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Higher Education AI Policies—A Document Analysis of University Guidelines

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ABSTRACT

Artificial Intelligence (AI) has been highlighted as a potentially disruptive force across several industries and in higher education. Research has suggested that education and upskilling of citizens should adopt a broad approach, not only focusing on experts, for better nationwide AI readiness. This study investigates the content of AI policies in higher education by analysing official documents from Swedish universities. It identifies key themes and patterns, comparing them with related research and international guidelines. Expanding on the results of the study, it develops a dynamic alignment model for higher education AI policy (DAMHEAP) which, grounded in institutional theory, highlights strategic, pedagogical, ethical and legal, operational and adaptive alignments. This model, together with 10 practical recommendations, provides a roadmap for higher education institutions to develop and maintain AI policies that are pedagogically relevant, ethically responsible and adaptive to technological change.

1 | Introduction

In 1955, John McCarthy—often considered the father of Artificial Intelligence (AI)—coined the term together with colleagues Marvin Minsky, Nathaniel Rochester and Claude Shannon when writing 'A proposal for the Dartmouth summer research project on Artificial Intelligence' to the Rockefeller Foundation (Rajaraman 2014). Of course, the 'idea' that later became 'Artificial Intelligence' is older. In 1950, Alan Turing presents the famous 'Turing test', in which the intelligence of a machine is to be measured, in 'Computing Machines and Intelligence in the Mind' (Grzybowski et al. 2024). A couple of years earlier, in 1942, fiction writer Isaac Asimov published 'Runaround', a short story in which the 'Three Laws of Robotics' are introduced (Haenlein and Kaplan 2019). Today, the discussion has, to a large extent, been centred on the topic of generative AI (GAI)—AI techniques that can generate seemingly novel content, such as images and text—which rose to popularity with the release of OpenAI's ChatGPT in late 2022 (Feuerriegel et al. 2024).

AI has been highlighted as a potentially disruptive force across several industries (Rigley et al. 2024) and in higher education (Moorhouse et al. 2023), where needs for risk management strategies for handling the strengths, weaknesses, opportunities and threats of AI in higher education have been actualised (Humble 2024). A potential gap has been observed where industry needs and professional competences do not always align (Rigley et al. 2024). Research has suggested that education and upskilling of citizens should adopt a broad approach, not only focusing on experts, for better nationwide AI readiness (Rigley et al. 2024). Suggestions for what broader and lifelong-learning focused AI courses could include are AI readiness, adaptability, motivation for learning, AI trust and technology understanding (Humble 2023). Further, the use of GAI has been noted to have a significant impact on work and business (Salari et al. 2025). For example, replacing or reducing the needs of employees in certain content creating occupations (Salari et al. 2025). But on the other hand, GAI could also create new job opportunities that, for example, require specialised knowledge related to AI (Salari et al. 2025).

Previous research has stressed the importance for higher education institutions to adapt education and curriculum to align with critical competence needs and professional development regarding AI (Clear et al. 2025). An important part of higher education adaptation to AI is the policy and guidelines they provide to students and teachers. Previous research has examined AI policies for higher education, but these have mainly been focused on the top universities (Moorhouse et al. 2023) and the US (McDonald et al. 2025; Kim and Wu 2024). Although there are examples of AI policy studies in other higher education contexts than the US and top universities, such as Christ-Brendemühl's (2025) study on universities in Germany, it has been noted that there is still a need for further research that explores the topic outside the context of the US (McDonald et al. 2025).

In recent years, more Swedish universities have decided on official policies and guidelines to guide the use of AI (mainly generative) in higher education. These are often viewed as complementary to policies and guidelines provided by national agencies, such as 'Guidelines for generative AI in public administration' (Myndigheten för Digital Förvaltning and In tegritetsskyddsmyndigheten n.d.), and the EU, such as 'the AI Act' (European Commission 2025). However, few studies have investigated this growing body of higher education AI policy documents and compared them to each other, and to other official AI policies and guidelines on the national and international levels.

This study aims to identify themes and patterns in the official AI policies and guidelines for higher education that have been published by Swedish universities so far. On the basis of these findings and a comparison with other AI policies and related research, the study asks the question:

> RQ: *What should an AI policy for higher education contain?*

2 | Background

This section presents a background of related AI guidelines and related research, structured in two sub-headings. In the first sub-heading, related AI guidelines and policies are presented. In the second sub-heading, related research studies are presented. The content of both sub-headings is discussed and compared to the findings of this study in the discussion section.

2.1 | Related AI Guidelines

In August of 2024, the European Commission's Artificial Intelligence Act (the AI Act) came into force (European Commission 2025). In 2 years, August of 2026, the AI Act will be fully applicable, with exceptions of AI literacy obligations and prohibitions becoming applicable in February of 2025, governance obligations and rules for general purpose AI becoming applicable in August of 2025 and an extended transition for rules concerning high-risk AI systems until August of 2027 (European Commission 2025). The AI Act is described as 'the first-ever comprehensive legal framework on AI worldwide' and aims to 'foster trustworthy AI in Europe' (European Commission 2025). The AI Act further describes four levels of risks with AI, which have implications for the rules set upon the AI systems. These levels are:

> Minimal Risk—There are no rules introduced for AI systems that pose no or minimal risk, and this includes the majority of AI systems currently in use in the EU.

> Limited Risk—This mainly concerns AI systems with transparency risks, and these systems, such as chatbots and GAI, have an obligation to clearly label content that has been generated by AI so that humans can make informed decisions.

> High Risk—If serious risks are posed to human health, safety or fundamental rights through the use of an AI system, then the system becomes subject to strict obligations—such as risk assessment, ensure traceability through activity logging, detailed information of purpose for assessment by authorities, human oversight and high level accuracy, security and robustness—before it can be made available.

> Unacceptable Risk—If a clear threat is posed to people's safety, livelihoods, and rights by an AI system, that system is banned. Eight AI-based practices are listed in light of this: (1) manipulation and deception, (2) exploitation of vulnerabilities, (3) social scoring, (4) assessment and prediction of criminal offence risks, (5) creating or expanding databases for facial recognition through untargeted scraping of closed-circuit television (CCTV) or the internet, (6) emotion recognition in education or workplaces, (7) deducing protected characteristics through biometric categorization and (8) remote biometric identification in real time and in publicly accessible spaces for the purpose of law enforcement.
>
> (European Commission 2025)

On the 25th of October 2022, the European Commission (2024) published ethical guidelines on the use of AI in education. The European Commission (2024) states that teachers in primary and secondary education are the primary target for these guidelines and that they require little or no previous experience in digital education. The guidelines document (European Commission 2022) addresses common misconceptions about AI, the ethical requirements and considerations that underpin the guidelines, but also presents practical advice for educators and leaders and discusses competences that may emerge with the use of AI:

> Guiding Questions—It encourages the use of a set of questions when assessing an AI tool for use in

> education. These questions are presented in the guidelines document and cover seven topics: (1) Human agency and oversight, (2) transparency, (3) diversity, non-discrimination and fairness, (4) societal and environmental wellbeing, (5) privacy and data governance, (6) technical robustness and safety and (7) accountability.

> Effective Use—It encourages planning and preparation before implementing AI and data uses in education. An incremental approach is recommended where several levels in education are involved, including students, educators, school management and the institutional level. Further, the guidelines document presents the following steps in planning for effective use: (1) Review current AI systems and data uses, (2) initiate policies and procedures, (3) carry out a pilot of the AI system, (4) collaborate with the AI system provider and (5) monitor the operation of the AI system and evaluate the risk.

> Emerging Competences—It highlights the role teachers and school leaders play for AI to be successfully adapted into education, and the necessary digital competences that will need to be developed in order to enhance teaching, learning and assessment, while still being mindful of both opportunities and challenges. These emerging competences are clustered in six areas: (1) Professional engagement, (2) digital resources, (3) teaching and learning, (4) assessment, (5) empowering learners and (6) facilitating learners' digital competence.

(European Commission 2022)

In the Swedish context, the Agency for Digital Government (Swedish: Myndigheten för digital förvaltning [DIGG]) and the Swedish Authority for Privacy Protection (Swedish: Integritetsskyddsmyndigheten [IMY]) have put together 'Guidelines for generative AI in public administration'. The aim of the guidelines is stated to provide guidance and confidence to regions, public authorities and municipalities in their use of GAI, and to facilitate use that meets business needs. In total, 18 different guidelines are presented across seven different areas.

> Area 1: Management and responsibilities—It encompass guidelines for implementing an AI policy (guideline 1), preparing for AI regulation (guideline 2), and that decisions supported by GAI should have human control (guideline 3).

> Area 2: Data protection and personal data processing (GDPR)—encompasses guidelines for taking the data protection framework as a starting point (guideline 4), using GAI according to data protection law principles (guideline 5), clarifying the division of roles between personal data controller and personal data processor (guideline 6), ensuring that there is a legal basis and other legal support for the use (guideline 7), consider whether automated decision-making and transfers to third countries occur (guideline 8), ensuring individual rights when using GAI (guideline 9), assess the risks of use and ensure appropriate safety (guideline 10), and specifically if use of publicly available and integrated GAI (guideline 11).

> Area 3: Employment law—encompasses the guidelines for analyzing the impact of introducing GAI on the workplace and preparing for the transition (guideline 12).

> Area 4: Acquisition—It encompasses guidelines for making informed decisions about acquiring GAI (guideline 13) and purchasing GAI according to the Swedish Public Procurement Act (guideline 14).

> Area 5: Information security—It encompasses guidelines for ensuring privacy when using GAI (guideline 15) and identifying information security risks in the use of GAI (guideline 16).

> Area 6: Copyright—It encompasses the guidelines for assessing copyright when using GAI (guideline 17).

> Area 7: Ethics—encompasses the guidelines for using GAI in an ethical way (guideline 18).

(Myndigheten för Digital Förvaltning and Integritetsskyddsmyndigheten n.d.)

2.2 | Related Research

It has been highlighted in previous research that there is a potential misalignment between employee skills and industry needs regarding AI (Rigley et al. 2024). Rigley et al. (2024) conducted a systematic review of AI skills in government policies and documents, covering seven different countries. It is reported in the study that the countries focusing on broader and nationwide approaches for educating and upskilling (US and Singapore) correlated to a higher extent with AI readiness than countries focusing on narrower approaches (China, Sweden and Canada) with smaller groups and experts with advanced AI skills and knowledge (Rigley et al. 2024).

Moorhouse et al. (2023) investigated the world's top 50 ranked higher education institutions in their study on GAI guidelines in higher education. At the time, just under half of the included institutions had developed guidelines that were publicly available (Moorhouse et al. 2023). Findings from the study highlight three main areas that were covered in the analysed guidelines: academic integrity, assessment advice, and student communication (Moorhouse et al. 2023). The study suggests that

including GAI as part of the assessment process may be beneficial for higher education institutions, since the technology is already part of both educational and work-related settings (Moorhouse et al. 2023).

In a study by Kim and Wu (2024), emerging AI policies in higher education across the US are investigated. The study identifies both diverse approaches, guidelines, ethics and audiences (Kim and Wu 2024), which could reflect different types of institutional leadership, cultures, initiatives and resources (Kim and Wu 2024). Because of the lack of consistency in the practice of developing AI policies, Kim and Wu (2024) call for the development of AI policies that are multi-disciplinary and consider both the potentials and risks of AI. Further, it is stated that there is a critical need for higher education policy development concerning AI (Kim and Wu 2024).

Another study, providing insights into the development of AI policies in higher education institutions in the US, is presented by McDonald et al. (2025). In the study, it is highlighted that a majority of the included higher education institutions encourage the use of GAI in education (McDonald et al. 2025). Further, a majority of the guidance provided focused on writing tasks, whereas STEM (Science, Technology, Engineering and Mathematics)-related activities, such as coding, were often infrequent or vague when mentioned (McDonald et al. 2025). Ethics related to GAI were also mentioned by more than half of the institutions according to the study (McDonald et al. 2025). Finally, McDonald et al. (2025) highlight the need for future research on AI policies in higher education institutions outside of the US.

In the European context, a study by Christ-Brendemühl (2025) examines GAI guidelines from 67 universities in Germany. The study highlights that a majority of the universities permit, through their guidelines, both teachers and students to use GAI (Christ-Brendemühl 2025). Further, the study notes that included guidelines for GAI in German universities stress the importance of both students and teachers building their AI literacy to prepare for future work and changing demands (Christ-Brendemühl 2025). According to the study, about half of the analysed guidelines for GAI also state that the opportunities outweigh the risks of GAI, which further stresses the potential impact GAI can have on higher education institutions (Christ-Brendemühl 2025).

2.3 | Institutional Theory

To support the understanding of AI policy development in higher education, the lens of institutional theory can be applied. The theory provides a framework for understanding how organisations respond to external expectations and pressures (Lammers and Garcia 2014). Public institutions, such as universities, operate within a complex landscape, where social norms, professional practices, legal requirements and ethical responsibilities influence decision-making (Lammers and Garcia 2014). In the context of this study, some of the influence comes from national regulations, such as guidelines from DIGG and IMY, and from international regulations, such as the AI Act from the European Commission.

According to DiMaggio and Powell's (1983) institutional isomorphism, there are mainly three types of pressures that push organisations towards change and convergence: coercive, normative and mimetic (DiMaggio and Powell 1983). Coercive pressures arise from rules and legalisation, normative pressures arise from professional standards and shared values and mimetic pressures arise when organisations emulate other organisations in times of uncertainty (Martínez-Ferrero and García-Sánchez 2017). The AI Act can be seen as an example of coercive pressure on higher education institutions, whereas commitments to academic integrity and responsible technology use can be seen as examples of normative pressures. Regarding mimetic pressures and uncertainty, the rise of GAI and its potential consequences for higher education institutions can be seen as an example of this.

3 | Method

This study has been conducted as a qualitative document analysis with official AI policies and guidelines, published by Swedish universities, as the main data source. Document analysis can be described as a qualitative method for systematically reviewing and evaluating the content of documents (Kutsyuruba 2023). Although document analysis is often used for triangulation together with other methods, for example, in case studies, it can also be approached as a stand-alone method (Bowen 2009), as has been done in this study. Further details on the process of data collection and data analysis are provided below.

3.1 | Data Collection

Data consist of official AI policies and guidelines from Swedish universities. The collection has been limited to policies and guidelines that are decided by some level of management at the universities and have been recorded and archived. The rationale for this limitation in the collected data is that these management decisions give the policies more weight (compared with, for example, recommendations posted on a university website) and that they are more stable over time (since they have been recorded and archived by the universities).

For the data collection, all Swedish universities (no = 18) and university colleges (no = 12), as listed by the Swedish Higher Education Authority (Universitetskanslersämbetet n.d.), were contacted in February 2025, a total of 30. This was done through an email to the contact persons for the register or archive at the universities. All 30 universities and university colleges answered the email, and a total of nine answered that they had a decided AI policy or guidelines for their institution (six universities and three university colleges). Policies were then accessed either through links or attached documents sent by the university contact persons.

The universities and university colleges that did not have a decided AI policy or guidelines for their institution stated that they were in the process of developing an AI policy or guidelines, that they had plans to do so in the future, or that they for the moment did not have an AI policy or guidelines or had plans for developing one in the future. Further, several of the universities and

university colleges stated that they provide AI recommendations for staff and students on their websites and offer professional development courses for their personnel, regardless of whether they have a decided AI policy or not. A summary of the collected AI policies is provided in Table 1. Looking at the collected AI policies, all of them have a clear focus on GAI.

3.2 | Data Analysis

The collected data were analysed with an inductive thematic analysis, popularised by Braun and Clarke (2006). Thematic analysis is described by Braun and Clarke (2006) as a flexible method for qualitative analysis, meaning that it need not be tied to a specific theoretical or epistemological position. In this study, the analysis was conducted mainly with an inductive approach, meaning that no theoretical framework guided the identification of codes and themes. Instead, frequent, dominant and significant themes were allowed to emerge (inductively) from the data (Thomas 2006). However, in the last step of analysis (further explained below), institutional theory, previous research and related policies are used to deductively develop a conceptual model on the basis of comparison and discussion of the study's results.

The analysis process was conducted in six steps, inspired by the systematic thematic analysis, outlined by Naeem et al. (2023): (1) Transcription, Familiarisation with the Data and Selection of Quotations; (2) Selection of Keywords; (3) Coding; (4) Theme Development; (5) Conceptualisation Through Interpretation of Keywords, Codes and Themes; and (6) Development of Conceptual Model. Conducted steps in the analysis are described in further detail below.

Step 1—In the first step, data familiarisation was reached through reading and re-reading of collected material, while highlighting potential codes and themes.

TABLE 1 | Summary of collected data.

Institution	Document title	Decision level	Identification
Uppsala University (UU)	'Riktlinjer för användning av generativ AI i undervisning och examination' [Guidelines for the use of generative AI in teaching and examination]	Vice Chancellor	UFV 2023/2129
Lund University (LU)	'Policy för användandet av generativa AI-verktyg i kurser på grundnivå och avancerad nivå' [Policy for the use of generative AI tools in first and second cycle courses]	Faculty Board for the Faculty of Social Sciences	U 2023/848
Stockholm University (SU)	'Riktlinjer om examination, plagiat och användning av AI-teknologi' [Guidelines on examination, plagiarism and use of AI technology]	Head of Department of Political Science	SU-320-0016-24
Karlstad University (KAU)	'Generativ AI i utbildning vid Karlstads universitet—vägledning för lärare och studenter' [Generative AI in education at Karlstad University—guidance for teachers and students]	Vice Chancellor	C2024/131
Linköping University (LiU)	'Beslut om vägledning för lärares och studenters användning av generativ AI i utbildning vid Linköpings universitet' [Decision on guidance for teachers' and students' use of generative AI in education at Linköping University]	Education Committee	LiU-2023-02660
Malmö University (MaU)	'Rättssäkra examinationer och användandet av generativ artificiell intelligens vid Malmö universitet' [Legally secure examinations and the use of generative artificial intelligence at Malmö University]	Vice Chancellor	MAU 2024/2881
The Swedish School of Sport and Health Sciences (GIH)	'Riktlinjer för användning av generativ AI—Inom utbildning för lärare och studenter vid GIH' [Guidelines for the use of generative AI—In education for teachers and students at GIH]	Vice Chancellor	GIH 2024/538
Dalarna University (DU)	'Policy för användning av generativ AI (GAI)' [Policy on the use of Generative AI (GAI)]	Vice Chancellor	C 2024/1319
University West (HV)	'Riktlinje för användande av generativ AI i utbildningen' [Guideline for the use of generative AI in education]	Research and Education Committee	HV 2023/792

Step 2—In the second step, the collected material was closely examined by identifying recurring patterns in the material, which are noted as keywords.

Step 3—In the third step, highlights and keywords from steps 1 and 2 were compared to the collected material and transformed into codes, which were collected in a spreadsheet document.

Step 4—In the fourth step, codes in the spreadsheet document are re-organised to create meaningful groups, themes, which highlight patterns and relationships in the collected material. A total of 32 themes are created.

Step 5—In the fifth step, the created themes in the previous step are re-organised to create new, meaningful and coherent themes and patterns. This involves creating a relationship hierarchy between the themes, which could be described as themes (no = 15), super-themes (no = 17) and newly created categories (no = 4). These themes, super-themes, categories and relationships are summarised in Figure 1.

Step 6—In the sixth step, findings from the previous steps in the analysis are compared to and discussed in relation to previous research, related policies and institutional theory in order to develop a conceptual model of the findings. This part of the analysis is presented in the discussion section of the study.

4 | Results

This section presents the results of the study. These are organised according to categories and themes, created during the analysis of collected data. Section 4.1 presents identified themes and super-themes related to the category 'Background'. Section 4.2 presents identified themes and super-themes related to the category 'Responsibilities'. Section 4.3 presents themes and super-themes related to the category 'Educational considerations'. Section 4.4 presents themes and super-themes related to the category 'Ethical and legal considerations'. Table 2 below displays a summary of the categories and associated super-themes presented in this section, parenthesis displays the number of AI policies (a total of nine) that support the category and super-theme. All extractions and quotes

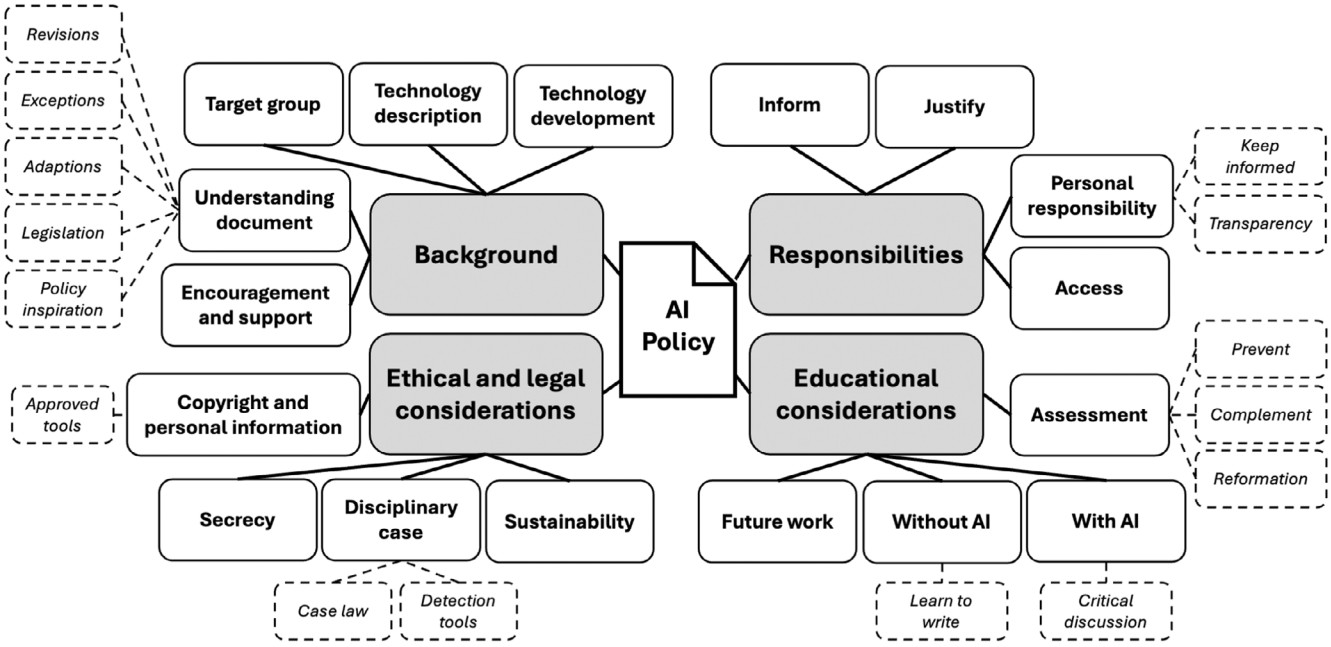

FIGURE 1 | Coding tree from the systematic thematic analysis.

TABLE 2 | Summary of categories and super-themes.

Background (9/9)	Responsibilities (9/9)	Educational considerations (8/9)	Ethical and legal considerations (9/9)
Technology development (4/9)	Inform (8/9)	Assessment (7/9)	Disciplinary case (7/9)
Technology description (6/9)	Justify (3/9)	Without AI (6/9)	Copyright and personal information (8/9)
Understanding document (8/9)	Access (6/9)	With AI (5/9)	Secrecy (4/9)
Target group (6/9)	Personal responsibility (8/9)	Future work (2/9)	Sustainability (1/9)
Encouragement and support (7/9)			

presented in this section have been translated from Swedish to English, without changing the underlying meaning of the text.

4.1 | Policy Backgrounds

The category 'Background' consists of five main themes (super-themes). These are: 'Technology description', 'Technology development', 'Understanding document', 'Target group' and 'Encouragement and support'. The main theme 'Technology description' encompasses descriptions of technologies in the university's AI policies. The policies that included this had a clear focus on describing generative AI, often with a summarised description, emphasising the output of the technology. For example, 'Generative AI is a type of Artificial Intelligence that can create new works from similar data it has been trained on' (HV).

'Technology development' is a main theme in the collected material that emphasises the speed at which technology is developing. This is often highlighted as a reason why the policy is needed and why students and personnel need to learn about generative AI. One of the policies also notes that because the technology is developing so rapidly, the policies should be reviewed at least once a year: 'It is important to understand that the development of technology is very fast and the guidelines should be reviewed at least once a year, at least for the next 5 years' (GIH).

The main theme 'Understanding document' contains extracts from the collected material that specify for the readers how the policies should be understood. For example, highlighting how revisions to the policies should be handled, who can decide on exceptions or adaptations of the policies, clarifying how the policies relate to other types of legislation and if there was any inspiration for the policy development.

The main theme 'Target group' specifies who the policies are intended for. All collected material mentions both students and personnel at the institutions as relevant people for the policies. For example, 'The guidelines are aimed at teachers, students and doctoral students and provide an overall framework for what constitutes reasonable, recommended and permitted use of generative AI in teaching at all levels' (UU).

The main theme 'Encouragement and support' states general standpoints towards the technology and clarifies where students and personnel can get help and support. Many of the collected policies explicitly encourage students and personnel to use and explore the technology. For example, 'All teachers, administrative staff and departmental management should try a GAI tool to understand how they work and how they can influence teaching and assessment, and what decisions need to be made to ensure the quality of education and provide a good and fair learning environment for students' (LU).

4.2 | Responsibilities

The category 'Responsibilities' consists of four main themes (super-themes). These are: 'Inform', 'Justify', 'Access' and 'Personal responsibility'. The main theme 'Inform' specifies how the use of, or limitations in the use of, AI should be communicated to students. For example, 'At the start of the course, you as a teacher/course coordinator/examiner should clearly inform orally and in writing whether it is permitted or not to use generative AI. Feel free to give examples of what is permitted and what is not' (LIU).

The main theme 'Justify' encompasses extracts from the collected material, which states, for example, that restrictions in the use of AI should be motivated by the teachers/course coordinator/examiner. For example, 'The restriction must be justified on the basis of learning objectives, the nature of the task or pedagogical considerations' (UU). However, it could also contain justifications for the use or inclusion of AI in teaching and examination. For example, 'Define what generative AI means in your context and what your goal is in using it in teaching' (GIH).

The main theme 'Access' in the collected material stipulates that if an AI tool is recommended to the students, or required for teaching, learning and/or examination in the course, then the students also need access to the tool and should be informed about this. For example, 'If any GAI tools are recommended for learning activities or assessment, all students must have equal access to them. If this is associated with a cost, this should be clearly stated in the course information communicated at the beginning of the course' (LU).

'Personal responsibility' contains clarifications in the collected material about the responsibilities individuals have regarding the use and information of AI at the institutions, such as transparency and keeping informed. For example, it is stated that 'Students planning to use generative AI in the context of education or examinations are responsible for keeping themselves informed of both central and any local guidelines' (UU), and 'If the examination allows generative AI to be used, the instructions should make it clear that it is good academic practice to report how generative AI has been used and, where appropriate, report which parts of the examination have been generated by AI' (MAU).

4.3 | Educational Considerations

The category 'Educational considerations' consists of four main themes (super-themes). These are: 'Assessment', 'Without AI', 'With AI' and 'Future work'. The main theme 'Assessment' contains instructions in the collected policies for how assessment should be handled at the institutions. For example, 'Teachers need to be able to confirm that students have achieved the learning outcomes. If the use of GAI tools would make this difficult or impossible with the current assessment, the assessment conditions (examination design and implementation) need to be reviewed to ensure the reliability of the assessment' (LU). The main theme further highlights the importance of preventing inappropriate use or misuse of AI, but also to consider alternatives and complements. For example, 'Ensure that the course is examined in a legally secure manner. Oral and classroom examinations can be alternatives/complements to home exams/assignments. Review and revise the syllabus if necessary' (KAU). It is also highlighted that

some parts of the assessment might need to be reformed in the future because of existing technology. For example, 'While we can replace unsupervised home exams on most undergraduate courses, essay writing poses a particular challenge. In the long term, we may need to reform how we examine and assess essays' (SU).

The two main themes 'Without AI' and 'With AI' highlight examples from the collected policies for when and when not AI should be used. It is highlighted that 'It is not allowed to use GAI tools to produce text or other material for examination/assessment of study performance (except in cases where it is explicitly included in the learning objectives to use the tools)' (LU), but that 'GAI tools [are] allowed to support learning' (LU). None of the documents make a statement of an acceptable or unacceptable percentage of AI use. A rationale for not allowing AI in some part of higher education is that 'It is important that students at the undergraduate level still have the opportunity to practice academic writing and that interactive elements that promote deep learning are included' (SU). It is also highlighted that even if AI is to be used, critical discussions are important. For example, 'Discuss that AI tools can have their shortcomings, such as generating inaccurate information or reflecting biases in the material they generate' (GIH).

The main theme 'Future work' highlights examples in the collected policies where AI is addressed in relation to future work or demands for future competencies. One of the policies encourages personnel to apply AI in their teaching to prepare students for the future, 'Generative AI is an enabling technology that can be used in different ways in education. Teachers are therefore encouraged to use generative AI in their teaching to prepare students for future careers' (LIU). Another of the policies states that the future with AI is a reality and that they (the university) have a responsibility to prepare students, 'As generative AI becomes a natural part of working life in many fields, we have a responsibility to prepare our students for this reality by integrating GAI and its applications into relevant courses' (DU).

4.4 | Ethical and Legal Considerations

The category 'Ethical and legal considerations' consists of four main themes (super-themes). These are: 'Disciplinary case', 'Copyright and personal information', 'Secrecy' and 'Sustainability'.

The main theme 'Disciplinary case' addresses examples in the policies of how to handle misuse and suspicion of misuse of AI, as well as statements regarding case law and AI detection tools. For example, it is stated that 'If it is suspected that a student has used an AI chatbot in an unauthorized way in connection with an examination, the offense must be investigated, and if there is a well-founded suspicion of cheating, it is reported in the same way as other cheating cases' (SU). This is required in the other documents as well. Disciplinary actions mentioned in the documents for cases where AI misuse has been decided are warnings and suspension, which is the same as with other forms of cheating. Regarding case law, it is stated that 'It follows from Swedish case law that [...] the student is 'otherwise trying to mislead' if the student submits a product at the examination under the pretext that it is the result of the student's independent effort if the student has in fact taken the help of generative AI' (MAU). Regarding AI detection tools, it is, for example, stated that 'There is no reliable tool yet to determine whether a text is AI-generated or human-written, and an investigation into misleading cannot be based on it' (HV).

'Copyright and personal information' is a main theme that encompasses extracts from the collected policies that clarifies AI use and restriction in AI use related to copyright law and protection of personal information. Policies state that personal information and/or copyright protected material should not be disclosed in the AI systems, especially if it can be used for training the system. For example, 'Employees who choose to use GAI shall do so in a responsible and ethical manner, taking particular care that no sensitive personal data is shared, in accordance with the General Data Protection Regulation' (DU). The theme further address examples in the collected material where special and approved AI systems are mentioned. For example, 'Sensitive personal data may only be transferred to a generative AI system approved by the University' (UU).

The last two main themes, 'Secrecy' and 'Sustainability', encompass aspects of the collected policies where AI is addressed in relation to information that is covered by secrecy, is considered confidential, or relates to sustainability. Regarding the secrecy, it is stated that 'Any data fed into a generative AI acts as an additional knowledge base that the service learns from. This means that the data entered will be stored at the companies and the individual who entered the information no longer has control over its further use. Therefore, the use of confidential material such as patient data, personal data or research data must be avoided when supported by generative AI' (GIH). Sustainability is not mentioned to a large extent in the collected material. However, it is addressed as a potential ethical dilemma that needs to be considered. For example, 'Other dilemmas concern liability for copyrighted material and sustainability aspects' (HV).

5 | Discussion

In this section, findings from the study are discussed in relation to prior research (Section 5.1), compared to other local and international AI guidelines (Section 5.2), and interpreted through the lens of institutional theory (Section 5.3). These discussions are then used as the basis for developing and presenting a conceptual model (Section 5.4) and design recommendations for future higher education AI policies (Section 5.5). Lastly, limitations and future research are addressed in Section 5.6.

5.1 | Comparison to Related Research

Previous research on AI policies in higher education has noted that three common areas for guidelines concern academic integrity, assessment and student communication (Moorhouse et al. 2023). These three areas are also present in the findings of this study. Academic integrity is highlighted as part of the category 'Ethical and legal considerations', where super-themes, disciplinary case, secrecy, copyright and personal information are addressed. Assessment is highlighted

as part of the category 'Educational considerations', where assessment is addressed in relation to education both with and without AI. Student communication is highlighted as part of the category 'Responsibilities', where it is noted that students should receive both information and justification for the use and restrictions of AI, as well as how to get access to the tools required for course activities.

Similar to what has been highlighted in the studies by McDonald et al. (2025) and Christ-Brendemühl (2025), many of the policies analysed in this study encourage student and personnel use of AI. This is, for example, motivated by statements that knowledge about AI is important for future work and, in some instances, that universities have a responsibility towards their students to prepare them for this future. A notion also emphasised by Christ-Brendemühl (2025). McDonald et al. (2025) further note that it is more common for AI guidelines to focus on writing tasks in education, such as thesis work, whereas STEM practices, such as coding, are given less space. This is consistent with the findings in this study and should not be considered surprising. Most higher education courses include some type of text production, such as thesis work or essay writing, whereas not all include STEM activities, such as coding. However, given the growing importance of AI and digital technologies in modern society, maybe more education programmes should include STEM activities?

In the study by Rigley et al. (2024), it is noted that a broader and nationwide approach towards education and upskilling of AI correlates to a larger extent with AI readiness, compared to a narrower and more expert-focused approach. Sweden is mentioned in the study by Rigley et al. (2024) as one of the countries that have focused on the narrow approach to AI. However, findings in this study indicate that Sweden, or at least the Swedish universities included in this study, has set out a path towards a broader approach of AI readiness, including all, or most, students and personnel.

Kim and Wu (2024) also stress the importance of higher education institutions developing AI policies that are multi-disciplinary and consider both potentials and risks of AI. Regarding AI potentials and risks, findings in this study show examples of this in the analysed policies. Potentials are often highlighted in relation to future work and supported learning, whereas risks are considered in relation to ethical and legal considerations. However, the multi-disciplinary approach is less present in the analysed material. As previously noted by McDonald et al. (2025), AI guidelines tend to focus more on writing tasks. Although this might be considered reasonable, it is also at risk of missing other important and relevant practices that should be considered in relation to AI in higher education.

5.2 | Comparison to Related Guidelines

Regarding other related AI guidelines, on the national and international levels, a high level of consensus can be noted in relation to the analysed material. This is not that surprising since higher education institutions are often part of the public sector and abide by national and international legislation and recommendations. The European Commission (2022, 2024) ethical guidelines for the use of AI in education are primarily targeted towards primary and secondary education. However, several similarities can be observed in relation to the AI policies analysed in this study. For example, the guidelines from the European Commission (2022, 2024) highlight guiding questions that address privacy and data governance and stress the importance of considering both opportunities and challenges in enhancing teaching, learning and assessment with AI. These are topics also addressed in the analysed material of this study and highlighted in the identified themes and super-themes.

The guidelines provided in the Swedish context by the Agency for Digital Government [Swedish: Myndigheten för digital förvaltning (DIGG)] and the Swedish Authority for Privacy Protection [Swedish: Integritetsskyddsmyndigheten (IMY)] also show several similarities with the ones addressed in the material analysed for this study. The guidelines emphasise, for example, the importance of management and responsibilities, data protection and personal data, information security, copyright and ethics. These can be related to the themes and categories identified in this study, such as 'Responsibilities' and 'Ethical and legal considerations'. However, although the guidelines provided by the Swedish authorities place more emphasis on the acquisition and implementation of AI systems, the AI policies analysed in this study focus more on education and assessment, which, of course, reflects the organisations' different focus areas when it comes to AI.

One interesting aspect of related AI policies that is not addressed to a large extent in the analysed material is the different risk levels of AI, highlighted in the European Commission's (2025) AI Act. Many of the higher education AI policies analysed in this study address or discuss potential risks or challenges with AI. However, none of them present a risk level analysis of AI tools as detailed as it is described in the AI Act. It should be mentioned that it is possible that some of the universities included in this study have conducted risk assessments similar to the one mentioned in the AI Act but have opted not to include it in the official AI policy. Still, a categorisation of how the universities view the risks of different AI tools or different types of AI tools could be a valuable asset for personnel in their decision-making of what tools to use and include in higher education teaching.

5.3 | Interpreting Through the Lens of Institutional Theory

The findings of the study can also be understood through the lens of institutional theory, which provides further understanding of how higher education institutions respond to external expectations and pressures in the development of AI policies. As noted in the background section, institutional theory provides three primary pressures for understanding organisational similarity: coercive pressures, normative pressures, and mimetic pressures (DiMaggio and Powell 1983; Martínez-Ferrero and García-Sánchez 2017).

In the results of this study, evidence of coercive pressures can be found in the widespread alignment of university policies towards national and international regulations. For example,

references to the General Data Protection Regulation (GDPR) and alignment with guidelines from DIGG, IMY and the European Commission are found in the analysed documents. These references and alignments suggest that legal and regulatory frameworks have played an important role in shaping institutional responses (in the form of policies) to AI, particularly in the areas of data protection, copyright and ethical use.

Evidence of normative pressures can also be found through the emphasis on academic integrity, transparency and responsive use of AI tools. These values can be related to embedded professional norms in higher education and are reflected in the documents' focus on informing students, justifying restrictions and encouraging ethical reflections. The inclusion of guidance on how to communicate AI-related expectations to students and emphasis on personal responsibility further illustrate how universities are responding to shared professional standards.

Lastly, evidence of mimetic pressures can be found in the similarities in structure and content across the analysed policy documents. For example, several of the policies include sections about assessment, responsibilities and legal considerations. Many of the policies also adopt similar language and content when describing generative AI and its implications. This convergence may reflect a tendency from the institutions to emulate other institutions in a time of uncertainty about how to best manage the educational and ethical challenges posed by AI technologies.

5.4 | A Dynamic Alignment Model for Higher Education AI Policy

To address the challenges and opportunities presented by AI in higher education, this study proposes a new conceptual model: the Dynamic Alignment Model for Higher Education AI Policy (DAMHEAP). This model is designed to guide institutions in developing AI policies that are grounded in ethical and legal regulations, while still being pedagogically relevant, contextually adaptive and strategically aligned with broader societal and technical developments. The model emerges from the intersection of three perspectives in this study:

1. Empirical findings from the included Swedish university AI policies, which reveal recurring themes concerning education, ethics, responsibilities and institutional positioning.
2. Comparative insights from national and international guidelines and research, which highlight both convergence (e.g., academic integrity and data protection) and divergence (e.g., risk classification and disciplinary breadth).
3. Institutional theory, which explains how universities respond to pressures in their shaping of AI policies, such as coercive pressures, normative pressures and mimetic pressures.

Rather than presenting a static checklist, this model emphasises alignment across five dynamic dimensions that continuously evolve in response to internal and external change:

1. Strategic Alignment: Policies must align with institutional missions, national strategies and international frameworks (such as the AI Act, GDPR and so forth). This includes articulating the purpose of the AI adoption, its role for future readiness, and its fit within the broader goals for digitalisation in the organisation.
2. Pedagogical Alignment: AI policies should support constructive alignment between learning outcomes, teaching methods and assessment strategies. This includes clear guidance on when and how AI can be used to enhance learning, and when its use may undermine educational integrity.
3. Ethical and Legal Alignment: Institutions must ensure that AI use complies with legal obligations and ethical standards. This includes data protection, copyright, transparency, fairness and practices for handling misuse and uncertainty (such as unreliable AI detection tools).
4. Operational Alignment: Policies must be implemented and supported by infrastructure, training and access. This includes ensuring that students and staff have equitable access to AI tools and that responsibilities for communication, justification and oversight are clearly defined.
5. Adaptive Alignment: Given the rapid development of AI technologies, policies must be considered 'living' documents. Higher education institutions should establish practices for regular review, stakeholder feedback, and responsiveness to emerging risks and opportunities. This includes integrating risk analysis frameworks and scenario planning.

The Dynamic Alignments Model for Higher Education AI Policy (DAMHEAP) can be visualised as a rotating wheel (Figure 2). The institutional AI policy represents the centre of the wheel, whereas the five alignments constitute the spokes, which must

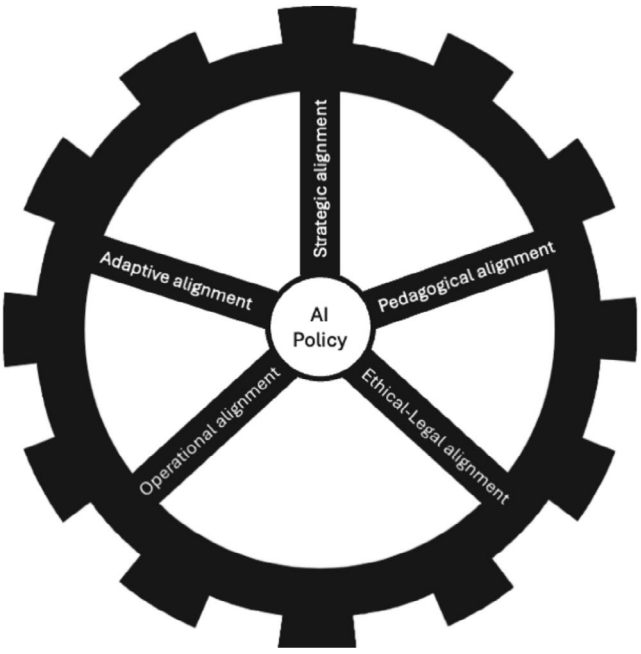

FIGURE 2 | Dynamic alignments model for higher education AI policy.

remain balanced and responsive as external and internal conditions shift. Just as misalignment in the spokes can destabilise the wheel, so can imbalance and lack of responsiveness in policy alignments jeopardise the effectiveness and legitimacy of the AI policy.

5.5 | Recommendations for Policy Design

Building on the DAMHEAP, presented in the previous section, this section provides recommendations for designing AI policies in higher education that are mindful of both pedagogical concerns and institutional requirements. The aim is to provide recommendations that are strategically aligned with institutional goals, pedagogically relevant and adaptive to future developments. The recommendations are presented below according to the facets of the DAMHEAP:

Strategic Alignment

1. Integrate AI policy with institutional strategy: Ensure that AI policy development is aligned with broader institutional goals, for example, digital transformation, pedagogical innovation and workforce readiness.
2. Reference national and international frameworks: Connect institutional policies to international and national guidelines, such as the AI Act and GDPR.

Pedagogical Alignment

3. Support constructive alignment in teaching and assessment: Provide guidance on how AI tools can be used to support learning outcomes and when their use is not appropriate.
4. Encourage discipline-specific adaptations: Highlight that AI use can vary across different disciplines. Policies should allow flexibility to adapt AI use and integration to fit disciplinary norms and pedagogy.

Ethical and Legal Alignment

5. Establish clear boundaries for ethical AI use: Define what is considered acceptable and unacceptable AI use, for example, regarding copyright, plagiarism and data privacy.
6. Include practices for handling misuse: Develop strategies for investigating and responding to suspected AI misuse, being mindful of the limitations of AI detection tools.

Operational Alignment

7. Ensure equitable access to AI tools: If AI tools are recommended or required, for example, in courses, institutions should ensure that all students have access to relevant tools, and that potential costs are clearly communicated beforehand.
8. Clarify roles and responsibilities: Define who is responsible for communicating AI-related topics and expectations within the organisation, for example, updating policy content, maintaining oversight and so forth.

Adaptive Alignment

9. Treat policies as living documents: Establish practices for regular review and revision of AI policies, which could include responsiveness to new technological developments and feedback from stakeholders.
10. Incorporate risk analysis frameworks: Include structured approaches to evaluating AI risks, such as SWOT analysis and risk management strategies (Humble 2024).

5.6 | Limitations and Future Research

As previously highlighted by McDonald et al. (2025), there is a need for further research on AI policies in higher education outside of the US; this study can be viewed as an answer to that call. Still, there are limitations in this study that should be noted. First, this study includes policies from nine Swedish universities, which are all that have an official AI policy so far. This could be considered a low number compared to the study by Moorhouse et al. (2023), which investigated the world's top 50 ranked higher education institutions, or the study by Christ-Brendemühl (2025), which examined 67 universities in Germany. However, this study also includes comparisons to related research and other national and international AI policies, which complements the analysis of the Swedish AI policies for higher education. Still, more universities are in the process of developing their own AI policies (both in Sweden and other countries), and more legislation (local and international) is bound to be developed with the fast-developing speed of modern AI technologies. Studying this is a moving target, but an important endeavour for future research.

6 | Conclusion

This study set out to answer the question: What should an AI policy for higher education contain? Through a systematic thematic analysis of AI policies from Swedish universities, the study has identified four core categories of content in the analysed policies: (1) background content, (2) clarifications of responsibilities, (3) educational considerations and (4) ethical and legal considerations. Building on these findings—and a comparison with institutional theory and related research and guidelines—the DAMHEAP is developed. The DAMHEAP model emphasises alignment across five domains in AI policy work: strategic alignment, pedagogical alignment, ethical and legal alignment, operational alignment and adaptive alignment. This allows for a dynamic approach to policy development that enables institutions to respond to both internal needs, such as pedagogy, and external pressures, such as national and international requirements and guidelines.

The theoretical contribution of the study lies in advancing institutional theory by applying core concepts—coercive pressures, normative pressures and mimetic pressures—in the context of AI

policy development in higher education and developing a conceptual model. The DAMHEAP translates the pressures from institutional theory into actionable policy dimensions and, by doing so, bridges theory and practice. Practically, the study provides 10 actionable recommendations for AI policy design, which are grounded in the conceptual model DAMHEAP. These recommendations support institutions to develop policies that are pedagogically relevant, ethically responsible, adaptive to technological change and legally compliant. The recommendations also highlight the importance of continuous policy revision, stakeholder engagement and equitable access to relevant AI tools.

As AI technologies continue to evolve, higher education institutions should adopt a proactive approach to policy development. This study offers a roadmap for that work, ensuring that AI integration in higher education is not only innovative but also responsible, adaptive and aligned with pedagogical and societal values.

Conflicts of Interest

The author declares no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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