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LA Modellen og MATNAT

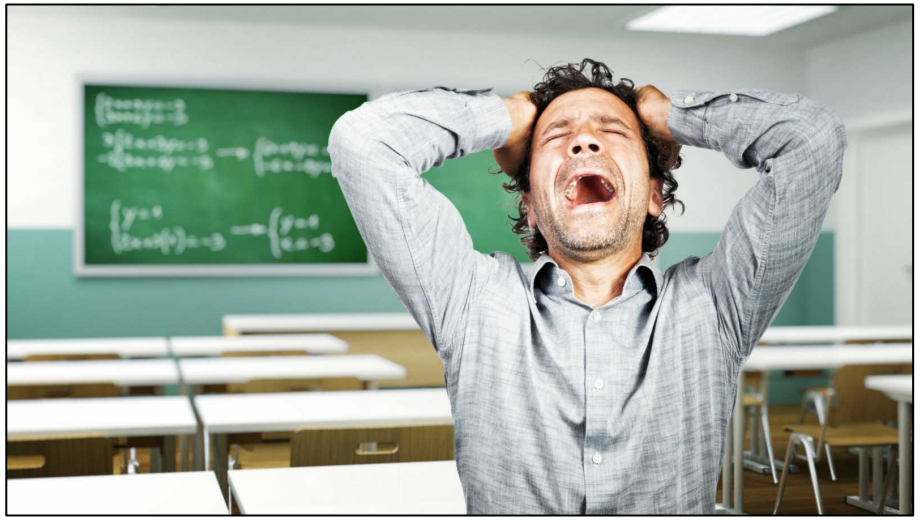
Tor Ole Odden
Center for Computing in Science Education

STUT Møte
27 April, 2022

Aktiv læring: Ikke alltid så lett!

UiO har som mål at undervisningen skal være mer **aktiv** og **studentsentrert**

Dette kan være **vanskelig** å oppnå når man jobber **alene**!



Læringsassistentmodellen

LA modellen: En modell der emner transformeres slik at studentene møter aktiv læring

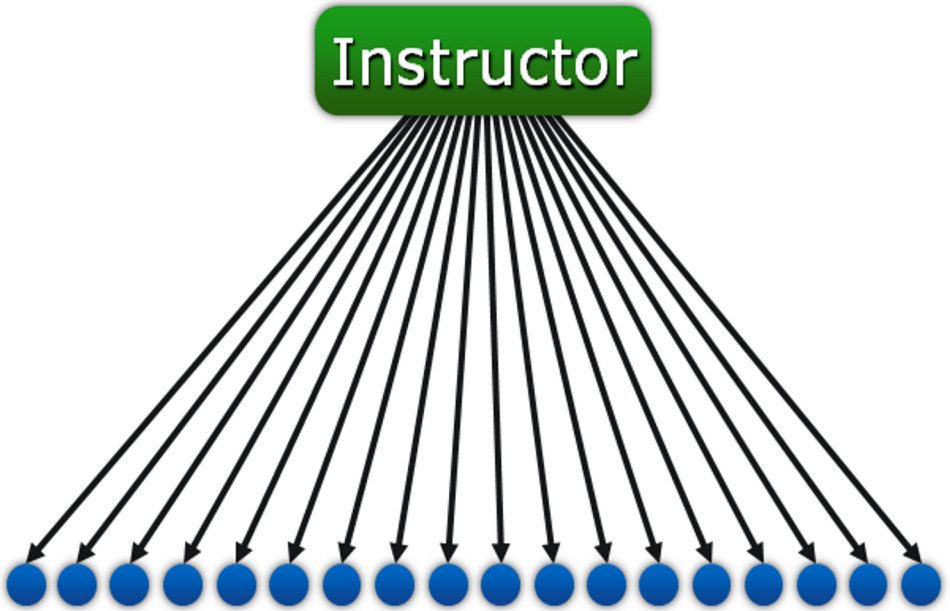
University of Colorado Boulder

Læringsassistenter: Studenter som er...

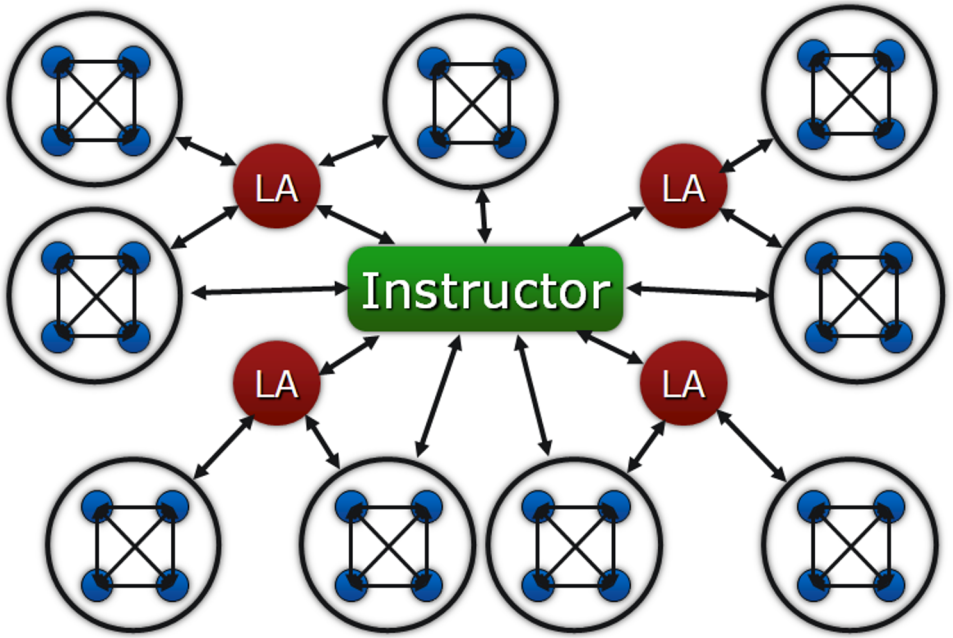
- Erfarne i sitt fag
- Pedagogisk skolert
- Ansatt til å fasilitere aktiv læringsaktiviteter

Hvordan ”transformeres” emnene?

Tradisjonelt



Transformert



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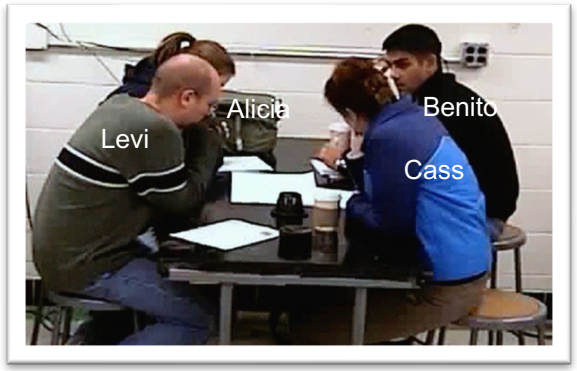
Essensielle elementer i LA-modellen



Praksis

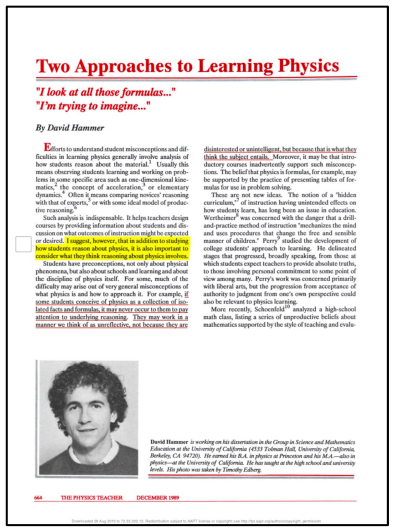
Lede aktiviteter i miljøer der aktiv læring skjer

Innhold

Ukentlige møter med emneansvarlig

Pedagogikk

Ukentlige seminarer i pedagogikk



Two Approaches to Learning Physics

"I look at all those formulas..."
"I'm trying to imagine..."

By David Hammer

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UiO MATNAT LA Team




UiO MATNAT LA Program Implementation

Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
Physics Math	Physics	Physics Math	Physics Math	Physics Math Chemistry

Spring 2021	Fall 2021	Spring 2022
Physics Math Chemistry	Physics **Math** Chemistry	Physics Math Chemistry Biosciences

1. Weekly pedagogy seminars
2. Weekly course meetings
3. Development of active learning materials (KURT)

Veien videre…

Spring 2022	…	??? 202X
Physics Math Chemistry Biosciences	…	Physics Math Chemistry Biosciences Astrophysics Informatics Geosciences Pharmacy …more?

+

UiO LA Workshop, 9-10 juni

Sign up now!

Nordic Regional Learning Assistant Workshop

Do you want to learn how to partner with students to bring active learning methods into your teaching? Join us for the Nordic Regional Learning Assistant (LA) Workshop!

Tid og sted: 9. juni 2022 09:00–10. juni 2022 15:00, Location at Blindern to be decided
Legg til i kalender

Background

Learning assistants (LAs) are students trained to facilitate learning activities to support less experienced students in their learning. LAs work closely with faculty as part of the instructional team, providing faculty with important insights about their students´ learning.

Since 2018 the Center for Computing in Science Education (CCSE) and LINK - Centre for Learning, Innovation and Academic Development have worked to integrate Learning Assistants into courses and programs across UiO.

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Forskning på LA Modellen

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REVIEW Open Access

A scoping review of literature assessing the impact of the learning assistant model

Anthony P. Barrasso* and Kathryn E. Spilios

Abstract

Much of modern education reform is focused on implementation of evidenced-based teaching, but these techniques are sometimes met with trepidation from faculty, due to inexperience or lack of necessary resources. One near-peer teaching model designed to facilitate evidenced-based teaching in Science, Technology, Engineering, and Mathematics classrooms is the Learning Assistant (LA) model. Here, we describe the details of the LA model, present a scoping review of literature using the four original goals of the LA model as a framework, and suggest future areas of research that would deepen our understanding of the impact that the LA model may have on education. We summarize how the LA model improves student outcomes and teacher preparation and identify a relative deficiency of literature that addresses how the LA model impacts faculty and departmental/institutional change. Additionally, of the 39 papers reviewed, 11 are strictly pre-experimental study designs, 28 use quasi-experimental designs or a combination of quasi and pre-experimental, and none of them included a true experimental design. Thus, we conclude that current studies suggest that LA model positively impacts education, but more refined assessment would improve our understanding of the model. Furthermore, despite the encouraging research on the impact of the LA model and the proliferation of LA programs at institutions across the world, the study of the LA model has been, for the most part, limited to a small group of education researchers. Therefore, a major objective of this review is to introduce the LA model to a new group of instructors and researchers who can further our understanding of this promising model.

Keywords: Learning assistant, Near-peer, Curriculum reform, Institutional change, Peer instruction

Near-peer instruction and the Learning Assistant model

For decades, near-peer teaching has been implemented to supplement education from faculty instructors (Whitman & Fife, 1988). In the literature, there are many examples of near-peer teaching including peer-assisted learning, team-based learning, peer tutoring, education through student interaction, peer mentoring, supplemental instruction, and peer-led team learning (Evans & Cuffe, 2009; Lockspeiser, O'Sullivan, Teherani, & Muller, 2008; ten Cate & Durning, 2007; Williams & Fowler, 2014). However, the central concept of near-peer teaching is consistent: students helping other students learn. Often the near-peer instructor is a student who has recently passed the course and they interact with students during regular class time, which distinguishes near-peer instruction from small group learning and remedial tutoring models. Importantly, the role of a near-peer instructor is distinct from that of a Teaching Assistant (TA), who may aid instructors in their responsibilities as teachers (i.e., grading, evaluation, preparing assignments). In contrast, near-peer instructors work as aides to students in their responsibilities as learners.

The benefits of near-peer teaching in general have been demonstrated among medical and nursing students, where near-peer instructors create supportive learning environments and improve grades (Evans & Cuffe, 2009; Irvine, Williams, & McKenna, 2018; ten Cate, van de Vorst, & van den Broek, 2012; Williams & Fowler, 2014). Two specific models of near-peer

* Correspondence: apb1@bu.edu
Department of Biology, Boston University, Boston, MA 02215, USA

Takk for meg!