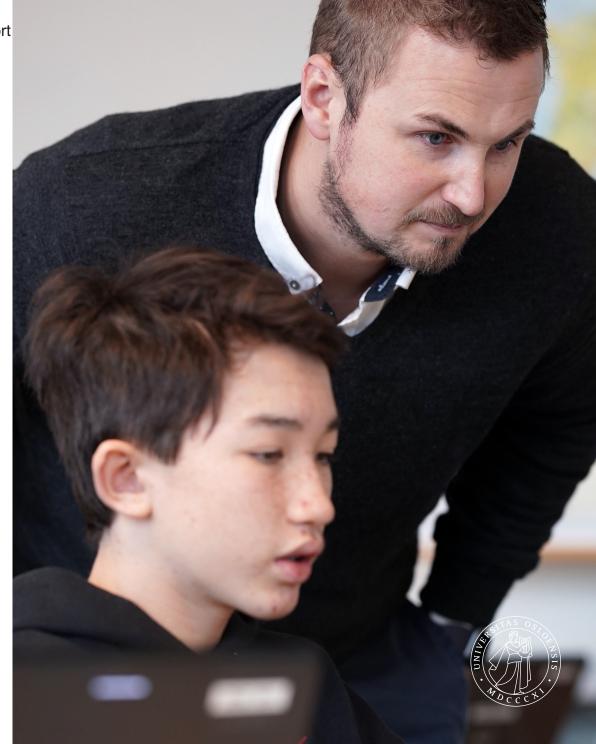


Quality in Nordic Teaching (QUINT) - A Nordic Centre of Excellence

QUINT at a glance

2021/2022 Report







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Introduction

Roughly four years since the QUINT Centre was established in 2018, we now take a look back at the outcomes of recent work that the researchers and administrative staff have produced. Findings from QUINT projects in 2021, and the first half of 2022, are forming a clearer picture of teaching quality in the Nordic countries than we have ever had before.

The pandemic was an unexpected roadblock in the progress of many projects, but these projects have all adapted wonderfully. In the crisis of COVID-19, QUINT researchers managed to find opportunity, and have delivered new insights on the importance of the classroom as a learning environment, and on how learning takes place when it is done remotely. This research culminated in a special issue of Education in the North Journal: Nordic values and schooling during COVID-19, followed by a digital conference on the Nordic countries' response to pandemic in relation to education (page 19).

Another milestone was the publication, in late 2021, of the book "Ways of Analyzing Teaching Quality: Potentials and Pitfalls." The book's origins go back to the first QUINT Conference in 2019, and the chapters cover the many of the themes discussed by researchers during that gathering (page 13).

In 2021 Kirsti Klette and QUINT also initiated the QUALI-FAIR Hub – a cooperation involving 12 departments and six faculties at the University of Oslo. The Hub will work with making sensitive research data more accessible to researchers (page 6).

QUINT has worked to strengthen its collaboration between its partner institutions, and has built new relations with external

organisations and researchers over the past two years. In 2022, Director Kirsti Klette and Associate Professor Inga Staal Jenset held a two-day seminar at the University of California Irvine, titled 'The Use of Video for Teacher Learning' – the first such collaboration between QUINT and UC Irvine. In addition, a number of QUINT affiliates were involved in sessions at the American Educational Research Association (AERA) annual meeting 2022, titled "Cultivating Equitable Education Systems for the 21st Century." AERA's annual meeting is the world's largest gathering of education researchers.

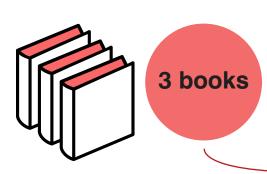
With pandemic restrictions lifted 2022, QUINT was finally able to host a second physical conference in Iceland (page 15). The 2022 QUINT conference and PhD Summer Institute brought together many of the same people from the 2019 conference, as well as some fresh new voices. More than 80 people attended the conference, and feedback was overwhelmingly positive. We look forward to building on the discussions held during the Conference and Summer Institute, and to continuing our dialoge with researchers in the international community.

This document serves as an overview of the QUINT Centre's status as of the time of writing. It is a snapshot of the progress so far, and highlights some important high points from the past two years. The report is organised around QUINT's four thematic areas and the progress reports from the projects under them. Articles about specific events, publications and projects of note are highlighted throughout.

We're excited to share this overview with you, and look forward to continuing to report on the fine work being done at the QUINT – Quality In Nordic Teaching. ■

2021 in numbers

During 2021, QUINT affiliates published...



- Ways of Analyzing Teaching Quality Potentials and Pitfalls
- Samfundsfagsdidaktik: Livsverden, fag og politisk dannelse
 [Social studies didactics: Lifeworld, subjects and political formation]
- Didaktik and Curriculum in Ongoing Dialogue

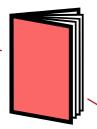
1 special journal issue

Volume 28(3) of Education in the North – "Nordic values and schooling during COVID-19: how to balance comprehensive education and sustainable pandemic regulations"



23 book chapters





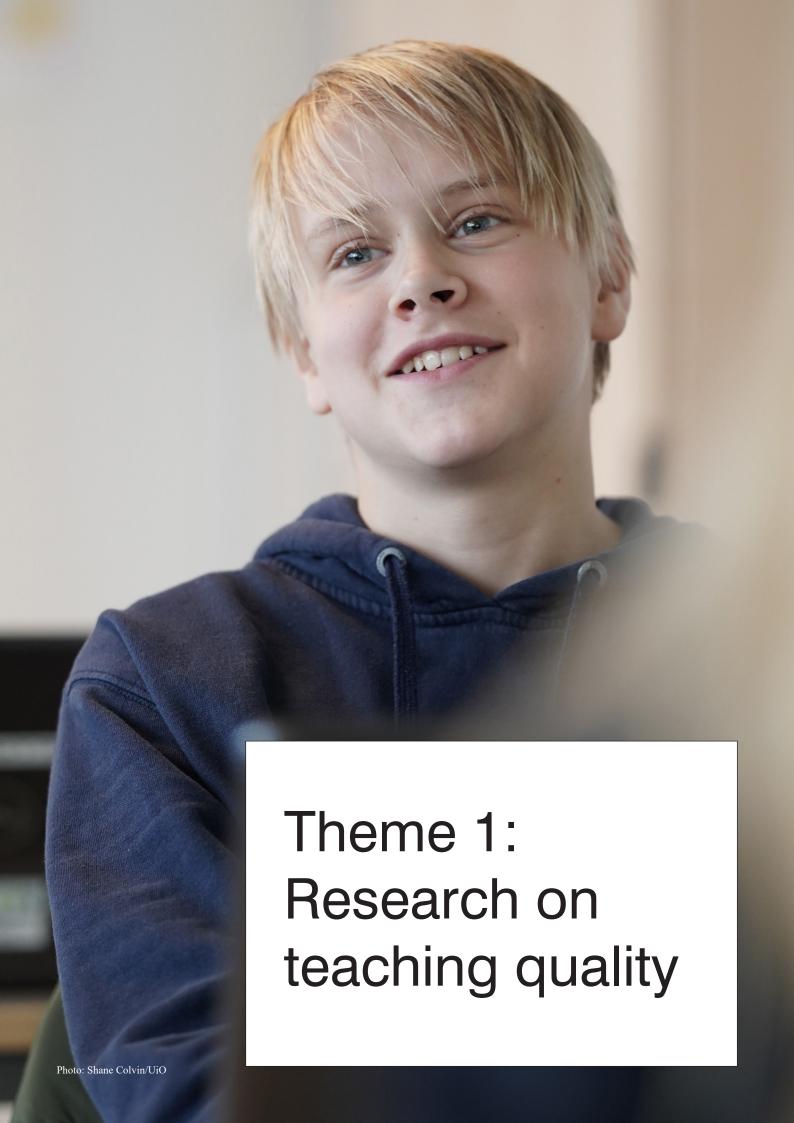
36 peer reviewed journal articles

...and presented

Despite the restrictions on events in 2021, QUINT researchers were still active in presenting findings, either inperson or at online events.



more than
50 papers at
conferences
around the
world.



Theme 1 comprises of four projects. Below is brief summary of the current findings from each project.

LISA-Nordic Sutdy

Findings from the LISA Nordic study point to strong commonalities in teaching quality across the Nordic countries. There are, however, some interesting differences.

LISA Nordic uses the PLATO observation system, which measures discrete aspects of teaching on a scale of 1-4. Results from LISA Nordic show all countries score high on the domain Supporting Climate in all three subject areas. Likewise all countries score low on teachers' use of Scaffolding techniques (Modelling, Strategy Instruction, Feedback etc.), with some higher mean scores in Swedish classrooms.

There are interesting differences between school subjects. In general, we see higher PLATO scores in Mathematics compared to Language Arts (LA) and Social Science Classrooms. For LA (and partly Social Science), Danish classrooms score systematically higher on the elements Classroom Discourse and Text- Based Instruction.

OUISST

Quality in Social Science Teaching (QUISST) is a comparative study that analyses the quality of social science teaching in Nordic classrooms. Researchers use video data to perform different types of analyses, combining the PLATO framework with more subject-specific approaches in social science classrooms.

Social science teaching involves descriptive as well as normative domains aiming at active democratic citizenship in all Nordic countries. As such, QUISST researchers look at the role of social deliberation and citizenship education in social science lessons, as well as also more content-specific analyses such as teaching about economy, and/or higher order thinking.

The project is ongoing, but preliminary results show similarities between the Nordic countries across the four PLATO domains. They also show that Social Science classrooms score especially low on the Instructional Scaffolding elements. QUISST researchers have started to discuss this lack of explicit instruction in social science and how to understand it. There might be a purpose to providing implicit inscruction; Social Science is about ambiguous concepts. The challenge is how to teach students to connect to these ambiguous and complex concepts.

QuiCC (Quality in Culturally Diverse Classrooms)

The QuiCC project uses the LISA Nordic video data to investigate how teachers are making use of the languages the students bring to the classroom, and how multiple languages are used and presented by the teachers.

Analyses so far suggest that, despite the multiple languages present in many of the classrooms, discourses and conversation tend to be monolingual (e.g., drawing on the national L1 language) and teachers seem to seldom draw on or use the multiple language sources present among the students.

Across all classrooms there are few visible accommodations for language learning available and most classrooms are rather empty visually, with no accommodations for language learning on the walls. The study is ongoing.

Connected Classrooms Nordic (CCN)

The Connected Classrooms project focuses on technology rich classrooms and the relationship between digitalization and teaching quality. The project draws on video recordings and collaborative discussions with teachers in Sweden, Finland, Denmark and Iceland. Findings so far suggest that in digitally rich classrooms:

- Organization of teaching moves towards learning platforms, which changes participation frameworks for teacher-student interaction. Instructions tend to be more in written text, and terms for formative feedback during work changes.
- Classroom literacy practices become interlinked and connected, and move "under the teachers' radar". This means increased access to, and use of, a multitude of texts and information, which can give room for students' agency and engagement. For the teacher, this raises new demands on how to supervise and scaffold students' work as it becomes more and more diverse and difficult to follow and monitor.
- There are elements of gamification and more interactive learning material in some subjects (mathematics and partly Language Arts), but not all. These elements are characterized by intense engagement from the students' perspective, but do not always lead to more challenging tasks or higher quality in how content is represented.

QUALITY in Literature Education (QUALE)

QUALE is a qualitative intervention study in focusing on literature education in Denmark, Norway and Sweden. The project draws on the completed large-scale research and development project Improving the Quality of Danish and Mathematics in Danish Lower-Secondary Education, abbreviated KiDM in Danish. The KiDM project designed a multiple intervention research program for improving the quality of literature education.

QUALE aims to re-contextualise the literature interventions developed within KiDM for a Nordic context. Methodologically, the QUALE intervention study represents a new type of researcher-teacher collaboration in the Nordic countries by discussing and developing learning resources in close collaboration with the participating teachers.

Progress so far:

- The online platform resource, originally designed in Danish, has been translated into Norwegian and Swedish and works successfully in the two countries. The platform includes literary works of art as well as learning instruction material and tutorials for teachers participating in the project.
- The learning resources have been tested in collaboration with teachers and analysed and reflected on among QUALE researchers, which led to iterative revisions of the design of the platform.



Video-based research provides excellent data for collaborative studies, joint analyses, and subsequent reanalysis, but such ambitions require a flexible infrastructure that ensures the data is both easily accessible and secure in terms of privacy and intellectual property.

How can we build a flexible infrastructure and storage system for video data that supports interoperability, accessibility and joint analyses?

So far we have reached the following Milestones under Theme 2:

- Finalized the QuintLISANordicDataSet and platform, making sure that the classroom video data are available and accessible for all QUINT researchers. In addition, we provide training and exchange seminars on how to use this platform upon request, and our experienced technical staff provide regular courses in video-coding drawing on different software tools.
- Established a QUINT Nordic Data Managers Network focusing on competence building activities such as recording equipment for video research; eye-gazing solutions, maintenance of the TLV lab Recording Suitcases (Iceland and Finland).

- Set up courses in data management targeted PhD candidates: The data manager in Oslo provide courses for PhD candidates, training a new generation of researchers.
- Held regular courses in: (a) Data management, storage and sharing, (b) Ethics and issues of anonymization when using context-sensitive data/ video data, and (c) Consents forms the support data sharing and interoperability (see also TLV lab Consent Forms Archive).
- Appointed a competence hub for how to make qualitative and other context-sensitive data FAIR (QUALI-FAIR) (Klette PI) (funded 2022-2024 (with a focus on storage solutions, infrastructues and metadata that support data sharing, interoperability and reusablity. See article below.)
- Centre Director Klette has been appointed as a member in the Norwegain national committee for FAIR research "Felles infrastruktur og tjenester for FAIR forskningsdata" [Joint infrastructure and services for FAIR research data], appointed by the Ministry and the Directorate for ICT and joint services in higher education and research. (National report to be I finalized March 2022).



The value of making data available for multiple studies has long been acknowledged. There is an ongoing discussion about the importance of making data FAIR, and public funders often require projects to make data available and guarantee its reuse by others. What has been lacking are specific instructions, routines, forms and procedures for making context sensitive data FAIR in practice. The QUALI-FAIR hub will ensure that FAIR data procedures can be easily incorporated as an organic part of a research project's life cycle.

The QUALI-FAIR hub was initiated by the QUINT centre director Kirsti Klette, who is also coordinating the hub. The QUINT centre deals with a large amounts of sensitive information in its classroom video observation studies, so the need for better procedures for this type of data has been apparent to Klette for some time;

"We've seen a huge interest from researchers wanting access the data we've collected for our classroom studies, but the process of making it available is complicated. There may be legitimate reasons to shield generated data, like personal

privacy as well as issues provided in the initial consents, but often the barriers to sharing data have more to do with lack of culture of thinking principled around these issues including administrative and technical and support and procedures."

The QUALI-FAIR hub gathers competence from different academic groups; six faculties and 12 departments at the University of Oslo, as well as experts from the University of Oslo Library, Fair@UiO and the Nordic centre of excellence QUINT. All of these groups deal with a wide range of research data; from medical information, to field notes, to video and photographs. These data are context-sensitive and often contain personal information about individuals, so they present a number of challenges when it comes to their re-use over time and across studies. The hub will work on making this these data FAIR − Findable, Accessible, Interoperable and Reusable − and still ensure the appropriate protections of subjects of the data. ■

Theme 3: Using videos to support teachers' professional learning

Theme 3 includes the two Videos to Support excellence in Teaching (VIST) projects (in Iceland and Norway) and the Linking Instruction and Student Achievement – Professional Learning Observations of Teaching (LISA-PLOT) project in Sweden.

Although designed around some common core ideas the three projects differ in scope, focus and size, as well as institutional solution. While the PLOT projects have now become a part of the Karlstad region school owners' professional development strategy, VIST Iceland is organized as a Professional Development (PD) course at the university level (University level). VIST Norway was organized as 'one cell' in the new National PD strategy. Below is a summary of key findings and outputs from the respective projects.

VIST Norway

The project has finalized coaching all teachers and school leaders and including nine secondary schools/school leaders and a total of 70 teachers (38 LA teachers and 32 Math teachers). The project is now systematically evaluating the effect of the coaching through interviews and video recordings, as well as survey data. Findings so far:

 Teachers are positive when evaluating VIST, in particular concerning how teachers experience it as useful to see themselves on video. FThe teachers in VIST have reported that the use of authentic video clips has contributed to a better understanding of what they

- accomplished and did not accomplish in their teaching.
- Teachers emphasized the importance of getting other professionals' views on what they do in the classroom and why. They pointed out that it was helpful to see oneself in teaching situations and get feedback on their own teaching practices, and that it's useful to discuss didactic questions based on specific situations and to get feedback related to specific teaching sequences.
- The teachers also expressed that VIST had contributed to raising their awareness and reflection on their own teaching practices and provided them with new knowledge about modelling and strategy teaching (two of the key elements in VIST Norway). This shows that the PD has in fact deepened teachers' reflections and developed their professional vision on targeted aspects of instruction. They also highlighted that VIST has contributed to a focus on change within teacher teams, and to a more research-oriented focus within teacher teams.

VIST Iceland

In the school year of 2020-2021 nine lower secondary teachers completed an on-line professional learning course, aiming to identify characteristics of quality teaching and impact on student learning, and methods for improving their own teaching practice by collaborative inquiry into video recordings.



A similar course took place in the spring term of 2022 with ten participating teachers and similar data will be used for evaluation and generating findings. The results of the program so far have very positive but have generated some conclusions/lessons learned for the researchers, especially in terms of course organisation and focusing on only some key PLATO elements (e.g. Instructional Scaffolding elements and the Classroom Discourse element).

LISA-PLOT Sweden

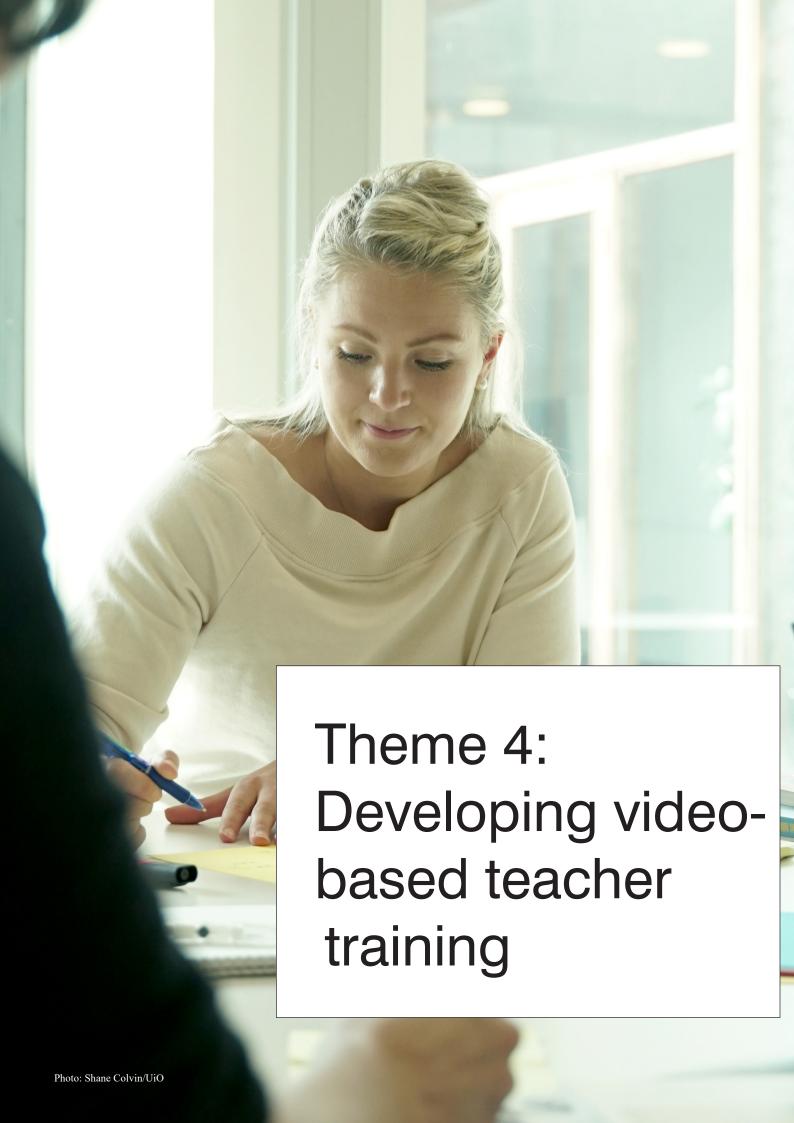
The study Linking Instruction and Student Achievement – Professional Learning Observations of Teaching (LISA-PLOT) completed its professional development phase in February 2021 (it started in January 2020). In all, 45 teachers, six teacher coaches, and eight principals participated in the project. During 2021, data collection was finalized, and analyses of interviews, video-recorded lessons, audio-recorded feedback sessions, and survey data have been conducted.

Analyses from the study has resulted in several interesting results with a clear bearing on professional development work in cooperation between researchers and teachers:

 First of all, observations of teaching followed by feedback based on PLATO elements and, later, group reflection with colleagues, was experienced as helpful in identifying areas of improvement and support instructional development.

- After a year of successive observation, feedback, and collegial team work, the teachers found that they had improved their capacity for leading text-based discussions, their modelling of processes and strategies, and that their instruction was more structured than before.
- Organizational impediments and challenges to long-term cooperative developmental work were identified, but also some of the vital resources for maintaining and advancing such work, especially the teacher coaches, who operated as local and subject-specific change agents in legitimizing, explaining, and leading the professional development work at school and municipal level.

In general, Theme 3 researchers found that, across countries (Sweden, Norway, Iceland) teachers find PLATO to be a relevant concretization of what good teaching practices actually look like in the classroom. The framework has raised teachers' awareness about the details of specific elements of teaching, and several teachers report that PLATO has affected the way they plan their lessons. While both teachers and researchers agree that no tool can capture all aspects of teaching, the projects Lisa Plot, VIST Norway and VIST Iceland have experienced that PLATO provides a good starting point and a shared language to break down teaching practices into their constituent parts.



Theme 4 comprises of five projects/studies:
The Coherence and Assignments in Teacher
Education (CATE) Nordic study and four different
(but related) sub-studies using videos in teacher
training. This part of the QUINT research ambition
started in 2021. Below is a summary of some of the
initial findings and outputs from the CATE Nordic
study and the different sub-projects that use videos
in teacher training.

The Coherence and Assignments in Teacher Education (CATE) Nordic Study is a quantitative study using surveys to investigate the quality of program design and instructional practices in teacher education in the Nordic countries. The project targets teacher candidates' perceptions of their teacher preparation in five programs in Denmark (1), Iceland (2) and Norway (2).

- The CATE survey in Denmark focusing on Field Practice Experiences Questionnaire for teacher students – Danish version (FPE-DK) showed in general a high level of opportunities to learn by observing, practicing and receiving feedback on 12 teaching enactment activities. Nevertheless, there are significant differences between observing and practicing on all levels of field practice.
- In the results of the CATE survey in Iceland teacher candidates report that they had some opportunities to connect various parts of their teacher education program. They report less opportunities to enact some aspects of teaching practices (e.g. analyse real, whole class conversations; analyse students' work) but report strong support from cooperating teachers in the field. There was little difference between reports from teacher candidates depending on whether they were in a 5-year program (M.Ed) or a 2-year program (BA/BS background), though students in the 2 year program reported greater connection between what they learned in campus courses and what they observed in their field practice placement.
- The CATE student survey data in Norway
 has been used longitudinally, and the new
 data collected within QUINT indicate that the
 students do not necessarily experience increased
 opportunities to study and enact practice in their
 program (compared to the 2017 survey data).

Findings here highlight the importance of working with faculty as a steady and dynamic process, to ensure a coherent understanding of the program.

Current findings from both **Learning to Notice** and **Scaffolding Scaffolding** sub-studies indicate that:

- Students are able to learn to notice and reason around specific teaching practices through the use of video in teacher education, but the teacher educator plays and important role in facilitating the use of video through the assignments and scaffolds used.
- Further, the students are to some extent able to enact these practices with their pupils in school, and they reason around contextual issues related to their enactment in mentoring conversations.

The study Increasing quality by using video in social sciences teacher training examines what candidates notice in social sciences teacher training when they video observe. Preliminary findings indicate that:

- the majority of the candidates evaluate the lesson's form and content as more important to observe than the lesson's goal;
- they evaluate a focus on movement to motivate the students' participation when planning their own teaching practice as very important for social sciences lessons;
- they find a useful theory for social sciences in Olga Dysthes (1997) theory of dialogue to ensure classroom discourse. The candidates' choice of theories attribute to the hypothesis that social sciences is a complex subject with a lack of subject didactics where candidates have to transfer didactics from other subjects to plan their teaching. A further question could be indeed, why they choose especially those theories.

The fourth sub-study titled **Becoming a Teacher** – **between theory and practice** has just started at the time of writing. ■

Teacher feedback on procedural skills, conceptual understanding, and mathematical practices: A video study in lower secondary mathematics classrooms

Feedback is a prevalent teaching practice in mathematics classrooms, but few studies have documented how mathematics teachers enact feedback in classrooms. We investigated how 47 teachers provided feedback in 172 mathematics lessons in Norwegian lower secondary schools. We analyzed the quality of feedback, the quantity of feedback, and whether the feedback addressed students' procedural skills, conceptual understanding, or engagement in mathematical practices. Teachers spent large amounts of time providing concrete and specific feedback, most of it addressing procedural skills while conceptual feedback was less common. The study highlights details of feedback relevant for both pre- and inservice mathematics teacher training.

Stovner, R. B. & Klette, K. (2022). "Teacher feedback on procedural skills, conceptual understanding, and mathematical practices: A video study in lower secondary mathematics classrooms" in Teaching and Teacher Education, Volume 110.

https://doi.org/10.1016/j.tate.2021.103593.

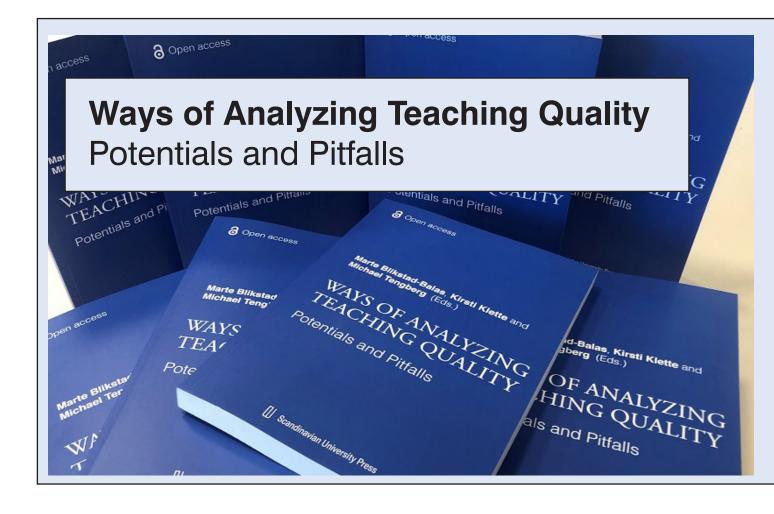
Selected Publications

Missed opportunities of text-based instruction: What characterizes learning of interpretation if strategies are not taught and students not challenged?

Despite robust evidence of effectiveness, many teachers struggle to implement research-based recommendations of reading instruction into everyday practice. This study examined naturally occurring text-based instruction in 237 lower secondary language arts lessons in 62 different classrooms from Norway and Sweden. Using both quantitative and qualitative approaches, we found evidence that explicit strategy instruction and cognitively challenging tasks were rare even in lessons that did focus on deep comprehension of text. We also identified some of the distinct challenges (or missed opportunities) that characterize comprehension-oriented instruction. These findings provide critical insight into relevant areas of future professional development for teachers.

Tengberg M., Blikstad-Balas M., Roe A. (2022), "Missed opportunities of text-based instruction: What characterizes learning of interpretation if strategies are not taught and students not challenged?" in Teaching and Teacher Education, Volume 115.

https://doi.org/10.1016/j.tate.2022.103698.



Function and Use of Literary Texts in Nordic Schools

In this comparative study, naturally occurring literature instruction in Nordic lower secondary school is investigated in order to find out how lessons are organized, to what extent different genres are read and worked upon, and for what subject-specific functions and purposes literary texts are used. Implications for text selection by teachers are discussed. The study relies on four consecutive video-recorded language arts lessons from 102 classrooms in Finland, Iceland, Norway, and Sweden. The function and use of literary texts were investigated by means of video-analysis and statistical comparisons. The analysis clearly indicates that literature plays an important part in Nordic language arts education. In all four countries, narrative fiction texts were favored above other genres. When the aim was to give students joint reading experiences, short stories and excerpts from novels were normally used. Reading literature for the sake of developing comprehension appears to be a dominant function of using literary texts in Nordic lower secondary arts classrooms. The present study also suggests that it is important for Nordic teachers to provide their students with positive reading experiences.

Nissen, A., Tengberg, M., Svanbjörnsdóttir, B. M., Gabrielsen, I.L., Marte Blikstad-Balas, M., & Klette, K. (2021). "Function and use of literary texts in Nordic schools." Contribution to a special issue Working with Literature in Nordic Secondary Education edited by A.F. Gourveennee. H. Höglund, M. Johansson, K. Kabel, & M. Sønneland. L1-Educational Studies in Language and Literature, 21, 1-22.

https://doi.org/10.17239/L1ESLL-2021.21.02.10

Nordic values and schooling during COVID-19 how to balance comprehensive education and sustainable pandemic regulations

QUINT researchers have edited this Special Issue on the Nordic experiences during Covid-19 in the Education in the North journal.

Special Issue: Klette K., Sigurðardóttir, A. K. and Martin, H. (2021). "Nordic values and schooling during COVID-19 how to balance comprehensive education and sustainable pandemic regulations" in Education in the North, 28(3).

https://www.abdn.ac.uk/education/research/eitn/journal/archive/59/

Recent research suggests that there is a direct link between quality of teaching and teacher's instructions and student achievement scores. Additionally, there is a strong correlation between levels of teaching quality and differences between schools and classrooms. However, measuring teaching quality has proven to be difficult and scholars strive to decide on the what and the how when aiming to measure teaching quality. This book discusses the many dilemmas of measuring teaching quality, be it substantial, theoretical, or methodological.

This collection of chapters originates from the discussions at the QUINT Conference 2019: Analysing Teaching Quality: Perspectives, Potential, and Pitfalls, organized by the Nordic Centre of Excellence: Quality in Nordic Teaching June 2019 at the University of Oslo.

The conference brought together scholars from around the world, and made available different perspectives and approaches to teaching quality. In this book, we have invited some of the key contributors from the conference to provide insights into the matter of instructional quality. The book consists of eight chapters that together address both methodological, theoretical and substantial aspects when measuring teaching quality. While all chapters touch upon issues of theory, methodology and empirical findings, they are organized according to one these three main themes depending on the overall focus of the chapter.

Chapters

- Why and How Should We Measure Instructional Quality?
- Practice, Feedback, Argument, Measurement: A Frame for Understanding Diverse Perspectives on Teaching Assessments.
- The Surplus of Quality: How to Study Quality in Teaching in Three QUINT Projects.
- A Validity Framework for the Design and Analysis of Studies Using Standardized Observation Systems.
- Multi-Group Measurement Invariance and Generalizability Analyses for an Instructional Quality Observational Instrument.
- Instructional Quality: A Review of Conceptualizations, Measurement Approaches, and Research Findings.
- Observational Scores as Predictors for Student Achievement Gains.
- Cognitive Activation Potential of E&S Tasks at Commercial Vocational Schools in German-Speaking Switzerland.
- Exploring the Potential in Using Teachers' Intended Lesson Goals as a Context-Sensitive Lens to Understanding Observational Scores of Instructional Quality.

QUINT researchers discuss book Ways of Analyzing Teaching Quality

n Ways of Analyzing Teaching Quality, scholars from around the world have joined forces to discuss the dilemmas associated with studying teaching quality, looking at methodological, theoretical and substantial issues. The book was edited by Marte Blikstad-Balas, Michael Tengberg and QUINT Director Kirsti Klette. Here is what two of the editors, Marte Blikstad-Balas and Michael Tengberg, have to say about the project.

What was the impetus for creating this Ways of Analyzing Teaching Quality?

"During the annual QUINT conference in 2019 there was a lot of really valuable discussion taking place between researchers about analysing teaching quality, and it seemed a shame for that discussion to only be shared with the people in the room at the time. We wanted to make the insights from that conference available to a wider audience, because we think they could be useful to all scholars working with teaching quality" Blikstad-Balas explains.

What gaps in our knowledge, or in the discussion around teaching quality, does this book fill?

"Well, there are many different approaches both theoretically and methodically on how to study teaching quality. Everyone agrees that studying teaching quality is important, but exactly how we should go about it is still very much an open question. What we've tried to do here is provide a collection of new knowledge that can help us identify some key areas in theory and methodology we should focus on to help move us towards a common understanding of what teaching quality is, and how it can be measured" says Tengberg.

Can you give us an overview of what the book contains, Blikstad-Balas?

"The book is eight chapters, each written by a researcher or researchers within the extended QUINT network that study teaching quality. You can divide the book into three themes: Theoretical, methodological, and empirical contributions, so it covers quite a lot. We wanted it to give a picture of the state of the field, but importantly we also wanted to present the new knowledge that we see coming out of the work that researchers at the QUINT centre and its broader network are doing. We think – and hope – the book contributes to

Conferences and seminars

Observation System Webinars

This series of webinar is a forum for discussion about classroom observation systems as a tool for understanding and improving teaching quality. In 2021 the Observation System Webinars have flourished, attracting attention of the academic environments from all over the world. Per March 2022 there were around 200 subscriptions with representatives from different institutions, career stages and research focus, but linked to measuring teaching quality through observation systems.

PhD Summer Institute 2021

PhD Summer Institute 2021 Annual "Frameworks for Analysing Teaching Quality: Methods, Measures and Meaning-making" was held online 31 August-1 September. There was high attendance numbers of both participants with and without papers. The Institute gathered PhD students from Germany, Switzerland, USA, Cyprus, UK, Netherlands, France – as well as all five Nordic countries – who presented a combined total of 30 papers over 10 sessions. All central research groups studying teaching quality were well represented by both early career researchers, as well as the experienced ones. Keynote speakers Anna-

Katharina Praetorius and Charalambos Y. Charalambous encouraged the PhD students to think about how they can contribute to furthering the field of teaching quality analysis through their collaborative work. In his keynote, Postdoctoral Fellow Mark White discussed the issue of rater error in classroom observation from the perspective of 'institutionalised rituals.' White argued that practices such as double rater scoring for classroom observation do not necessarily produce the kind of robust







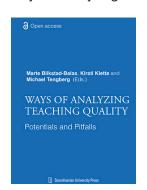
moving forward on some of these big dilemmas that we as scholars have been facing when we study teaching quality."

What are those dilemmas Tengberg, and how does the book contribute?

"It's complicated question, and that's part of the problem. When someone says they're 'studying teaching quality', as scholars we immediately start asking questions like 'what is your definition of 'teaching?' What defines 'quality?' What methodology are you using?' and so on. The authors in this book are grappling with those fundamental questions, and I think they've done a good job of honing in on them. They've looked

at the current research with a very critical eye and said 'how can we reduce the ambiguity here? How can we make our study of teaching more robust?""

Ways of Analyzing Teaching Quality was edited by



Marte Blikstad-Balas and Michael Tengberg, along with QUINT Director Kirsti Klette. It is available for free from Scandinavian University Press under the Creative Commons Attribution. ■

Book avaliable via open access link https://www.idunn.no/doi/ book/10.18261/9788215045054-2021

conclusions they are assumed to, and made the case for moving towards methods that look more directly at the potential validity threats to observation studies. Keynote speaker Klette summarized existing research on teaching quality drawing on empirical evidence from classrooms and linked observation scores from the QUINT countries to this portfolio - discussing how observation measures might shed light on teaching quality. (Summer Institutes is an obligatory event for the QUINT PhD students.)

OUINT Conference 2021

The QUINT conference – normally an open event – was (due to COVID and travel restrictions) run internally in 2021 as an virtual seminar in the days directly following the PhD Summer institute (2-3 of September). The conference was structured around the four themes of the QUINT centre and the projects connected to them. Practical and methodological questions relating to the QUISST, QUICC, QUALE and LISA Nordic studies were discussed in detail amongst the researchers and project leaders, who exchanged thoughts and feedback about the ongoing research. These included concepts of teaching quality, further plans and cohesion within the research groups, as well as between them.

QUINT researchers and PhD candidates also presented at number of conferences in 2021, including

- NOFA8 The 8th Nordic Conference on Subject Education "Creativity, Literacy and Critical Thinking in Subject Education: Issues and Trends for the 21st Century".
- The Ninth Nordic Conference on Mathematics Education "Nordic mathematics education: what it takes or means to bring Nordic mathematics education into the future".
- European Conference on Educational Research ECER 2021 "Education and Society: expectations, prescriptions, reconciliations".
- The Nordic Educational Research Association Congress NERA 2021 " Education and Society: expectations, prescriptions, reconciliations".
- NNMF8 nordiska konferensen för modersmålsdidaktisk forskning [The Nordic Conference for L1 Didactical research] "Ämnesdidaktiska perspektiv på språk och litteratur [Subject didactics Language Arts and Literature]".
- American Educational Research Association (AERA) annual meeting 2022, "Cultivating Equitable Education Systems for the 21st Century". ■

QUINT Conference and PhD Summer Institute 2022

In June 2022, QUINT gathered researchers from around the world in Iceland to present recent work and reflect upon the challenging aspects of conceptualizing, operationalizing and measuring teaching quality.

The event began with PhD Summer Institute, two days devoted to PhD papers, followed by parallel sessions with papers by experts in the field from all over the world. In this way, the format of the conference represented a unique platform for exchange of expertise between early career researchers and the more experienced ones. Alongside the main papers sessions, there were three keynote presentations, a video coding workshop, a panel debate on Icelandic policies on teaching quality, and a separate session dedicated to one of the central projects in QUINT, the LISA Nordic Study (website link with information on the project).

Papers in the parallel sessions represented a broad variety of topics, such as approaches to evaluating and measuring teaching quality in Social Science, Math, L1 and L2; teacher education and professional development; and subject-specific aspects of teaching quality.

One of the keynote presenters at the conference, Professor Daniël Muijs, said

"The conference stood out for the clarity of focus and the high quality of research presented. This high quality was evident across the board, from PhD's to experienced researchers. I felt that the conference moved the field forward in terms of understanding research into classroom processes. There was the feeling of an international community of scholars coming together."

QUINT PhD Summer Institute 2022

Over the course of two days, doctorial students from around the world, including the QUINT PhD fellows, presented and discussed their work in education research. 27 PhD papers were presented across various topics ranging from studies of cognitive activation in classrooms, to student and teachers' perceptions of teaching quality. Presenters fielded questions from their peers, as well as from senior researchers, including the conference's keynote presenters.

Hannah Bijlsma, PhD Fellow and Researcher at the University of Twente noted:

"Measuring teaching quality validly and reliably is a challenge. But it is not impossible. At the QU-INT conference, we discussed what to consider when observing and/or scoring lessons and assessing teachers and schools. This is valuable for my own research, which is on lesson quality in Dutch schools."

Patrick Schreyer, Doctoral candidate from Germany, DIPF, Leibniz Institute for Research and Information in Education said:

"The OUINT Conference 2022 was a welcome opportunity for personal exchange with researchers in the field of classroom research. I particularly liked the consensus regarding critical and reflective consideration of theorizing and prior measurements of instructional quality. This was evident not only in the excellent keynotes of the conference, but also in the methodologically rich and diverse contributions, both quantitative but also increasingly qualitative, of all participants."



Professor Daniël Muijs at the QUINT Conference. Photo: Misha Jemsek

Keynotes dig into detail on methodological challenges

Three distinguished keynote presenters held talks that went into depth on the challenges of measuring teaching quality, drawing insights from their extensive research on teaching quality specifically.



In his keynote, Professor Daniël Muijs discussed classroom observations, focusing on the difficulties in achieving reliability and making valid interpretations when measuring teaching quality. When discussing and problematizing validity issues, Professor Muijs raised critical points about different ways of conceptualizing teaching quality and what researchers can and cannot observe, as well as the consequences of not attending to the curriculum, classroom activities and the cultural context.

Professor Bell's keynote highlighted two different paths that educational research on teaching quality can take; information directly relevant and useful for practitioners one the one hand, and accumulating high quality research over time on the other hand. Professor Bell used these pathways to illustrate how the use of assessment information presents tradeoffs for key research issues when selecting common tools for measuring teaching quality in K-12 classrooms. The tradeoffs are definitions of teaching quality, measurement mode, data collection burden and validity.

And Professor Grossman talked about how to study core practices for Project-Based Learning (PBL). She presented a framework for PBL Core Practices pointing to four key practices: collaborative, authentic, iterative, and disciplinary, and she explained how this framework was used in a teacher professional learning intervention.

Workshop on coding classroom observations shows overlaps and discrepancies between frameworks

The first day of the conference featured a workshop where researchers applied a coding framework of their choice a video recording from a Nordic classroom, borrowed from the LISA Nordic study. Participants presented their framework and their findings to their workgroup.

A total of 12 different frameworks were applied to footage from either a Language Arts or a Mathematics classroom, and were then discussed by the researchers in the group. This workshop was co-organised and financed by the research project Synthesizing Research on Teaching Quality (SYNTEQ), coordinated by QUINT Centre Director Professor Kirsti Klette.

The results of these discussions gave insight into similarities and differences across frameworks and methods. Interestingly, despite differences in theoretical grounding and level of details, different frameworks revealed similar results in terms of patterns of teaching quality identified. The exercise also made visible some limitations of video-data, and illustrated the kinds of additional information different frameworks rely on to make statements about teaching quality.

The workshop represents a new approach to exchanging

* * *



knowledge on teaching observation frameworks. The feedback from participants was positive, with many saying that the workshop was inspiring and useful for understanding how different research environments work with classroom video data.

Patrick Schreyer, Doctoral candidate at DIPF, Leibniz Institute for Research and Information in Education said

"A particular highlight for me was the coding workshop, in which participants had the opportunity to discuss their observation systems and approaches based on two collectively viewed instructional videos"

Hannah Bijlsma, PhD candidate and Researcher at the University of Twente, said

"The coding workshop made me realize how important a well-developed measuring instrument is and what influence the underlying concept of the instrument has on the rating of the lesson"

Further coding workshops will likely be arranged in the future, and the format will continue to be developed.

Panel Debate – Icelandic policies on teaching quality

Quotes in this section have been edited for length and clarity.

Conference organisers used the opportunity of visiting

Iceland to invite members of the national and local education community to a panel debate on Icelandic education policy. Panelists included Icelandic education ministers, union leaders, teachers, school leadership, and researchers. The discussion moderated by Professor Kirsti Klette (QUINT/UiO) and Professor Nikolaj Elf (QUINT/SDU) centred on the current state of teaching policy in Iceland and pathways to improving teaching quality in the country.

On the question of how the panelists would define quality in teaching, they responded that in Icelandic schools, quality in teaching is often linked to the well-being of the students in the classrooms and in schools. Therefore there has been focus on how students feel themselves in schools, and how the Icelandic teachers can contribute and facilitate this feeling this comfort. However, the panelists recognise that there is a rapidly growing group of students who feel disconnected at school. All panelists seemed to agree that defining teaching quality is in general a complex matter to define and measure. The LISA Nordic study in Iceland has revealed that Icelandic classrooms seem to score slightly lower on some categories of teaching quality than the other Nordic countries. These are preliminary findings, further analysis will reveal possible clarifications for these scores.

Towards a joint community of teachers and researchers

The panelists covered a variety of other topics, such as the current effort to improve the tools available to teachers, the current initiatives in education policy in Iceland, and the relationship between education researchers and practitioners. Professional development for teachers emerged as an important theme. The Icelandic Teachers' Trade Union leader, Ragnar Þór Pétursson, expressed concern over what he sees as a division between academics and teachers, saying too many education researchers lack teaching experience, and too many teachers lack good research literacy. He urged greater involvement of educational researchers' in the education system.

"There's no reason that academics shouldn't be full-functioning members of the school communities. You don't have to be distant, looking at the world through the lens of a camera. If educators and researchers manage to connect better, we can do magic."

Teachers' professional development and training is one forum where these connections can be made and strengthened, said Pétursson. QUINT Icelandic researchers have been working closely with teachers and policy-makers in QUINT projects on Professional Development (PD) under the research theme Using videos to support teachers' professional learning.

Better tools for teachers

When asked what kind of help or resources are available to teachers in Iceland, Ingvi Hrannar Ómarsson – specialist in the Ministry of Education and Children – responded that they are currently working on revising the standardised tests.

"The changes that we are hoping to do after that are to create more support for teachers, to create more resources for them, and to stop with competition and start with collaboration. We should trust the teachers and say 'you know your students best, we're not going to tell you to measure all your students on this particular day.' Instead, we should create toolboxes where teachers can access what they need and what they think their students need. We want tools where teachers can use the tool, see the results, and then adjust their teaching."

The evolution of teaching policy

Anna Kristín Sigurðardóttir, a QUINT researcher, a theme 3 co-leader, and Professor at the University of Iceland, reflected on the changes occurring in how policy addresses teaching quality.

"Teaching is a complex task, it's a whole system that hangs together. And when we look at educational policy in Iceland and other countries, we have had our neo-liberal approach with an emphasis on competition, measurements and things like that. But now I think we are moving towards professionalization, and acknowledging that what actually happens in the

classroom is the most important if we want to develop the quality of the whole system."

Kolbrún Þorbjörg Pálsdóttir, Dean of the School of Education at the University of Iceland added

"We mustn't forget that schools have changed tremendously. Societies have changed the role of the school, and the role of teachers has changed. It's not just about the importance of teaching and subjects and doing well on exams, it's about the growth of the person, it's about becoming the best version of yourself possible, and a good citizen. I think we take that to heart in policy, but maybe not in practice, it's very challenging work."

The QUINT projects Learning to notice in teacher education, Video to support excellence in teaching (VIST) and The Coherence and Assignments in Teacher Education (CATE) Nordic Study all examine ways of improving teaching quality through measures taken at the teacher education and professional development levels. Work is underway by QUINT researchers in Iceland that builds upon these projects.

* * *

LISA Nordic session

In a special session, titled "Standardized instruments and observation manuals as lenses into teaching quality: findings from Nordic classrooms using student perception surveys and the PLATO manual", three key researchers from LISA Nordic presented papers on insights gained from the project. LISA Nordic Study is one of the central projects in the QUINT centre, coordinated by Centre Director Professor Kirsti Klette (University of Oslo) and Professor Michael Tengberg (Karlstad University).

The session included three papers focusing on teaching quality in Language Arts classrooms in the Nordic countries, as well as comments from the discussant, Professor Pamela Grossman (University of Pennsylvania).

Paper 1 (Klette et al.) reported on a standardized class-room observation manual (PLATO) and discussed challenges linked to analyzing teaching quality. Paper 2 (Roe et al.) focused on how student perception surveys (the Tripod survey) might inform researchers about features of teaching quality. And Paper 3 (Gisladottir et al.) reported on the stated purpose and use of feedback (based on PLATO scorings) in Icelandic classrooms. ■

Nordic values and schooling during COVID-19:

Special journal issue and conference



When the COVID-19 pandemic first began causing temporary school closures, the shift to remote learning was quick and often dramatic. Teachers, students and parents all had to drastically adjust to the new situation. So too, did researchers studying teaching in Nordic schools.

Since its establishment in 2018 the QUINT centre has investigated teaching quality through video observation studies of Nordic classrooms. When these classrooms closed, it created unexpected obstacles for researchers, but also provided an opportunity. Remote learning, not just classroom learning, was now a major part of schooling for a whole generation of students. How would the Nordic school model handle this new situation?

The Nordic model of schooling

The Nordic school model is based on principles of equal access to high quality schooling, and closures arising from the pandemic posed a threat this access. When the physical environment of the classroom was removed from the equation, students' regular schooling experience became more unequal. A QUINT study, which surveyed more than 4,500 parents of children in grades 1 to 10 in Norway, found that the quality of a

student's education during periods of remote learning was highly dependent on their home circumstances and access to digital technology. Professor Marte Blikstad-Balas explained that

"home-schooling during the pandemic has, in many ways, challenged the Nordic model, where everyone must have the same opportunities, regardless of their circumstances and where they come from. By sending everyone home, we have shaken that principle."

National measures and personal experiences

To gain insight into how the pandemic affected schooling in the Nordics, QUINT researchers carried out a number of studies during 2020 and 2021. In a special issue of the journal Education in the North (EITN), published in December 2021, researchers from Denmark, Finland, Iceland, Norway and Sweden published articles that discuss Emergency Remote Schooling (ERS) from a Nordic perspective. The articles focus on three groups; teachers, parents and 'other key voices', which includes students and school leaders.

The findings in these articles provide a number of interesting insights. In Denmark, for example, there was evidence that the pandemic actually had some positive

in a nationwide survey, conducted four times during the first year of COVID-19. In this survey, students most often reported their emotional, social and academic well-being as 'good' or 'very good.' There was, however, some decline in both emotional and academic wellbeing over time.

In Iceland, researchers found that teachers adjusted their teaching strategies as a result of remote learning requirements. Academic demands on students were lowered and teachers focused on core subjects, ignoring others. This was part of what the researchers describe as a shift in focus from academic demands to a focus on students' well-being.

In another study, researchers looked at how lower secondary teachers in Denmark, Finland, Iceland and Sweden tackled the shift to online schooling. The article emphasises that teachers' own autonomy and personal initiative was critical in the transition from in-person to remote schooling. The researchers also point out that, even in schools with high levels of competence in remote learning solutions, these solutions were viewed by teachers as inferior to in-person teaching:

"Through almost all interviews, teachers pointed out how dependent their ordinary teaching was on face-to-face interaction, including non-verbal expressions, and how the absence of physical interaction made it difficult to promote deeper analysis and reflection."

Lessons learned

Certain common themes have emerged in the studies on Nordic schooling during the COVID-19 pandemic. One is the focus on wellbeing during periods of remote learning. Another is that remote learning significantly reduced the equity of the Nordic school model. But what can be learned from the difference between each country's national strategy for keeping schools running during the pandemic?



Left to right: Kirsti Klette, SteffenHandal and Elin Brandsæter. Photo: Misha Jemsek.

To begin answering this question QUINT, in collaboration with NordForsk and UiO's Faculty of Educational Sciences, organised the conference *Nordic schools during COVID-19: Lessions learned* on Febuary 17,

2022, where different expert voices from the Nordic countries were heard. Researchers who have produced papers in the EITN special issue presented their findings, followed by a panel discussion with politicians, teachers' union leaders and school principals, who elaborated on the different national experiences during the pandemic.

"I think one of the things that the pandemic has shown is how integrated academic and social learning are, and that you can really excel academically if you have a good social network, if you have a safety net, if you feel secure in the learning environment. This is, I think, very important for the Nordic countries to learn from." – Steffen Handal, President of the Norwegian Teachers' Union.

The conference was characterised by an eagerness from all participants to discuss what they saw as the major issues that emerged for the education sector during the pandemic.



MP and former Minister of Education in Norway, Guri Melby live at Nordic schools during COVID-19. Photo: Misha Jemsek.

Guests from Iceland – including President of the Icelandic Teachers Union Ragnar Þór Pétursson and researchers form Icelandic universities – discussed the decision of lowering of academic requirements in their schools with participants from other countries where the strategy differed.

Researchers from Finland and Sweden shared their findings on the readiness of Nordic teachers for the sudden move to online learning. The speaker for the education committee in Sweden, Gunilla Svantorp, provided comments on the situation in Sweden. And Ane Qvortrup elaborated on her surprising finding that Danish students reported high well-being during the pandemic.

During the debate section of the conference, school professionals researchers and from Norway challenged the national government's actions on schooling during the pandemic, and received direct responses from former Minister of Education, Guri Melby.

With so much still to unpack about this unusual time in history, QUINT's recent research on the pandemic's effect on schooling are sure to be only the beginning. ■



UINT continues targeted steps to strengthen the PhD community in 2021. Currently, we are organising the following activities targeted QUINT PhD students:

- Ensuring all PhD students have two supervisors; one from their home institution and one from another country relevant for their research.
- Requiring all PhD students to draw on data from at least two countries.
- Organising targeted QUINT PhD seminars. Throughout 2021 we organised four internal PhD seminars focusing on Observations Methods and Design and Comparative Methods and Challenges when drawing video data.
- Organised joint QUINT PhD symposia on Nordic and International conferences.
- Giving QUINT PhD students a platform to present their analyses to senior scholars and work with PhD candidates from all over the world at The QUINT Summer Institute.
- Supporting all QUINT PhD candidates in presenting their work at conferences, either as individual papers (for example the Nordic Conference on Mathematics Education (NORMA) in June 2021) and/or as part of QUINT sub-projects (for example individual papers and PhD contributions in Symposia at NOFA (Nordic Conference on Subject Didactics) in May 2021.
- Providing double supervision, access to the QuintLISANordicDataSet and Mobility Grants support joint analyses and writings. This gives QUINT PhD candidates a privileged position when applying for QUINT Mobility Grants
- Last, but not least, all QUINT PhD Candidates are actively participating in the QUIINT Teaching Quality Theory webinars and QUINT Observation System Webinars.

All these activities have provided PhD students the opportunity to engage with and learn from senior researchers, discuss their specific projects and challenges with other PhD candidates (and each other), and to engage in the scholarly activity of describing and defending their research to the broader community.

QUINT continues to offer extra courses for the PhD candidates. Further plans for strengthening the community will be designed around: a) joint writing and supervision tailored their academic needs, b) the development of soft skills (see for example writing course below), c) comparative challenges/ validity theory as a possible solution, d) theorizing teaching quality (see QUINT Teaching Quality Theory-Webinars and Observation System Webinars) as well as (e) continue our steady work on making presentations on Nordic and international conferences.

In addition, a list of useful PhD courses at partner institutions and valuable seminars that may be attended have been made available for the students. PhD candidates may attend monthly writing seminars at the faculty of Educational Science at the University of Oslo. These seminar are based on a "Shut up and Write" structure.

Different topics are presented each time by acknowledged researchers from University of Oslo as well as international ones.

QUINT Postdoctoral Community

In 2021, QUINT employed several postdoctoral fellows, thereby establishing also a QUINT Podstdoctoral Community. The Fellows are Mark White, Jennifer Luoto, Camilla Magnusson and two pending (ARMIN Jentsch + a new SYNTEQ Post Doc). Additionally, QUINT sent an application for a Marie Skłodowska-Curie (MSCA) Postdoctoral Fellowship with the pending reply in 2022. The Marie Skłodowska-Curie Actions are among Europe's most competitive and prestigious research and innovation fellowships. The aim of the submitted project is to apply yet another analytical framework on the video footage from the Nordic classrooms. This application illustrates QUINT's ongoing impact in the research field and collaborations beyond the Nordic countries.

Researcher Education

QUIINT researcher education comes focuses on:

- Comparative analyses and writings.
- Building an infrastructure for comparative data and analyses (e.g. QuintLISANordicDataSet portal).
- Presenting their work and analyses at Nordic and International conferences and fora.
- Commenting upon/ and contributing to the international discussion on Teaching Quality (TQ Theory Webinars observation System Webinars, International and Nordic Conferences, QUINT Summer Institutes).

For the post-docs we offer and apply Postdoctoral Training, including career development plans and a mentor to follow their individual progression. Additionally, all of the postdoctoral fellows are encouraged to attend Postdoctoral Career Success Programme and other courses provided by the University of Oslo.

QUINT is also committed to enhancing professionalism of the participating early career researchers and providing platforms for their development as leading researchers in the field of educational sciences, classroom observation studies, and teaching quality. The Vitae Researcher Development Framework (RDF) is providing guidance for further planning and monitoring progress. The main domains are:

- Supporting researcher career development. With access to international teams and projects, our senior staff encourages considerations of their career paths, mostly with focus on a researcher career.
- Efforts to develop leadership skills, Through organising webinars, workshops and conferences (Mark White Obs Systems Webinars, Jennifer coding workshop, Camilla QUINT conference 2022).
- Engagement in the research project involvement and/ or Apply for new funding.
- Academic skills.
- Policy and media training, provided by institutions.
- Soft skills. ■

QUINT Researcher

Mobility Program



Professor Torben Spanget Christensen and the QUINT PhD fellows together at the 2021 NERA congress in Odense, Denmark. Photo: Misha Jemsek/UiO

After a long hiatus due to COVID restrictions, the QUINT researcher mobility program is up and running again.

During the first quarter of 2022, all seven QUINT PhD fellows have been able to travel to visit partner institutions in the Nordic region to meet with their external supervisors and exchange knowledge with other researchers.

The Mobility call 2021 attracted broad attention from the QUINT researchers, and there are a total planned 17 visits for 2022. Mobility grants are equally distributed between early career researchers and senior staff. The goals for visitations are joint analysis, joint publications, further collaborations and project ideas development.

In April 2022 PhD fellows Cæcilie Hejl and Jonas Teglbjærg are visited the University of Oslo, where they met with supervisors and studied LISA-Nordic video data from Norway.

"Even though we've had a good working collaboration over Zoom, meeting in person tends to lead to more productive discussions" says students' regular schooling experience became Teglbjærg. "And it's very useful to get direct access to the video data from Norway" says Hejl.

Mobility and knowledge-exchange between institutions is especially important for the kind of research being conducted at QUINT.

"All of us in the PhD programme are taking a Nordic

perspective in our research, so having the opportunity to actually travel to universities in other Nordic countries and talk to people there is really valuable" says Alexander Selling.



PhD Fellows Cæcilie Hejl and Jonas Teglbjærg viewing video data from the LISA-Nordic study at the University of Oslo. Photo: Misha Jemsek/

In March Selling visited Umeå Math Education Research Centre in Sweden.

"I use frameworks that have been developed by the researchers at Umeå University, and I got invaluable feedback and advice on different aspects of my research. I also got the opportunity to expand my network within the mathematical didactics community."

In addition to the PhD fellows, seven senior QUINT-

affiliated researchers have also made use of the mobility grant in 2022 so far.

Berglind Gísladóttir (University of Iceland) and Birna Svanbjörnsdóttir (University of Akureyri) traveled to Norway to discuss their proposed study with QUINT researchers based at the University of Oslo.

Researchers increasingly agree that strong teacher education programs should provide prospective teachers with opportunities to learn that are grounded in the actual work of teaching. Gísladóttir and Svanbjörnsdóttir have been using surveys (designed for the Coherence and Assignments in Teacher Education - CATE) to determine the level of opportunity teaching stu-

dents in Iceland have to enact teaching theory in their work placements. Now they are moving into the next phase of their study.

"The teacher education program in Iceland is wellestablished, but it hasn't been researched. We want to know more about the coherence of the program and how it supports students' field placement and future work as teachers" says Svanbjörnsdóttir.

Gísladóttir and Svanbjörnsdóttir will compare their survey results to data already gathered from surveys conducted in teacher education programs in Norway.

Room for improvement in Icelandic teaching quality

Evidence from Gísladóttir and Svanbjörnsdóttir's prior research on teaching quality in Iceland has pointed to specific areas that they believe could be improved by adjusting teacher training.

"Our research on 10 classrooms in Iceland has shown that they have a supportive atmosphere, that classroom and time management are good, and that students like their teachers. But there is room for improvement on how teachers give feedback to students, and in how they provide scaffolding techniques to help students solve problems" says Gísladóttir.

Svanbjörnsdóttir adds that

"There is good evidence to support the idea that high quality feedback is important for students' learning, but a lot of teachers seem to struggle putting the theory into practice. Our suspicion is that this stems from the way teachers are trained."

Using video for teacher training

As they design their study, Gísladóttir and Svanbjörnsdóttir are looking into ways of using video in teacher training in Iceland. Their proposed study will have teaching students video-record their field placements in schools.



Birna Svanbjörnsdóttir (left) and Berglind Gísladóttir (right). Photo: Misha Jemsek/UiO

Researchers will then analyse the footage using the PLATO protocol and discuss the results with the teaching students.

The project Learning to Notice in Teacher Education has used a similar methodology in its study of teacher education in Norway. During their visit to Oslo, Gísladóttir and Svanbjörnsdóttir took the opportunity to talk with two researchers from the Learning to Notice project,



Gísladóttir and Svanbjörnsdóttir in workshop with Inga Staal Jenset (middle), Kirsti Klette and Gøril Brataas at the University of Oslo.

Inga Staal Jenset and Gøril Brataas, as well as QUINT Director Kirsti Klette, about the design of the study.

"The education research environment is quite small in Iceland, so it's nice to be here amongst a larger group of people all studying teaching" says Gísladóttir.

"We got the QUINT mobility grant so we could travel [to Oslo] and get help with our grant proposal, and we have been getting a lot valuable discussions with the researchers here. It's a supportive environment" says Svanbjörnsdóttir. ■



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University partners















