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Disciplinary activity, computing science –tracks to explore

The aim of the morning session is to prepare you for representing the viewpoint of computing sciences this afternoon. It will be important then that you share your computing science viewpoint (e.g. you being the one saying “good idea, (but) I think implementing it will raise some technical issues, namely...”) and your ideas (e.g. “a logics-based text processing system can provide a formal representation of the concepts to be mastered, which is good for the system to be explainable”).

It is OK to be incorrect; being listening, comprehensive and indulgent to each other is the keyword for this afternoon. There is no grade, we are all here for the sake of learning unique skills and expressing our views, so let’s make the best we can of this day!

Objective: *Using the post-its and the drawboard (physical if in person or the mural platform if online), create a **concept map**, which depicts the core concepts you think are related to 1) grading and assessment; 2) artificial intelligence and computer systems; and 3) artificial intelligence for automating grading and assessment. List these concepts and depict how they relate to other concepts, and what is a good grading, especially within the perspective of your subject – computing sciences.*

The below structure is there to help you getting started and help checking that you cover it all. It need not be followed “step by step, exhaustively” and you can and are invited to explore on your own. Think of your goal first (being a philosophy representative); the rest is secondary. Follow how your mind works.

Step 1: Relate the key concepts of grading & assessment

First, think for yourself for a few minutes and propose a few items. What type of assessment have you encountered in your life (go deep, to high school and even primary school)? What was it assessing? Was it fair? How could it have been better?

Then, complete your map with the contents that can be found in these resources:

- Read about grading and assessment there <https://resilienteducator.com/classroom-resources/grading-vs-assessment-whats-the-difference/>
- Types of assessment
 - <https://www.marketing91.com/types-of-assessment/>
 - <https://www.prodigygame.com/main-en/blog/types-of-assessment/>
- What makes a good assessment?
 - <https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/assessment-and-feedback/good-assessment/>
 - <https://www.algonquincollege.com/profres/assessing-students/qualities-of-good-assessment-practices/>



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Step 2: Relate the key concepts of artificial Intelligence

Using the post-its and the drawboard, create a concept map based on the core concepts you think are related to artificial intelligence.

First, think for yourself: what is AI? What kind of AI systems do you know/use? How can it be used? How should it be used? How should it not be used?

- Definition and examples (skim through): <https://www.ibm.com/topics/artificial-intelligence>
- <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- Lists of abilities of AI systems:
- <https://www2.deloitte.com/nl/nl/pages/data-analytics/articles/part-2-artificial-intelligence-techniques-explained.html>
- <https://www.analyticssteps.com/blogs/6-major-branches-artificial-intelligence-ai>
- The most comprehensive book (check the list of chapters; then pick the one that you see fit)
 - <https://cs.calvin.edu/courses/cs/344/kvlinden/resources/AIMA-3rd-edition.pdf>

Step 3: Integrate the concepts of grading and assessment with artificial intelligence

Using the post-its and the drawboard, **connect the concept map of grading & assessment with that of artificial intelligence**

First, think for yourself: are there some grading/assessment activities that are already automated (e.g. multi-choice questionnaires)? What further automation might be possible? What are the risks and benefits of such automation – for those that make assessments and set grades? How about for those that are assessed/graded? For society more generally?

Then, complete your map with the contents that can be found in these resources:

- Here is a list of applications, with often some discussions of benefits, risks and issues
 - <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
 - https://searchcio.techtarget.com/podcast/Cognitive-tutor-could-teach-employees-new-skills?_gl=1*15nxh9l*_ga*MTQzNTA4MTU0OC4xNjM5Njk4ODI4*_ga_TQKE4GS5P9*MTYzOTY5ODgyOC4xLjAuMTYzOTY5ODgyOC4w&_ga=2.175863266.1731280675.1639698828-1435081548.1639698828
 - <https://hbr.org/2020/08/what-happens-when-ai-is-used-to-set-grades>
 - <https://copleys.com/education/ai-grading>
 - <https://www.matellio.com/blog/ai-grading-system-features-and-cost-of-development/>



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Disciplinary activity, informatics –tracks to explore

The aim of the morning session is to prepare you for representing the viewpoint of informatics this afternoon (interaction design, human-computer interfaces, informatics). It will be important then that you share your informatics viewpoint (e.g. you being the one saying “good idea, (but) I think this will sets a highly all-time competition between students, namely...” and your ideas (e.g. “this solution, by integrating the possibility of teachers’ feedback on top of automatically made assessments, strengthens the room for meaningful collaboration between the groups”).

It is OK to be incorrect; being listening, comprehensive and indulgent to each other is the keyword for this afternoon. There is no grade, we are all here for the sake of learning unique skills and expressing our views, so let’s make the best we can of this day!

Objective: Using the post-its and the drawboard (physical if in person or the mural platform if online), create a **concept map**, which depicts the core concepts you think are related to 1) grading and assessment; 2) artificial intelligence and computer systems; and 3) artificial intelligence for automating grading and assessment. List these concepts and depict how they relate to other concepts, and what is a good grading, especially within the perspective of your subject - informatics. The below structure is there to help you getting started and help checking that you cover it all. It need not be followed “step by step, exhaustively” and you can and are invited to explore on your own. Think of your goal first (being a philosophy representative); the rest is secondary. Follow how your mind works.

Step 1: Relate the key concepts of grading & assessment

First, think for yourself for a few minutes and propose a few items. What type of assessment have you encountered in your life (go deep, to high school and even primary school)? What was it assessing? Was it fair? How could it have been better?

Then, complete your map with the contents that can be found in these resources:

- Read about grading and assessment there <https://resilienteducator.com/classroom-resources/grading-vs-assessment-whats-the-difference/>
- <https://qsi.berkeley.edu/qsi-guide-contents/grading-intro/before-you-grade/design-assignments/>
- Types of assessment
 - <https://www.marketing91.com/types-of-assessment/>
 - <https://www.prodigygame.com/main-en/blog/types-of-assessment/>
- What makes a good assessment?
 - <https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/assessment-and-feedback/good-assessment/>
 - <https://www.algonquincollege.com/profres/assessing-students/qualities-of-good-assessment-practices/>
- Who (user/stakeholder) are part of grading an assessment (student/teacher etc...)



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Step 2: Relate the key concepts of artificial Intelligence

Using the post-its and the drawboard, create a concept map based on the core concepts you think are related to artificial intelligence.

First, think for yourself: what is AI? What kind of AI systems do you know/use? How can it be used? How should it be used? How should it not be used?

- Definition and examples (skim through):
 - https://en.wikipedia.org/wiki/Artificial_intelligence
 - <https://www.ibm.com/topics/artificial-intelligence>
 - <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- AI and user experience, Human-AI Interaction Design:
 - <https://uxofai.com>
 - <https://www.microsoft.com/en-us/research/blog/guidelines-for-human-ai-interaction-design/> (including links to papers in guidelines).
 - <https://www.microsoft.com/en-us/research/project/guidelines-for-human-ai-interaction/>
 - <https://www.ericsson.com/en/ai/ux-design-in-ai>
 - <https://www.forbes.com/sites/forbestechcouncil/2021/10/01/why-uxui-should-be-considered-throughout-the-ai-life-cycle/?sh=428964812fe3>
- Examples of books on AI and society:
 - <https://www.datadriveninvestor.com/2019/02/28/4-books-on-ai/>
 - The Atlas of AI: <https://yalebooks.yale.edu/book/9780300209570/atlas-ai>
 - The most comprehensive book (check the list of chapters; then pick the one that you see fit) <https://cs.calvin.edu/courses/cs/344/kvlinden/resources/AIMA-3rd-edition.pdf>

Step 3: Integrate the concepts of grading and assessment with artificial intelligence

Using the post-its and the drawboard, connect the concept map of grading & assessment with that of artificial intelligence

First, think for yourself: are there some grading/assessment activities that are already automated (e.g. multi-choice questionnaires)? What further automation might be possible? What are the risks and benefits of such automation – for those that make assessments and set grades? How about for those that are assessed/graded? For society more generally?

Then, complete your map with the contents that can be found in these resources:

- Here is a list of applications, with often some discussions of benefits, risks and issues
- <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- https://searchcio.techtarget.com/podcast/Cognitive-tutor-could-teach-employees-new-skills?_gl=1*15nxh9l*_ga*MTQzNTA4MTU0OC4xNjM5Njk4ODI4*_ga_TQKE4GS5P9*MTYzOTY5ODQyOC4xLjAuMTYzOTY5ODQyOC4w&_ga=2.175863266.1731280675.1639698828-1435081548.1639698828
- <https://hbr.org/2020/08/what-happens-when-ai-is-used-to-set-grades>
- <https://copyleaks.com/education/ai-grading>
- <https://www.matellio.com/blog/ai-grading-system-features-and-cost-of-development/>



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Disciplinary activity, law –tracks to explore

The aim of the morning session is to prepare you for representing the viewpoint of law this afternoon. It will be important then that you share your law viewpoint (e.g. you being the one saying “good idea, (but) I think this raises some pedagogical issues, namely...”) and your ideas (e.g. “if we manage to automatically extract meaningful high-level information out of this system, we can streamline the adaptation to learners’ knowledge”).

It is OK to be incorrect; being listening, comprehensive and indulgent to each other is the keyword for this afternoon. There is no grade, we are all here for the sake of learning unique skills and expressing our views, so let’s make the best we can of this day!

Objective: *Using the post-its and the drawboard (physical if in person or the mural platform if online), create a **concept map**, which depicts the core concepts you think are related to 1) grading and assessment; 2) artificial intelligence and computer systems; and 3) artificial intelligence for automating grading and assessment. List these concepts and depict how they relate to other concepts, and what is a good grading, especially within the perspective of your subject - law. The below structure is there to help you getting started and help checking that you cover it all. It need not be followed “step by step, exhaustively” and you can and are invited to explore on your own. Think of your goal first (being a philosophy representative); the rest is secondary. Follow how your mind works.*

Step 1: Relate the key concepts of grading & assessment

First, think for yourself for a few minutes and propose a few items. What type of assessment have you encountered in your life (go deep, to high school and even primary school)? What was it assessing? Was it fair? How could it have been better?

Then, complete your map with the contents that can be found in these resources:

- Jessica L. Clark, Grades Matter; Legal Writing Grades Matter Most, Georgetown University Law Center
<https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=2246&context=facpub>
- Monica Chin, These students figured out their tests were graded by AI — and the easy way to cheat, <https://www.theverge.com/2020/9/2/21419012/edgenuity-online-class-ai-grading-keyword-mashing-students-school-cheating-algorithm-glitch>
- Dadi Ramesh and Suresh Sanampudi, An Automated Essay Scoring Systems: A Systematic Literature Review; 2021, Artificial Intelligence Review, accessible via Umeå university library (when logged in via your student CAS-user)
- Jimmy Ljungman, Vanessa Lislevand, John Pavlopoulos, Alexandra Farazouli, Zed Lee, Panagiotis Papapetrou, Uno Fors, Automated Grading of Exam Responses: An Extensive Classification Benchmark, https://link.springer.com/chapter/10.1007/978-3-030-88942-5_1
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Step 2: Relate the key concepts of artificial Intelligence

Using the post-its and the drawboard, create a concept map based on the core concepts you think are related to artificial intelligence.

First, think for yourself: what is AI? What kind of AI systems do you know/use? How can it be used? How should it be used? How should it not be used?

Then, complete your map with the contents that can be found in these resources:



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- EU regulation
 - EU AI regulation proposal: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206>
 - EU General Data Protection Regulation (GDPR), ex. Articles 5, 6, 7, 9 22, <https://eur-lex.europa.eu/eli/reg/2016/679/oj>
- Swedish regulation
 - Förvaltningslagen (2012:900), ex. 5 , 28 §: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forvaltningslag-2017900_sfs-2017-900
 - Högskoleförordningen (1993:100), ex. 1 kap. 4 a §, 6 kap. 18 §, 22-24 §§: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/hogskoleforordning-1993100_sfs-1993-100
 - Skollagen , ex. 3 kap. 15-17 §§, https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800
- Deakin, Simon; Markou, Christopher, Is Law Computable? : Critical Perspectives on Law and Artificial Intelligence; 2020, accessible via Umeå university library (when logged in via your student CAS-user)
- Rowena Rodrigues, Legal and Human Rights Issues of AI: Gaps, Challenges and Vulnerabilities; 2020 Journal of Responsible Technology, accessible via Umeå university library (when logged in via your student CAS-user)

Step 3: Integrate the concepts of grading and assessment with artificial intelligence

Using the post-its and the drawboard, connect the concept map of grading & assessment with that of artificial intelligence

First, think for yourself: are there some grading/assessment activities that are already automated (e.g. multi-choice questionnaires)? What further automation might be possible? What are the risks and benefits of such automation – for those that make assessments and set grades? How about for those that are assessed/graded? For society more generally?

- Bettina Berendt, Allison Littlejohn and Mike Blakemore, AI in Education: Learner Choice and Fundamental Rights; 2020, Learning, Media and Technology, accessible via Umeå university library (when logged in via your student CAS-user)
- Artificiell intelligens i skolan kräver ökad insikt hos lärarna, <https://www.skolverket.se/skolutveckling/forskning-och-utvarderingar/artiklar-om-forskning/artificiell-intelligens-i-skolan-kraver-okad-insikt-hos-lararna>
- EU regulation
 - EU AI regulation proposal: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206>
 - EU General Data Protection Regulation (GDPR), ex. Articles 5, 6, 7, 9 22, <https://eur-lex.europa.eu/eli/reg/2016/679/oj>
- Swedish regulation
 - Förvaltningslagen (2012:900), ex. 5 , 28 §: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forvaltningslag-2017900_sfs-2017-900
 - Högskoleförordningen (1993:100), ex. 1 kap. 4 a §, 6 kap. 18 §, 22-24 §§: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/hogskoleforordning-1993100_sfs-1993-100
 - Skollagen, ex. 3 kap. 15-17 §§, https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800



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Disciplinary activity, pedagogy –tracks to explore

The aim of the morning session is to prepare you for representing the viewpoint of pedagogy this afternoon. It will be important then that you share your pedagogy viewpoint (e.g. you being the one saying “good idea, (but) I think this raises some ethical issues, namely...”) and your ideas (e.g. “if we secure meaningful consent, then it would be more justified to implement this system”).

It is OK to be incorrect; being listening, comprehensive and indulgent to each other is the keyword for this afternoon. There is no grade, we are all here for the sake of learning unique skills and expressing our views, so let’s make the best we can of this day!

Objective: Using the post-its and the drawboard (physical if in person or the mural platform if online), create a **concept map**, which depicts the core concepts you think are related to 1) grading and assessment; 2) artificial intelligence and computer systems; and 3) artificial intelligence for automating grading and assessment. List these concepts and depict how they relate to other concepts, and what is a good grading, especially within the perspective of your subject - pedagogy. The below structure is there to help you getting started and help checking that you cover it all. It need not be followed “step by step, exhaustively” and you can and are invited to explore on your own. Think of your goal first (being a philosophy representative); the rest is secondary. Follow how your mind works.

Step 1: Relate the key concepts of grading & assessment

First, think for yourself for a few minutes and propose a few items. What type of assessment have you encountered in your life (go deep, to high school and even primary school)? What was it assessing? Was it fair? How could it have been better?

Then, complete your map with the contents that can be found in these resources:

- Read about grading and assessment
 - <https://english.uka.se/about-us/publications/reports--guidelines/reports--guidelines/2017-09-27-fair-examination.html>
 - <https://resilienteducator.com/classroom-resources/grading-vs-assessment-whats-the-difference/>
- Types of assessment
 - <https://www.reading.ac.uk/engageinassessment/different-ways-to-assess/eia-different-assessment-methods.aspx>
 - <https://www.marketing91.com/types-of-assessment/>
 - <https://www.prodigygame.com/main-en/blog/types-of-assessment/>
- What makes a good assessment?
 - <https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/assessment-and-feedback/good-assessment/>
 - <https://www.algonquincollege.com/profres/assessing-students/qualities-of-good-assessment-practices/>
- Issues in assessment
 - <https://www.futurelearn.com/info/courses/introduction-to-learning-and-teaching-in-higher-education/0/steps/26402>



Step 2: Relate the key concepts of artificial Intelligence

Using the post-its and the drawboard, create a concept map based on the core concepts you think are related to artificial intelligence.

First, think for yourself: what is AI? What kind of AI systems do you know/use? How can it be used? How should it be used? How should it not be used?

Then, complete your map with the contents that can be found in these resources:

- Definition and examples (skim through):
 - https://en.wikipedia.org/wiki/Artificial_intelligence
 - <https://www.ibm.com/topics/artificial-intelligence>
 - <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- Ethics of AI:
 - EU Ethical Guidelines: <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>
- The most comprehensive book on AI (check the list of chapters; then pick the one that you see fit)
 - <https://cs.calvin.edu/courses/cs/344/kvlinden/resources/AIMA-3rd-edition.pdf>

Step 3: Integrate the concepts of grading and assessment with artificial intelligence

Using the post-its and the drawboard, **connect the concept map of grading & assessment with that of artificial intelligence**

First, think for yourself: are there some grading/assessment activities that are already automated (e.g. multi-choice questionnaires)? What further automation might be possible? What are the risks and benefits of such automation – for those that make assessments and set grades? How about for those that are assessed/graded? For society more generally?

Then, complete your map with the contents that can be found in these resources:

- Pros & cons of using AI in the classroom:
 - <https://techbaji.com/advantages-disadvantages-artificial-intelligence-education/>
 - <https://livesglobal.com/pros-cons-artificial-intelligence-classroom/>
 - <https://www.robotlab.com/blog/advantages-and-challenges-of-ai-in-education-for-teachers-and-schools>
 - What does the future look like?
 - <https://www.jisc.ac.uk/reports/the-future-of-assessment>
 - Artificial Intelligence in education, UNESCO:
<https://unesdoc.unesco.org/ark:/48223/pf0000366994>
 - <https://blog.eera-ecer.de/artificial-intelligence-in-student-assessment/>
 - Artificial intelligence for education:
<https://www.tandfonline.com/doi/full/10.1080/00131857.2020.1728732>
 - <https://bernardmarr.com/how-is-ai-used-in-education-real-world-examples-of-today-and-a-peek-into-the-future/>
 - <https://www.lexalytics.com/lexablog/ai-in-education-present-future-ethics>
- Here is a list of applications, with often some discussions of benefits, risks and issues
- <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
 - https://searchcio.techtarget.com/podcast/Cognitive-tutor-could-teach-employees-new-skills?_gl=1*15nxh9l*_ga*MTQzNTA4MTU0OC4xNjM5Njk4ODI4*_ga_TQKE4GS5P9*MTYzOTY5ODgyOC4xLjAuMTYzOTY5ODgyOC4w&_ga=2.175863266.1731280675.1639698828-1435081548.1639698828
 - <https://hbr.org/2020/08/what-happens-when-ai-is-used-to-set-grades>
 - <https://copyleaks.com/education/ai-grading>
 - <https://www.matellio.com/blog/ai-grading-system-features-and-cost-of-development/>



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Disciplinary activity, philosophy –tracks to explore

The aim of the morning session is to prepare you for representing the viewpoint of philosophy this afternoon. It will be important then that you share your philosophy viewpoint (e.g. you being the one saying “good idea, (but) I think this raises some ethical issues, namely...”) and your ideas (e.g. “if we secure meaningful consent, then it would be more justified to implement this system”).

It is OK to be incorrect; being listening, comprehensive and indulgent to each other is the keyword for this afternoon. There is no grade, we are all here for the sake of learning unique skills and expressing our views, so let’s make the best we can of this day!

Objective: Using the post-its and the drawboard (physical if in person or the mural platform if online), create a **concept map**, which depicts the core concepts you think are related to 1) grading and assessment; 2) artificial intelligence and computer systems; and 3) artificial intelligence for automating grading and assessment. List these concepts and depict how they relate to other concepts, and what is a good grading, especially within the perspective of your subject - philosophy. The below structure is there to help you getting started and help checking that you cover it all. It need not be followed “step by step, exhaustively” and you can and are invited to explore on your own. Think of your goal first (being a philosophy representative); the rest is secondary. Follow how your mind works.

Step 1: Relate the key concepts of grading & assessment

First, think for yourself for a few minutes and propose a few items. What type of assessment have you encountered in your life (go deep, to high school and even primary school)? What was it assessing? Was it fair? How could it have been better?

Then, complete your map with the contents that can be found in these resources:

- Read about grading and assessment there <https://resilienteducator.com/classroom-resources/grading-vs-assessment-whats-the-difference/>
- <https://qsi.berkeley.edu/qsi-guide-contents/gradingq-intro/before-you-grade/design-assignments/>
- Types of assessment
 - <https://www.marketing91.com/types-of-assessment/>
 - <https://www.prodigygame.com/main-en/blog/types-of-assessment/>
- What makes a good assessment?
 - <https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/assessment-and-feedback/good-assessment/>
 - <https://www.algonquincollege.com/profres/assessing-students/qualities-of-good-assessment-practices/>
- The nature and ethics of grading
 - <https://philosophicaldisquisitions.blogspot.com/2020/02/the-moral-problem-of-grading-extended.html>
 - Brennan and Magness excerpt (see below)



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Step 2: Relate the key concepts of artificial Intelligence

Using the post-its and the drawboard, create a concept map based on the core concepts you think are related to artificial intelligence.

First, think for yourself: what is AI? What kind of AI systems do you know/use? How can it be used? How should it be used? How should it not be used?

Then, complete your map with the contents that can be found in these resources:

- Definition and examples (skim through):
 - https://en.wikipedia.org/wiki/Artificial_intelligence
 - <https://www.ibm.com/topics/artificial-intelligence>
 - <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- Ethics of AI:
 - EU Ethical Guidelines: <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>
 - Stanford Encyclopedia Entry on Ethics of Artificial Intelligence and Robotics (see especially sections 2.1-2.5): <https://plato.stanford.edu/entries/ethics-ai/><https://oxford-universitypressscholarship-com.proxy.ub.umu.se/view/10.1093/oso/9780190905033.001.0001/oso-9780190905033-chapter-9>
- The most comprehensive book on AI (check the list of chapters; then pick the one that you see fit)
 - Ethics of Artificial Intelligence (Ed. Liao, Oxford 2020)
 - <https://oxford-universitypressscholarship-com.proxy.ub.umu.se/view/10.1093/oso/9780190905033.001.0001/oso-9780190905033-chapter-9>

Step 3: Integrate the concepts of grading and assessment with artificial intelligence

Using the post-its and the drawboard, **connect the concept map of grading & assessment with that of artificial intelligence**

First, think for yourself: are there some grading/assessment activities that are already automated (e.g. multi-choice questionnaires)? What further automation might be possible? What are the risks and benefits of such automation – for those that make assessments and set grades? How about for those that are assessed/graded? For society more generally?

Then, complete your map with the contents that can be found in these resources:

- Here is a list of applications, with often some discussions of benefits, risks and issues
- <https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>
- https://searchcio.techtarget.com/podcast/Cognitive-tutor-could-teach-employees-new-skills?_gl=1*15nxh9l*_ga*MTQzNTA4MTU0OC4xNjM5Njk4ODI4*_ga_TQKE4GS5P9*MTYzOTY5ODgyOC4xLjAuMTYzOTY5ODgyOC4w&_ga=2.175863266.1731280675.1639698828-1435081548.1639698828
- <https://hbr.org/2020/08/what-happens-when-ai-is-used-to-set-grades>
- <https://copyleaks.com/education/ai-grading>
- <https://www.matellio.com/blog/ai-grading-system-features-and-cost-of-development/>