

Student Centred Cloud Tools in Distance Education

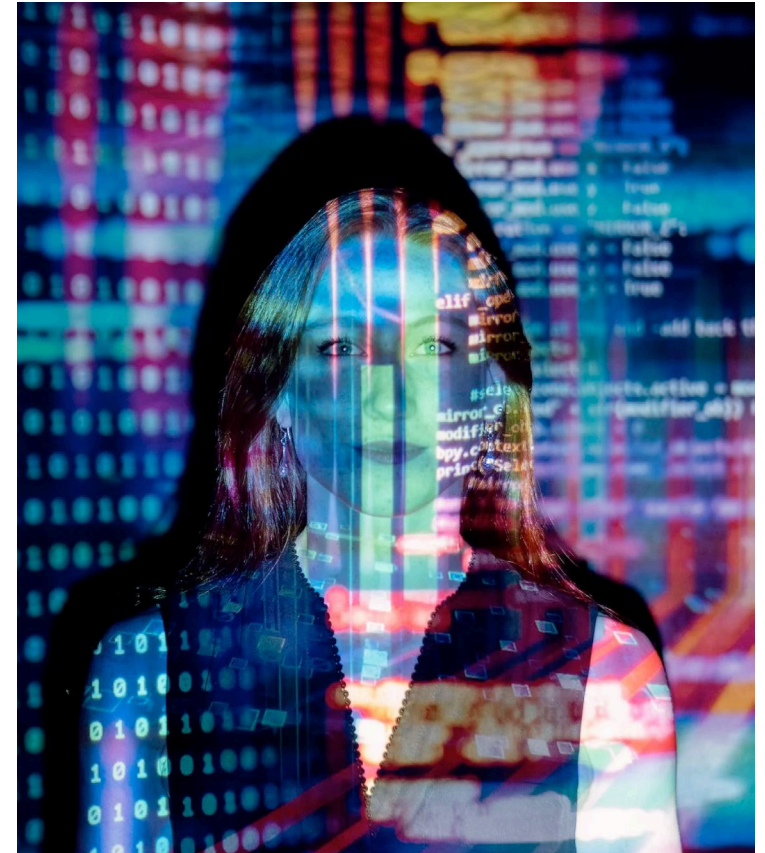
Kevin Gater & Pär-Ove Forss





Bakgrundsbeskrivning

- How can technology be used effectively in courses to enhance student centred learning?
- What digital tools are there and how can they be used pedagogically to inspire creativity, collaboration and critical thinking.



Problemformulering

- How is teacher awareness and usage of digital cloud-based tools?
- Are cloud-based tools seen as a benefit or a hinderance?
- To what extent are they being used and how?
- What is the current level of competence?
- What steps might further improve knowledge and competence?



<https://www.miun.se/medarbetare/gemensamt/servicetjanster/it/molntjanster/>

Metod

- Surveyed NMT teachers involved in distance education.
- Measure usage of approved cloud-based tools
- Measure usage of alternative cloud-based tools
- Discussion of cloud-based tools in a teaching context

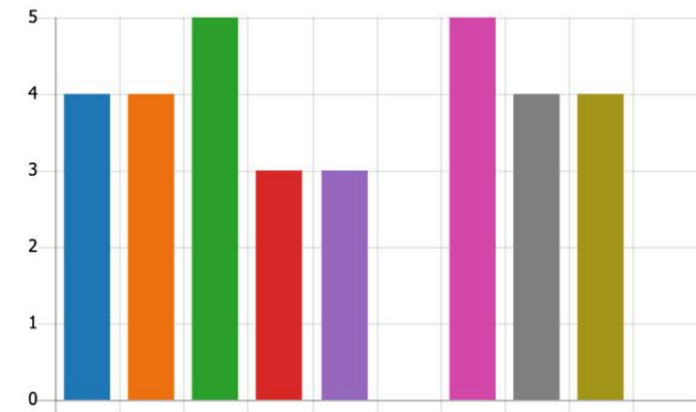
Resultat

- **32 Responses from NMT teachers with distance courses**

1. Which department do you work at?

[More Details](#)

● Data- och systemvetenskap (...)	4
● Design (DES)	4
● Ekoteknik och hållbart byggan...	5
● Elektronikkonstruktion (EKS)	3
● Informationssystem och -tekn...	3
● Kemiteknik (CHE)	0
● Kvalitets- och maskinteknik (K...	5
● Matematik och ämnesdidaktik...	4
● Medie- och kommunikationsv...	4
● Naturvetenskap (NAT)	0



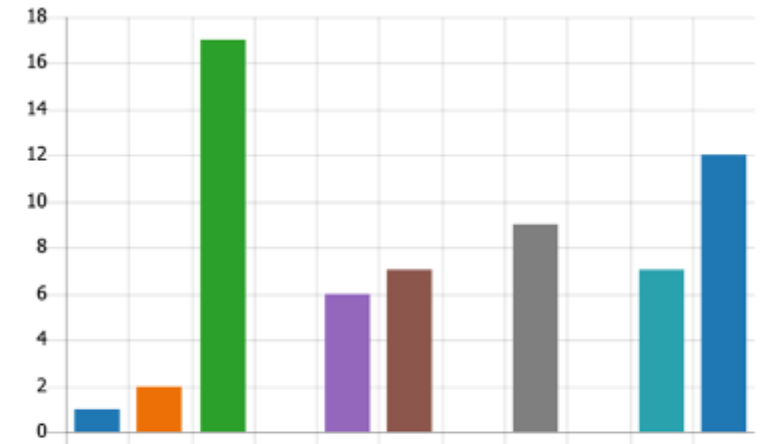
Approved tools

- 50% use Mentimeter
- 1/3 use Padlet.
- Trello and Mural popular.
- 37.5% don't use cloud tools

2. Which of the following cloud tools are you using in your distance courses?

[More Details](#)

Feedback Fruits	1
Lucidchart	2
Mentimeter	17
Mindmeister	0
Miro	6
Mural	7
Nearpod	0
Padlet	9
Polly	0
Trello	7
None of the above	12



Other tools

Design tools	File sharing/Storage	Communication	Video	Version management	Survey tools	Examination
Canva	Google Drive	Discord	YouTube	Github	Google Forms	Inspera
Diagrams.net	Sound Cloud			Bitbucket	DirectPoll	
Figma						

Frequency

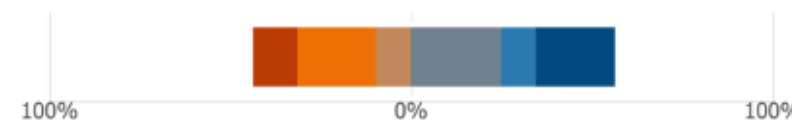
- 44% percent of the use cloud tools often
- 34% use them occasionally
- 22% don't use them

4. How often do you use cloud tools in your teaching?

[More Details](#)

■ Daily ■ Weekly ■ Monthly ■ Seasonal ■ Yearly ■ Never

Check the relevant answer



Useage

- “tools with better aesthetic visually”
- “better student collaboration and to collect student experiences”
- “for turning in complex assignments and for info that is constantly being updated”
- "for visualisation of systems i.e., systems analysis"

5. In which ways are you using cloud tools?

[More Details](#)

■ Yes ■ No

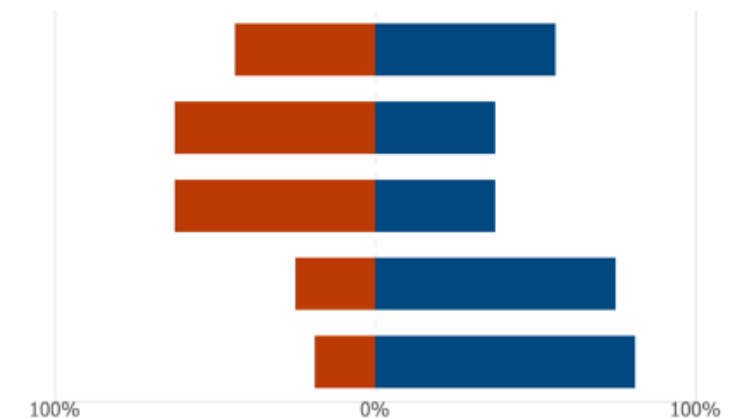
To gather data

For students to collaborate

For students to learn more effectively

Examination

Other



Benefits

Collaboration, real time collaboration and making the students more active and engaged

To get our distance students in a simple way together with our campus students to be able to discuss and make visible to each other what they come up with.

To create a visual "classroom"

To follow the progress of the students

No need to install software locally on computer (avoids problems with students who have different OS and not admin rights).

Challenges



Difficult to get the students to take part in pre-recorded of material



Lack of mathematics editor



Security and login issues



To use different programs at the same time



Finding the time to find, evaluate and learn the best tools



Dependence on internet connection

Support learning



Discussions and reflections in real time with everyone else help students reach further in their learning.



Force students to share thoughts and see how other people think



Feeling of togetherness.



More fun, more varied and easier teaching with better opportunities for group work with both Campus and distance students



Location independent

Student Collaboration

They can work, discuss and brainstorm together in real time with tools such as whiteboards, Trello, Lucidchart, Miro, Figma and others.

Digital tools change power dynamics, sometimes I feel that digital collaborations are more democratic and can facilitate access for students to collaborative dialogue.

Better communication platforms provide better collaboration.

Teacher awareness

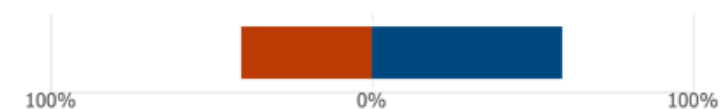
- 59 percent responded that they were aware
- 41 percent responded that they were unaware

12. How aware are you of MIUN approved cloud tools available to use on distance courses?

[More Details](#)

■ Unaware ■ Aware

Check the relevant answer



Teacher support

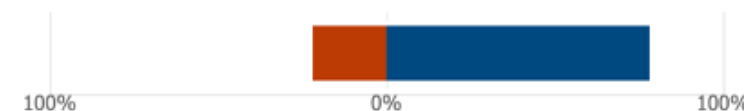
- 22 percent responded that they did
- 78 percent responded that they did not

13. Do you feel that you receive adequate instruction and support for utilising cloud tools in your courses?

[More Details](#)

■ Yes ■ No

Check the relevant answer



Influence apps

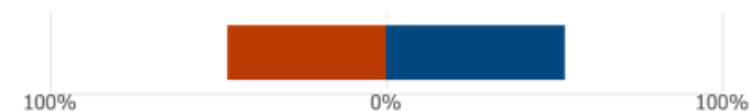
- 47 percent responded yes
- 53 percent responded no

14. Do you feel that you have the possibility to influence what cloud apps Miun uses?

[More Details](#)

■ Yes ■ No

Check the relevant answer



Fortsatt arbete

- Interview key candidates to dig deeper
- Additional guidance and support necessary
- Better awareness of what there is and how to use
- Collegial approach to spread awareness and support
- ALP research project



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Tack!