processes in continuing education students?" The results of a questionnaire to participants enrolled in a course on Data Literacy in Norway, show that analogue learning games promote active engagement, foster social inclusion, and stimulate creative thinking when the setting around the activity feels safe for the participants. Participants also expressed that the social nature of analogue games not only bolstered creativity but also enhanced and deepened understanding and retention of knowledge from the course content. The findings suggest a promising avenue for further exploration of integrating learning games into continuing education curricula as a strategy to leverage the benefits of social interaction and active engagement, and to enhance creative learning that can deepen learning of course content.

We aim to reach educators with an interest for engaging students in creative, inclusive learning. We will invite the audience to actively reflect upon their own teaching practices and share experiences, using Mentimeter.

Ribeiro, M. C. (2019) "Analog and digital games as a pedagogical tool in the teacher training context", Research in Social Sciences and Technology, Vol. 4, No. 2, pp 163-173.

Motivere studenter gjennom interaktive undervisningspraksiser og teknologier Motivating students through interactive teaching practices and technologies 10:45-12:15, Nordre Allmenning

En prinsippbasert tilnærming til introduksjonsvideoer for bruk i omvendt undervisning Vegard Gjerde

Introduksjonsvideoer er en populær tilnærming for omvendt undervisning, men det er tidkrevende å produsere og uklart hva de bør inneholde (Hew, Bai, Dawson, & Lo, 2021). Jeg presenterer en tilnærming hvor innholdet i videoene baseres på domenespesifikke prinsipper og strukturen på videoene baseres på læringsprinsipper (Gjerde, Submitted for publication). Hver video fokuserer på ett prinsipp eller definisjon, med tilhørende spørsmål for å stimulere utbroderende innkoding og ett konkret eksempel. Strukturen inkluderer en introduksjon, pretest, foreleserens svar på spørsmålene, posttest, og gjenhenting av prinsippet fra hukommelsen. Videoene forbereder studentene til forelesninger og er ment som deres første møte med prinsipper og konsepter. Hver video varte fra 5 til 15 minutter og ble brukt i et introduksjonsfysikkurs ved et stort universitet i Norge. Jeg undersøkte studentenes erfaringer og refleksjoner gjennom intervjuer og spørreskjemaer fra to kohorter. Kvalitative data ble analysert med tematisk analyse og kvantitative data med statistisk analyse.

Funnene viser at de fleste studentene brukte videoene, og over to tredjedeler ville bli veldig skuffet hvis de mistet tilgang til dem. Til sammenligning ville mindre enn 10% bli svært skuffet hvis de mistet tilgang til læreboken. Bruken av de strukturerte funksjonene i videoene varierte. Generelt følte studentene at videoene hjalp dem med å lære og få oversikt, noe som korrelerte med deres engasjement. Denne tilnærmingen gjør det enklere og raskere å lage introduksjonsvideoer for omvendt undervisning og fremmer mer effektive læringsprosesser.

Gjerde, V. (Submitted for publication). Short introductory videos for elaborative encoding of physics principles.

Hew, K. F., Bai, S., Dawson, P., & Lo, C. K. (2021). Meta-analyses of flipped classroom studies: A review of methodology. Educational Research Review, 33, 100393. doi:10.1016/j.edurev.2021.100393

ChemView360 – et interaktivt læringsverktøy for bachelorstudenter på kjemilaboratoriet.

Jonathan Soulé, Monica Jordheim, John Georg Seland, Bjørn Grung

Kjemi er sentralt i STEM-utdannelser, og mange studieprogrammer inkluderer det tidlig i studieløpet. Laboratoriekursene er ressurskrevende og krever omfattende forberedelser, spesielt med tanke på HMS. Til tross for tilgang til lab-forelesninger og skriftlig materiale, kommer studentene ofte uforberedt til øvelsene. Dette svekker læringsmålene og reduserer tiden til kritisk tenkning og dybdelæring.

Prosjektet ChemView360 har utviklet en virtuell labguide med 360-graders bilder for å forbedre studentenes forberedelser. Denne guiden lar studentene utforske laboratoriet og bli kjent med utstyr og HMS-elementer. Den gir også tilgang til innføringsvideoer, demonstrasjoner av utstyr og metoder, og informasjon om farlige kjemikalier.

I en presentasjon inviteres deltakerne til å utforske det virtuelle laboratoriet og undervisningsmaterialene. Resultatene fra en spørreundersøkelse blant bachelorstudenter vil også bli presentert, som viser deres forberedelsesnivå, informasjonsbehov og mottakelse av ChemView360 som undervisningsmateriale. Målgruppen for denne presentasjonen er undervisere, teknikere og assistenter ved labundervisning.

1. Camel, V.; Maillard, M.-N.; Descharles, N.; Le Roux, E.; Cladière, M.; Billault, I. Open Digital Educational Resources for Self-Training Chemistry Lab Safety Rules. J. Chem. Educ. 2021, 98 (1), 208–217.

https://doi.org/10.1021/acs.jchemed.0c00094.

2. Eidesen, P.; Hjelle, S. S. How to make virtual field guides and use them to bridge field-and classroom teaching. 2023, Authorea Preprints.

Pasientsentrert kommunikasjon ved gynekologisk undersøkelse – kan bruk av VR-teknologi gi medisinstudenter et bedre innblikk i kvinnens perspektiv?

Gunnar Tschudi Bondevik, Endre Visted, Signe Hjelen Stige, Monika Kvernenes

Selv om det er økende bruk av VR-teknologi i studentundervisning, er det begrenset kunnskap om læringsutbyttet sammenlignet med andre pedagogiske virkemidler. Medisinstudenter ved UiB har et 4-dagers grunnkurs i klinisk kommunikasjon 3. studieår. I studien skal vi undersøke læringsutbyttet etter undervisning i pasientsentrert kommunikasjon ved gynekologisk undersøkelse (GU), med vekt på kvinnens perspektiv.

Studentene (n=90-100) som skal delta på kommunikasjonskurset i uke 6, 2025 vil bli delt inn i 12 grupper med 8 studenter hver. Fire av gruppene vil få besøk av en kvinne som forteller om sine erfaringer med kommunikasjon ved GU, fire grupper vil bli vist 2-dimensjonal film på flatskjerm som viser kommunikasjon ved GU filmet fra kvinnens perspektiv, og fire av gruppene vil bli vist de samme filmene 3-dimensjonalt i VR format – etterfulgt av en samtale i alle gruppene.

Ved kursslutt skal studentene sende inn ½ sides anonym besvarelse på følgende oppgave: «Hva lærte du av – og hvordan opplevde du - undervisningen om pasientperspektivet ved gynekologisk undersøkelse?» Tekstene vil bli analysert kvalitativt med systematisk tekstkondensering. I tillegg vil en undersøke i hvilken grad det er samsvar mellom selvrapportert læringsutbytte og kommunikasjonskursets læringsutbyttebeskrivelse – og om det er forskjeller mellom de tre studentgruppene som har fått denne undervisningen gjennom pasientbesøk, flatskjerm og VR.

På Læringskonferansen ønsker vi å nå publikum som vurderer å bruke VR-teknologi i sin undervisning. Presentasjonen inkluderer PowerPoint, Mentimeter og en video om GU fra kvinnens perspektiv, der publikum skal ta stilling til om dette er pasientsentret, og diskutere om VR kan være et virkemiddel i egen undervisning.

Mistry D et al. The Present and Future of Virtual Reality in Medical Education: A Narrative Review. Cureus.2023 Dec 26;15(12):e51124.

Tancman S et al. Silent voices that must be heard - women's perceptions of gynecologic examinations J Psychosom Obstet Gynaecol 2022 Jun;43(2):190-197.

Games and Game-Like Elements in Teaching

Ragnhild Gya

The use of games and game-like elements in teaching has the potential to increase student engagement, as well as boost motivation and learning outcomes. It has become more and more popular, and consequently, a lot of research has emerged on this topic in recent years. I will present the latest research in the field, highlighting both advantages and disadvantages, as well as what we still do not know.

I will also showcase examples of how this can be implemented. There are many different ways to incorporate games directly, or game-like elements, into teaching. You can create escape room-like tasks, run quizzes (such as Kahoot) with points and friendly competition, or have students create their own games entirely. It is also possible to use ready-made products, such as board games or video games, that are based on the subject being taught.

I will delve a bit deeper into an example where I used biological board games to teach evolution and ecology in biology didactics for the teacher education program at the University of Bergen (UiB). I will report on what the students thought about the games and how effective they found them for learning the subject matter. This presentation is relevant for anyone interested in trying out such creative teaching approaches in their own courses. I will speak generally on the topic, even though my example focuses on biology.

Workshop 2

Equity or Advantage? The effect of receiving access arrangements in university exams on students with specific learning difficulties (SpLD)

13:00-14:30, Storsalen

Helen Duncan

Formal, timed, written, closed book examinations are a common feature of the educational system in universities and aim to assess the subject knowledge, skill and ability of all the candidates in the cohort in a uniform way. Adjustments, such as extra time and use of a word processor, may be made to the administrative conditions of exams for students with Specific Learning Difficulties (SpLD) where standard exam conditions may unfairly disadvantage this particular cohort. These adjustments are intended to remove construct-irrelevant barriers and promote parity of assessment, where time is not the construct being measured by the exam. However, granting exam access arrangements violates the principle of assessing all candidates in a uniform way (by changing the administrative conditions for some candidates), raising concerns that the adjustments may inflate the results of those students to whom they are granted and thereby lead to an unfair advantage. This study compared the exam outcomes of students with SpLD who sat the exams with exam adjustments with those of their non-disabled peers who sat the same exams under standard conditions to identify whether the exam adjustments promote equity or lead to an advantage.

Poster Session

Implementation of a new study plan at a decentralised location in medicine

Audun Osland Vik-Mo, Svein Joar Johnsen, Hartwig Kørner, Simon Dankel

Aim: We present the experiences of challenges and solutions in building a decentralised medical education program at a re-structured medical university campus in Stavanger.

Method: Vestlandslegen was developed as a decentralised medical education program, with the last 3 years of education taking place in Stavanger, Haugesund and Førde. The first leg of the project was to begin with eight (2023) and following year 20 students to Stavanger, which we here present experiences from. There is an up-scaling to 70 students each year planned. New course descriptions with a new model of portfolio assessment were developed. We will present the structure chosen to both provide an improved education with the strengths of decentralised education, as also the steps taken to ensure educational levels. The need for pedagogy training, the structure of employment and staff information as well as student-administration are described.

Results: Providing good interaction between the main site in Bergen and decentralised campus in Stavanger has been a challenge with both differences in study-plan and different sites. The largest challenge was at the level of teachers. Challenges in regard to insight into and sharing materials, and new development joint resources are highlighted with focus on the most effective solutions from our experience. There was a very obvious need for extensive information-plan for both to staff, hospital and other collaborators. A building of a strong basic campus infrastructure locally in regard to pedagogy and hands-on queries was needed. Revised contracts of collaboration with the hospital was needed as project developed. The day-to-day interaction and feedback (online) of students to teachers and faculty was needed and must also be met by visible changes to motivate further feedback.

Receptive and productive oral vocabulary knowledge of low- and high-educated adult L2 learners of Norwegian

Athanasios Karathanasis, Vadim Kimmelman, Ann-Kristin Hellan Gujord

Research in SLA is often restricted to informants with WEIRD-profile (Western, Educated, Industrialized, Rich, Democratic) [1]. This study investigated experimentally the receptive and productive oral vocabulary knowledge of low- and high-educated adult L2 learners of Norwegian at the early stage of language acquisition based on correctness and reaction time scores. High-educated learners would have bigger correctness scores and faster reaction times, and that the gap between their vocabularies would also be bigger [2]. The experiment employed two tasks: a picture identification task for receptive vocabulary and a picture naming task for productive vocabulary. In the receptive, participants listened to one Norwegian word at a time and chose the picture that matched its meaning. In the productive, they were asked to name a picture on the screen. Data from 40 participants, divided into two groups (low- and high-educated), were statistically analysed with R and R Studio. Correctness scores from the two tasks were measured for the relationship between the two vocabularies and their development across the two groups. The results showed that: a) receptive scores are always better in both groups, b) low-educated learners are less accurate and respond slower in both tasks, c) against the hypothesis, the gap between the receptive and the productive vocabulary is bigger for low-educated learners. The findings highlight variation in second language acquisition and prove that studying new learner groups can generate new insight.

- [1] Gujord, A. K. H., Søfteland, Å., & Emilsen, L. E. (2023). Å forske på språkutviklinga hos innlærere med begrensa skolebakgrunn–metodiske valg og problemstillinger. Nordand, 18(2), 125-139.
- [2] Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of languagelearning context. Language learning, 48(3), 365-391.

How co-creation changes learning at the Geophysical Institute

Kjersti Daae, Mirjam S. Glessmer, Anne D. Årvik, Tiril T. Try, Mahaut de Vareilles, Harald Sodemann, Elin Darelius, Hans Christian Steen-Larsen, Stefanie Semper, Linda Latuta, Francesco de Saltalamacchia Robert Kordts, Catherine Bovill, Sondre Bolland, Julien Weihs, Kristin Kalvik, Tor Eldevik

"The project CoCreatingGFI (funded by HK-dir) changes how students and staff collaborate to create a better education at the Geophysical Institute, UiB. We invite students to take on responsibility for their learning, support them in developing critical and ethical thinking, and prepare them for a diverse range of work and lifelong learning. In our four work packages, we:

explore opportunities to co-create learning outcomes and assessments beyond traditional bounds, and pilot learning activities promoting active learning and co-creation. This has resulted in substantial changes or redesigning of 4 courses.

create supportive conditions at GFI by looking at how the organization is structured, whether there are places where student voices could be elevated and whether the administrative framework could better support co-creation at an institutional level. We have co-created an educational part of GFI's strategy document.

strengthen and support a growing community of practice in teaching and learning among teachers at GFI, for example through regular "teachers' breakfasts" and through inviting teachers into Scholarship of Teaching and Learning (SoTL) projects.

share results with a wider community, supported by experts and peers in iEarth, Center of Excellent Education. We share our lessons learned in 8 publications, 8 conference presentations (6 national and 2 international), and 2 book chapters, for example, by sharing 8 postcard designs with method suggestions.

We invite you to our poster to pick up some of those postcards for yourself and discuss what we have learned in CoCreatingGFI, how we got there, the road ahead, and how we can contribute to the wider UiB teaching and learning community.

Bingo boosts: enhancing fieldwork engagement through playful learning

Francesco Saltalamacchia, Kjersti Daae, Mirjam Glessmer, Linda Latuta, Taraneh Westergerling

Fieldwork serves as a cornerstone in science education, offering students invaluable hands-on experience and fostering a deeper understanding of the discipline, the data, and the scientific method (Malm, 2021). Despite its many benefits, not all students fully capitalise on fieldwork opportunities due to, for example, practical concerns or feelings of exclusion (Orion & Hofstein, 1994). To address these issues and enhance student engagement during fieldwork, we present a gamified activity prompt in the form of a bingo card. This innovative approach aims to nudge students towards maximising learning opportunities through playful engagement, thereby bridging the gap between participation and independent application of knowledge. The bingo was introduced during a cruise in 2022 to a group of physical oceanography students ranging from bachelor to PhD level. Post-fieldwork surveys suggest that implementing the fieldwork bingo increased student commitment and autonomy, reducing barriers to learning. The results are published in the Oceanography magazine (Glessmer et al., 2023) as a collaborative effort between the professors who came up with the bingo idea and two students participating in the cruise. The bingo presented here is a version adapted by one of the students and a colleague for their own teaching in a biology course. This work contributes to the ongoing discourse on enhancing educational effectiveness in scientific disciplines through innovative pedagogical strategies. We aim to share our experiences and insights with educators and students across the UiB community, advocating for the adoption of gamified activities to enrich teaching experiences not only during fieldwork. Our "bingo poster" will actively engage the audience through interactive discussions about the bingo activity, encouraging participants to consider how similar strategies could be adapted to their educational contexts.

Curriculum vs non-curriculum methods learning

Pål Ringkjøb Nielsen, Jan Magne Cederstrøm, Benjamin Aubrey Robson

Over the years, the methods used by graduate students from the Department of Earth Science in their master thesis has changed. Now a days, with the rapid shifts in technology, new hires and the change from a more petroleum-focused career path to a more diverse career trajectory, the students encounter a wider variety of methods e.g. numerical methods, geomatics as well as laboratory work.

In this study, as a part of the course MNPED660, we aimed to investigate where the students gain the necessary skills to perform methods used in their master thesis in Earth Science or in Physical Geography. The focus has been on students within Quaternary geology (e.g. climate, environmental changes etc.) and physical geography which have a large overlap with Quaternary geology. These students often participate in the same courses and have similar subjects for their master thesis giving a wider student-base to investigate. Specifically, we wanted to determine the necessity for students to seek knowledge for methods beyond the curriculum - through advisors, online resources, or peers - and the additional effort this may entail.

The study was done using a questionnaire sent out to both present and former students, with the goal to create an understanding of what the primary sources from which students acquire the necessary skills to complete their master thesis, and if there is a lack of knowledge learned from the current curriculum at the Department of Earth Science.

Improving students' programming skills through Collaborative Scientific Python

Julien-Pooya Weihs, Daniel Oddmund Lid

Scientific programming is an increasingly important part of the curriculum at MatNat and scientific careers overall. However, students often struggle to see its uses and benefits, where and how to begin learning it, and lack formal training applicable to their discipline. At the same time, teachers face challenges in defining clear programming goals and creating new teaching materials that integrate the complexities of programming.

To address these issues, a pilot course of five lectures over two weeks was created at the Geophysical Institute in Spring 2024. This course aimed to help students understand and practice the basics of scientific Python and achieve working fluency in collaborative projects using Git.

The course focused on common Python packages (pandas, matplotlib, numpy), standard scientific procedures (reading, pre-processing, analyzing, and visualizing data), basic Git commands (push, pull, commit), and collaborative tools (forks, branches). Designed with methods supported by didactic literature, the course emphasized active participation and group work, using real-world geophysical data. Pre- and post-course data were collected via surveys from 12 of the attending students.

In this talk, I will present the main structure of the course and the resources developed for it. I will also share the reported positive impact on students' motivation, self-efficacy, and sense of belonging. Additionally, I will highlight students' reflections on the integrated Python-Git framework at the center of the course. By doing so, I hope to inspire you to engage in conversation and try out this short programming course at your department!

Prosjekt for mer programmering i fysikk

Augustin Winther, Vegard Gjerde, Johan Alme, Martino Marisaldi

En bachelor i fysikk skal gi studentene nødvendige verktøy, både i form av teoretisk kunnskap og praktiske metoder, for å løse komplekse problemstillinger innen fagfeltet. Ett sentralt verktøy i fysikk er programmering. Imidlertid har det vært et begrenset tilbud av programmering i fysikk-bacheloren ved Universitetet i Bergen (UiB).

Nye studenter som kommer til UiB for å studere fysikk har før gjerne bare hatt ett introduksjonsemne i programmering første semester, og deretter vært sporadisk innom programmering. Dette prosjektet har som mål å integrere mer programmering i flere fysikkemner ved UiB. Programmeringsoppgavene skal ha fysikken som hovedfokus, og skal i hovedsak lære studenter hvordan man går fram for å løse problemstillinger som ikke kan løses med tradisjonelle metoder som penn og papir.

Læringsmaterialet blir utviklet av studenter som er ansatt i prosjektet. Det består av eksempeloppgaver, oppgaver, og detaljerte løsningsforslag, samt forklaringer og info om de forskjellige verktøyene som blir brukt. Studentene vil lære å bruke de samme metodene som blir anvendt av ferdigutdannede fysikere, og vil få en mer solid akademisk grunnmur før de begynner på mastergraden.

Alt undervisningsmateriell er samlet på én felles «Programmering i fysikk» emneside på læringsplattformen Mitt UiB (Canvas) som er strukturert for å være så brukervennlig og navigerbar som mulig.

Prosjektet vil bli pilotert i høstsemesteret 2024 i fysikkemnet PHYS113 (Mekanikk 2 og termodynamikk). Vår primære målgruppe er undervisere innen realfag, spesielt de som allerede underviser i eller vurderer å innføre programmering i læreplanen.

Generativ kunstig intelligens i universitetspedagogikken: Erfaringer fra et UPED-kurs Robert Kordts, Belinda Muñoz Solheim

Den raske utviklingen av generativ kunstig intelligens (genAl) har utløst et behov for videreutdanning på dette feltet, særlig om lærerkunnskap (jf. Brandão et al., 2024). I et Scholarship of Academic Development-prosjekt (SoAD, Eggins & Macdonald, 2003) undersøkte vi derfor hvilken effekt et universitetspedagogikkurs om genAl hadde på underviserkunnskapen. Med utgangspunkt i TPACK-modellen (Mishra & Koehler, 2006), som skiller mellom (generell) pedagogisk kunnskap (PK) og teknologirelatert kunnskap (TK) samt skjæringspunktet mellom disse to (TPK), spurte vi oss selv hvilke kunnskapsområder som ble fremmet av dette kurset. Spørreskjemaer før og etter kurset våren 2024 med elleve deltakere vurderte kunnskapsområdene: spørsmål tilpasset genAl av Schmidt et al. (2009) for PK, genAl-TK og genAl-TPK, samt spørsmål tilpasset fra Kiryakova & Angelova (2023) for å registrere lærernes syn på positive muligheter og negative utfordringer ved genAl. Dataene fra åtte deltakere ble analysert. For PK var det ingen endring mellom pre- og post, men det var en signifikant økning i genAl-TK fra pre- til post. GenAl-TPK økte også signifikant. Når det gjelder genAls positive og negative muligheter i undervisningen, fant vi en interaksjonseffekt: Fra før til etter undersøkelsen økte vurderingen av muligheter, mens vurderingen av utfordringer gikk ned. Selv med et lite utvalg tyder dataene på at målet om å fremme kunnskap om genAl og bruken av genAl i undervisningen ble nådd. Det virker interessant at PK ikke har endret seg: Spørsmålene ser ut til å være for uspesifikke eller utvalget for lite til dette. Funnene oppmuntrer oss derfor til å fortsette kurset og SoAD-prosjektet.

A Comparative Study of Initial Teacher Education Programs (ITEPs) and Global Citizenship Education (GCE) in Italy and Ireland

Guilia Filippi

This study examines how Initial Teacher Education (ITE) programmes in Italy and Ireland prepare future primary school teachers for Global Citizenship Education (GCE). GCE has gained increasing attention in recent decades due to its focus on global issues such as justice, gender equality, inequality and climate change. However, it remains a complex and multifaceted concept (Pashby et al., 2020). Drawing on the GCE framework outlined in the Dublin Declaration of 2022, this research explores the implementation of GCE in ITE programmes and participants' preparation for these issues.

Using a qualitative multiple-case study approach (Yin, 2018), data was collected through semi-structured interviews and focus groups with 32 participants, including prospective teachers and teacher educators. Additionally, contextual factors were considered through exploratory observations and document analysis to develop a better comparative analysis. The study assesses participants' understanding and awareness of GCE and highlights similarities and differences in its integration into ITE programmes in the two countries (Estellés & Fischman, 2021; Tarozzi & Mallon, 2019).

The research compares approaches in Italy and Ireland, providing valuable insights into the practical applications of GCE at both local and global levels. The findings, which aim to contribute to the development of more effective GCE

curricula and pedagogical practices for teacher education, have direct implications for the future of teacher education systems.

Estellés, M., & Fischman, G. E. (2021). Who needs global citizenship education? A review of the literature on teacher education. Journal of Teacher Education, 72(2), 223-236

Pashby, K., Da Costa, M., Stein, S., & Andreotti, V. (2020). A meta-review of typologies of global citizenship education. Comparative Education, 56(2), 144-164.

Tarozzi, M., & Mallon, B. (2019). Educating teachers towards global citizenship: A comparative study in four European countries. London Review of Education, 17(2), 112-125.

Yin, R. K. (2018). Case study research and applications. Sage.

Videreutvikling av arbeidspraksis for disiplinstudenter ved å støtte praksisveilederne

Kristin Holtermann, Jonathan Soulé, Sehoya Cotner

Stortingsmeldingen (Meld. St.16 (2020–2021) oppfordrer høyere utdanningsinstitusjonene til å tilby praksisemner for å styrke studentenes læring og studienes arbeidslivsrelevans. Disiplinstudenter opplever at arbeidspraksis bidrar til å utvikle deres perspektiv og se sammenhengen mellom teori og praksis (Hole et al 2018). I arbeidspraksisemner for disiplinstudenter (se eksempel Velle et al 2017), har studenter praksis i en ekstern bedrift innen rammen av et 10 ETCS emne. I bedriftene utfører studentene faglig relevante oppgaver, under veiledning av bedriftens ansatte. Fra akademia vet vi at veilederne er viktig for studentenes faglige utvikling (Limeri et al., 2019). Det finnes mindre kunnskap om hvordan arbeidspraksis oppleves av veilederne i bedrifter som tilbyr arbeidspraksis, og hvilke behov disse veilederne har for å kunne støtte studentens læring.

DEVELOP (Developing evidence-based mentoring for better STEM work placements) tar utgangspunkt i praksisveiledernes perspektiv for å videreutvikle praksis for studenter, bedrifter og universitetet. Med utgangspunkt i tre praksisemner innen disiplinene biologi og geologi ved UiB, UiO og UiT, har vi gjennomført tre fokusgruppeintervjuer (n=15) med praksisveiledere. Tema for intervjuene var veiledernes erfaring med å ha studenter i praksis, samt styrker og utfordringer med studentenes praksisperiode. Disse fokusgruppeintervjuene bidrar til ny kunnskap om praksis fra praksisveileders perspektiv (Schneider et al., in review). Dataene er videre brukt til å utvikle en kompetansehevende ressurs for praksisveilederne (praksisveileder.no).

Vi presenterer hvordan vi har brukt intervjudata til å utvikle en pedagogisk ressurs, selve ressursen praksisveileder.no, og hvordan ressursen bidrar til å øke nytten av praksis for både studenter og veiledere.

Hole et al (2018) Biology students at work: Using blogs to investigate personal epistemologies. Cogent Education, 5(1).

Limeri et al (2019) "Where's My Mentor?!" Characterizing Negative Mentoring Experiences in Undergraduate Life Science Research, CBE Life Sci Educ.

Velle et al (2017) Developing work placements in a discipline-oriented education, Nordic Journal of STEM Education

Forskningsbaserte og inkluderende evalueringer av undervisning og emnedesign Research informed and inclusive evaluations of teaching and course design 13:00-14:30, Søndre Allmenning 1

Al-nt all bad – leveraging the power of generative Al as a partner in scalable and domain-agnostic course evaluations – giving you more time for what really matters.

Magnus Svendsen Nerheim, Pernille Eyde Nerlie, Sehoya Cotner

Artificial intelligence (AI), generative AI and large language models (LLMs) have emerged as a disruptive technology in higher education (HE), presenting challenges and opportunities to both teachers and students. In prior work we have called for a collaborative approach emphasizing honesty and transparency while navigating these tools in teaching and learning (Coelho et al. 2024). Although increasingly explored for use in teaching, learning and assessment, the use of AIs in supporting 'administrative' tasks in HE is less documented. This is somewhat surprising, given the potential of LLMs for such tasks and the push-back increased 'teacher-administration' and New Public Management (NPM) has received from academics in Norway (Bleiklie 2020).

Our study explores the feasibility of using generative AI as a partner in interpreting course evaluations. Often a neglected and 'administrative' burden, course evaluations are prone to observer biases, and the interpretation of results prone to confirmation bias unless excessive time (or money) is invested into their analysis (Roxå 2019). By using an exploratory approach based on traditional coding of qualitative responses and substituting the observer with LLMs, we can replicate the desired quality of outcome in a fraction of the time compared to non-AI methods, allowing the observer to focus on using the insights from the students' feedback rather than on conducting the analysis. In our talk, beyond teaching our colleagues how to save time and utilize their course evaluations to a higher degree, we will lead a discussion about the areas in which generative AI is a feasible partner, pitfalls to avoid, and where human curation and quality assurance is warranted. Ultimately, the audience will have a little more hope that it AI-nt that bad.

The benefits of a research based embedded system for student evaluation of teaching

Roy Andersson

We show how a faculty wide research-based student evaluation of teaching (SET) system focusing on student learning, and not on student satisfaction, has contributed to systematically improving teaching quality over the past 20 years.

Lund University Faculty of Engineering (LTH) introduced a student evaluation of teaching (SET) system focusing on student learning in 2003, based on the Course Experience Questionnaire, CEQ (Ramsden 2005). The SET system uses an electronic survey that generate a working report which is discussed by the course leader, the program coordinator and student representatives (Eftring and Roxå 2023). The three parties' individual comments are included in the public end-report. The SET system has to date resulted in a database containing more than 320 000 questionnaires, displaying a development in Good Teaching, Good Assessment, Clear Goals and Standards, and Overall Satisfaction (Roxå et al. 2021).

The SET system is embedded in a wider system of resources to scaffold quality development, all using the same educational paradigm as the CEQ, deep and surface approach to learning (Marton and Säljö 1976). Since the same educational paradigm is used the SET system contributes in several ways to the whole. One example is that SET data is used as a qualitative tool in conversations about teaching and learning both among teachers and students as well as leaders, and we can see that both frequency and quality in these conversations evolve (Roxå et al. 2019). Another example is the contribution to better conference proceedings and merit portfolios (Larsson et al. 2015).

The presentation will be in three parts:

- 1. A brief overview of the SET system compared with other systems.
- 2. An interactive example with the audience (full participant engagement) exemplifying the benefits.
- 3. Final questions and discussion, and take-home messages.

Exploring the Consequences of Single-Assessment Grading in Higher Education

Sondre Bolland

Assessment in higher education serves multiple essential functions. It informs program selection and determines student progression (Brown, 2013). Assessments provide faculty with feedback on teaching effectiveness (Biggs, 2003) and offer students insights into their performance and areas for improvement (Gibbs, 2005). Additionally, they are crucial for institutional quality assurance and accountability, validating qualifications and ensuring the quality of academic programs and professional training (Knight, 2002; Kuh, 2011).

In Norwegian higher education, lecturers choose between two main assessment strategies: a 100% exam, where the final grade is determined solely by the final exam, and a portfolio approach, where multiple assessments throughout the semester contribute to the final grade.

We investigated the educational implications of these strategies on student learning. To gain deeper insight, we considered aspects such as validated assessment, assessment feedback, test anxiety, case studies of graded and non-graded assessments, and the relationship between assessment and Bloom's Taxonomy of learning.

We aim to use this information to prompt a discussion among educators at the University of Bergen. This discussion will help gain a deeper understanding of the assessment methods used at the university, their impact on students, and potential enhancements and drawbacks.

Biggs, J.: Teaching for Quality Learning at University (2003)

Brown, G.A., Bull, J., Pendlebury, M.: Assessing student learning in higher education. Routledge (2013)

Gibbs, G., Simpson, C.: Conditions under which assessment supports students learning. Learning and Teaching in Higher Education (1), 3–31 (2005)

Knight, P.T.: The Achilles' heel of quality: the assessment of student learning. Quality in Higher Education 8(1), 107–115 (2002)

Kuh, G.D., Kinzie, J., Schuh, J.H., Whitt, E.J.: Student success in college: Creating conditions that matter. John Wiley & Sons (2011)

Hvordan lage inkluderende emnedesign?

Cecilie Boge, Tane Holm Høisæter

UiB læringslab hjelper mange ulike fagmiljø med å utvikle nye eller revidere eksisterende emner, både for campusstudenter og for videreutdanningsstudenter. Et viktig mål for oss er å bidra til at studentene aktivt deltar i undervisningen og at de opplever å være en del av et akademisk fellesskap. Utforming av inkluderende emnedesign blir ofte brukt om undervisningsopplegg som sikrer variasjon i undervisningsmetoder, læringsstrategier og vurderingsformer, for å støtte en mangfoldig studentgruppes læring. I tillegg er det viktig å utvikle emnedesign som har avklarte og eksplisitte forventninger til hva studentene skal (kunne) gjøre, og der de får vist hva de kan på ulike måter.

I denne paperpresentasjonen ønsker vi å dele erfaringer fra FRONESIS-prosjektet og fra emneutviklingsprosjektet. FRONESIS er et utviklingsarbeid ved Institutt for global helse og samfunnsmedisin (IGS) der UiB læringslab/UiB Videre har jobbet sammen med fagmiljøet i allmennmedisin for å lage et nytt videreutdanningsemne for fastleger. Målet med emnet er å gi fastlegene økt veilederkompetanse gjennom refleksjoner og øvelser som gjennomføres i praksisperiodene, parvise tilbakemeldinger og kollegastøtte.

For å kunne hjelpe så mange fagmiljø som mulig med å utvikle helhetlige og inkluderende emnedesign, har UiB læringslab, sammen med Program for universitetspedagogikk og Universitetsbiblioteket, laget en åpen nettressurs for emneutvikling. Her kan undervisere og andre lære om grunnleggende innføring i læring, emnedesign, hvordan skrive læringsutbyttebeskrivelser, få tips til aktiv læring og varierte vurderingsformer og bli inspirert av ulike eksempler fra UiB.

Smith, S. V., Pickford, R., Priestley, J., & Sellers, R. (2021). Developing the Inclusive Course Design Tool: a tool to support staff reflection on their inclusive practice. Compass (Eltham), 14(1). https://doi.org/10.21100/compass.v14i1.1115

Thomas, E. and May, H. (2010) 'Inclusive Learning and Teaching in Higher Education.' Report, Higher Education Academy: https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/inclusivelearningandteaching finalreport 1568036778.pdf

Koble arbeid og læring: Utvikling av ferdigheter og relevans for arbeidsliv

Connecting work and learning: Skill building and work-life relevance

13:00-13:30, Søndre Almenning

Å lære å skrive juss. Ikkje-juristar sitt møte med skriving av juridiske tekstar

Ingrid Halvorsen Barlund, Guri Lindblad

Eit fagdidaktisk forskingsprosjekt:

Hovudproblemstilling:

Prosjektet handla om korleis ikkje-juristar kan tileigne seg grunnleggjande juridiske skriveferdigheiter gjennom ulike undervisningsaktivitetar på EVU-kurset JUR601 Innføring i jus for næringslivet. (1*) Hovudproblemstillinga var om ei kursendring mot meir metodeundervisning og skrivetrening på kostnad av undervisning i den materielle jussen ville gje eit betre kurstilbod totalt til studentane.

Metode:

Overordna var dette ein kvalitativ studie inspirert av Maxwell (2013) (2*) sin interaktive modell for gjennomføring av kvalitativ forsking. Studien tok utgangspunkt i studentopplevd læring (evalueringsskjema), fokusgruppeintervju, og analysar basert på undervisaranes observasjonar og av eksamensresultat for 2021-2023.

Prosjektets hovudkonklusjon:

Funna i prosjektet tilseier at undervisninga bør vere meir interaktiv og leggje til rette for meir skrivetrening enn den har gjort tidlegare. Munnleg tilbakemelding på eigen tekst vart peika på som særskilt nyttig for studentar med leseog skrivevanskar. Ei utfordring med omlegginga er at undervisninga om juridisk metode og skrivetrening går på kostnad av undervisninga om den materielle jussen. Vi argumenterer likevel for at skrivetreninga og det å lære seg grunnleggjande juridisk metode er essensielt fordi det utrustar studentane med viktige verktøy for å lære seg juss og handtere problemstillingar dei møter i arbeidskvardagen. Argumentet vert underbygd av funn frå eksamen, der studentar som nytta tilboda, fekk betre resultat, både i 2022 og 2023.

Kven kan ha interesse?

Prosjektet er retta mot opplæring av ikkje-juristar, men har overføringsverdi for de fleste fag, knytt til vurderinga undervisning i metode, på kostnad av formidling av materiell kunnskap, men gjerne særskilt innan etter- og vidareutdanning. Vi ynskjer å utfordre deltakarane til å reflektere over avveginga metodisk/materiell undervisning i samband med vår presentasjon.

- 1* Studia blir publisert som del av antologien «Undervisning i juss for studenter som ikke skal bli jurister» (Helde, Parman og Suzen red,).
- 2* Maxwell, J. (2013). Qualitative Research Design: An Interactive Approach. SAGE.

Praktisk prosedyretrening i juristutdanningen

Henriette Tøssebro

Dagens juristutdanning har et sterkt fokus på skriftlige ferdigheter, men gir lite rom for praktisk trening. Selv om bare en liten prosentandel av studentene ender opp som advokater eller dommere, er retoriske ferdigheter et viktig kjennemerke ved en god jurist. Dessuten viser forskning at praktisk trening kan ha god effekt på læringsutbyttet.

Dette SoTL-prosjektet undersøker hvilken betydning gjennomføringen av et prosedyrekurs (mock trial) har på læringsutbyttet til studenter på 4. studieår av juristutdanningen.

Studien kombinerer en kvantitativ analyse av studentenes eksamensresultater på en skriftlig skoleeksamen (caseoppgave) med kvalitative data fra fokusgruppeintervjuer. Først vil det gjennomføres fokusgruppeintervjuer med studentene som både har og ikke har gjennomført prosedyrekurs. Deretter vil eksamensresultatene til studenter som har deltatt i prosedyrekurset bli sammenlignet med resultatene til de som ikke har deltatt.

Det forventes at studenter som har deltatt i prosedyrekurset vil prestere bedre på eksamen og være bedre rustet til fremtidige yrkesutfordringer. Dette vil i så fall kunne være et argument for at praksisorienterte læringsmetoder implementeres mer aktivt i juristutdanningen.

Resultatene vil ikke foreligge på konferansetidspunktet, men prosjektdesignet og formatet vil drøftes med konferansedeltakerne, som selv kan hente inspirasjon til å gjennomføre tilsvarende studier på eget fagområde. Under presentasjonen vil jeg legge til rette for aktiv deltakelse gjennom bruk av Mentimeter. Forskningsfunnene tar jeg sikte på å publisere i et akademisk tidsskrift.

Dian, Ahmad & Manab, *Practical Legal Training in Legal Education: Law Students' Perceptions* (2020) https://iiste.org/Journals/index.php/JEP/article/view/51659

Martinez & Krieger, *Performance Isn't Everything: The Importance of Conceptual Competence in Outcome Assessment of Experiential Learning* (2011) https://www.semanticscholar.org/paper/Performance-Isn't-Everything%3A-The-Importance-of-in-Martinez-Krieger/68815f2a56522e69d3f4038be91abce205af95c3

Rattleff, *Jurastuderendes læring via deres aktive arbejde med stoffet* (2013) https://tidsskrift.dk/dut/article/view/6340

Grimes, Learning law by doing law in the UK (2014) https://journals.northumbria.ac.uk/index.php/ijcle/article/view/130

Suartha & Martha, *Moot Court as Learning Method for Bachelor of Law: Towards Progressive Legal Education* (2020) https://www.semanticscholar.org/paper/Moot-Court-as-Learning-Method-for-Bachelor-of-Law%3A-Suartha-Martha/4e8ad912670cbeec17db859aeed1dce397b2f9c0

Does work-practice matter? Student perspectives on the longer-term impacts of discipline-based work-practice.

Kristin Holtermann, Jonathan Soulé, Sehoya Cotner

In a collaborative effort to make our educations more "authentic," and equip students with transferable skills, many study programs incorporate work-integrated learning (in our case, "work practice"). These programs (see Velle et al 2017) have been associated with several positive and tractable outcomes, such as increased student motivation and increased sense of relevance in their studies (Hole et al 2018). However, we know less about student perceptions of the longer-term impacts of these experiences.

We report here on findings from a survey of students previously enrolled in one of seven different courses that includes work practice, from three different universities in Norway. Using both constrained-choice and open-ended survey items, we asked students about their experience, whether they were employed in the field now, and whether the work-practice had helped them get a job in the field. We also asked them to reflect on skills acquisition, networking impacts, and whether they would recommend the experience to their peers.

As an example of our findings, we learned that work practice increased the practical and generic skillsets of the students and increased their motivation to finish their study program. Further, alumni report work-practice to be relevant: "when you have learned something in practice, it is easier to understand things you read about within the same field." Critically, 100% of the program alumni would recommend work-practice to their peers. These findings are encouraging and support an institutional investment in similar programs across Norway. We will conclude with

some resources and recommendations for our colleagues interested in learning more about discipline-based work-practice.

Hole et al (2018) Cogent Education, 5:1

Velle et al (2017) Nordic Journal of STEM Education, Vol. 1, No. 1 (2017)

Integrating practical skills and work-life relevance in Geoscience Education through internships: Insights from GEOV298 GeoPraksis

Kenneth Mangersnes, Jarle Børve Sleire, Thomas Hagen Thuesen

Students, employers, and governing powers have long sought work-life relevancy in higher education. GeoIntern (GEOV298) is a course at the Department of Earth Science established in 2022 to answer this demand and bring our students closer to future employers. The course design is based on seven learning modules focusing on practical skills relevant to work-life and a three-week internship with a geo-relevant company. This way, the course incorporates student-active learning with realistic problem-solving scenarios that test students' geoscientific knowledge, generic skills, and collaborative abilities in interdisciplinary working groups. Reflective notes and ongoing student dialogue allow instructors to adjust the format and content of the teaching both during and after each semester. An unforeseen, yet positive effect of the course is the increased confidence and sense of belonging among students, who recognize that society values them and their expertise. This also motivates them to pursue further master's studies.

Tilknytning, kreativitet og partnerskap i undervisning og læring

Connection, Creativity and Partnership in Teaching and Learning

13:00-14:30, Nordre Almenning 3

Learning about data through social connection: Game-based strategies in a continuing education workshop Fride Klykken, Rosaline Barendregt, Ingunn Ness, Barbara Wasson

Data literacy is key in connecting and participating in today's datafied society. Presenting findings from a study of a continuing education data literacy workshop incorporating games, the paper's RQ explore how students report (1) on their learning experiences about data, as well as (2) on their learning experiences of more 'soft skills' such as critical thinking, collaboration, and creativity.

The case study was designed around an online continuing education course (SLATE, 2024), where students were invited to a non-mandatory, face-to-face workshop. During the workshop students played two analogue learning games designed to raise awareness and knowledge about data, with short post-play debriefing activities. The data literacy games were initially co-created in an Erasmus+ project (Castañeda, et al, 2024), and further developed and adapted to suit the curriculum of the present continuing education course. A survey questionnaire was distributed at the end of the workshop (N=61).

The first game (DataDelta) requires players to conduct internet searches and create stories. The second game (DataIceberg) is a memory game where the players look for pairs of cards before categorising them on player boards according to data type. Preliminary findings suggest that participants agreed that both games promoted social connection and collaboration, albeit the two games provided different learning experiences. The tentative conclusions reflect on benefits and challenges for combining game-based learning strategies during future university teaching and learning activities.

We aim to reach educators with an interest for engaging students. The audience will be invited to play the game DataDelta during the presentation.

Castañeda, L., Arnab, S., Tur, G., Klykken, F., Wasson, B., & Haba-Ortuño, I. (2024). Co-creating pedagogically informed games for data literacy. Revista de Educación, 405, 37-66.

SLATE (Centre for the Science of Learning & Technology). (2024, 20. August). Fantastiske Data (DIGI610). https://www4.uib.no/emner/DIGI610

Transversality: What is it and how does it speak to higher education?

Simon Gilbertson

In this paper, I will describe contemporary developments of the term transversality, in particular the usage within Critical PostHumanities as developed by Rosi Braidotti (2019) (not as in its use in advanced mathematics). After this succint beginning, I will go on to share thoughts to initiate a plenum discussion about some of the potential consequences, (material, epistemological and ontological) transversality may elicit within higher education.

Braidotti, R. (2019). Posthuman knowledge. Cambridge: Polity Press

Gilbertson, S. (2023). Transversality in music therapy education. In K. Goodman (ed.) Developing issues in World Music Therapy Education and Training: A Plurality of Views. Chapter 1 (pp.3-10). Charles C. Thomas Publisher

The Same, But Different: Teacher and student experiences of partnership

Gerald Decelles III, Catherine Bovill, Anders Mattias Lundmark

Norwegian Higher Education institutions have been increasingly adopting 'students as partners' (SaP) approaches, in common with other universities internationally. In Norway, the Centres for Teaching Excellence or 'Senter for fremragende utdanning' (SFU) initiative (started in 2010) has embraced SaP and supported Norwegian universities to embed partnership approaches in different disciplines. The partnership approach is rooted in a range of theories, including from Dewey, Freire, and other scholars such as those in critical pedagogy and emphasizes collaborative, reciprocal educational processes (Cook-Sather et al., 2014). Contemporary research not only highlights partnership's benefits and challenges (Bovill et al., 2016; Mercer-Mapstone et al., 2017), but also underscores a growing interest in understanding the shared experiences of participants as a way to inform and enrich future partnership endeavours.

In this study we investigate the research question: Do students and teachers who engage in partnership share common experiences? Data collection began in 2023 with Geoscience departments in the iEarth network, (one of Norway's Centres for Teaching Excellence-SFU). 20 survey participants and nine interviewees participated in the study. Data analysis employed reflexive thematic analysis, using software for iterative coding and theme development. We explore five key themes from the findings: the value of relationship building; voice/agency and power; the importance of positive experiences; multiple understandings; and uncertainty. All themes were shared by teachers and students but experienced in different ways.

This presentation (utilizing Mentis and think/pair/share) will examine these themes, and pay particular attention to exploring uncertainty in partnership, as this does not appear to have received much attention in the existing literature. The findings suggest that staff experience reduced uncertainty due to partnership, while students found that partnership increases uncertainty. The target audience for this presentation is students and teachers as well as those involved in higher education pedagogical decision making.

Infusing motivational factors into teaching and learning activities

Jorun Nylehn, Kjersti Lea

The payoff of learning in higher education is obvious to the rational part of the brain. However, the unconscious part is in charge of motivating us, and highly influenced by short-term concerns. Can we trick the unconscious part of the brain to go in for the hard work of learning? One answer is to weave motivational factors into the design of teaching and learning activities.

We will present a teaching activity that applies several motivational factors to engage students. The activity is inspired by motivational theory and neurobiology and includes freedom to choose a topic within given limits, good opportunities to master the material and receive cred, and to present in a positive social setting with humor. The activity also invites students to be creative, to the degree they want and feel comfortable with, and to be short-term rewarding (release dopamine, which can increase memory).

Students participating in the teaching activity have answered a questionnaire about aspects of the teaching and learning activity. The subject area is ecological interactions in biology, but the activity could easily be transferred to other topics and fields of study.

The activity will be presented briefly, with emphasis on the theoretical background, and exemplified with excerpts from the students' answers. There will be a small web-based poll and discussion to engage the audience.

Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. American Psychologist, 55(1), 68-78.

Shohamy, D., & Adcock, R. A. (2010). Dopamine and adaptive memory. Trends in Cognitive Sciences, 14(10), 464-472. https://doi.org/10.1016/j.tics.2010.08.002

October 18 workshops with John Harding and Helen Duncan, NG5

Friday, October 18, 9:00-10:30, NG5:

Workshop 1: A Case Study on Developing a co-designed Transition Event for Disabled Students

Helen Duncan

This workshop will explore the collaborative process of designing an inclusive transition event for incoming disabled students. Drawing on a participatory research project, this session will highlight how students can be actively involved in creating supportive academic environments. The workshop will present a case study where disabled students worked alongside the disability service to co-design the annual transition event. By adopting participatory approaches, this project aimed to tailor the transition event to better meet the needs of new students, thus enhancing accessibility and inclusivity.

The workshop will explore the project's methodology, which included focus groups and collaborative planning sessions, resulting in a student-driven transition event. The workshop will also discuss the importance of regularly reviewing disability support provisions and incorporating student feedback to ensure effectiveness. Attendees will gain insights into the benefits and challenges of co-design projects and will leave with practical strategies for implementing similar initiatives in their institutions.

Friday, October 18, 10:45-12:15, NG5

Workshop 2: From reasonable adjustment to inclusive practice: the Undiscovered Country? Exploring the influence of lecture capture technology on academic outcomes and learning experiences for disabled students in higher education.

John Harding

My doctoral research explores the impact of lecture recordings on the academic outcomes and experiences of disabled and non-disabled students at a higher education institution in the UK. Despite extensive literature on lecture recordings, few studies focus on disabled students. Set against increasing participation of disabled students and evolving inclusive pedagogy, and political conceptions of disability, my study employed an exploratory mixed-methods design, including quasi-experimental time-series analysis and quantitative and qualitative methods, to investigate the effects of lecture recordings on academic outcomes and learning experiences. Key findings reveal no significant impact on exam marks for both groups, though a possible positive effect on classification for disabled students was noted. Both groups found recordings beneficial for understanding, engagement, workload management, and well-being, with disabled students particularly benefiting in engagement and improvement in notetaking. The study underscores the need for evidence-based communication on effective use of recordings and highlights the importance of context in applying inclusive pedagogy, suggesting avenues for further research and practical implications for inclusive education.