LEARNING ANALYTICS

Annual Report 2016

SLATE

Centre for the Science of
Learning & Technology

UNIVERSITY OF BERGEN

The Centre for the Science of Learning & Technology (SLATE) is an R&D learning sciences unit, which contributes to international research and national competence development on the use data and data approaches in understanding education and lifetime learning. As such SLATE carries out research that will clarify and explore concepts such as learning analytics, big and small data in education, assessment for learning, and learning & technology in all facets of human learning. SLATE draws together researchers from multiple disciplines including information science, cognitive science, and pedagogy, and thereby conducts integrated research that will advance the frontiers of sciences of learning, as well as inform education practice and policy.

MANDATE from the Ministry of Education and Research:

- SLATE shall carry out research of high quality on learning analysis*.
- SLATE shall be an R&D unit that contributes to national competence and knowledge development within learning analytics.
- SLATE shall map and be a central resource for the possibilities and challenges related to the use and research on learning analytics in Norway.
- SLATE shall be internationally oriented and seek relevant international collaboration within learning analysis.
- SLATE shall through its R&D activity develop and disseminate knowledge to the relevant actors in the Educational sector.
- SLATE shall through seeking collaboration influence competence development within the learning analysis disciplines in other milieu in the Higher Education sector.

The long term ambition is that SLATE will develop into a broad milieu for the learning sciences by drawing together an even larger spectrum of relevant disciplines such as sociology, design, development psychology, and neuroscience.

* the study of the role of data and data analytics for understanding and improving learning, teaching, and education, and covers, among others, the research fields of Learning Analytics and Knowledge (LAK), Educational Data Mining (EDM), and Big Data in Education.

Director's Reflections

2016 was a year for laying foundations, both in establishing SLATE as a Centre and in increasing our staff, developing research, and beginning outreach. Early in 2016 we established our Core Values, our Strategic Approach, and set Strategic Goals for the first 5 years.

The year has been exciting and challenging. SLATE has drawn a lot of attention both nationally and internationally, with requests for meetings, invitations for presentations of the Centre, and collaboration on research proposals. We attended 51 meetings with a cross-section of stakeholders & target groups, gave 26 invited presentations (excluding those at our opening), and collaborated on 7 research proposals, demonstrating that there is a curiosity about, and demand for knowledge and experience on learning analytics in Norway.   We have published 23 academic works and been present in workshops and conferences with presentations and posters. During 2016 we hosted 6 SLATE Guest Lectures, one intern, and one guest Professor.

In our year of building our research foundations, we instigated a number of research projects, both with local and international research partners. These projects span from research overviews and systematic reviews, to infrastructures for educational data, and to projects using learning analytics to better understanding learning and learning processes. Together with OUCEA, University of Oxford, we started three projects, Fidelity of Assessment, a Systematic Review of Technology Enhanced Formative Assessment, and Intelligent Accountability. In addition, as per our mandate, we began a project, MAP LA, which is mapping the challenges and opportunities related to research and use of learning analytics in Norway. As part of this work in March 2017 we are launching the Norwegian Learning Analytics Inventory, Læringsanalyseportalen, which will enable those involved in learning analytics in Norway to register their tools, methods, activities, data sets, publications, etc. Building further on this overview we will carry out interviews and surveys to further our understanding of the challenges and opportunities of using learning analytics. SLATE researchers also joined in the three important projects instigated by Standards Norge's Læringskommiteen (lead by IKT-Senteret) that are addressing the issues of access and sharing of data, standardisation, and privacy and ethics.

As we navigated through our first year we were confronted with a number of questions about our role, especially in relation to the growing Norwegian EdTech community. Would we provide a quality stamp for learning analytics products? First we do not have the resources, or even the mandate to do such, and second, as researchers, how to we reconcile the need to first carry out complex research with the demand for a quick answers about the efficacy or learning effect of a new product.   As there is also a great interest in the use of learning analytics in institutions, organisations, and municipalities, there is a pressing need for the Centre to build competence and gain experience in order to be able to provide solid advice. Nationally and internationally there is a great demand for expertise on learning analytics and one of our pressing issues for SLATE is to hire the right people to build a team that can carry out research, participate in competence development across stakeholders (including researchers), and can provide help and advice to the educational sector. Currently there are few in Norway that have experience with learning analytics, and building an R&D community with this experience takes time.   Furthermore, to do so requires interdisciplinarity, which in itself takes time to mature.   We certainly have some exciting years ahead !

Barbara Wasson, Director SLATE

Core Values

Integrity

To maintain an inclusive community and working environment that is based on trust, ethical behaviour, open communication, and flow of information for all constituents.

Interdisciplinarity

To apply the broadest views of learning and the learner through collaboration across disciplines, institutions, and industries.

Excellence

To strive and maintain the highest standards of research. To nurture a thriving, creative environment where individuals are inspired to make the best use of their talents as they develop learning innovations.

Globality

To lead and mediate authentic collaboration nationally and internationally, and ensure that diverse cultural perspectives are continuously represented.

Strategic Approach

ENGAGE...

in research on learning and the learner that spurs insight and innovation.

COMMUNICATE...

with Ministry, educational community, teachers, schools, students, parents, and the public about the various events, findings, and implications of the research.

EXPAND...

partnerships with national, international, intergovernmental, academic, industrial and entrepreneurial communities.

INSPIRE...

the next generation of learning researchers through interactions with faculty, postdocs, teachers, and industry partners.

Strategic Goals

Specifically, over the next 5 years, SLATE will:

- Generate empirical data that can advance and transform educational practice, in the broadest sense at the intersection of learners, technology, and pedagogy.

- Ensure that research addresses all facets of human learning throughout a lifetime; including learning in the workplace, and during leisure time.

- Inform the use of data analytics approaches in education by understanding the impact of learning analysis on learners, teachers, institutions, and society.

- Apply computational approaches such as data mining, learning analytics, machine learning algorithms, predictive modelling, and data visualisations as a lens to better inform learning, teaching, and assessment in both educational and workplace settings.

- Advance our understanding of emergent technologies, new work patterns, and future learning pathways of "next gen" learners in order to better prepare them for a world where content is pervasive, dynamic, and continuously accessible across multiple channels and devices.

HIGHLIGHTS of 2016

SLATE Opening Seminar

SLATE was officially opened 9 June, 2016 in the University of Bergen Aula, with a full day seminar. After welcoming remarks by UiB Rector Dag Rune Olsen, and Dean Jarle Eid (leader of the SLATE Executive Board), SLATE was officially opened by Director-General Eivind Heder from the Ministry of Education and Research.

SLATE Kick-off – Programme		
9:00	**Registration & Coffee**	
9:30	Welcome	Rector Dag Rune Olsen Dean Jarle Eid
9:45	Opening of SLATE, Kunnskapsdepartment	Ekspedisjonssjef Eivind Heder
10:00	On SLATE Centre	Barbara Wasson, SLATE
10:20	State-of-the Field of LAK	Kamila Misiejuk, SLATE
10:40	**Coffee break**	
11:00	Implementation of Assessment for Learning	Therese Hopfenbeck & Jo-Anne Baird OUCEA, University of Oxford & Astrid Tolo, SLATE
11:40	Teacher Assessment Innovation	Nancy Law, CITE, University of Hong Kong
12:00	**Lunch**	**Christie Café**
13:00	Learning Analytics	Cecilie Hansen Uni Research Helse & SLATE
13:20	Big Data in Higher Education	Weiqin Chen, SLATE
13:40	Big Data Infrastructure for Educational Data	Klaus Johannsen Uni Research Computing & SLATE
14:00	Ethics and Privacy for Learning Analytics	Tore Hoel, HiOA
14:20	Map LA (in Norway)	Nina Morlandstø, SLATE
14:40	**Coffee break**	
15:00	FUTURE LEARNING: *Orchestrating 21st Century Learning Ecosystems Using Analytics*	Michail Giannakos, NTNU
15:20	Oslo Schools' vision for learning analytics	Bjarte Rørmark, Oslo Kommune
15:40	The Red Thread	Sølvi Lillejord, Knowledge Centre for Education & Konrad Morgan, EDUVATE
16:15	**Tapas / Finger food**	

SLATE skal også samarbeide med internasjonale forskningsmiljøer. I forgrunnen ser vi førsteamanuensis Astrid Tolo fra SLATE og representanter fra Oxford University Department of Education, representert ved blant annet assosiert professor Therese N. Hopfenbeck og professor jo-Anne Baird. De deltok ved åpningen av senteret.

The seminar programme comprised of presentations by researchers from SLATE, our local and international partners, and invited speakers representing national activity around Learning Analytics, including Bjarte Rørmark, Oslo Kommune, Associate Professor Michail Giannakos, NTNU, and Ethics and Privacy expert Tore Hoel, UiOA (NB: pictures from Skolelederen, 6, 2016).

Det var mange tilstede da det nye senteret for læringsanalyse – SLATE – hadde sin åpningskonferanse.

First intern

Master student Kamila Misiejuk from Berlin was an intern at SLATE for 3 months, January – April 2016. She began working on the SoF LAK project to map the field of Learning Analytics and Knowledge (LAK) and has since continued as a research assistant on the project.

Contributing Expertise

Barbara Wasson was an invited expert in the LAEP learning analytics workshop held in Amsterdam, 15 - 16 March. LAEP is an EU project that explored the implications and opportunities of learning analytics for European educational policy during the next 10-15 years. She was also a Panel member at the EU Commission Policy Workshop on STEAM & Learning Analytics held in Brussels in November.

SLATE in the NEWS

Director Barbara Wasson and Vice-director Astrid Tolo were featured in articles in Bedre Skole, Skolelederen, and in 2015 in Synkron.

Director Interviewed on Learning Analytics

Barbara Wasson was interviewed on the adoption of learning analytics by LACE.

International Representation

Professor II Weiqin Chen represented SLATE at a meeting in China between the EU LACE association, international researchers, and Beijing Normal University (BNU). BNU also has a government funded center on big data center for technology-mediated learning, led by Associate Professor Jingjing Zhang.

Active Masters Student

Joakim Vindenes is invited to a California workshop to contribute his virtual reality expertise to a science communication workshop.
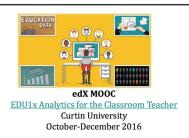
Visiting Professor

In November Professor Jeroen van Merrienboer, Research Director of the School of Health Professions Education (SHE), Maastricht University began a 4 month sabbatical as a visiting professor, and will continue his affiliation through a 20% position from March 2017.

Internal Competence Development

Several SLATE employees completed a 2-month edX MOOC on Learning Analytics for Classroom Teachers offered by Curtain University, Australia. An interview with SLATE's own Director was featured in Module 4.   Director Barbara Wasson and Uni Research Health researcher Jo Wake 20016 Learning Analytics Summer Institute (LASI) at the University of Michigan, a competence development offer from the Society of Learning Analytics Research (SOLAR).

EDU1x: Analytics for the Classroom Teacher

edX MOOC
EDU1x Analytics for the Classroom Teacher
Curtin University
October-December 2016

Dissemination to Educational Sector

Astrid Tolo presented SLATE and its research to school leaders and teachers at Hordaland Fylkeskommune's yearly conference Dei Gode Døma.

Dissemination to Industry

Barbara Wasson was an invited speaker at Gyldendal's seminar on @Bedrelæring. She spoke about "What research says about adaptive learning".

SLATE Postdoc Defends her PhD

PostDoc Dr. Ingunn Johanne Ness defended her PhD in November. Her research accessed authentic innovation processes and one of her cases was carried out in the international Industrial concern, Statoil. Applying this expertise Ness will lead the innovative research futures efforts in SLATE and carry out research on innovation, creativity, and leadership, including a study of how school and municipality leaders adopt learning analytics.

National Collaboration

In 2016 SLATE collaborated with the Knowledge Centre for Education on systematic reviews that will provide a foundation for future research. In December we received news that 3 Norgesuniversitetet's projects in which SLATE is a collaborating partner received funding. UiB's project on Teaching and Learning in the Digital Age: Online Tools and Assessment Practices, is focussed on digital assessment and active student learning, HiOA's project is developing an Open edX MOOC for the health sciences, and Høyskole Kristiania is developing student active pedagogical model for net and campus students. SLATE will advise and collaborate on learning analytics and provide access to our big data infrastructure in these projects.

Key figures 2016

- PhD students: 2
- Masters Students: 4
- Publications: 23
- Posters: 2
- Presentations: 26
- Meetings with stakeholders: 51
- Partner in Applications: 7

Outreach

Website

SLATE has established a website (slate.uib.no) for the dissemination of information about news, research activities and SLATE events.

Social Media

SLATE's Facebook Page and Twitter Feed allow SLATE to play a more active role in online discussions and information sharing. Per 31.12 the SLATE Facebook page had 196 followers and our twitter feed (@SlateResearch) had 188 followers.

SLATE Guest Lecture Series

In 2016 SLATE hosted 7 guest lectures by leading international researchers.

SLATE Guest Lecture Series	
12 May	**Professor Michael Kirckmeier-Rust**, Graz Technical University *"LEA's Box"*
26 May	**Post-doc Angelica B. Ortiz de Gortari** *"Targeting the real life impact of virtual interactions"*
6 September	**Professor David Kirp**, University of California, Berkeley *"How to Reform Schools: "Slow and Steady" Wins the Race"*
7 September	**Professor David Kirp**, University of California, Berkeley *"The 2016 US Presidential Election: Spectacle or Horror Show?"*
27 September	**Associate Professor Lina Markauskaite**, University of Sydney *"Teaching and learning for knowledgeable action and innovation: An epistemic fluency perspective"*
12 December	**Professor Jo-Anne Baird**, Oxford University *"Research impact for social justice- some strategies and examples from the assessment field"*
12 December	**Dr Yasmine El Masri**, Oxford University *"Using Technology in Science Tasks: Reducing Language Barriers for Syrian Refugees in Lebanon"*

Management and Administration

The SLATE Centre is hosted by the Faculty of Psychology (PSYFA) at the University of Bergen (UiB). SLATE's primary funding support comes from the Norwegian Ministry of Education and Research and UiB. PSYFA also provides some administrative support.

Administrative structure

The Centre is led by Director, Professor Barbara Wasson, Vice Director, Associate Professor Astrid Tolo, and the Administrative Leader, Jorunn Viken. In addition to these three, the SLATE leader group comprises the communications advisor and the leader of Research Cluster 3. The Centre also includes engineers, researchers, research assistants, PhD and Master students.

SLATE is responsible for administering its own economy and communication. General IT support is provided by the IT department at UiB.

In 2016 we have been working to further establish the Centre. Many project leaders, a project economist, Cluster leaders, programmers and research assistants have been hired. More people will continue to be hired including 2 more PhD students in early 2017.

Employees in 2016	
Barbara Wasson	Director
Astrid Tolo	Vice-Director
Jorunn Viken	Administrative Leader
Dana Kvietkute	Centre Economist (20%)
Elinor Bartle	Communications Advisor (20%)
Ingunn J. Ness	PostDoc, Cluster 3 leader
Angelica Ortiz de Gortari	Researcher (1 month)
Nina Morlandstø	Senior Engineer, Project leader
Weiqin Chen	Professor II, Cluster 2 Co-leader
Jo-Anne Baird	Professor II
Khoa Pham	Research Assistant, Programmer
Kamila Misenijuk	Research Assistant

PhD Candidates & Masters Students	
Rosaline Barendgret	PhD Candidate
Kamila Misiejuk	Masters Student @ Humbolt University (supervisor Barbara Wasson)
Joakim Vindenes	Masters Student
Glenn Stava	Masters Student
Nicolai Gulbrandsøy	Masters Student
Gry Nagl	Masters Student

The Board and the Scientific Advisory Committee

The SLATE Board is an administrative body that meets twice a year. Two meetings were held in 2016, one in June and one in November. In addition, the Board can be consulted on issues outside the regular meeting times.

SLATE Board			
UiB		**Alternate**	
Jarle Eid (Leader)	Dean Psychology Faculty	Inger Hilde Nordhus	Vice-Dean of Research Psychology Faculty
Oddrun Samdal	Vice-Rector of Education		
Knut Helland	Dean Social Science Faculty	Knut Hidle	Vice-Dean of Education Social Science Faculty
Tina Oftedal	Student representative	Simen Tollefsen	Student representative
External		**Alternate**	
Reidar Jakobsen	Research Director Uni Research Health	Torill Helen Tveito	Research Leader Uni Research Health
Lin Holvik	Director Kulturtanken	Bjørn Lyngdal	Rector Amalie Skram videregående skole

The SLATE Scientific Advisory Committee (SAC) comprised of leading international researchers and consultants from the international research community. SAC is a sounding board for research directions and strategies. Four members of SAC meet in Bergen during the June opening week.

Scientific Advisory Committee	
Jo-Anne Baird	Department of Education, Oxford University
Jacqueline Bourdeau	LICEF, Télé-université du Québec
Elaine Coleman	Strategic Consultant
Nancy Law	CITE, University of Hong Kong
Konrad Morgan	EDUVATE INC
Sølvi Lillejord	Norwegian Knowledge Centre for Education

Finances

The Norwegian Ministry of Education and Research (5,150 MNOK core funding) and UiB (5,0 MNOK core funding) were SLATE's primary funding sources in 2016.

In addition, UiB has financed the renovation of office space for SLATE. This renovation is designed to create an environment that will enhance effective, creative, and innovative work and which will make SLATE an attractive research centre for researchers and stakeholders across UiB and from other Institutions.

KD Financed	5 150 000
Salary- and personal costs	1 909 109
Investments R&D	2 191 253
Operating costs	634 946
Total costs	4 735 308
Transferred to 2017-2020	414 692

UiB Financed*	5 000 000
Salary- and personal costs	1 083 145
Total costs	1 083 145*
Transferred to 2017-2020	3 916 855

* There is a delay in the use of the UiB funds as it takes a while to identify focus areas and hire into new positions. This skew in use of funding will be adjusted for in 2017 with the hiring of three new 20% positions and 5 new PhDs/PostDocs. In addition to the reported funding, UiB has spent 1 million NOK on office space renovations for SLATE.

Appendix

Publications

Barendregt, R. & Wasson, B. (2016). Foundations of Sneak Teaching Game Design, *Short Paper Proceedings of Designs for Learning 2016*, 1-6.

Barendregt, R., Lamo, Y. & Rabbi, F. (2016). A bottom up approach for synchronous user interaction design and workflow modelling. *Procedia Computer Science*, 98, 340-347.

Bull, S. & **Wasson, B.** (2016). Competence Visualisation: Making sense of data from 21st-century technologies in language learning. *ReCALL,* 28(2),147-165.

Chang, B., Song, Y., Sasikumar, M., Biswas, G., Chen, W., **Chen, Weiqin**, Yang, Ji-C., Murthy, S., Wong, S., & Iyer, S. (Eds) (2016). Doctoral Student Consortium (DSC). Proceedings of the 24th International Conference on Computers in Education (ICCE 2016). Asia-Pacific Society for Computers in Education 2016 (ISBN 9789868473584) 33 p.

Chen, W., Yang, J-C., Murthy, S., Wong, S. & Iyer, S. (Eds) (2016). *Proceedings of the 24th International Conference on Computers in Education (ICCE 2016).* Asia-Pacific Society for Computers in Education 2016 (ISBN 9789868473577) 719 p.

Eide, H. & **Tolo, A** (2016) Akademisk skriving og utvikling av skolelederkompetanse. *Acta Didactica*. Vol 10. Nr 4.

Hansen, C., Netteland, G. & Wasson, B. (2016). Learning analytics and open learning modelling for professional competence development of firefighters and future healthcare leaders. *CEUR Workshop Proceedings,* 1601, 87-90.

Hansen, C. & Wasson, B. (2016). Teacher inquiry into student learning: The TISL heart model and method for use in teachers' professional development. *Nordic Journal of Digital Literacy,* 10, 24-49.

Hoel, T. & **Chen, W.** (2016). The Principle of Data Protection by Design and Default as a lever for bringing Pedagogy into the Discourse on Learning Analytics. In: *Workshop Proceedings of the 24th International Conference on Computers in Education (ICCE 2016), 113-121.* Asia-Pacific Society for Computers in Education 2016. ISBN 9789869401210

Jiang, B., Yin, C., Warriem, J., **Chen, W.**, Yang, J-C., Murthy, S., Wong, S. & Iyer, S. (Eds) (2016). *Work-In-Progress Poster Proceedings of the 24th International Conference on Computers in Education* (ICCE 2016). Asia-Pacific Society for Computers in Education 2016 (ISBN 9789868473591) 14 p.

Luckin, R., **Hansen, C., Wasson, B.,** Clark, W., Avramides, K., Hunter, J. & Oliver, M. (2016). Teacher Inquiry into Students' Learning: Researching Pedagogical Innovations. In P. Reimann, S. Bull, M. Kickmeier-Rust, R. Vatrapu & B. Wasson (Eds) *Measuring and Visualizing Learning in the Information-Rich Classroom*. Routledge, 74-91. ISBN 9781138021136

Netteland, G., Wasson, B., Hansen, C. & Hirnstein, M. (2016). Learning analytics and open learning modelling for professional competence development. In NOKOBIT - Norsk konferanse for organisasjoners bruk av informasjonsteknologi, 24(1) Suppl. NOKOBIT, 1-5.

Reimann, P., Bull, S., Kickmeier-Rust, M., Vatrapu, R. & **Wasson, B.** (2016). Measuring and Visualizing Learning in the Information-Rich Classroom. Routledge. ISBN 9781138021136

Reimann, P., Bull, S., Kickmeier-Rust, M., Vatrapu, R. & **Wasson, B.** (2016). Introduction. In P. Reimann, S. Bull, M. Kickmeier-Rust, R. Vatrapu & B. Wasson (Eds) *Measuring and Visualizing Learning in the Information-Rich Classroom*. Routledge, ix-xvi. ISBN 9781138021136

Reimann, P., Bull, S., Kickmeier-Rust, M., Vatrapu, R. & **Wasson, B**. (2016). Preface. In P. Reimann, S. Bull, M. Kickmeier-Rust, R. Vatrapu & B. Wasson (Eds) *Measuring and Visualizing Learning in the Information-Rich Classroom*. Routledge, vii-viii. ISBN 9781138021136

Supnithi, T., Mohd A., Ahmad F., Mavinkurve, M., Kojiri, To., **Chen, W**., Yang, Ji-C., Murthy, S., Wong, S. & Iyer, S. (Eds) (2016). *Workshop Proceedings of the 24th International Conference on Computers in Education* (ICCE 2016). Asia-Pacific Society for Computers in Education 2016 (ISBN 9789869401210) 464 p.

Sørensen, B. H., Selander, S., **Wasson, B. &** Wenneström, S. (2016). Designs for Learning – Taking a Step Forward. *Designs for Learning,* 8(1), 23-24

Wasson, B. & Hansen, C. (2016). Data Literacy and Use for Teaching. In P. Reimann, S. Bull, M. Kickmeier-Rust, R. Vatrapu & B. Wasson (Eds) *Measuring and Visualizing Learning in the Information-Rich Classroom*. Routledge, 56-73. ISBN 9781138021136s

Wasson, B., Hansen. C. & Mor, Y. **(2016).** Grand Challenge Problem 11: Empowering Teachers with Student Data. I: Grand Challenge Problems in Technology Enhanced Learning II: MOOCs and Beyond. Springer 2016 ISBN 978-3-319-12561-9., 55-58**.**

Wasson, B., Hansen, C. & Netteland, G. **(2016).** Data literacy and use for learning when using learning analytics for learners. *CEUR Workshop Proceedings,* 1596, 38-41.

Wasson, B. & Kirschner, P. (forthcoming). From Instructional Design to Learning Design: European Approaches. Educational Technology.

Wong, L. H., Mitrovic, T., So, H.-J., **Chen, W**., Yang, J.-C., Murthy, S., Wong, S.& Iyer, S. (Eds) (2016). *Early Career Workshop Proceedings of the 24th International Conference on Computers in Education* (ICCE 2016). Asia-Pacific Society for Computers in Education 2016 (ISBN 9789868473560) 12 p.

Yang, J.-C.,.**Chen, W**, Murthy, S., Wong, S. & Iyer, S. (Eds). (2016). *Extended Summary Proceedings of the 24th International Conference on Computers in Education* (ICCE 2016). Asia-Pacific Society for Computers in Education 2016 (ISBN 9789869401203) 18 p.

Posters

Hansen, Cecilie, Wasson, Barbara & Netteland, G. iComPAss**,** Utdanningskonferansen 2016: Ny kunnskap om læring – konsekvenser for praksis, styring og organisering; Oslo, 8 November 2016.

Ness, Ingunn Johanne. Creative Knowledge Processes in Innovation Work, NATED Closing Conference, Oslo, 8 September 2016.

SLATE Presentations

When	Where	Place	Who	Title
2 February	OUCEA	Oxford	AT	Governing Complex Education Systems:A Norwegian Case Study
2 February	OUCEA	Oxford	BW, CH	
23 February	LICEF, Télé-université du Québec	Montreal	BW	SLATE-senteret
11 March	Dei Gode Døma	Bergen	AT	SLATE
14 March	LAEP Workshop	Amsterdam	BW	LA in Norway & SLATE
10 March	Læringskomiteen, Standards Norge	Oslo	WC	SLATE-senteret
11 March	Dei Gode Døma	Bergen	AT	SLATE-senteret
15 March	LAEP Workshop	Amsterdam	BW	LA @ SLATE
19 April	Gyldendal @Bedrelæring Seminar	Oslo	AT	Hva vet vi om adaptiv læring? / What does research say about adaptive learning ?
24 April	LAK ´16 workshop Learning Analytics for Workplace and Professional Learning	Edinburgh	BW, CH	
24 April	Møte i Nasjonal ekspertgruppe for digital vurdering (Norgesuniversitetet)	Bergen	AT	
25 April	LAK ´16 workshop Learning Analytics for Learners	Edinburgh	BW, CH	Data Literacy and Use for Learning
25 April	LAK'16 workshop on Ethics and Privacy in Learning Analytics (#EP4LA).	Edinburgh	WC	Privacy Requirements for Learning Analytics – from Policies to Technical Solutions. Workshop on Ethics and Privacy in Learning Analytics
25 April	LAK'16 workshop on Ethics and Privacy in Learning Analytics (#EP4LA).	Edinburgh	WC	Mapping a Privacy Framework to a Reference Model of Learning Analytics
3 May	SIU Guest lecture	Bergen	BW	SLATE-senteret
19 May	Designs for Learning	Copenhagen	RB, BW	Foundations of Sneak Teaching Games
25 May	NIFU: Learning Analytics seminar in collaboration with Oslo EdTech Cluster	Oslo	BW	SLATE-senteret
9 June	SLATE Opening	Bergen	See own list	SLATE Opening Seminar (see own list)
18 July	Department of Education and Early Childhood Development (Province of New Brunswick, Canada)	Fredericton, NB, Canada	BW	ICT and Education in Norway
22 July	St. Francis Xavier University	Antigonish, NS, Canada	RB	Interaction Design
26 August	Høyskolen Kristiania	Oslo	BW	SLATE Centre and Big Data Infrastructure
8 September	NATED forskerskole Final Conference	Oslo	IN	The Room of Opportunity PhD project

SLATE Presentations

When	Where	Place	Who	Title
21 September	International Conference on Current and Future Trends of ICT in Healthcare	London, UK	RB	A bottom up approach for: Synchronous User Interaction Design & Workflow Modelling
22 Sept	Ny i Hordaland konferanse	Solstrand	AT	Vudering for Læring
27 September	International meeting at the Big Data Center for Technology-Mediated Learning	Beijing Normal University	WC	SLATE Center and Big Data Infrastructure
9 November	EU Commission Policy Workshop on STEAM & Learning Analytics	Brussels	BW, CH	Barbara sat in Panel on Policy Issues related to STEAM in Europe
15 November	Fleksibel utdanning Norge (FuNKon16)	BI, Oslo	BW	Keynote on Centre for the Science of Learning & Technology
13 December	BIFF / UiB Workshop	Vilvite, Bergen	IN	Creative Knowledge processes in multidisciplinary group work

* BW- Barbara Wasson; AT- Astrid Tolo; WC- Weiqin Chen; CH- Cecilie Hansen; RB- Rosaline Barendregt; IN- Ingunn Ness

SLATE Meetings

When	With	Where	Who	Topic
1-3 February	OUCEA, Oxford University & Kunnskapssenteret & SLATE	Oxford	BW, AT, CH	SLATE - OUCEA collaboration
11 February	New School AS	Bergen	BW, AT, MH	Learning Analytics
17 February	IT Department UiB	Bergen	BW, AT	Information exchange & on SLATE
17 February	InfoMedia	Bergen	BW	SFU Application
23-24 February	Jacqueline Bourdeau (SAC), LICEF, Télé-université du Québec	Montreal	BW, JB	SLATE, Scientific Advisory Committee
25 February	Irina Muhina, iECARUS	Toronto	BW, IM	SLATE-senteret & Big Data
7 March	DigUiB - lærings- og formidlingslab, UiB	Bergen	BW, AT	Information exchange
8 March	SLATE Board Meeting	Bergen	BW, AT, EB	Board Meeting
9-10 March	Kunnskapssenteret	Oslo	BW, AT, HR, KM, CH, JAB	On collaboration
10 March	CEMO	Oslo	BW, AT, CH	Possible collaboration
10 March	IKT-Senteret	Oslo	BW, WC	Læringsanalyse
14-15 March	LAEP Policy Workshop (EU)	Amsterdam	BW	Learning Analytics policy issues in Europe
29 March	Big Data Research	skype	BW	Possible EU-project
29 March	Uninett	Bergen	BW, AT, LBL, IM, TH	Information Exchange on LA & LMS
5 April	InfoMedia	Bergen	BW	SFU Application
5 April	Big Data Centre	Bergen	BW & WC, KJ, ET	Cluster 2 projects
6 April	Centre for Global Health, UiB	Bergen	BW & WC	SFU Application
5 April	Hordaland Fylkes Kommune & Studix	Bergen	BW, WC, AT	FINNUT Application
14 April	Eva Mjøvik, IKT-Senter	Oslo	BW, WC	Læringskomiteen / Standard Norge arbeid og SLATE
25 April	Nasjonal ekspertgruppe for digital vurdering	Bergen	AT	Informasjon om SLATE
26 April	Representatives from the German Embasy and the Minister of Education of North Rinne Westphalia	UiB, Bergen	BW, AT	SLATE
2 May	Datakilder og betingelser for deling av data for læringsanalyse	HiOA, Oslo	WC	Avklaring av datakilder og betingelser for deling av data for læringsanalyse
3 May	Marques Anderson, World Education Foundation	Bergen	BW	Possible collaboration
11 May	Vokabular Aktivitetsdata Project Meeting	BI, Oslo	WC	Kick-Off Meeting
12-13 May	Michael Kickmeier-Rust, Technical University of Graz	Bergen	BW, CH, MH, JW	Learning analytics, CEFR algorithms, OLMs
26 May	Eva Mjøvik, IKT-Senter	Skype	BW, NM	SLATE & læringskomiteen collaboration
3 June	SLATE Board Meeting	Bergen	BW, AT, EB	Board Meeting
11 August	Ingeborg Krange, Høyskolen Kristiania	Skype	BW	Exploring SLATE - HK collaboration
16 August	DigUiB	Bergen	BW; AT, JV	Exploring collaboration
30 August	STUDIX	Oslo	BW	Consulting on Tool design

SLATE Meetings

When	With	Where	Who	Topic
31 August	Eva Mjøvik, IKT-Senteret	Oslo	BW, NM	Læringskomiteen
15 September	Gard Titlestad International Council for Open and Distance Education (ICDE)	Bergen	BW, IN	Exploring collaboration between SLATE-ICDE
19 September	CANVAS iPed Seminar	Bergen	AT	Information on Canvas LMS
26 August	Høyskolen Kristiania Mini-Seminar	Oslo	BW	Meeting with instructors, IT-responsible, PeerGrade.io on collaboration on learning analytics
31 August	IKT-Senteret	Oslo	NM, JW	Personvern og læringsanalyse
26-28 September	International meeting at the Big Data Center for Technology-Mediated Learning	Beijing Normal University	WC	Big Data and Education & possible collaboration
10 October	International meeting @ Big Data Center for Technology-Mediated Learning	Beijing Normal University	WC	SLATE Center and Big Data Infrastructure
27-28 September	Lina Markauskaite visit	Bergen	BW, AT, IN	Exploring collaboration on learning analytics & innovation and learning
29 September	Fagbokforlaget	Bergen	BW, AT, JV	Collaboration on publishing av academic material (not digital learning resources)
3 October	Høyskolen Kristiania & SLATE	SKYPE	BW	FINNUT application: e-Assessment i HE
12 October	Standard Norge Project Meeting	Standard Norge, Oslo	JW	Avklaring av datakilder og betingelser for deling av data for læringsanalyse.
24 October	Høyskolen Kristiania, SLATE, iPed	Bergen	BW, AT, RG	Establish application to FINNUT
25 October	Bente Moen, Centre for International Health, UiB & DigUiB	Bergen	BW	Establish research on the FutureLearn MOOC
31 October	Oslo Kommune	Oslo	BW, AT	Advising on learning analytics
3 November	Peergrade.io	Skype	BW, AT, RG	Peer assessment system PeerGrade
14 November	IKT-Senteret, Prosjektet Datadeling	Oslo	NM, JW	Prosjektet Datadeling
17 November	SLATE Board Meeting	Bergen	BW, AT, EB	Board Meeting
7-8 December	Oxford Centre for Sociocultural and Activity Theory Research (OSAT)	Oxford	IN	Exploring possible collaboration
16 December	Statoil	Bergen	IN	Investigating and defining potential collaboration
20 December	International Research Institute of Stavanger (IRIS) Meeting	Bergen	IN	Investigating and defining potential collaboration
20 December	Chronis Kynigos, Professor University of Athens	Skype	BW	Possible collaboration

* BW- Barbara Wasson; AT- Astrid Tolo; WC- Weiqin Chen; CH- Cecilie Hansen; RB- Rosaline Barendregt; IN- Ingunn Ness; EB- Elinor Bartle; JV- Jorunn Viken; NM- Nina Morlandstø; JW- Jo Wake; MH-Marina Hirstein

SLATE Kick-off — Programme

9:00	**Registration & Coffee**	
9:30	Welcome	Rector Dag Rune Olsen Dean Jarle Eid
9:45	Opening of SLATE, Kunnskapsdepartment	Ekspedisjonssjef Eivind Heder
10:00	On SLATE Centre	Barbara Wasson, SLATE
10:20	State-of-the Field of LAK	Kamila Misiejuk, SLATE
10:40	**Coffee break**	
11:00	Implementation of Assessment for Learning	Therese Hopfenbeck & Jo-Anne Baird OUCEA, University of Oxford & Astrid Tolo, SLATE
11:40	Teacher Assessment Innovation	Nancy Law, CITE, University of Hong Kong
12:00	**Lunch**	**Christie Café**
13:00	Learning Analytics	Cecilie Hansen Uni Research Helse & SLATE
13:20	Big Data in Higher Education	Weiqin Chen, SLATE
13:40	Big Data Infrastructure for Educational Data	Klaus Johannsen Uni Research Computing & SLATE
14:00	Ethics and Privacy for Learning Analytics	Tore Hoel, HiOA
14:20	Map LA (in Norway)	Nina Morlandstø, SLATE
14:40	**Coffee break**	
15:00	FUTURE LEARNING: *Orchestrating 21st Century Learning Ecosystems Using Analytics*	Michail Giannakos, NTNU
15:20	Oslo Schools' vision for learning analytics	Bjarte Rørmark, Oslo Kommune
15:40	The Red Thread	Sølvi Lillejord, Knowledge Centre for Education & Konrad Morgan, EDUVATE
16:15	**Tapas / Finger food**	

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