Graduation Thesis Requirements and Procedure for Defence in the Institute of Education

I. Graduation thesis requirements

- 1. The bachelor's thesis or master's thesis (hereinafter referred to as the graduation thesis) is a pedagogical research paper of empirical nature that meets the requirements of an academic paper (see Appendix 1).
- 2. The graduation thesis may also take the form of an article classified under categories 1.1, 1.2, or 3.1, according to the Estonian Research Information System classification scheme.
 - A summary in Estonian (6,000–9,000 characters, including spaces) that reflects all parts of the thesis must accompany the foreign-language article.
- 3. The objective of the graduation thesis is to enable students to find a research-based solution to a problem related to learning, teaching or subject content, by providing them with skills of independent research.
- 4. The graduation thesis may have one or multiple authors. The authors of a multi-author thesis can also be students enrolled in different curricula at the same academic level. In the case of multi-author theses, the authors must specify their individual original contributions in the authorship confirmation. A multi-author thesis must demonstrate a greater workload, such as a bigger dataset, a more complex study design, and/or more advanced data analysis.

The following requirements are stated in singular form but apply to theses with both single or multiple authors and one or multiple supervisors.

II Topic and supervisor

- 5. The student must choose a supervisor and inform the academic affairs specialist of this no later than May 31 of the academic year preceding the defence. The supervisor must be a person who has at least a master's degree or an equivalent level of education. In justified cases, an outstanding practitioner in their field who does not have a master's degree or an equivalent may be appointed as the supervisor. If the supervisor is not affiliated with the university by an employment contract, a primary supervisor must be appointed from among the employees of the Institute of Education. If the supervisor is from another field of the university, a primary supervisor will be appointed from among the employees of the Institute of Education (except for the Curriculum of Teacher Education if the student defends their thesis with a subject code from another field and the supervisor is affiliated with the university by an employment contract). In the latter case, the programme director decides on the appointment of the primary supervisor. If necessary, the latter will be appointed by a decision of the government of the Institute of Education.
- 6. The student, in collaboration with their supervisor, defines the topic and prepares a

project in compliance with the requirements (see Appendix 2).

The project, signed digitally by the author(s) and supervisor(s), must be submitted to the academic affairs specialist by 31 October or 31 May (no later than 5:00 PM) in the semester preceding the thesis defence. For the master's programme in Special Education and Speech Therapy, the project can only be submitted by 31 October. If a student enrolled in an Estonian-language curriculum wishes to write and/or defend their thesis in a language other than Estonian, they must provide justification for this in their project.

- 7. If the project does not meet the requirements, the student will be asked to improve it and/or find a co-supervisor. The graduation thesis project must be either approved or rejected by the programme director by 30 November or 15 June at the latest, involving experts in the field if necessary. If the authors are from different curricula, the project must be coordinated and approved or rejected by the programme directors of the respective curricula. They will also decide which defence committee within the Institute of Education the thesis will be referred to.
- 8. The programme directors submit the supervisor(s) of the thesis for approval to the director of studies no later than 1 December or 16 June. The basis for confirming the supervisor is a thesis project that complies with the requirements. The supervisors of theses are approved by an order of the head of the institute no later than six months before the anticipated defence of the thesis.
- 9. The supervisor is responsible for the following:
 - a) assisting the student in selecting the topic of the thesis and guiding them through all stages of the thesis process (approximately 30 hours for a bachelor's thesis and 40 hours for a master's thesis);
 - b) explaining the timeline of the thesis and its requirements;
 - assigning the scientific field (CERCS) for the master's thesis and ensuring its inclusion in the thesis project (the list for the field of social sciences can be found on the intranet: https://wiki.ut.ee/display/ois/CERCS+teaduseriala);
 - d) conducting a plagiarism check using the plagiarism detection system to verify the originality of the thesis and sending the brief report generated by the system, along with the supervisor's interpretation, to the academic affairs specialist no later than five days before the defence;
 - e) evaluating the compliance of the thesis with the graduation thesis requirements and giving the consent for the thesis to be defended if the requirements are met, confirming this with their digital signature;
 - f) sending the recommended grade in a separate email to the academic affairs specialist no later than the day before the defence.

III Formation of the defence committee

10. The members of the defence committee are appointed based on the proposal of the programme director. The defence committee consists of at least three members. The committee includes academic staff, including doctoral students. In the case of awarding a qualification, professional organisations have the right to send their representative to the committee. The committee is eligible for evaluation if more than half of its members are present.

- 11. When a qualification is awarded upon the completion of the curriculum, the composition of the thesis defence committee is coordinated with the professional organisation granting the qualification. In the case of awarding a teaching qualification, coordination is carried out in cooperation with the Pedagogicum. For other professional organisations, the coordination of the defence committees is arranged by the Institute of Education.
- 12. The defence committee is formed by October 15th of each academic year. The programme director makes the proposal for the composition of the defence committee. Changes to the committee composition and defence date may be made within one academic year if necessary. The committee is confirmed by the order of the head of the institute no later than January 10th if the defence takes place in winter, and no later than May 15th if the defence takes place in spring.

IV. Submission of the graduation thesis and referral for defence

- 13. The graduation thesis must be submitted to the academic affairs specialist no later than 10 working days before the defence in electronic format (as a PDF file), digitally signed by both the author and the supervisor. As an exception, if digital signing is not possible, the thesis may be submitted and signed on paper. For a bachelor's thesis, the file name format should be: last name_first name_ba.pdf, and for a master's thesis: last name_first name_ma.pdf
- 14. As part of the thesis, the author submits a simple licence in the same file. The licence does not include a page number and is not given in the table of contents. There are three types of simple licences, and their forms are available on the institute's website: https://haridus.ut.ee/et/sisu/loputoode-nouded.
- 15. The prerequisite for allowing the thesis to be defended is the completion of all courses in the curriculum.
- 16. A reviewer can be a competent person in the field who has at least the educational level corresponding to the work being reviewed. If a suitable reviewer cannot be found among the staff of the Institute of Education, a reviewer is sought from outside the institute or outside the university.
- 17. The supervisor is responsible for finding a reviewer and making the agreement for the review. The supervisor submits the reviewer's name to the academic affairs specialist. The academic affairs specialist coordinates the reviewers with the programme directors and subsequently forwards the information to the chairperson of the defence committee.
- 18. The thesis is sent to the reviewer by the academic affairs specialist at least 7 days before the defence. Along with the thesis, a review form with the assessment criteria (see Appendix 3) is also sent.
- 19. The reviewer submits the thesis review, including the recommended grade, to the academic affairs specialist via email at least two days before the defence. The academic affairs specialist then forwards the review to the student no earlier than two days before the defence.

20. The author of the thesis has the right to withdraw their thesis no later than one day before the start of the thesis defence for the respective curriculum. Corrections to the thesis (such as typos, citation errors, etc.) can be made up until the thesis is submitted for defence. In exceptional cases, corrections that prevent potential significant harm can be made after submission upon the recommendation of the defence committee.

IV Procedure for defence and assessment

- 21. The graduation thesis can be defended twice a year: in January and in May-June.
- 22. The duration of the defence is up to 30 minutes in the case of a bachelor's and up to 45 minutes in the case of a master's thesis.
- 23. The defence of the thesis can only take place in the physical presence of the defender. However, the chairperson of the defence committee may, upon a justified request, allow the defence to be conducted via real-time, two-way communication with audio and video capabilities. The reviewer participates in the defence unless they are unable to do so for a valid reason. If the reviewer cannot participate in the defence, their responsibilities are carried out by a member of the defence committee.
- 24. The defence of the graduation thesis takes place in the form of a public academic debate in the following stages:
 - a) an overview of the thesis by the student (up to 7 minutes in the case of a bachelor's, and up to 12 minutes in the case of a master's thesis), where the student gives an overview of the main parts of the thesis (research problem, objective, research questions, method and results);
 - b) an academic debate between the reviewer and the student;
 - c) a public discussion and questions to the student;
 - d) closing remarks by the student (optional).
- 25. The thesis is evaluated by the defence committee, in which the reviewer and the supervisor also participate with advisory voting rights. If the supervisor is a member of the defence committee, they do not participate in the assessment of the thesis that they supervised.
- 26. The assessment of the thesis (including a thesis in the form of an article) is based on the achievement of the desired learning outcomes set out in the assessment criteria (see Appendix 4). To receive a positive result, the thesis must meet at least the minimum level of all required learning outcomes. The final grade is determined by consensus and is composed of the grades given to the thesis and defence by the committee members as well as the recommended grades from the reviewer and supervisor.
- 27. If the defence committee determines that the thesis and defence do not meet the required standard, the thesis will be assessed as 'insufficient'. In this case, a resubmission for defence is possible once.
- 28. The second defence of the graduation thesis must take place within one year from the end of the semester in which the first defence occurred. For the second

defence, the thesis must be revised or rewritten according to the assessment criteria. A second defence of the same thesis is not allowed if the student has received a negative grade due to academic plagiarism.

- 29. The grades of the theses are announced immediately after the minutes of the defence have been signed, but no later than within one workday after the defence.
- 30. The results of the defence can be contested in accordance with the procedure established in section 158 of the University of Tartu Study Regulations.

Appendix 1. Guidelines for Writing and Formatting the Thesis

1. Structure and main components of the thesis

Formatting of the thesis is based on APA (*American Psychological Association*) publication guidelines.

1.1. Typically, the thesis follows this structure:

- Title page (page 1, but no page number on the title page). See the format of the title page at the end of the requirements.
- Abstract (page 2) A summary in Estonian and foreign language
- Table of contents
- Main text (beginning on a new page):
- Introduction
- Theoretical overview
- Method
- Results
- Discussion
- Acknowledgments
- Author's declaration
- List of references (beginning on a new page)
- Appendices (beginning on a new page; each appendix on a new page)

Abstract. The abstract provides a concise overview of the thesis, limited to 120 words. It includes the title of the thesis and a brief description of the research problem, objective of the research, methods, key results, and conclusions. Keywords are listed immediately after the abstract. An impersonal writing style is recommended, avoiding interpretations of the results.

The introduction of the thesis provides background to the research problem, justifies the choice of the topic, and explains its importance and relevance based on relevant studies.

Theoretical overview. In this chapter relevant aspects of the current research are synthesised and discussed. Connections between theories, previous studies, and the thesis are demonstrated. This section may include several subchapters. At the end, the research problem and objective of the thesis are stated, and hypotheses or research questions are formulated.

Method. This chapter describes how the study is structured and conducted. It provides information that allows readers to understand what was done and how it was done. The

methodology chapter must be detailed enough to allow the study to be replicated. Typically, the chapter is divided into subchapters, outlining the actions taken to ensure the quality of the study at all stages. Ethical considerations are also discussed.

Sample: principles of forming a sample; number of the respondents; other information about them relevant to the study.

Instruments (tests, questionnaires, observation records, etc.): a list and short description of the applied instruments; principles behind their choice or design; how validity and reliability were ensured. The instruments and their exact descriptions are presented in the appendices.

Data collection: This section describes the data collection methods used and how the data was gathered. It includes a list and brief description of the research instruments used, the principles behind their selection or creation, and their reliability. The procedure for data collection is also described. Detailed descriptions of the research instruments and measurement tools/data collection instruments are provided in the appendices if necessary and/or possible.

Procedure: A brief overview of how the empirical study was conducted is provided, including instructions given to respondents, division of respondents into subgroups, etc. A detailed description is only necessary if the method is novel. An overview of the principles of data processing and methods used is also given. The chapter must be detailed enough for the reader to replicate the study. For qualitative methods, it is advised to divide the chapter into the following subchapters: *Sample*, *Data Collection*, *Data Analysis*. Each subchapter should describe the corresponding part of the procedure, highlighting how the quality of the study was ensured.

Data analysis: An overview of the principles of data processing and the methods used is provided, along with a detailed description of the activities related to data analysis.

Results. In the results chapter, an overview of the data analysis results is presented. All significant results must be included. The meaning of the obtained results is not discussed in this chapter. To present or illustrate the results more clearly, tables and figures are used, and in the case of qualitative work, quotations are included.

Discussion. In this chapter, the results are interpreted in the context of the research questions and/or hypotheses, as well as in relation to the introduction and theoretical framework. The discussion should begin with a clear statement indicating whether the proposed hypotheses were confirmed or not, and whether answers to the research questions were obtained. Rather than repeating the results, the discussion should focus on interpreting them. Similarities and differences between the results and data presented in the literature should be highlighted, explained, and justified. The validity of the generalizations and conclusions should be critically assessed, along with the strengths and limitations of the study. Additionally, the potential implications of the results should be outlined, and recommendations for future research provided. The results and discussion may also be combined into a single chapter.

Acknowledgements. Here all people (except for the names of the respondents of the study) who helped the author of the thesis are acknowledged and grants and/or participation in research projects are indicated.

Author's declaration. Everybody's contribution is brought out in the case of a thesis with several authors. The following text is added at the end of the body of the thesis: I hereby declare that I have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.

The text is followed by the name and signature of the author of the thesis and the date.

List of references. All references cited in the thesis must be included in the list of references, and vice versa. The list of references should be comprehensive but not excessive, including a sufficient number of sources to support the author's viewpoints and the conducted research. If the thesis sample consists of texts (e.g., textbooks, newspapers, or other materials such as films), a separate list of these sources should be provided under an appropriate subheading.

Appendices are numbered and presented in the order in which they were referred to in the text. Appendices have headings and are included in the table of contents. Pages are not numbered in the appendices.

1.2. Action and development research and their structure

Action and development research are studies with a developmental and practical focus (e.g., the creation and testing of teaching materials, educational trails, subject courses, development plans, etc.). The problem in action or development research typically arises from practice and is connected to theory and/or previous studies. Due to the cyclical nature of these studies, the structure of the main text may differ from the structure presented in subsection 1.1 of Appendix 1.

1.3. A journal article as a thesis

The author of the thesis submits to the committee a PDF version of an article classified under categories 1.1, 1.2, or 3.1 according to the Estonian Research Information System (ETIS) classifiers, along with a confirmation letter regarding its acceptance for publication or the article's source reference. In the case of an article, the defender of the thesis is the first or the second author.

If the article has several authors, the author of the thesis provides an explanation of their contribution to the article on a separate sheet. If the author of the article studies on a programme with Estonian as a language of instruction, a summary 6,000-9,000 characters with spaces in Estonian is added to the article published in a foreign language. The summary in Estonian includes the following parts: introduction (incl. a theoretical overview, objective and research questions / hypotheses), method, results and discussion. Keywords in Estonian are added at the end of the summary. Formatting requirements for the article (formatting requirements for the journal) are presented in a separate document. Compliance with the graduation thesis requirements is assessed according to the requirements for the journal. The author of the thesis and supervisor digitally sign the afore-mentioned documents in one envelope.

2. Text formatting

General formatting requirements

The recommended volume of a bachelor's thesis is 15–25 pages, and 30–35 pages of a master's thesis, excluding appendices (applies also to theses with several authors).

- a) The thesis is submitted in A4 format.
- b) The thesis should be in 12-point Times New Roman font (Normal) with 1.5 line spacing and 2.5 cm margins.
- c) No extra space should be inserted between paragraphs within a chapter. In Paragraph Format set 'Before' & 'After' to 0.
- d) The thesis should be left-aligned and words should not be hyphenated at the end of a line.
- e) The running head should be placed in the right-hand upper corner together with the page number.
- f) The pages should be numbered consecutively through the thesis in Arabic numerals, counting from the title page, which should be counted, but not numbered. Thus, the visible numbering starts from the second page. The pages of the appendices are not numbered.
- g) Each subsequent chapter and subchapter are separated from the preceding text by one blank line.
- h) The paragraph following a chapter title, subtitle, table, or figure begins without an indent. Subsequent paragraphs start with an indent (1.27 cm).
- i) The table of contents, introduction, references, and appendices each start on a new page.

Headings. Headings of different levels are used in the thesis. Throughout the text, all subchapters of equal importance must have headings of the same level, formatted identically. This helps the reader to understand the hierarchical structure of the paper. Numbers in front of the headings are optional. Headings are not followed by a full stop unless the heading is the first sentence of a paragraph.

Referencing. All works and authors whose ideas or viewpoints are used must be cited. The references must be formatted in a way which enables the reader to unmistakably understand which ideas belong to the author of the paper and which come from outside sources. If possible, referencing primary sources should be used. Referencing secondary sources (someone else's interpretation of what another author has written) should be avoided. The author (authors) and the year of publication are indicated in the text. If the work has no author, the title (2-3 first words in the case of a long title) and year of publication are indicated (See Table 1).

A quotation is the exact, word-for-word presentation of the original text. A quotation is enclosed in quotation marks and followed by the name of the author, year of publication and page number in brackets. If part of the cited text has been omitted from the quotation, an ellipsis (a punctuation mark consisting of three dots) in brackets is used in the place of the omitted text. A quotation should be long enough to convey the meaning and be relevant to the context. Longer quotations are separated from the rest of the text by using a different font or by placing the quotation in a free-standing, indented block with no quotation marks with single line spacing. Proper referencing is essential to avoid any possible accusation of plagiarism.

The use of generative artificial intelligence (AI) applications must also be cited in accordance with the University of Tartu guidelines for using AI applications for teaching and studies: https://ut.ee/et/sisu/tartu-ulikooli-suunis-tekstiroboti-kasutamiseks-oppetoos

Table 1. In-text citations

Types of referencing		
General principles	All authors whose ideas or viewpoints are described must be cited in the text. The in-text citation must correspond to the source listed in the references.	
Parenthetical citation	The surname of the author(s) and the year of publication of the source (in the case of a quotation, also the page numbers) are given in parentheses within the text. For example,	
	(Toomela, 2016) (Jõgi & Aus, 2015)	
	Two or more works by different authors within the same parentheses are ordered alphabetically and separated by semicolons. For example,	
	(Jõgi & Aus, 2015; Toomela, 2016)	
In-sentence reference	When the author's name is presented as part of the sentence, the year of publication (and page numbers in the case of a quote) is added in parentheses immediately after the author's surname. For example, • According to Toomela (2016) • Jõgi and Aus (2015) pointed out that	
One or two authors	If there is one or two authors, the surnames of both authors are listed. In the case of two authors, the names are joined by 'and'. In parentheses, they are joined by an ampersand (&). For example, parenthetical citation: (Nelis & Pedaste, 2020) narrative citation: Nelis ja Pedaste (2020)	
Three or more authors	If there are three or more authors, only the surname of the first author is listed, followed by <i>et al.</i> (in the text in Estonian jt) In parentheses, <i>et al.</i> is used. For example,	
	parenthetical citation: (Anspal <i>et al.</i> , 2019) narrative citation: Anspal <i>et al.</i> / Anspal jt (2019)	
Two or more works by the same author	When citing sources by the same author published at different times, the author's name is mentioned once, and the sources are listed chronologically starting from the earliest. The years of publication are separated by commas. For example, parenthetical citation: (Toomela, 2016, 2017)	
	narrative citation: Toomela (2016, 2017)	

When citing sources by the same author published in the same year, a letter (a, b, c) is added after the year. The letters are assigned based on the order of the sources in the bibliography (alphabetically by title). For example,

parenthetical citation: (Sadler, 2012a, 2012b) narrative citation: Sadler (2012a, 2012b)

Organisation or institution as an author

(American Psychological Association, 2020) (Haridus- ja Teadusministeerium, 2021)

If an institution or organisation has a well-known and commonly used abbreviation, the abbreviation can be used when repeatedly citing the source in the work. As is customary with abbreviations, the full name of the institution or organisation should be provided upon first mention, followed by the abbreviation. Subsequently, the abbreviation can be used in citations. In the list of references, the full name should be provided.

Upon first mention: (Haridus- ja Teadusministeerium [HTM], 2021) Subsequently: (HTM, 2021)

No author

If there is no author, the source is cited by its title. In the list of references, all publication details of the source are provided. For curricula and similar updating legal acts, the year of adoption is presented, followed by a slash and the year of the version being referenced. For example, (Põhikooli riiklik õppekava, 2011)

Citing an appendix of a curriculum (Ainevaldkond "Matemaatika", 2023)

If the title is long, the first three words are provided, for example (Kutsestandard. Õpetaja..., 2020)

No date of publication

If the source does not have a year of publication, 's.a.' is used in the citation. For example, (Kiindumussuhe, s.a.)

When citing sources by the same author, all of which lack a year of publication, a corresponding letter (a, b, c, etc.) is added with a hyphen. The letters are assigned based on the order of the sources' appearance in the text. For example,

Maasik (s.a.-a) Maasik (s.a.-b)

Indirect citation	Indirect citation should be avoided and used only when the primary source is not available. If indirect citation is unavoidable, both the original source and the source through which it is cited must be referenced. For example, (Rachlin, 1991, as cited in Krull, 2018) Odom <i>et al.</i> (1999, as cited in Nelis & Pedaste, 2020)		
Conference presentation	and the year the conference took place are referenced. A corresponding entry for the cited conference presentation should also be included in the list of references. For example, parenthetical citation: (Evans <i>et al.</i> , 2019)		
	narrative citation: Evans et al. (2019)		
	is referenced in the text only in exceptional cases. The person sed must be aware of it. Personal contact and communication are references.		
Electronic	Correspondence with emeritus professor of pedagogy, E. Krull		
correspondence	(personal communication, September 20, 2019), revealed that		
Interview or personal communication	Emeritus professor J. Mikk (personal communication, October 2, 2019) finds that		
Direct quotations			
Shorter quotations (up to 40 words)	A quotation is placed in quotation marks, and the exact page number must be indicated when referencing it. If a part of the quoted sentence is omitted, the missing text should be replaced with round brackets containing three dots. For example,		
Shorter quotations (up	number must be indicated when referencing it. If a part of the quoted sentence is omitted, the missing text should be replaced		
Shorter quotations (up	number must be indicated when referencing it. If a part of the quoted sentence is omitted, the missing text should be replaced with round brackets containing three dots. For example, On huvipakkuv, et "kuigi infotehnoloogia on tohutult arenenud () eelistasid just nooremad õpetajad endiselt traditsioonilise		
Shorter quotations (up	number must be indicated when referencing it. If a part of the quoted sentence is omitted, the missing text should be replaced with round brackets containing three dots. For example, On huvipakkuv, et "kuigi infotehnoloogia on tohutult arenenud () eelistasid just nooremad õpetajad endiselt traditsioonilise õpetamise meetodeid" (Tamm, 2007, lk 18). To quote something said in a video, the time range (minutes: seconds) during which the quoted text was spoken must be		
Shorter quotations (up	number must be indicated when referencing it. If a part of the quoted sentence is omitted, the missing text should be replaced with round brackets containing three dots. For example, On huvipakkuv, et "kuigi infotehnoloogia on tohutult arenenud () eelistasid just nooremad õpetajad endiselt traditsioonilise õpetamise meetodeid" (Tamm, 2007, lk 18). To quote something said in a video, the time range (minutes: seconds) during which the quoted text was spoken must be indicated. For example,		

indented paragraph, without quotation marks, and with single line spacing (1.0). For example,

Kikas (2013, p. 31) has explained as follows:

Kuna kolmandas kooliastmes õppivad lapsed on piisavalt vanad ja kus-seitse aastat koolis käinud, kalduvad põhikooli aineõpetajad arvama, et laste psüühilised protsessid on arenenud täiskasvanute tasemele ja nende ülesanne ei ole protsesse arendada. Tegelikkuses tuleks nende iseärasustega õpetamisel alati arvestada ning õpetajate tegevus kujundab ka psüühilisi protsesse, juhtugu see siis õpetaja teadmata või teadvustatult (ja teadvustatult on alati parem).

The list of references is added at the end of the work (including an entry for the text generator). The sources are presented in alphabetical order based on the first authors' last names, and each entry includes the following elements: the author's name(s), year of publication, title, and publication details. If no author is listed, the title is used as the basis for ordering. This information is necessary to locate the specific source. For electronic documents, the entry must include the author of the text, the title, and the webpage address. Table 2 provides examples of the main types of references. When formatting the list of references, a hanging indent is used starting from the second line of each entry. For example,

Häidkind, P., & Oras, K. (2016). Kaasava hariduse mõiste ning õpetaja ees seisvad ülesanded lasteaedades ja esimeses kooliastmes. *Eesti Haridusteaduste Ajakiri*, 4(2), 60–88.

Kivirand, T., Leijen, Ä., Lepp, L., & Malva, L. (2020). Kaasava hariduse tähendus ja tõhusa rakendamise tegurid Eesti kontekstis: õpetajaid koolitavate või nõustavate spetsialistide vaade. *Eesti Haridusteaduste Ajakiri*, 8(1), 48–71.

Table 2. Examples of reference entries for the sources used

Source type	Principles for creating a reference entry with examples
General principles	The list of references should include all the sources cited in the thesis. The sources are presented in alphabetical order based on the first authors' last names. If no author is listed, the title is used as the basis for ordering. Each entry usually includes the following elements: the author's name(s), year of publication, title, and publication details. All entries end with a full stop. A full stop is not added after the web address or DOI number. The exact principles for creating an entry depend on the type of source.
Sources published by the same	Sources published by the same author in the same year are arranged alphabetically by title. Different sources are indicated by letters a, b, c after the year. For example,

author in the	Sadler, I. (2012a). The challenges for new academics in adopting student-
same year	centred approaches to teaching. <i>Studies in Higher Education</i> , <i>37</i> (6), 731–745. https://doi.org/10.1080/03075079.2010.543968
	Sadler, I. (2012b). The influence of interactions with students for the
	development of new academics as teachers in higher education.
	Higher Education, 64 (2), 147–160. https://doi.org/10.1007/s10734-012-9545-0
No author	If there is no author, the source is given in the list of references by its title,
	for example,
	Looduse entsüklopeedia (2013). Varrak.
Periodicals	
Journal	A journal article entry must include the information about the author(s), year
articles	of publication, title, journal name, volume, issue, and page numbers. The
	journal name and volume are italicized, with the issue in parentheses. If the
	article has a DOI number (Digital Object Identifier for electronic sources), it
	is also included.

Nelis, P., & Pedaste, M. (2020). Kaasava hariduse mudel alushariduse kontekstis: süstemaatiline kirjandusülevaade. *Eesti Haridusteaduste Ajakiri*, 8(2), 138–163. https://doi.org/10.12697/eha.2020.8.2.06 Garner, R. (2007, April 5). British parents spend least time with

Newspaper article

Garner, R. (2007, April 5). British parents spend least time with children. *The Independent*, p. 21.

https://doi.org/10.1080/00313831.2017.1420688

Noorma, M. (2016, 14. apr). Nulltolerants plagiaadile. Postimees, lk 17.

A web address is included in the reference entry for a newspaper article published online, for example,

Raudla, H. (2019, 8. märts). Millest sõltub koolide digipädevus? *Õpetajate Leht*. https://opleht.ee/2019/03/millest-soltub-koolide-digipadevus

Book	
The book has an author, reprint of the book	Fromkin, V., & Rodman, R. (1983). <i>An Introduction to Language</i> (3rd ed.). Holt-Saunders. Toomela, A. (2016). <i>Kultuur, kõne ja Minu Ise</i> . Eesti Keele Sihtasutus. Krull, E. (2018). <i>Pedagoogilise psühholoogia käsiraamat</i> . 3. tr. TÜ Kirjastus.
The book has an editor	Kikas, E. (toim). (2008). Õppimine ja õpetamine koolieelses eas. TÜ Kirjastus.
A chapter from a book	Jõgi, A-L., & Aus, K. (2015). Õpipädevus. E. Kikas, & A. Toomela (toim), Õppimine ja õpetamine kolmandas kooliastmes. Üldpädevused ja nende arendamine (lk 112–146). Eesti Ülikoolide Kirjastuse OÜ. Oak, A., & Rose, E. (2003). Educational trends in England. In E.

Power, R. Tolden, & I. Cat (Eds.), *England Today* (pp. 22–54). Cambridge University Press.

	Cambridge University Fress.		
Electronic	For an electronic document, the entry must include the author of the text (if		
sources	the author is known), the title, the homepage, and the web address.		
The	American Psychological Association. (2020). Student Title Page Guide.		
document has	https://apastyle.apa.org/instructional-aids/student-title-page-		
an author and	guide.pdf		
year of	Haridus- ja Teadusministeerium. (2021). Haridusvaldkonna arengukava		
•	2021–2035. https://www.hm.ee/sites/default/files/documents/2022-		
publication	09/1haridusvaldkonna_arengukava_2035_kinnitatud_11.11.21.pdf		
The	Kutsestandard. Õpetaja, tase 7. (2020).		
document has	https://www.kutseregister.ee/ctrl/et/Standardid/exportPdf/10824233/		
no author	https://www.kutseregister.ee/ett/et/Standardid/exporti di/10024255/		
no aumor			
Legal	In the entry of a legal act, the year of adoption of the legal act is presented,		
documents	along with the web address of the version used in the work.		
documents	Põhikooli riiklik õppekava (2011). <i>Riigi Teataja I 14.01.2011, 1</i>		
	https://www.riigiteataja.ee/akt/108032023005		
	Example of an appendix of a curriculum		
	Ainevaldkond "Matemaatika". Põhikooli riiklik õppekava. Lisa 5		
	(2023). Riigi Teataja I, 08.03.2023, 1.		
	(2023). Kilgi Teataja 1, 00.03.2023, 1.		
Webpage	Kiindumussuhe. (s.a.) https://peaasi.ee/kiindumussuhe/		
Webpage	Haridussilm. (2023). Ukraina õppijad Eesti hariduses.		
	https://www.haridussilm.ee/ee/valdkonnaraportid/ukraina-oppijad-		
	eesti-hariduses		
Dissertations	Ukkur, J. (2017). Alustava kutseõpetaja professionaalse arengu toetamine		
and theses			
	[magistritöö, Tallinna Ülikool]. ETERA.		
published	https://www.etera.ee/s/QQps2g6hhQ		
online	Öun, M. (2015). Koolijuht algaja õpetaja toetajana koolikeskkonnaga		
	kohanemisel [magistritöö, Tartu Ülikool]. DSpace.		
	http://hdl.handle.net/10062/48432		
Other sources			
Video file	Aru, J. (2018). <i>Kuidas aju õpib?</i> [video]. https://vimeo.com/289749373		
- C			
Conference	For a conference presentation, the entry should include the name(s) of the		
presentation	presenter(s); the date of the conference in parentheses, including the day(s)		
	and year; the title of the presentation followed by the type of presentation in		
	square brackets (the description of the type can be flexible, e.g., oral		
	presentation, poster presentation, etc.); the name of the conference and the		
	location where it was held. If a video of the presentation is available, a link		
	to the video should be added at the end of the entry.		
	Evans, A. C., Jr., Garbarino, J., Bocanegra, E., Kinscherff, R. T., &		
	Márquez-Greene, N. (2019, August 8–11). Gun violence: An event		
	on the power of community [Conference presentation]. APA 2019		
	Convention, Chicago, IL, United States.		
	https://convention.apa.org/2019-video		
	1 ····· O		

Tables and figures

Tables and figures are numbered in the order in which they are referred to in the text. Each table has a title that is placed above the table. The table must be understood without reference to the text. All abbreviations must be explained in the notes below the table. The table must contain properly placed headings and labels for columns and rows. Single spacing should be used and tables should be placed in the text as near as possible to where they are first referred to. In the table, the text size can be reduced to 10 points if necessary. Only those horizontal lines that separate important parts of the table are left visible when formatting the table. Generally, the table is presented on one page. A longer table can be included in an appendix or split across pages, but in such cases, the header must be repeated on the new page. An informative table supplements the text – it does not duplicate it. Each table must be referred to in the text, and the main aspects which the reader should look for in it should be indicated in the text. Only the most important information in the table should be emphasized in the text.

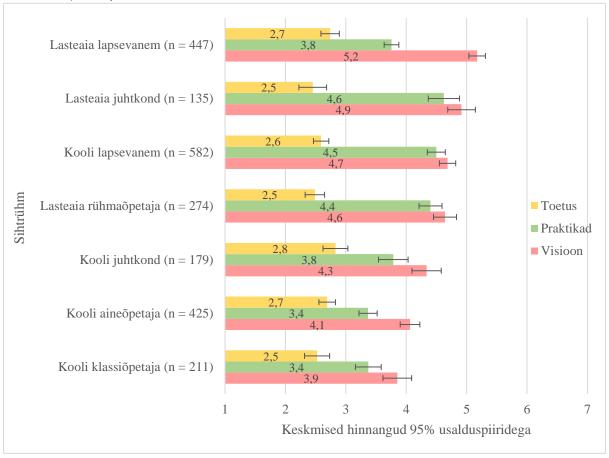
A figure is any type of illustrative material other than a table. A figure may be a graph, drawing, photo, etc. The main formatting requirements are the same as for tables, except that figures have captions. See examples below.

Table 7. The averages, standard deviations, minima, and maxima of the ratings given to teachers and peers as influencers of learning motivation (Vellak, 2019, p. 22).

Faktorid	M	SD	Min	Max
Õpetajad kui positiivsed motiveerijad	2,93	0,56	1	4
Individuaalne õppimiskäitumine	2,64	0,56	1	4
Eakaaslased kui positiivsed motiveerijad	2,53	0,59	1	4
Õpetajad kui negatiivsed motiveerijad	2,13	0,59	1	4
Eakaaslased kui negatiivsed motiveerijad	1,46	0,48	1	4

Notes. M – mean; SD – standard deviation; Min – minimum; Max – maximum

Figure 1. Attitudes of different target groups towards inclusive education (adapted from Silm *et al.*, 2024)



Note. Each attitude subscale contained three statements, to which respondents could answer on a 7-point scale (1 – strongly disagree, 7 – strongly agree).

Format of the title page

University of Tartu

Faculty of Social Sciences
Institute of Education
Curriculum for

First name and last name
TITLE OF THE THESIS
MA thesis

Supervisor(s): academic title, and first and last name

Example of title page formatting

University of Tartu

Faculty of Social Sciences

Institute of Education

Curriculum for Primary School Teacher

Mari Maasikas

TITLE

Master's thesis

Supervisor: Lecturer Uku Udupasun

Appendix 2. Form for the Graduation thesis (bachelor's thesis / master's thesis)
Project
Student (first name, last name, curriculum, year of entry)
Initial title of the thesis and volume in ECTS; (scientific field (CERCS) for the master's thesis)
Supervisor(s) (first name, last name, degree, position, contact information)
Justification for the choice of topic and the research problem (scientifically justified and correctly referenced)
Objective of the thesis (in one sentence)
Hypothesis/hypotheses and/or research questions of the thesis
Research methods: description of the sample, instruments, procedure of the research
Thesis timeline (estimated allocation of time)
Literature used in the preparation of the thesis project (formatted according to this guidelines)
guidelines)
guidelines) Signature of the student: (signed digitally)

Appendix 3. Recommended Format for Reviewing a Graduation Thesis

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Title of the thesis:

Reviewer:

The review serves as a basis for the defence of the thesis and the discussion with the defender. When preparing the review, please follow the criteria outlined below, adding your observations, comments, and questions for each criterion.

Learning outcome	Criterion	Comments and questions of the reviewer
Outcome 1. Formulates the research problem based on scientific	1. Consistency of the title with the research problem and research questions and/or hypotheses	
literature and accordingly	2. Research problem	
defines the research objective and research	3. Research objective	
questions and/or hypotheses.	4. Research questions and/or hypotheses	
Outcome 2. Finds, analyses, and synthesises relevant scientific literature, theoretical	5. Scientific reliability, relevance, and timeliness of the literature, and comprehensiveness of the review	
approaches presented in it, and research	6. Definition and use of key concepts	
results.	7. Substantive logic and level of synthesis in the treatment of the topic	
Outcome 3. Selects the most appropriate research method	8. Suitability and justification of the sample	

for the study, justifies its choice, processes, and analyses the research data.	9. Suitability of data collection (instrument, procedure), its justification and quality assurance	
	10. Suitability of data analysis, justification and quality assurance	
	11. Compliance of the study implementation (sample design, data collection, and analysis) with ethical requirements	
Outcome 4 Presents the results of their study and	12. Presentation of results	
interprets them based on theoretical	13. Interpretation of results	
frameworks and the findings of previous research.	14. Study limitations, application possibilities of the results, and recommendations for further research	
Outcome 5. Follows the requirement of academic writing and the guidelines for	15. Volume of the thesis, compliance with formatting and referencing requirements	
formatting the thesis.	16. Language and spelling	

What else would you like to highlight or ask about the work?

Please so not include the suggested grade in the review. The reviewer is requested to submit their recommended grade to the academic affairs specialist via email at least two days before the defence.

Appendix 4. Thesis Evaluation Criteria

To achieve a positive result, the minimum level must be met for all criteria.

Learning outcome 1. Formulates the research problem based on scientific literature and accordingly defines the research objective and research questions and/or hypotheses.

Cr	iterion	Maximum	Average	Minimum
1.	Consistency of the title with the research problem and research questions and/or hypotheses.	The title of the thesis is in complete accordance with the research problem, objective, and research questions and/or hypotheses	The title of the thesis is partially in accordance with the research problem, objective, and research questions and/or hypotheses.	The title of the thesis is minimally in accordance with the research problem, objective, and research questions and/or hypotheses.
2.	Research problem	The research problem is clearly formulated and sufficiently justified based on theories and/or previous studies.	The research problem is formulated and justified based on theories and/or previous studies.	The research problem is formulated based on theories and/or previous studies, but its justification is not understandable.
3.	Research objective	The research objective is clearly formulated, related to the research problem, and consistently stated throughout the work.	The research objective is formulated, partially related to the research problem, and consistently stated throughout the work.	The research objective is formulated, but the relation to the research problem is not clear.
4.	Research questions and/or hypotheses	Research questions and/or hypotheses are clearly formulated, and are in accordance with the research objective. Hypotheses are formulated based on theory and/or previous studies.	Research questions and/or hypotheses are formulated, and are partially in accordance with the research objective. Hypotheses are formulated based on theory and/or previous studies.	Research questions and/or hypotheses are formulated, but the relation to the research objective is not clear. In formulating the hypotheses, no reference is made to theory and/or previous studies.

Learning outcome 2. Finds, analyses, and synthesises relevant scientific literature, theoretical approaches presented in it, and research results.

Criterion		Maximum	Average	Minimum
5.	Scientific reliability, relevance, and timeliness of the literature, and comprehensiveness of the review	An excellent overview of the research topic is provided, based on scientifically reliable, relevant, and up-to-date sources, which is consistent with the research part.	A good overview of the research topic is provided, based mostly on scientifically reliable, relevant, and up-to-date sources, which is consistent with the research part.	A limited overview of the research topic is provided, based on scientifically reliable, relevant, and up-to-date sources, which is partially consistent with the research part.
6.	Definition and use of key concepts	All key concepts are defined in the thesis and are consistently used appropriately throughout the text.	All key concepts are defined in the thesis and are mostly used appropriately throughout the text.	Key concepts are mostly defined and/or used unclearly.
7.	Substantive logic and level of synthesis in the treatment of the topic	The structure of the theoretical overview is logical, and previous studies and theories are excellently synthesised.	The structure of the theoretical overview is mostly logical, and previous studies and theories are well synthesised.	The structure of the theoretical overview is mostly logical, and previous studies and theories are insufficiently synthesised.

Learning outcome 3. Selects the most appropriate research method for the study, justifies its choice, processes, and analyses the research data.

Criterion	Maximum	Average	Minimum
8. Suitability and justification of the sample	The sample is suitable for achieving the objective of the thesis, its composition principles are thoroughly explained with references to sources, and the essential background data of the sample from the perspective of the study are presented.	The sample is suitable for achieving the objective of the thesis, its composition principles are explained and the essential background data of the sample from the perspective of the study are mostly presented.	The sample is partly suitable for achieving the objective of the thesis, and some background data of the sample from the perspective of the study are presented.

9. Suitability of data collection (instrument, procedure), its justification and quality assurance	Data collection is appropriate for achieving the objective of the study, and its selection and implementation principles are justified with references to sources. Relevant activities are carried out to ensure the quality of data collection, and they are thoroughly described.	Data collection is appropriate for achieving the objective of the study, and its selection and implementation principles are justified. Relevant activities are carried out to ensure the quality of data collection, and they are described.	Data collection is partly appropriate for achieving the objective of the study, and its selection and implementation principles are poorly justified. Activities are carried out to ensure the quality of data collection, and they are described.
10. Suitability of data analysis, justification and quality assurance	Data analysis is in accordance with the hypotheses and/or research questions, its selection is appropriate and the procedure is thoroughly described. Relevant activities are carried out to ensure the quality of data analysis, and they are thoroughly described.	Data analysis is in accordance with the hypotheses and/or research questions, its selection is appropriate and the procedure is somewhat described. Relevant activities are carried out to ensure the quality of data analysis, and they are described to some extent.	Data analysis is partly in accordance with the hypotheses and/or research questions, its selection is partly appropriate and the procedure is described poorly.
11. Compliance of the study implementation (sample design, data collection, and analysis) with ethical requirements	The study is designed and conducted in accordance with ethical requirements, and the assurance of ethical compliance is described at all stages of the study design and implementation with references to sources.	The study is designed and conducted in accordance with ethical requirements, and the assurance of ethical compliance is described at some stages of the study design and implementation.	The study is designed and conducted in accordance with ethical requirements.

Learning outcome 4: Presents the results of their study and interprets them based on theoretical frameworks and the findings of previous research.

Criterion	Maximum	Average	Minimum
12. Presentation of results	All significant data analysis results are presented clearly and in a logical sequence, considering the hypotheses and/or research questions, and all illustrative tools are appropriate	All data analysis results are presented mostly clearly and in a logical sequence, considering the hypotheses and/or research questions, and all illustrative tools are mostly appropriate.	All data analysis results are presented mostly clearly, considering the hypotheses and/or research questions, and illustrative tools are somewhat appropriate.
13. Interpretation of results	The key results related to the research questions and/or hypotheses are comprehensively linked to theories and/or previous studies and interpreted, providing several relevant justifications for the findings.	The results related to the research questions and/or hypotheses are partly linked to theories and/or previous studies and interpreted, providing some justifications for the findings.	The results related to the research questions and/or hypotheses are minimally linked to theories and/or previous studies, providing only a few justifications for the findings.
14. Study limitations, application possibilities of the results, and recommendations for further research	Several relevant study limitations and application possibilities are presented and thoroughly discussed. Multiple appropriate recommendations for further research are provided.	Some relevant study limitations and application possibilities are presented and partly discussed. A few appropriate recommendations for further research are provided.	Some study limitations and application possibilities are presented. A few recommendations for further research are provided.

Learning outcome 5. Follows the requirement of academic writing and the guidelines for formatting the thesis

Criterion	Maximum	Average	Minimum
15. Volume of the thesis, compliance with formatting and referencing requirements	The volume of the thesis is substantively justified and meets the requirements. The formatting, referencing, and list of references used are in full compliance with the thesis formatting guidelines.	The volume of the thesis is substantively justified and meets the requirements. The formatting, referencing, and list of references used are mostly in compliance with the thesis formatting guidelines.	The volume of the thesis meets the requirements. The referencing is in compliance with the thesis requirements. There are shortcomings in the formatting and list of references.
16. Language use and spelling	The language use is in complete accordance with the requirements of scientific writing, and the spelling is flawless.	There are minor shortcomings in the language use in adhering to the requirements of scientific writing, and a few spelling errors.	There are significant shortcomings adhering to the requirements of scientific writing. There are multiple spelling mistakes.

Learning outcome 6. Presents the work and defends their viewpoints in the public academic discussion.

Criterion	Maximum	Average	Minimum
17. Clarity of public presentation	A relevant and fluent overview of the main parts of the thesis is provided within the given time frame, using correctly prepared material that purposefully supports the presentation.	A relevant overview of the main parts of the thesis is provided within the given time frame, using purposefully the material that supports the presentation.	A relevant overview of the parts of the thesis is provided within the given time frame, but not all important parts are discussed. Material supporting the presentation is used.

18. Answering questions and	Answering questions is	Answering questions is mostly	Answering questions is mostly
participation in	appropriate, the answers are	appropriate, the answers are mostly	appropriate, but the answers are
discussion	justified, and the discussion is	justified, and the discussion is	insufficiently justified; the
	related to the topic of the thesis	generally related to the topic of the	discussion is generally related to
	and its theoretical background.	thesis and its theoretical background.	the topic of the thesis.
	Communication is mutually	Communication is mutually	Communication is mutually
	respectful.	respectful.	respectful.
	_	_	_