Integrering av AI-verktøy i forskerutdanningen

Et innblikk i AI-kompetansen blant ph.d.-kandidatene ved UiT Norges arktiske universitet

Cornel Borit, PhD (UiT), Andrea A. Gasparini, PhD (UiO)

PhD on Track

VIRAK, 4-5. juni 2025, Drammen

Plan

- Bakgrunn
- Metode
- Funn
- Tidligere studier
- Bruk av resultater/ veien videre

Bakgrunn

- Hva?
  - PhD Day at the Library (Workshop)
- Når?
  - 17. november 2024
- Hvem?
  - PhD on Track
  - UiT Universitetsbibliotekets High North Academy
  - UiT Skrivesenteret

Grafisk utforming: Tonje Lockertsen

Formål med studiet

Å kartlegge kunnskap om og vaner rundt bruk av AI i forbindelse med doktorgradsarbeidet hos ph.d.-kandidatene på UiT.

Metode

- Spørreundersøkelse om integrering av AI-verktøy i forskerutdanningen
  - Identifisere kunnskaper, holdninger og vaner om bruk av AI verktøy
  - Indentifisere ph.d.-kandidatenes kunnskapsnivå om UiTs retningslinjer om bruk av AI
  - Kartlegge ph.d.-kandidatenes oppfatning av den institusjonelle opplæringstilbud angående AI-verktoy
- Observasjoner under workshopen

Metode (cont. 1)

Spørreundersøkelse om integrering av AI-verktøy i doktorgradsforskningen

- 10 spørsmål

✓ 3 lukkede spørsmål, som dekker demografisk informasjon, erfaring med AI-chatbots og kunnskap om UiTs retningslinjer

✓ 7 åpne spørsmål som dekker stipendiatenes brukevaner, behov om opplæring og forslag til gode praksiser

Metode (cont. 2)

- Respondenter
  - 38 workshopdeltakere (35 stipendiater, 2 postdocs, 1 vitenskapelig ansatte)
  - Internasjonale og norske
  - Alle stadier i ph.d.-løpet
  - Alle fagområder
  - Kjønnsbalanse
  - 6 fakulteter og enheter – HSL (13), Helsefak (8), BFE (8), NT (4), IVT (2), RESULT (2), UMAK (1)

Bilde: Cornel Borit

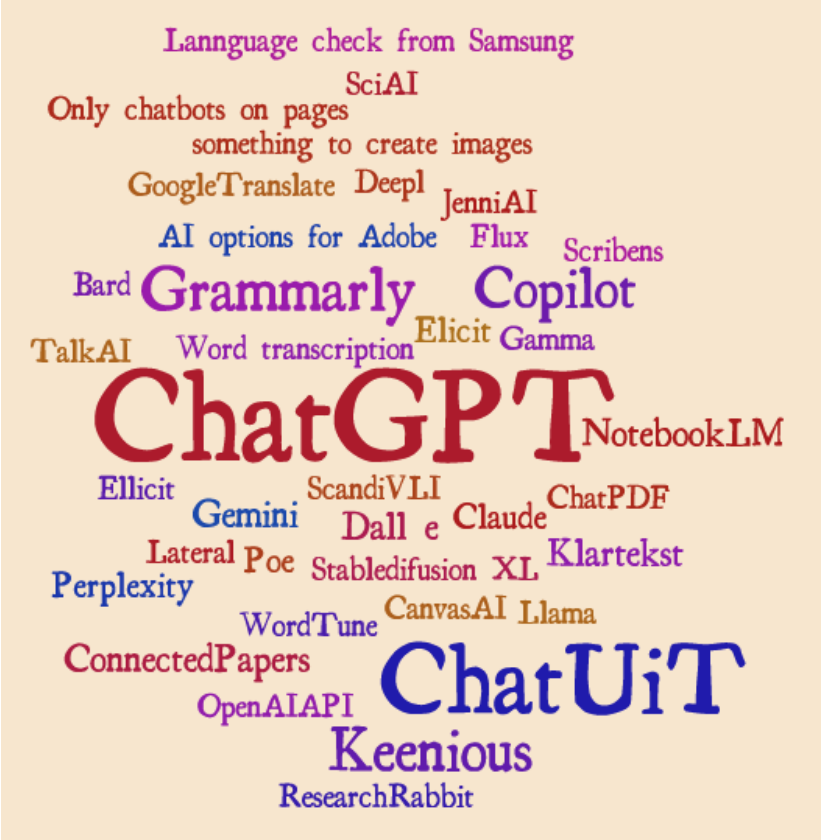
- Anonymiserte besvarelser på papir i slutten av workshopen
- Tematisk analyse

Q2: Which AI-based tools have you tested in general?

- 39 tools in total

- 4 participants (10%) listed only 1 tool
- 8 participants (21%) listed 2 tools
- 14 participants (37%) listed 3 tools
- 12 participants (32%) listed 4 or more tools

- Top 5 tools (62% of all the 69 mentions):
  - ChatGPT (30; 23%)
  - ChatUiT (21; 16%)
  - Grammarly (10; 8%)
  - Keenious (10; 8%)
  - Copilot (9; 7%)
- 26 tools (67% of tools) only 1 occurrence each

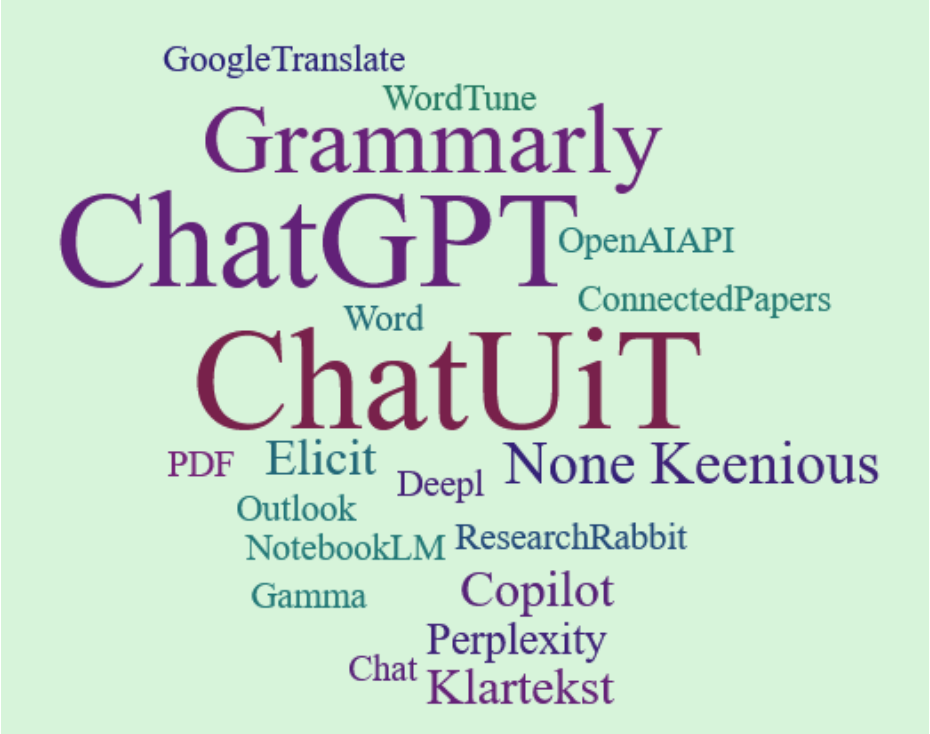


Q3: Which AI-based tools do you actively use in your research/work?

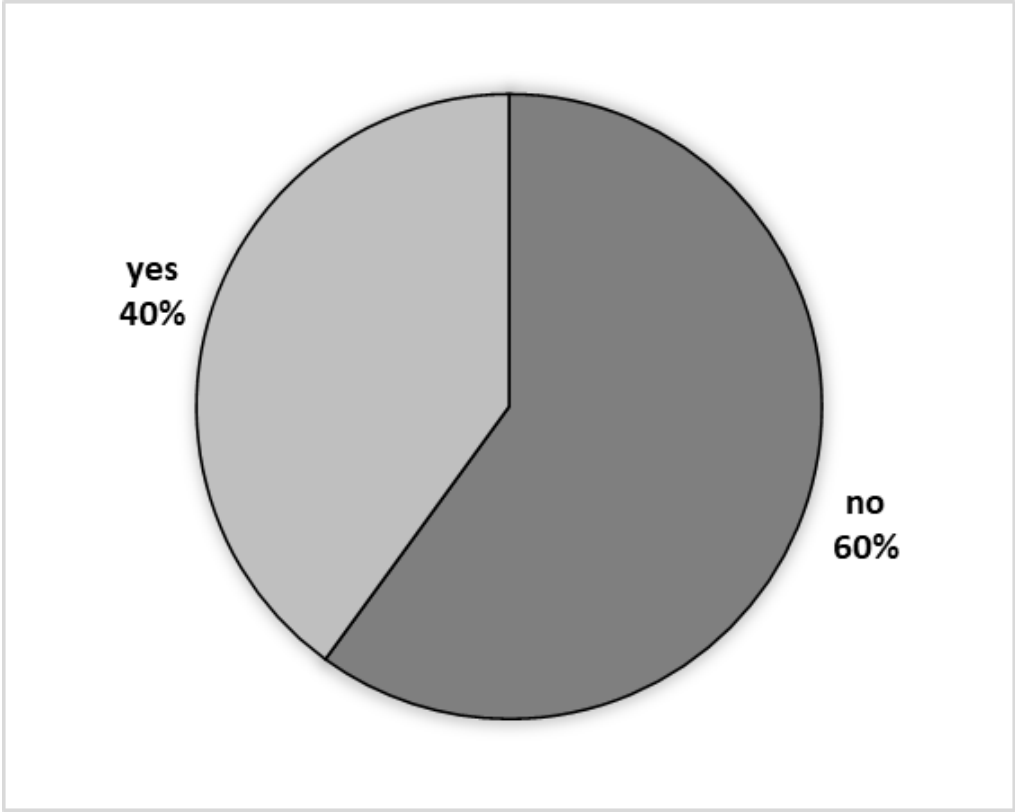
- 20 tools in total

- 4 participants (10%) do not use any tool
- 16 participants (42%) listed only 1 tool
- 10 participants (26%) listed 2 tools
- 5 participants (13%) listed 3 tools
- 3 participants (8%) listed 4 or more tools

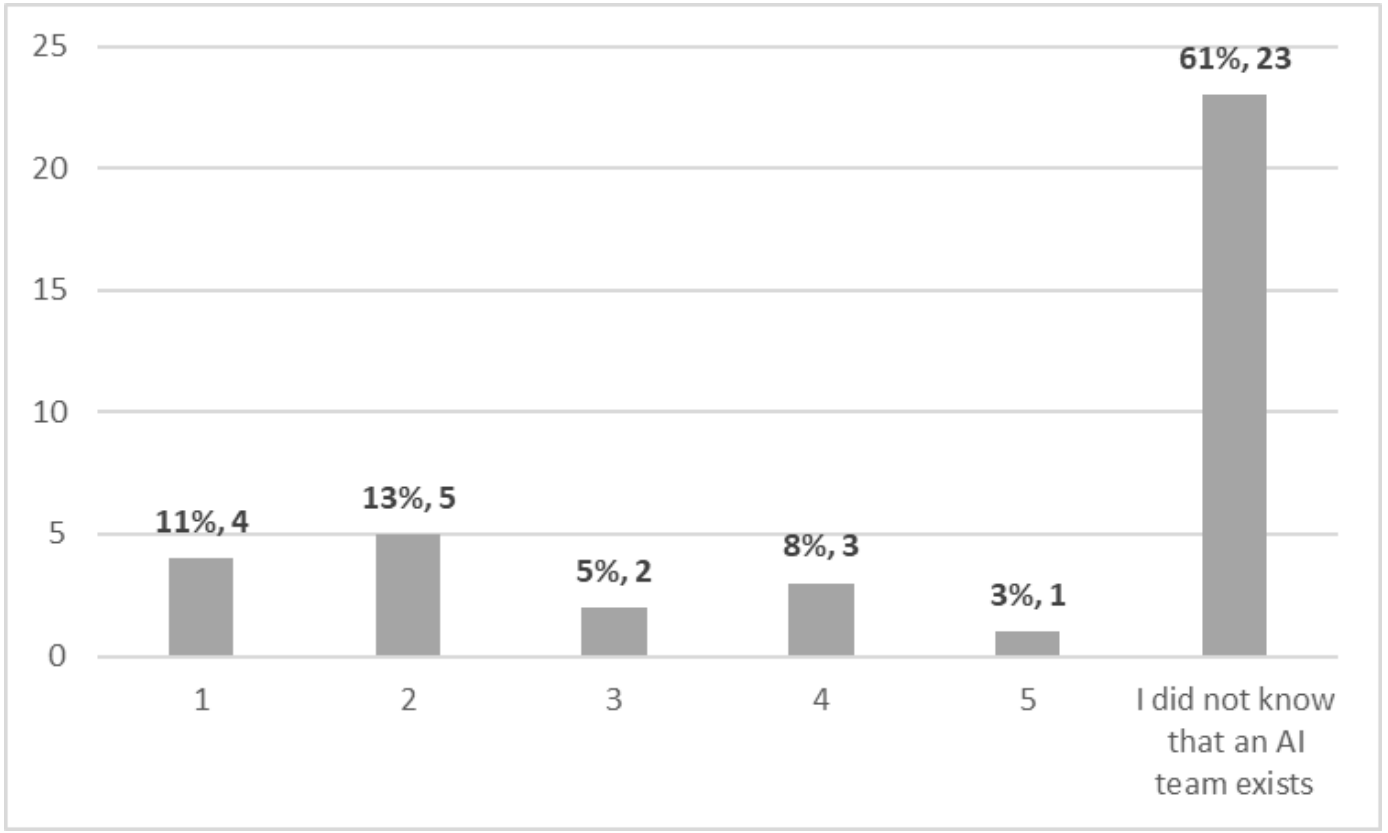
- Top 3 tools (58% of all the 65 mentions):
  - ChatUIT (15; 22%)
  - ChatGPT (14; 20%)
  - Grammarly (9; 13%)
- 12 tools (60% of tools) only 1 occurrence each



Q4: Have you read the web page regarding how you can use AI at UiT?



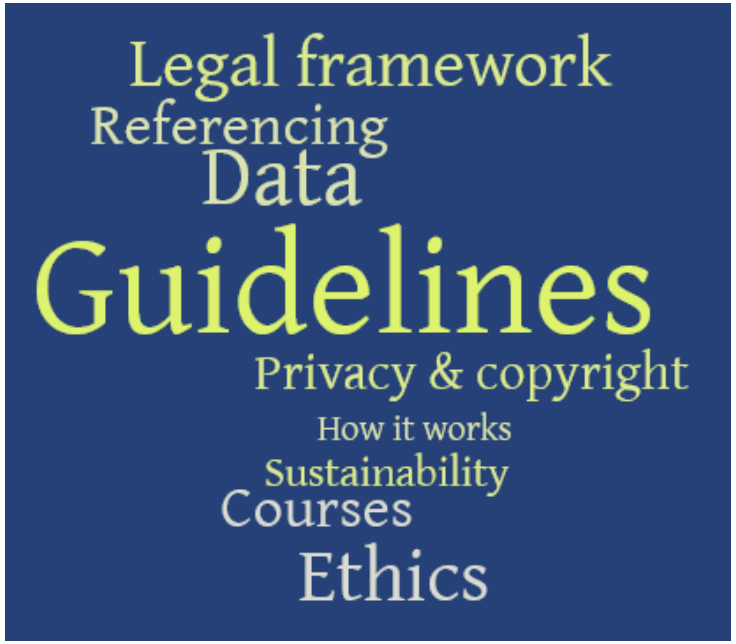
Q6: On a scale from 1 to 5, where 5 is the highest, how well do you consider that your voice is represented in the AI-team at UiT The Arctic University of Tromsø?



Q5: What kind of information you THINK you would need to use AI more ethically and efficiently in your academic work /administrative work? Write keywords.

1. Guidelines general (15; **27%**)
2. Info on data storage/use (8)
3. Ethics of using AI tools (7)
4. Legal framework (6)
5. Citation and referencing (5)
6. Courses about use of AI (5)
7. Privacy and copyright (4)
8. Sustainability (3)
9. How it works (2)

- 9 themes, 55 mentions
- Not answered/ N/A (4; 7%)
- Top 3 account for approx. 55% of all mentions



Q5: What kind of information you THINK you would need to use AI more ethically and efficiently in your academic work /administrative work? Write keywords.

"Transparency about data use by the AI tools."

"We need information about using AI without crossing boundaries"

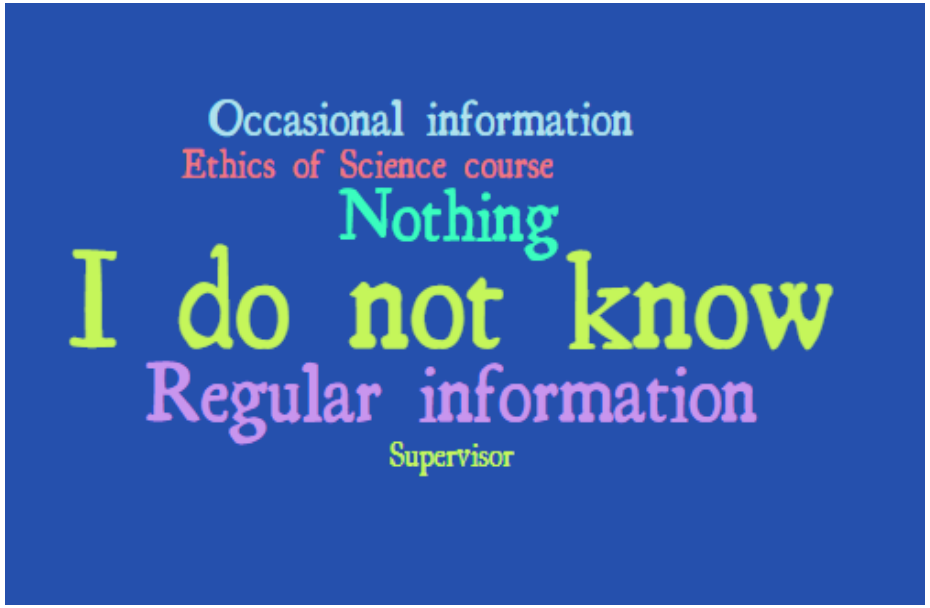
"The mandatory course on philosophy and ethics all PhD candidates have to do could address AI, because it influences both the philosophical and ethical aspects of research."

"How to refer to it and whether I have to."

Q7: How does your department support access to information regarding the use of AI in research work?

1. I do not know (14; **37%)**
2. Regular information (7)
3. Nothing at all (6)
4. Occasional information (3)
5. Only in the Ethics of Science course (2)
6. Information on other topics than research (2)
7. Only with my supervisor (1)
8. Not answered/ N/A (3)

- 8 themes, 38 mentions
- Not answered/ N/A (3; 8%)
- Top 3 account for approx. 71% of all mentions



Q7: How does your department support access to information regarding the use of AI in research work?

"I do not know. There is not a lot of focus on it."

"Seminars; Invited researchers to present their work in the use of AI; *Pros* and *Cons*; Ethical considerations."

"The centre eploying me does not provide any information regarding AI use in research."

"Some information and events, but no domain-specific."

Q8: What ideas do you have for improving the access to information on the use of AI at your department?

1. Courses, workshops, seminars (23; **55%**)
2. Accessible guidelines (6)
3. Available resources/tools (2)
4. Updates/ newsletters (2)
5. Web based information (2)
6. Access is good enough (1)
7. More discussions (1)
8. Not department's responsability (1)
9. Not answered/ N/A (4)

- 9 themes, 42 mentions
- Not answered/ N/A (4; 1%)
- Top 3 account for approx. 74% of all mentions

Q8: What ideas do you have for improving the access to information on the use of AI at your department?

"More regular reminders of resources."

"Maybe a workshop each semester revolving around how we can use AI specifically for our research."

"Information posters (AI need-to-know rules); Web based information - all in one place."

"Good and accessible guidelines for students and staff."

Q9: How does your department contribute to competence development regarding the use of AI in research?

1. I do not know (13; **34%**)
2. A little (8)
3. Regularily (7)
4. Not at all (5)
5. Not answered/ N/A (5)

- 5 themes, 38 mentions
- Not answered/ N/A (5; 1,5 %)
- Top 3 account for approx. 74% of all mentions

Q9: How does your department contribute to competence development regarding the use of AI in research?

"I do not know."

"Contact with AI team; Researchers in contact; Contact with other departments/groups with the same interests

"Since I have been here, there has been no training or information regarding AI."

"One guest lecture from the AI team in general; there should be one for writing articles."

Q10: What ideas do you have for improving competence acquisition in the use of AI at your department?

1. Seminars, courses, practical activities, workshops (25; **66%**)
2. Web resources (2)
3. No suggestions(2)
4. Competence sharing in research groups (1)
5. Adapted education by level (1)
6. Not answered/ N/A (7)

- 6 themes, 38 mentions
- Not answered/ N/A (7; 2 %)
- Top 3 account for approx. 76% of all mentions

Q10: What ideas do you have for improving competence acquisition in the use of AI at your department?

"Workshops specifically designed for our department (tailored on our needs)

"We need (mandatory) AI workshops for researchers, since so many use it recklessly."

"Workshops and knowledge-sharing in teams."

"Develop an intuitive web page!"

Resultater

Observasjoner:

- Testing og bruk av et ekstremt stort antall verktøy som **ikke** er godkjent av universitetet: Gamma, Wordttune, Lateral, Fluks, Talkpdf, etc.

- Funn viser at det ikke er samsvar mellom anbefalinger og hva folk gjør!

Resultater

Observasjoner:

- Stipendiatene brukte KI på data fra Excel-ark for å spare tid på og å effektivisere arbeidet med store mengder av data, **ikke for analyse**!

- Hva med min AI-forbedrede tekst 5 år fra nå!?

Resultater

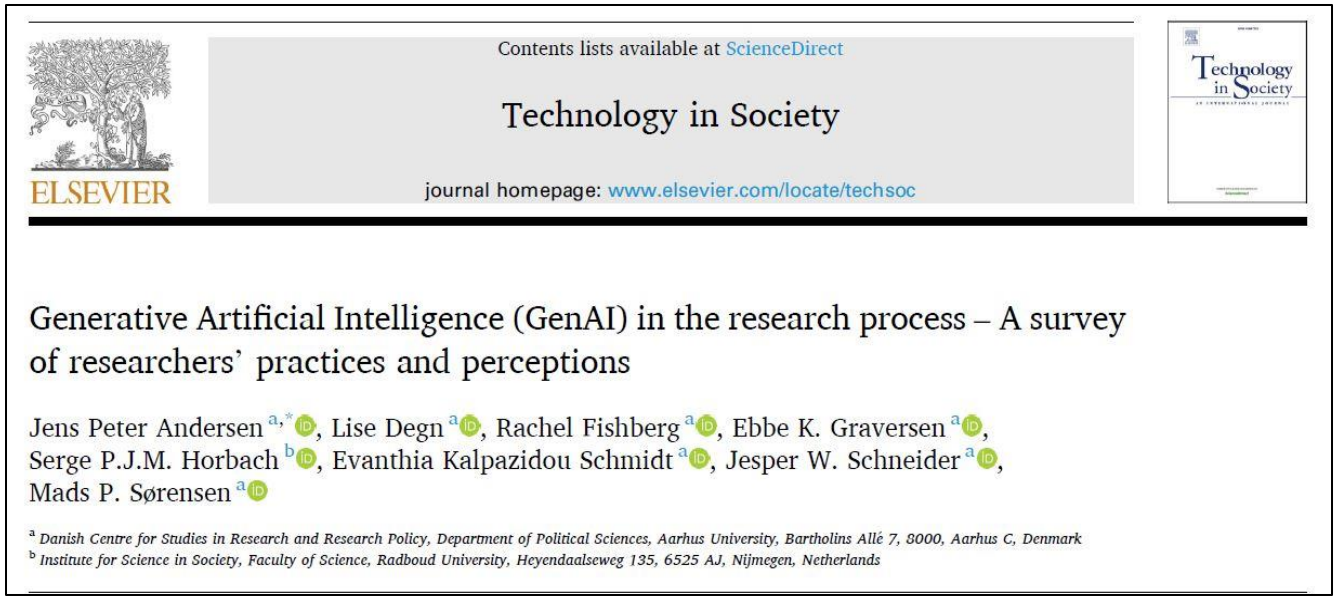
Observasjoner:

- Stipendiatene er usikre på om ikke den norske «modellen» med restriksjoner setter en stopper for muligheter i forskningen.

Bruk av resultater/ veien videre

- Trenger å forsterke **akademisk dannelse/ formell utdanning** – her kan og bør biblioteket ha en rolle!
- Stipendiatene forventer at instituttene tar en mer aktiv rolle i å skape, oppdatere og formidle **retningslinjer** om bruk av AI-verktøy.
- Øke samarbeid og erfaringsdeling ved å tilrettelegge en bedre dialog mellom forskere og institusjoner **(kommunikasjon og åpenhet).**
- Trenger å repetere underveis i studieløpet **etikken** akademikere har.
    - *Etikk er sentral og må kontekstualiseres i forhold til institusjon, fag og pedagogikk* (Jeon et al., 2025).

Tidligere studier



Contents lists available at ScienceDirect

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Generative Artificial Intelligence (GenAI) in the research process – A survey of researchers' practices and perceptions

Jens Peter Andersen [a,*], Lise Degn [a], Rachel Fishberg [a], Ebbe K. Graversen [a], Serge P.J.M. Horbach [b], Evanthia Kalpazidou Schmidt [a], Jesper W. Schneider [a], Mads P. Sørensen [a]

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"Språkredigering og dataanalyse ble generelt sett positivt… Juniorforskere brukte GenAI mer enn seniorkolleger…

Studien understreker behovet for tilpasningsdyktige, disiplinspesifikke retningslinjer for GenAI-bruk i forskning…" (Andersen et al., 2025)

Phd on Track – Redaksjonen 2025

Kåre Johan Mjør

Høgskulen på Vestlandet

Ida B. Juhasz

Anna H. Braathen

NHH

Hege K. Ringnes

OSLOMET

UNIVERSITETET I OSLO

Andrea A. Gasparini

Cornel Borit

Sindre A. Pedersen

+ styringsgruppe med representanter fra ledelsen fra partner-UB'ene

UiT Norges arktiske universitet

NTNU

Takk for oss!

Spørsmål? Kommentarer?

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