



Local response to online teaching

Estonia

Katri Lamesoo
Eda Tagamets

Centre for Educational Innovation
University of Tartu, Estonia

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Executive Summary

Background

The following report was compiled in the framework of an international project „Navigating Social Worlds: Toolbox for Social Inquiry“, focusing on teaching and learning social science research in higher education, in distance learning induced by the COVID-19 pandemic.

We conducted a survey with the objective to find out how online and distance learning has affected the learning experience of the students of the Institute of Education of the University of Tartu, in particular with the regard to the students' learning about the methods of social research and applying this knowledge writing their graduation thesis or other research.

Methodology

Data was collected in June 2021 by a web questionnaire, a link of which was posted to students' lists. Participating in the survey was voluntary for the respondents. A total of 209 students responded. 119 responses from bachelor's students and first 3 years of integrated study mode students (a total of 6 programmes) were selected for analysis.

It should be noted that due to the small size of the sample and possible non-response bias the outcomes of the survey should not be generalized to the general student population. This particularly concerns the questions about learning the research methods and applying them in graduation thesis. However, we believe that some insight into the students' learning can still be obtained here.

Key Findings

- 85% of the respondents found that overall, the teachers carried out their instruction adequately.
- 80% did not find online examinations difficult.

- 35% disagreed with the statement that the university should resume normal learning as soon as possible.
- 40...63% students did not notice change in the necessity of various learning activities, the exception being learning digital skills for which the perceived necessity had arisen.
- Lack of digital skills has not been a major factor affecting the students' learning
- Learning research methods was perceived as valuable for future learning and professional career but satisfaction was lower, compared to overall learning experience

Key Recommendations

In future research the increasingly diverse social educational and professional background of the students needs to be taken into account additionally. In teacher education we have recent high school graduates as well as lifelong learners who may have a degree and significant personal experience. Different background probably affects the students' coping and outcomes.

We recommend to try and find ways to improve teaching research methods online. Also the faculty might create opportunities to introduce their own research to the students.

1 Introduction

1.1 Background

This country report is part of the intellectual output 2 “Strategies and practices regarding online teaching at the local level” aiming at providing comparable evidence-based local data from partner universities on different challenges faced during online teaching.

The challenges posed by COVID-19 created an unprecedented crisis situation, when it was necessary to ensure a fully remote learning process. The decisions made during the pandemic on the provision of the study process were affected by the crisis situation. In order to learn from this crisis and to find out how to overcome such situations more successfully in the future, it is necessary to be aware of both the lessons of the crisis and the positive examples of using different solutions.

1.2 Objectives

The objectives of this research are:

- O1: to identify the challenges students faced during remote learning
- O2: to map the digital skills students from social field have
- O3: to evaluate how research classes/specific learning modules help students understand and engage into the research process
- O4: to identify what specific research behaviors students already master and in what areas they need additional help

2 Methodology

2.1 Research Questions

The research questions to be answered by this research report are:

1. How do the students relate to the remote learning process that they were exposed to during the last academic year?
2. What is the level of digital skills bachelor students report having?
3. How did exposure to formal and informal research classes/modules contributed to their knowledge and attitudes toward research process?
4. What specific research behaviors students feel competent engaging in?

2.2 Instruments

The final instrument used was generated using the previous experience of partner universities, but also previous measurements used for assessing research competencies (Swank & Lambie, 2016; Visser-Wijnveen, van der Rijst, & van Driel, 2016). The questionnaire was originally written in English, amended by partners and then translated into local languages for better use by partner countries (see Appendix 1). The dimensions that were included in the final version focused on:

- General perception regarding remote learning (14 items) – general students' perception regarding remote learning. Sample items included evaluation of specific activities during remote learning compared to in-person learning and evaluation of remote learning process (e.g. The study process organised in this way facilitates learning; It creates a higher workload).
- Self-evaluation of digital skills (16 items) – student's self-evaluation of their digital skills in the area of computer usage, using a five-point Likert scale (1 – strongly disagree, 5 – strongly agree).
- Formal research classes/modules (26 items) – identifying of any specific research class/research module included in their learning plan and rating the learning experience during that class/module.
- Informal research class/module (4 items) – identifying any other individual learning activity, outside the learning plan at home university (e.g. webinars, presentations, (intensive) summer/winter schools) that they took during the academic year.
- Level of research competencies (32 item) – self-evaluation of their confidence in performing specific research behaviors in the area of Qualitative/Quantitative Research Processes,

Research Ethics, Dissemination of Research/Scholarly Writing, and Research Inquiry/Literature Review.

- Experience of last-year students (6 items) – starting from the assumption that the last-year students are more involved in research though their bachelor thesis we evaluated their particular experience in relation to carrying a research in their field.
- Demographics included gender, year of study, university and field of study.

2.3 Sample

The data were collected in June 2021 by a web questionnaire, a link of which was posted to the lists of the students. Participating in the survey was voluntary for the respondents. A total of 209 students responded from both bachelor's and master's study levels. 119 responses from bachelor's students and integrated study mode students (a total of 6 programmes) were selected for analysis.

Average response rate for the questionnaire was 18% which can be considered good for a web based voluntary participation. Relatively fewer responses came from second year students, particularly of early years teacher and special needs teacher programs. Such deviation did not occur in the case of first- and third-year students.

Table 1. Bachelor's and integrated studies students in the Institute of Education, University of Tartu as of June 1, 2021, by programme and year

| Programme | 1 st year | 2 nd year | 3 rd year | Total |
|---|----------------------|----------------------|----------------------|-------|
| Early years teacher | 56 | 51 | 76 | 183 |
| Primary school teacher* | 30 | 26 | 36 | 92 |
| Special needs teacher | 72 | 77 | 76 | 225 |
| Teacher of humanities and social subjects | 19 | 22 | 17 | 58 |
| Teacher of science | 16 | 20 | 12 | 48 |
| Vocational teacher | 21 | 19 | 30 | 71 |
| Total | 214 | 215 | 247 | 677 |

Table 2. Respondents to the survey in the Institute of Education, University of Tartu as of July 1, 2021, by programme and year (n= 119)

| Programme | 1st year | 2nd year | 3rd year | Total |
|---|----------|----------|----------|-------|
| Early years teacher | 6 | 1 | 9 | 16 |
| Primary school teacher | 10 | 9 | 12 | 31 |
| Special needs teacher | 16 | 2 | 11 | 29 |
| Teacher of humanities and social subjects | 3 | 7 | 5 | 15 |
| Teacher of science | 4 | 6 | 4 | 14 |
| Vocational teacher | 6 | 4 | 4 | 14 |
| Total | 45 | 29 | 45 | 119 |

Table 3. Response rate of the survey in the Institute of Education, University of Tartu as of July 1, 2021, by programme and year (n= 119)

| Programme | 1st year | | | 2nd year | | | 3rd year | | | Total | | |
|---|---------------|---------------------|-----|---------------|---------------------|-----|---------------|---------------------|-----|---------------|---------------------|-----|
| | Stu- dents | Res- pon- ses | % | Stu- dents | Res- pon- ses | % | Stu- dents | Res- pon- ses | % | Stu- dents | Res- pon- ses | % |
| Early years teacher | 56 | 6 | 11% | 51 | 1 | 2% | 76 | 9 | 12% | 183 | 16 | 9% |
| Primary school teacher | 30 | 10 | 33% | 26 | 9 | 35% | 36 | 12 | 33% | 92 | 31 | 34% |
| Special needs teacher | 72 | 16 | 22% | 77 | 2 | 3% | 76 | 11 | 14% | 225 | 29 | 13% |
| Teacher of humanities and social subjects | 19 | 3 | 16% | 22 | 7 | 32% | 17 | 5 | 29% | 58 | 15 | 26% |
| Teacher of science | 16 | 4 | 25% | 20 | 6 | 30% | 12 | 4 | 33% | 48 | 14 | 29% |
| Vocational teacher | 21 | 6 | 29% | 19 | 4 | 21% | 30 | 4 | 13% | 71 | 14 | 20% |
| Total | 214 | 45 | 21% | 215 | 29 | 13% | 247 | 45 | 18% | 677 | 119 | 18% |

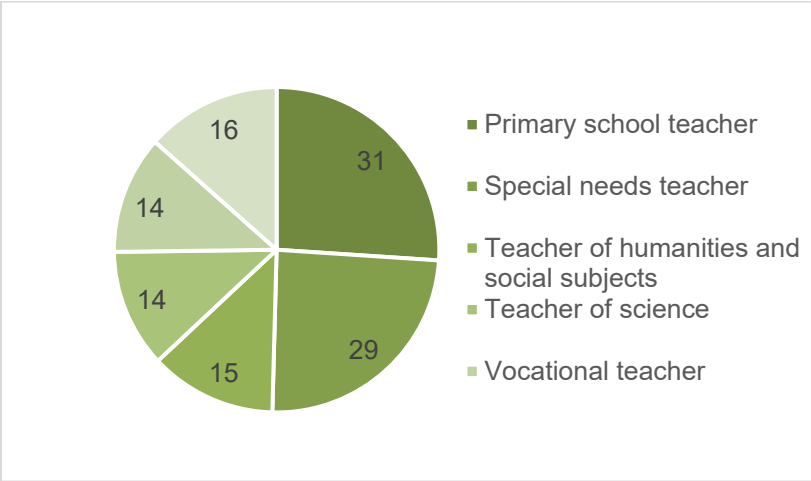


Figure 1. Respondents by study programme, n =119

Of the six programmes, one (vocational teacher) is entirely in block study mode, one (early years teacher) has a group in both regular and block study mode and four are taught in regular study mode. Block study mode means that the students must do a big part of the work independently and classes are on three consecutive days every other week.

Two programmes (teacher of humanities and social subjects and teacher of science) presume continuation of studies on master’s level and one programme (primary school teacher) is an integrated programme of bachelor’s and master’s studies with a duration of 5 years. Two bachelor’s programmes (early years teacher and vocational teacher) grant the graduates a formal professional qualification (teacher, level 6) with a right to teach.

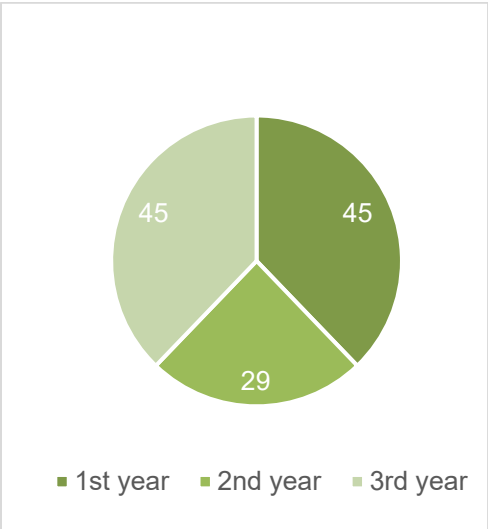


Figure 2. Respondents by study year, n=119

Of the 119 respondents, 112 were female and only 7 were male. This makes it virtually impossible to analyse the distribution of responses by gender.

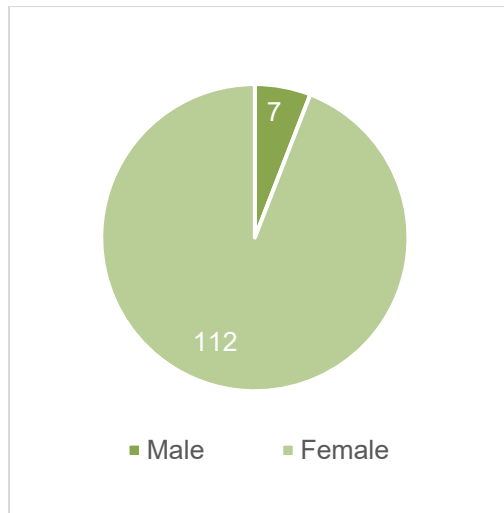


Figure 3. Respondents by gender, n=119

2.4 Data Collection

Data was collected in June 2021 by a web questionnaire in Estonian language, a link of which was posted to the lists of the students. Participating in the survey was voluntary for the respondents. The questionnaire in Estonian is provided in the Appendix.

2.5 Data Analysis

Microsoft Forms online was used for conducting the survey. Responses were automatically stored in a MS Excel file. For the data analysis, MS Excel and data analysis software R was used. We used crosstabs but not more complicated statistical tests due to the limitations of the sample.

2.6 Limitations

Due to the small size of the sample and the possible non-response bias the outcomes of the survey should not be generalized to the general student population. This particularly concerns the questions about learning the research methods and applying them in graduation thesis. However, we believe that some insight into the students' learning can still be obtained here.

3 Results

3.1 General perception regarding remote learning

The respondents were asked to think about the remote learning process during the last academic year (2020-2021) and rate their level of agreement with the statements about how they perceived the effects of remote learning.

Table 4. Agreement with the following statements about remote learning (n=119)

| Statement „The study process organised in this way“ | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|---|----------------|----------|----------------------------|----------|-------------------|------------|
| ... facilitates learning | 18 (15%) | 28 (24%) | 52 (44%) | 16 (13%) | 5 (4%) | 119 (100%) |
| ... creates a higher workload | 33 (28%) | 41 (34%) | 35 (29%) | 9 (8%) | 1 (1%) | 119 (100%) |
| ... is a good solution only in a crisis situation | 22 (19%) | 29 (25%) | 26 (22%) | 32 (27%) | 9 (8%) | 118 (100%) |
| ... creates alienation from the study process | 18 (15%) | 25 (21%) | 29 (24%) | 39 (33%) | 8 (7%) | 119 (100%) |
| ... creates emotional burden | 37 (31%) | 35 (29%) | 25 (21%) | 18 (15%) | 4 (3%) | 119 (100%) |
| ... hinders to see the whole study process | 22 (19%) | 38 (32%) | 25 (21%) | 29 (25%) | 4 (3%) | 118 (100%) |

62% of the respondents agreed or strongly agreed that remote learning **created a higher workload** and 60% agreed or strongly agreed that it **created an emotional burden**. However, only 17% disagreed or strongly disagreed that remote learning facilitated learning and 35% disagreed with the statement that the university should resume normal learning as soon as possible. This indicates that despite the workload and emotional burden the **students also perceived some benefits of distance learning**.

Some differences in opinions can be noted based on the programme and the study year of the respondent. It is possible that students of the programmes which are normally taught in block mode (a kind of distance learning in itself) may have been emotionally less affected by the situation. It is also worth noting that first year students did not have a normal learning mode experience to compare with. It is also possible that different stages of study have somewhat different learning content (introductory theoretical courses vs practical internship assignments)

that can be affected by remote learning in different ways and to differing extent. However, the data are inconclusive and neither the strength or statistical significance of this relation cannot be estimated based on these data.

Table 5. Agreement to statement „Study process organized this way facilitates learning”. Responses by programme (n=119)

| Programme | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|---|----------------|----------|----------------------------|----------|-------------------|------------|
| Early years teacher | 2 (12%) | 3 (19%) | 7 (44%) | 4 (25%) | 0 (0%) | 16 (100%) |
| Primary school teacher | 5 (16%) | 4 (13%) | 17 (55%) | 3 (10%) | 2 (6%) | 31 (100%) |
| Special needs teacher | 6 (21%) | 10 (34%) | 11 (38%) | 2 (7%) | 0 (0%) | 29 (100%) |
| Teacher of humanities and social subjects | 1 (7%) | 4 (27%) | 7 (47%) | 2 (13%) | 1 (7%) | 15 (100%) |
| Teacher of science | 1 (7%) | 3 (21%) | 6 (43%) | 3 (21%) | 1 (7%) | 14 (100%) |
| Vocational teacher | 3 (21%) | 4 (29%) | 4 (29%) | 2 (14%) | 1 (7%) | 14 (100%) |
| Total | 18 (15%) | 28 (24%) | 52 (44%) | 16 (13%) | 5 (4%) | 119 (100%) |

Table 6. Agreement to statement „Study process organized this way facilitates learning”. Responses by study year (n=119)

| Study year | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|------------|----------------|----------|----------------------------|----------|-------------------|------------|
| First | 9 (20%) | 12 (27%) | 19 (42%) | 4 (9%) | 1 (2%) | 45 (100%) |
| Second | 5 (17%) | 6 (21%) | 10 (34%) | 5 (17%) | 3 (10%) | 29 (100%) |
| Third | 4 (9%) | 10 (22%) | 23 (51%) | 7 (16%) | 1 (2%) | 45 (100%) |
| Total | 18 (15%) | 28 (24%) | 52 (44%) | 16 (13%) | 5 (4%) | 119 (100%) |

Table 7. Agreement to statement „Study process organized this way increases workload”. Responses by programme (n=119)

| Programme | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|------------------------|----------------|----------|----------------------------|----------|-------------------|-----------|
| Early years teacher | 7 (44%) | 2 (12%) | 5 (31%) | 2 (12%) | 0 (0%) | 16 (100%) |
| Primary school teacher | 8 (26%) | 14 (45%) | 8 (26%) | 1 (3%) | 0 (0%) | 31 (100%) |

| | | | | | | |
|---|----------|----------|----------|---------|--------|------------|
| Special needs teacher | 7 (24%) | 10 (34%) | 10 (34%) | 1 (3%) | 1 (3%) | 29 (100%) |
| Teacher of humanities and social subjects | 6 (40%) | 3 (20%) | 4 (27%) | 2 (13%) | 0 (0%) | 15 (100%) |
| Teacher of science | 3 (21%) | 6 (43%) | 4 (29%) | 1 (7%) | 0 (0%) | 14 (100%) |
| Vocational teacher | 2 (14%) | 6 (43%) | 4 (29%) | 2 (14%) | 0 (0%) | 14 (100%) |
| Total | 33 (28%) | 41 (34%) | 35 (29%) | 9 (8%) | 1 (1%) | 119 (100%) |

Table 8. Agreement to statement „Study process organized this way increases workload”. Responses by study year (n=119)

| Study year | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|------------|----------------|----------|----------------------------|----------|-------------------|------------|
| First | 9 (20%) | 9 (20%) | 22 (49%) | 4 (9%) | 1 (2%) | 45 (100%) |
| Second | 14 (48%) | 10 (34%) | 4 (14%) | 1 (3%) | 0 (0%) | 29 (100%) |
| Third | 10 (22%) | 22 (49%) | 9 (20%) | 4 (9%) | 0 (0%) | 45 (100%) |
| Total | 33 (28%) | 41 (34%) | 35 (29%) | 9 (8%) | 1 (1%) | 119 (100%) |

Table 9. Agreement to statement „Study process organized this way creates emotional burden”. Responses by programme (n=119)

| Programme | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|---|----------------|----------|----------------------------|----------|-------------------|------------|
| Early years teacher | 4 (25%) | 4 (25%) | 3 (19%) | 4 (25%) | 1 (6%) | 16 (100%) |
| Primary school teacher | 9 (29%) | 12 (39%) | 8 (26%) | 2 (6%) | 0 (0%) | 31 (100%) |
| Special needs teacher | 4 (14%) | 10 (34%) | 8 (28%) | 6 (21%) | 1 (3%) | 29 (100%) |
| Teacher of humanities and social subjects | 9 (60%) | 3 (20%) | 2 (13%) | 1 (7%) | 0 (0%) | 15 (100%) |
| Teacher of science | 6 (43%) | 5 (36%) | 2 (14%) | 1 (7%) | 0 (0%) | 14 (100%) |
| Vocational teacher | 5 (36%) | 1 (7%) | 2 (14%) | 4 (29%) | 2 (14%) | 14 (100%) |
| Total | 37 (31%) | 35 (29%) | 25 (21%) | 18 (15%) | 4 (3%) | 119 (100%) |

Table 10. Agreement to statement „Study process organized this way creates emotional burden”. Responses by study year (n=119)

| Study year | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|------------|----------------|----------|----------------------------|----------|-------------------|------------|
| First | 11 (24%) | 9 (20%) | 11 (24%) | 12 (27%) | 2 (4%) | 45 (100%) |
| Second | 14 (48%) | 10 (34%) | 3 (10%) | 1 (3%) | 1 (3%) | 29 (100%) |
| Third | 12 (27%) | 16 (36%) | 11 (24%) | 5 (11%) | 1 (2%) | 45 (100%) |
| Total | 37 (31%) | 35 (29%) | 25 (21%) | 18 (15%) | 4 (3%) | 119 (100%) |

3.1.1 Learning experience in remote learning, compared to normal learning mode

As it may have been expected, most respondents (74%) found that the **need for digital competencies has increased** in the period of remote learning. 58% of the respondents found that the need to read the materials and increased. The need for practical work and communication with peers had decreased in the opinion of 21% and 27% respectively. These responses allow for different interpretation – whether the students felt that these activities were less needed to achieve the learning outcomes with online learning or whether it rather reflects fewer opportunities provided by the university to engage in these activities.

Overall, in most dimensions nearly half of the students reported that they did not see the change in the necessity of various learning activities. This may indicate that online and distance learning tools were already used substantially before the emergency remote learning.

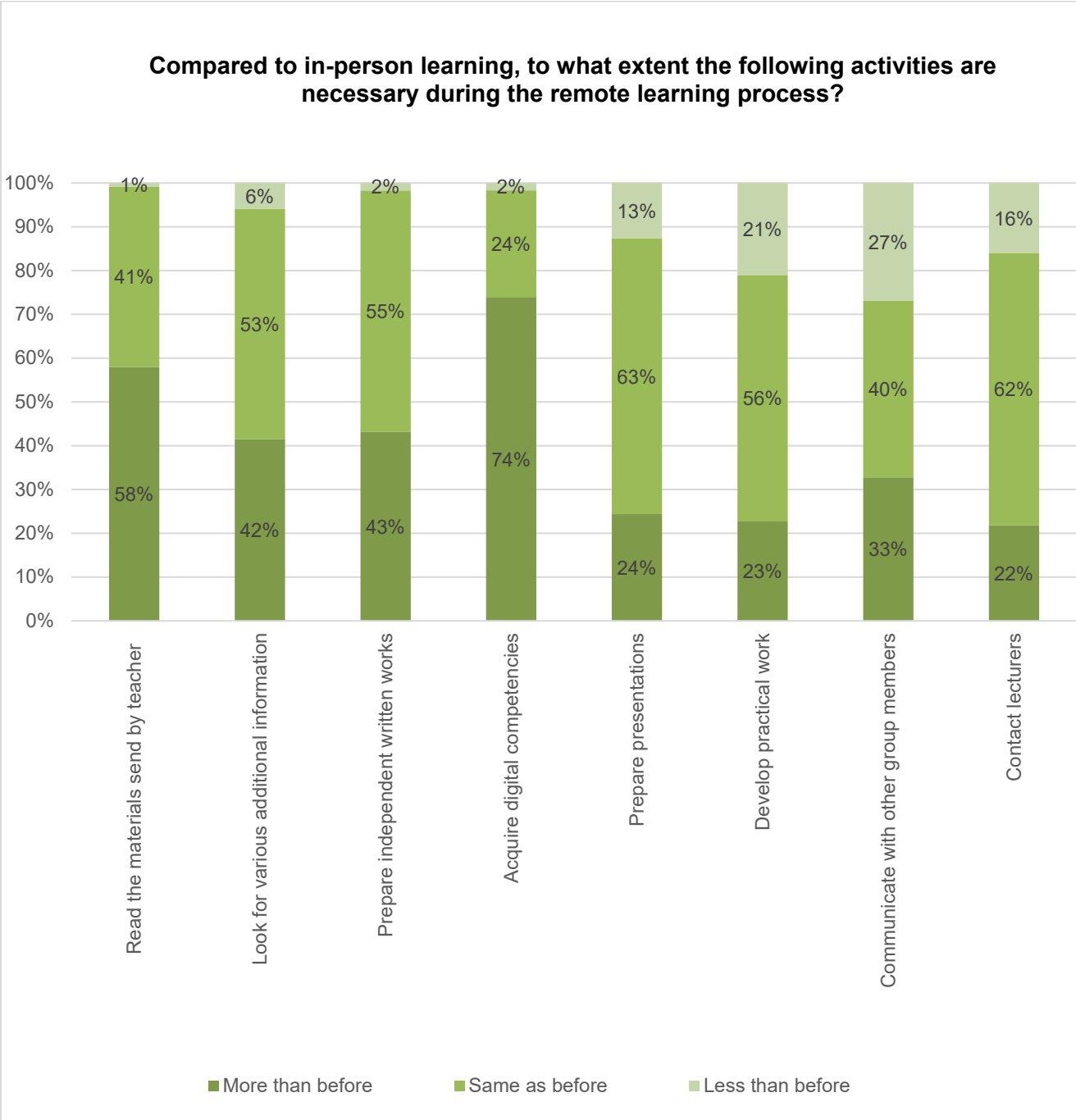


Figure 4. Learning experience in distance learning, compared to normal learning mode

3.2 Digital skills

The students were asked to evaluate their digital competencies, by indicating their level of agreement with a total of 16 statements. For 9 statements, over 90% of the respondents strongly agreed or agreed that they were competent in the skill mentioned. The only skills that were evaluated less highly were creating infographics and designing websites but even for the latter 29% of the respondents agreed or strongly agreed that they knew how to do it. 63% of the respondents strongly agree or agree that they are confident putting their content online, while only 15% disagree or strongly disagree. It is probably reasonable to conclude that **lack of digital skills has not been a major factor affecting the students' learning.**

Table 11. Respondents' self-evaluation of their digital skills (n=119)

| Statement | Strongly agree | | Agree | | Neither agree nor disagree | | Disagree | | Strongly disagree | | Total |
|---|----------------|-----|-------|-----|----------------------------|-----|----------|----|-------------------|----|-------|
| | n | % | n | % | n | % | n | % | n | % | |
| I know how to connect to a WIFI network | 107 | 91% | 8 | 7% | 2 | 2% | 0 | 0% | 0 | 0% | 117 |
| I know how to manage online files | 104 | 87% | 14 | 12% | 1 | 1% | 0 | 0% | 0 | 0% | 119 |
| I know how to open a new tab in my browser | 97 | 82% | 15 | 13% | 2 | 2% | 2 | 2% | 2 | 2% | 118 |
| I know how to connect to an online platform | 93 | 78% | 23 | 19% | 2 | 2% | 1 | 1% | 0 | 0% | 119 |
| I know which information I should and shouldn't share online | 86 | 73% | 27 | 23% | 5 | 4% | 0 | 0% | 0 | 0% | 118 |
| I know how to complete online forms | 85 | 72% | 28 | 24% | 5 | 4% | 0 | 0% | 0 | 0% | 118 |
| I am careful about my comments and behaviours while I am online | 80 | 67% | 33 | 28% | 5 | 4% | 1 | 1% | 0 | 0% | 119 |
| I know when I should and shouldn't share information online | 78 | 66% | 34 | 29% | 7 | 6% | 0 | 0% | 0 | 0% | 119 |
| I know how to adjust privacy settings | 60 | 50% | 41 | 34% | 13 | 11% | 5 | 4% | 0 | 0% | 119 |

| | | | | | | | | | | | |
|--|----|-----|----|-----|----|-----|----|-----|----|-----|-----|
| I can easily find the information I need on a website | 59 | 50% | 53 | 45% | 6 | 5% | 1 | 1% | 0 | 0% | 119 |
| I know how to create a video | 55 | 46% | 36 | 30% | 17 | 14% | 7 | 6% | 4 | 3% | 119 |
| I know how to use shortcut keys | 48 | 40% | 38 | 32% | 28 | 24% | 3 | 3% | 2 | 2% | 119 |
| I can easily navigate through the tools included in different online platforms | 41 | 34% | 52 | 44% | 20 | 17% | 6 | 5% | 0 | 0% | 119 |
| I feel confident putting content I have created online | 29 | 25% | 45 | 38% | 26 | 22% | 11 | 9% | 7 | 6% | 118 |
| I know how to create a infographic | 21 | 18% | 27 | 23% | 36 | 30% | 27 | 23% | 8 | 7% | 119 |
| I know how to design a website | 12 | 10% | 23 | 19% | 30 | 25% | 32 | 27% | 22 | 18% | 119 |

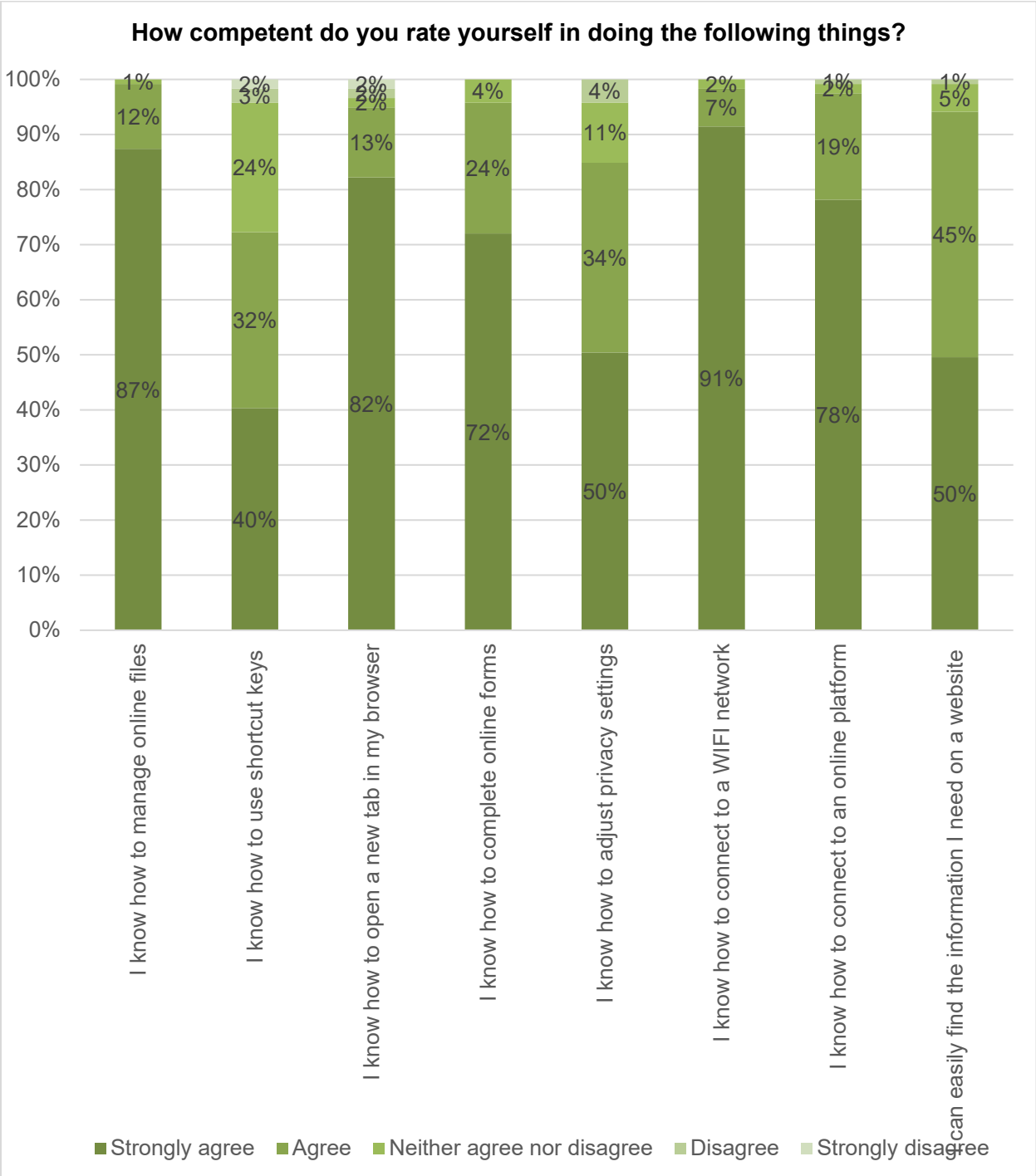


Figure 6. Self-evaluation level of digital skills. Statement “How competent do you rate yourself in doing the following things”.

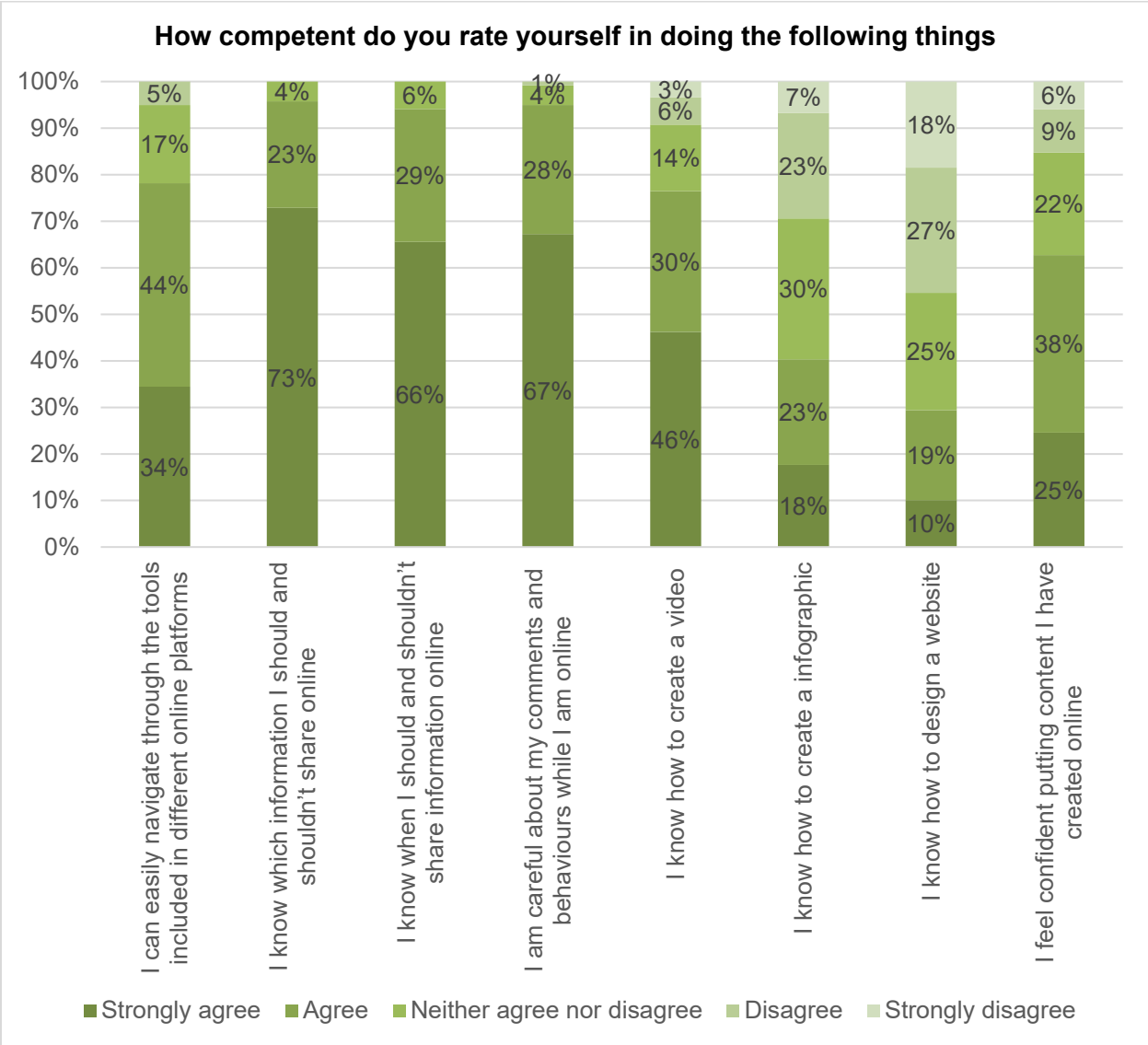


Figure 7. Self-evaluation level of digital skills. Statement “How competent do you rate yourself in doing the following things”.

There were **no significant differences between the self-evaluated digital skills of the students by study year** – this may indicate that the digital skills necessary have mostly been obtained already in the general education or during the spring term of 2020 when the university first switched to remote learning.

Table 12. Agreement to statement „I feel confident putting content I have created online“. Responses by study year (n = 118)

| Study year | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|------------|----------------|----------|----------------------------|----------|-------------------|------------|
| 1st year | 11 (25%) | 19 (43%) | 9 (20%) | 3 (7%) | 2 (5%) | 44 (100%) |
| 2nd year | 11 (38%) | 9 (31%) | 3 (10%) | 4 (14%) | 2 (7%) | 29 (100%) |
| 3rd year | 7 (16%) | 17 (38%) | 14 (31%) | 4 (9%) | 3 (7%) | 45 (100%) |
| Total | 29 (25%) | 45 (38%) | 26 (22%) | 11 (9%) | 7 (6%) | 118 (100%) |

3.3 Formal research class/modules

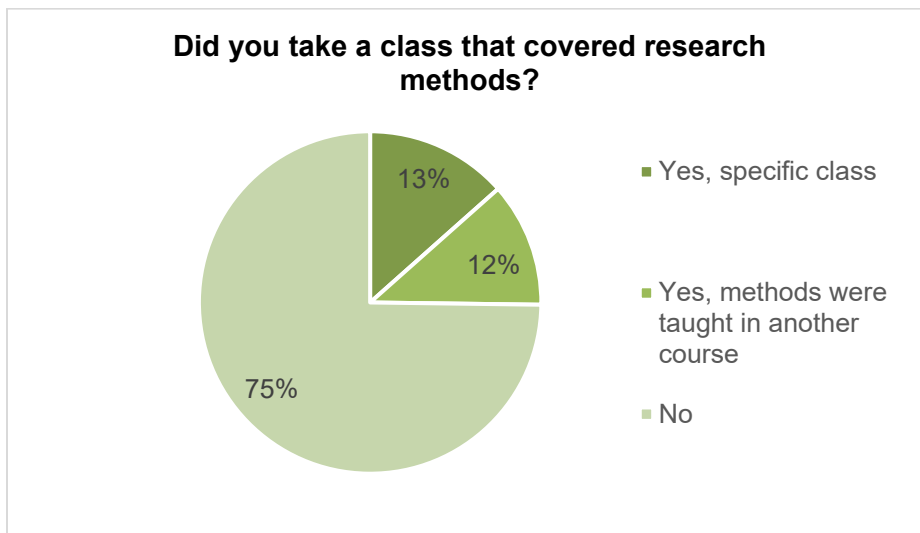


Figure 8. Number of students taken research methods classes, n=119.

Only 16 students, i.e., 13% of the total sample, had participated in a course on research methods during the distance learning period, and 14 students answered that they had taken a class where this topic was partially addressed. Of the 16 students who took a dedicated methods course, 2 were first year students, 1 second year and 13 third year students. Of the 14 students who learned about research methods in the framework of some other course, 7 were first year, 3 second year and 4 third year students.

As in this chapter we can talk about the experience of only 30 students who studied at least partly research methods during the distance learning period, the results are presented in figures rather than percentages and the small sample size does not allow for conclusions about the general student population.

The students who had studied research methods during the academic year were asked to rate their agreement to 25 statements about their learning experience.

Table 13. Students' perceived understanding about research methods (n=28...30).

| Response | | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Total |
|--|------|----------------|-------|----------------------------|----------|-------------------|-------|
| My understanding of the most important concepts used in social science research area has increased | Freq | 8 | 17 | 5 | 0 | 0 | 30 |
| | % | 27 | 57 | 17 | 0 | 0 | 100 |
| My understanding about the steps of the research process has increased | Freq | 8 | 13 | 6 | 0 | 1 | 28 |
| | % | 29 | 46 | 21 | 0 | 4 | 100 |
| My understanding about research methods has increased | Freq | 8 | 12 | 6 | 1 | 1 | 28 |
| | % | 29 | 43 | 21 | 4 | 4 | 100 |
| I feel that I am confident in using specific techniques for data analysis | Freq | 3 | 7 | 9 | 9 | 0 | 28 |
| | % | 11 | 25 | 32 | 32 | 0 | 100 |
| I became more interested about research in general | Freq | 4 | 5 | 13 | 3 | 2 | 27 |
| | % | 15 | 19 | 48 | 11 | 7 | 100 |
| There were sufficient opportunities to talk with researchers about their scientific research | Freq | 1 | 3 | 4 | 10 | 9 | 27 |
| | % | 4 | 11 | 15 | 37 | 33 | 100 |
| I got the opportunity to hear about current recent developments in my field of study | Freq | 4 | 3 | 8 | 7 | 4 | 26 |
| | % | 15 | 12 | 31 | 27 | 15 | 100 |
| I was introduced to the research carried out by my teacher | Freq | 6 | 1 | 8 | 4 | 7 | 26 |
| | % | 23 | 4 | 31 | 15 | 27 | 100 |

| | | | | | | | |
|--|------|----|----|----|----|----|-----|
| I was introduced to the research carried out by the institution/university | Freq | 3 | 7 | 6 | 6 | 4 | 26 |
| | % | 12 | 27 | 23 | 23 | 15 | 100 |
| My teacher encouraged me to look for alternative explanations for the research results | Freq | 5 | 8 | 6 | 4 | 3 | 26 |
| | % | 19 | 31 | 23 | 15 | 12 | 100 |
| Through research class (content), I became more enthusiastic about my field of study | Freq | 10 | 5 | 6 | 5 | 0 | 26 |
| | % | 38 | 19 | 23 | 19 | 0 | 100 |
| Examples between research and practice were given | Freq | 6 | 10 | 7 | 3 | 0 | 26 |
| | % | 23 | 38 | 27 | 12 | 0 | 100 |
| I learned what type of studies have been carried out in my field of study | Freq | 10 | 10 | 4 | 2 | 0 | 26 |
| | % | 38 | 38 | 15 | 8 | 0 | 100 |
| I learned how research can be used in my field of study | Freq | 7 | 10 | 6 | 3 | 0 | 26 |
| | % | 27 | 38 | 23 | 12 | 0 | 100 |
| I think that what I learnt will be useful in other classes as well | Freq | 10 | 10 | 5 | 2 | 0 | 27 |
| | % | 37 | 37 | 19 | 7 | 0 | 100 |
| I think that what I learnt will be useful in my career, upon graduation | Freq | 9 | 9 | 6 | 2 | 0 | 26 |
| | % | 35 | 35 | 23 | 8 | 0 | 100 |
| I think that no teacher will need all these information for being a good professional in the field | Freq | 0 | 2 | 8 | 8 | 8 | 26 |
| | % | 0 | 8 | 31 | 31 | 31 | 100 |
| My teacher encouraged me to carry on my own research | Freq | 6 | 8 | 8 | 3 | 1 | 26 |
| | % | 23 | 31 | 31 | 12 | 4 | 100 |
| The teacher has provided course assignments on a regular basis | Freq | 10 | 8 | 6 | 2 | 0 | 26 |
| | % | 38 | 31 | 23 | 8 | 0 | 100 |
| The teacher has given me individual feedback on my performance on assignments | Freq | 12 | 7 | 5 | 2 | 0 | 26 |
| | % | 46 | 27 | 19 | 8 | 0 | 100 |
| The teacher has informed me on what exams will look like in this situation | Freq | 12 | 10 | 2 | 2 | 0 | 26 |
| | % | 46 | 38 | 8 | 8 | 0 | 100 |

| | | | | | | | |
|---|------|----|----|----|----|----|-----|
| Examinations online were more difficult for me | Freq | 3 | 2 | 6 | 10 | 5 | 26 |
| | % | 12 | 8 | 23 | 38 | 19 | 100 |
| Overall, the teachers carried out their instruction adequately | Freq | 12 | 11 | 2 | 1 | 0 | 26 |
| | % | 46 | 42 | 8 | 4 | 0 | 100 |
| In general, I am satisfied with the research classes/modules taken remotely | Freq | 9 | 8 | 9 | 0 | 0 | 26 |
| | % | 35 | 31 | 35 | 0 | 0 | 100 |

88% agreed or strongly agreed that **overall, the teachers carried out their instruction adequately** and 65% agreed or strongly agreed that they were satisfied with the research classes/modules taken remotely.

83% agreed or strongly agreed that their **understanding of the most important concepts used in the social science research area had increased** and 75% agreed or strongly agreed that their understanding about the steps of the research process had increased. However only 36% agreed or strongly agreed that they felt confident in using specific techniques for data analysis; 32% of the respondents disagreed or strongly disagreed with this statement.

74% agreed or strongly agreed that **what was learned would be useful in other classes as well** and 69% agreed or strongly agreed that it was going to be useful in their work after graduation. Only 8% agreed or strongly agreed that a teacher wouldn't need the knowledge of research methods in order to be a good professional. This may reflect the efforts undertaken by the university to promote the idea of teacher-as-researcher, which is also a requirement of Estonian Teachers' Occupational Qualification Standards (OQS, n.d.).

There was less agreement with the statements regarding the opportunities to learn about research being done in the field: only 15% agreed or strongly agreed that there were sufficient opportunities to talk with researchers about their scientific research and 27% agreed or strongly agreed that they had had an opportunity to hear about current recent developments in the field. 27% agreed or strongly agreed that they had been introduced to the research carried out by their teacher and 38% agreed or strongly agreed that they had been introduced to the research carried out by their university. There may be a weak positive relation between the agreement with the statements "I was introduced to the research carried out by my teacher" and "I became more interested about research in general", but due to small sample size this cannot be inferred.

85% of the respondents agreed or strongly agreed that **they had been informed what exams would look like** in this situation and 19% agreed or strongly agreed that examinations online were difficult for them.

3.4 Informal research class/modules

Only 1 respondent reported having taken part in an extracurricular methodology class.

3.5 Research competencies

Respondents reported being most confident in identifying theories in literature – 86% said they felt highly competent or somewhat competent, 79% felt highly or somewhat confident about using proper reference style. Contrastingly, only 3% felt highly competent in understanding the epistemological assumptions of research. This may indicate that on bachelors's studies level the research classes are rather practical and more intricate theoretical concepts are not addressed. Consequently, only 30% reported being at least somewhat competent to write an article about their research findings. This, however, is not unexpected, as research skills are further advanced during master's studies which are required for obtaining a teacher's professional qualification (exceptions being early years teacher and vocational studies teacher).

It is more surprising that there were no significant differences in self-reported overall research competences between first-, second- and third year-students: 29% of the first-year students, 28% of the second-year students and 31% of the third-year students answered "highly competent" or "somewhat competent"; 30% of the first-year students, 35% of second-year students and 31% of third-year students responded feeling highly unconfident or somewhat unconfident. Only 5% of the first-year students felt highly unconfident while that was the case for 13% of the third-year students. Apparently, increasing knowledge also illuminates the part that is yet to be learned.

There are some differences in perceived research competence across study programmes but due to small sample size no firm conclusions can be made.

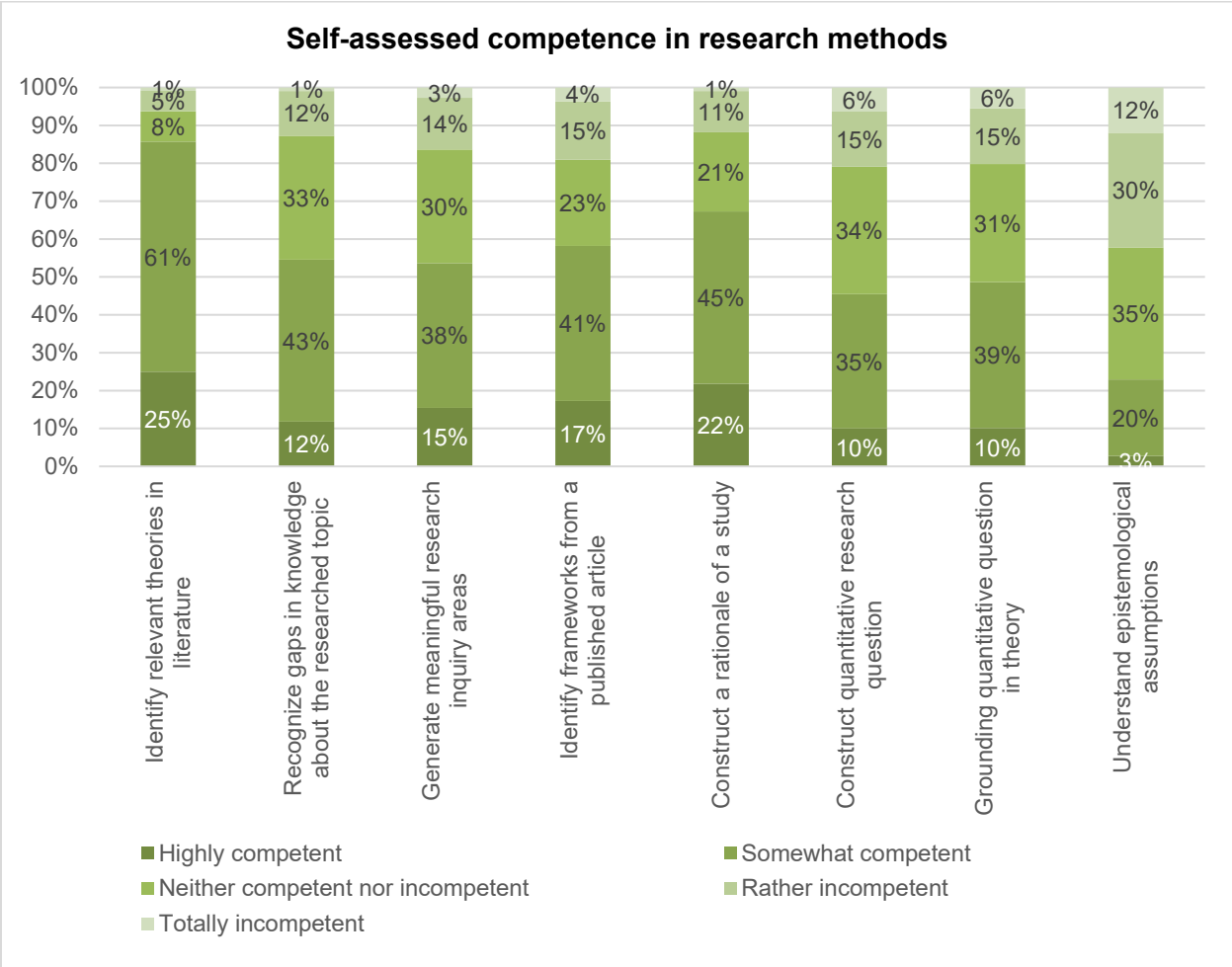


Figure 9. Self-assessed competence in research methods, n=119 (NA 7...15)

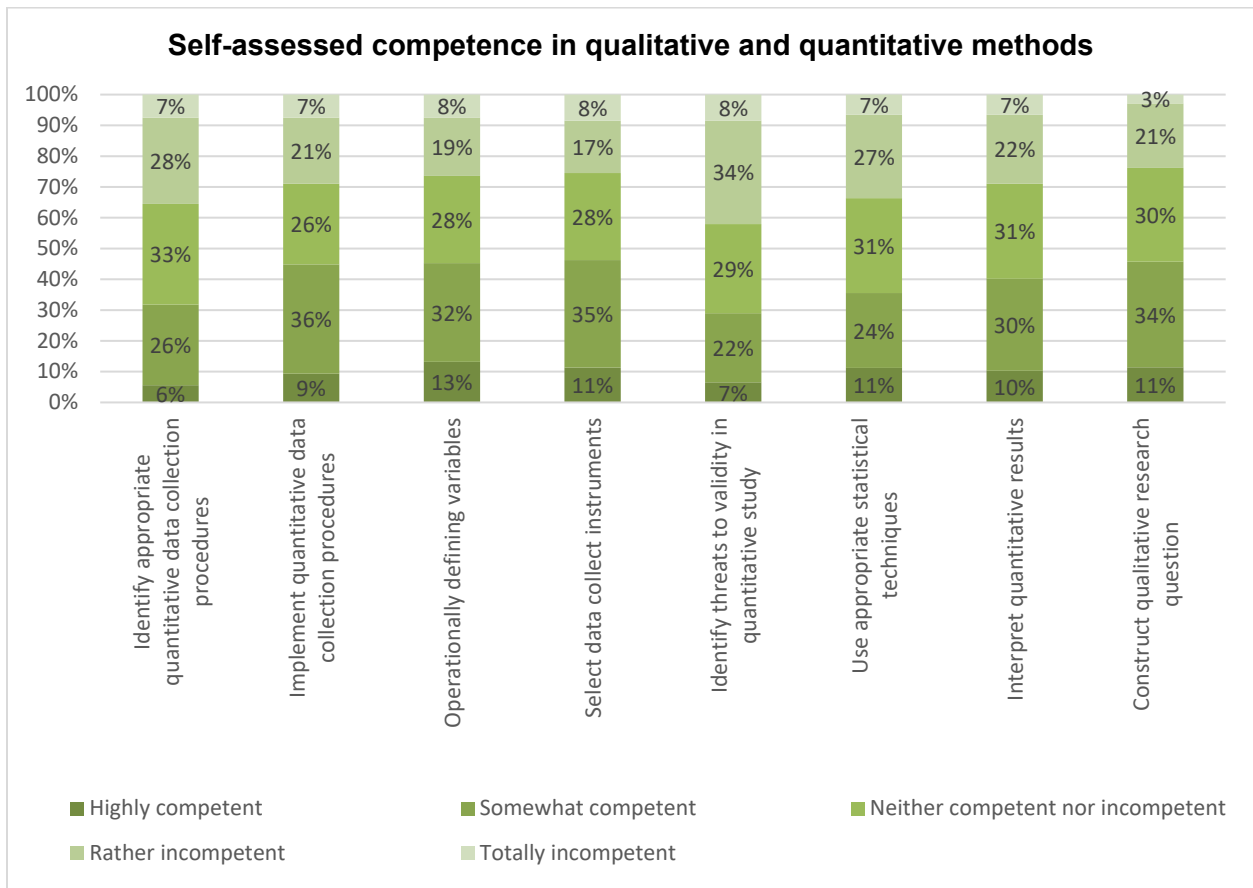


Figure 10. Self-assessed competence in qualitative and quantitative methods, n=119 (NA 7...15)

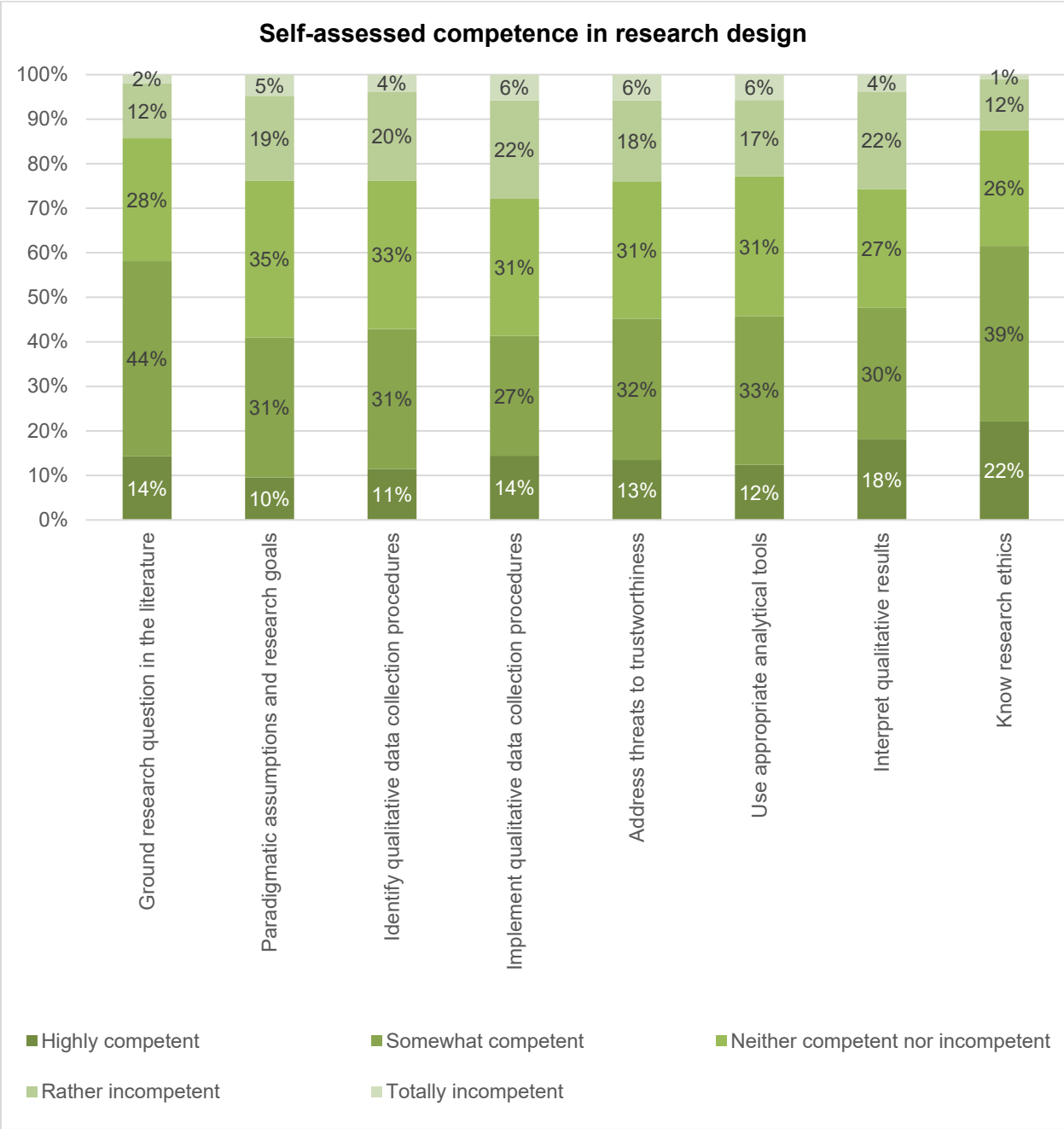


Figure 11. Self-assessed competence in research design, n=119 (NA 7...15)

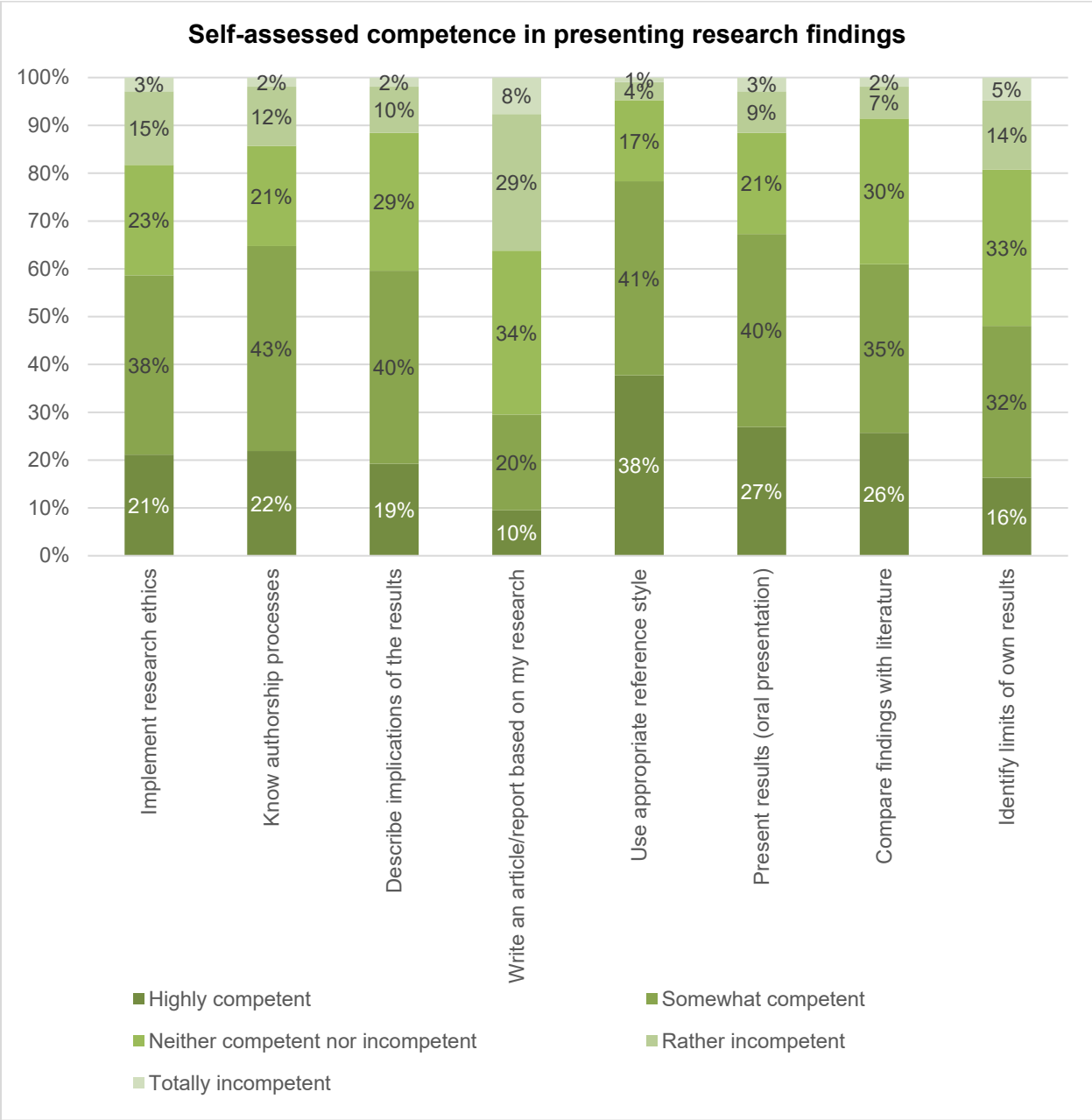


Figure 12. Self-assessed competence in presenting research findings, n=119 (NA 7...15)

Table 14. Question „How confident do you feel in social research?“, responses by study year (n=118)

| Study year | Highly confident | Somewhat confident | Neither confident nor unconfident | Somewhat unconfident | Highly unconfident | Total |
|------------|------------------|--------------------|-----------------------------------|----------------------|--------------------|------------|
| First | 1 (2%) | 12 (27%) | 18 (41%) | 11 (25%) | 2 (5%) | 44 (100%) |
| Second | 2 (7%) | 6 (21%) | 11 (38%) | 6 (21%) | 4 (14%) | 29 (100%) |
| Third | 2 (4%) | 12 (27%) | 17 (38%) | 8 (18%) | 6 (13%) | 45 (100%) |
| Total | 5 (4%) | 30 (25%) | 46 (39%) | 25 (21%) | 12 (10%) | 118 (100%) |

Table 15. Question „How confident do you feel in social research?“, responses by programme (n=118)

| Programme | Highly confident | Somewhat confident | Neither confident nor unconfident | Somewhat unconfident | Highly unconfident | Total |
|---|------------------|--------------------|-----------------------------------|----------------------|--------------------|------------|
| Early years teacher | 0 (0%) | 3 (19%) | 8 (50%) | 3 (19%) | 2 (12%) | 16 (100%) |
| Primary school teacher | 1 (3%) | 5 (16%) | 15 (48%) | 6 (19%) | 4 (13%) | 31 (100%) |
| Special needs teacher | 1 (4%) | 6 (21%) | 11 (39%) | 8 (29%) | 2 (7%) | 28 (100%) |
| Teacher of humanities and social subjects | 0 (0%) | 5 (33%) | 5 (33%) | 2 (13%) | 3 (20%) | 15 (100%) |
| Teacher of science | 3 (21%) | 4 (29%) | 5 (36%) | 1 (7%) | 1 (7%) | 14 (100%) |
| Vocational teacher | 0 (0%) | 7 (50%) | 2 (14%) | 5 (36%) | 0 (0%) | 14 (100%) |
| Total | 5 (4%) | 30 (25%) | 46 (39%) | 25 (21%) | 12 (10%) | 118 (100%) |

3.6 Graduation thesis

Of the 119 respondents, 45 were third year students but this number includes 12 students of primary school teacher programme that integrates bachelor's and master's studies. Thus, 33 respondents would have been presumed to have written their graduation thesis during the academic year observed. However, only 17 reported having defended their graduation thesis. Based on these data alone we cannot make any conclusions whether this discrepancy was in any way caused by remote learning, or any other difficulties caused by the pandemic situation (e.g.schools and kindergartens not allowing visitors for data collection).

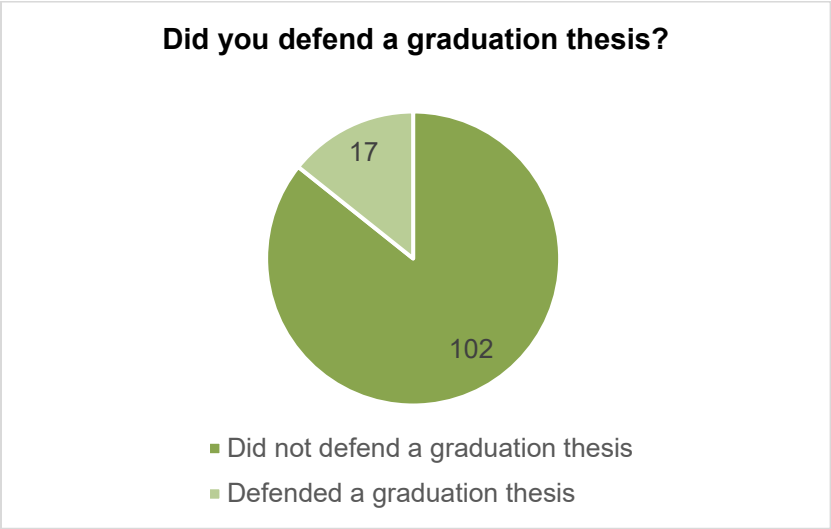


Figure 13. Question “Did you defend a graduation thesis?” (n = 119)

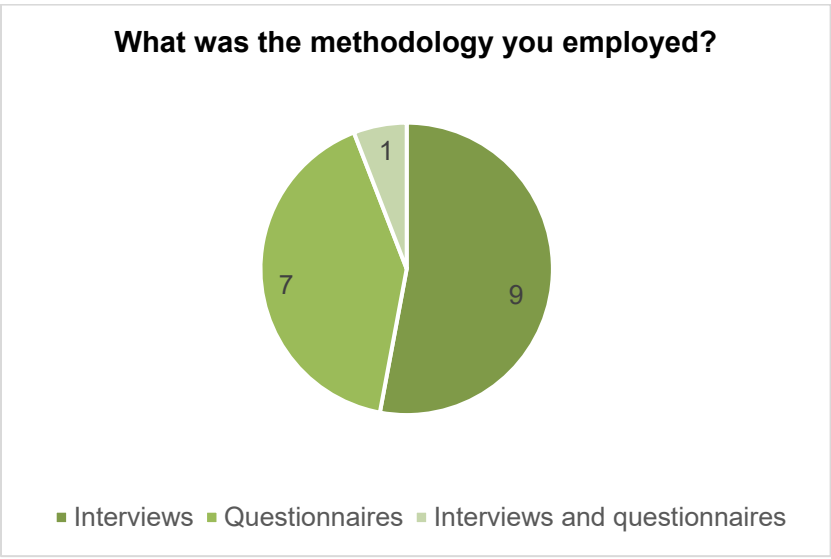


Figure 14. Question “What was the methodology you employed?” (n = 17)

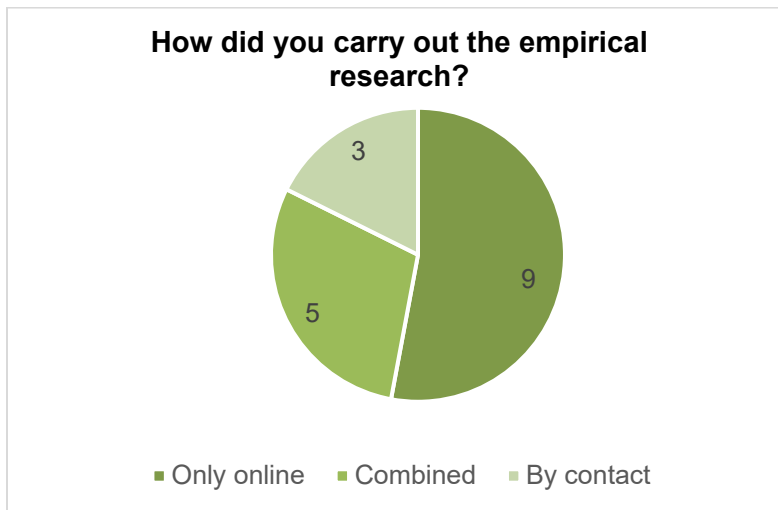


Figure 15. Question “How did you carry out the empirical research?” (n = 17)

Of the 17 respondents who defended their graduation thesis, 8 reported having had a lot of support and 3 quite a lot of support from their supervisor. 5 reported that they got some support and 1 respondent said they had not got much support. As for the support received from the peers, 2 respondents said they had experienced a lot of support and 3 quite a lot. 4 responded that they had not got much support from peers and 3 responded “not at all”.

We do not have the data of the respondents’ grades for the thesis defended but this is a topic for further inquiry: whether and in which ways the support of peers affects the success in thesis writing and defence and how it reflects in the graduates’ further interest in research. While it has been possible for some years already to co-author graduation thesis, this practice has not become very common.

4 Discussion and Recommendations

The students reported increased workload and emotional burden, but also perceived benefits of distance learning. There were minor differences in opinions based on the programme and the study year of the respondent. This can be explained by the limitations of the sample but also by the consistency of the learning experience provided. Other studies have pointed out that emergency remote education illuminated the shortcomings in the students' self-regulation skills which may need addressing particularly during the first study year (Trumm et al, 2020)

74% of the respondents found that the need for digital competencies increased in the period of remote learning but that lack of digital skills has not been a major factor affecting their learning. There are no significant differences between the self-evaluated digital skills of the students by study year – this may indicate that the digital skills necessary have mostly been obtained already in the general education or during the spring term of 2020 when the university first switched to remote learning.

While 88% agreed or strongly agreed that the teachers had carried out their instruction adequately, only 65% agreed or strongly agreed that they were satisfied with the research classes/modules taken remotely. Even when the respondents indicated that their knowledge of the concepts and steps of research had improved, there was significantly less confidence with knowledge about data analysis methods. It calls for further inquiry whether distance learning was an influencing factor here and it is possible that special attention needs to be paid to teaching research methods remotely.

Another topic worth a closer look is whether getting to know their teacher's own research leads to more interest in research among the students. In our survey the students who responded, found that there had not been many opportunities to learn about the current research being done in their field of study -- whether by their teacher, their university or in general. This may or may not have been due to the constraints of remote learning. However, as there are growing expectations to the teachers to be also researchers, sparking the interest at an early stage of teacher education may be of importance.

5 References

- OQS (n.d.). Occupational Qualification Standards: Teacher, EstQF Level 7. Accessed at <https://www.kutseregister.ee/ctrl/en/Standardid/vaata/10824233>
- Swank, J. M., & Lambie, G. W. (2016). Development of the Research Competencies Scale. *Measurement and Evaluation in Counseling and Development*, 49(2), 91-108.
- Trumm, E., Urmann, H., Remmik, M., Mägi, M., Tubelt, E., Espenberg, S. (2020). Lessons Learnt from Emergency Situation: Distance Learning at the University of Tartu. Tartu, CASS, 2020. Accessed at https://www.ut.ee/sites/default/files/www_ut/ut_lessons_from_2020_distance_learning.pdf
- Visser-Wijnveen, G. J., van der Rijst, R. M., & van Driel, J. H. (2016). A questionnaire to capture students' perceptions of research integration in their courses. *Higher Education*, 71, 473-488

6 Appendices

6.1 Questionnaire in Estonian

Õpikogemus ülikoolis distantsõppel 2020/2021

Palume Sul hinnata oma õpikogemust Tartu Ülikoolis pandeemiast tingitud distantsõppe ajal. Sinu vastused aitavad muuta õpetamist ülikoolides tõhusamaks.

See küsimustik on osa rahvusvahelisest Erasmuse projektist "Navigating Social Worlds: Toolbox for Social Inquiry", kus osalevad partnerid Eestist, Lätist, Leedust, Poolast ja Rumeeniast.

Küsimustiku täitmine on anonüümne ja vastuseid kasutatakse ainult üldistatult projekti aruannete ja publikatsioonide koostamiseks.

Vastanute vahel loosime välja kolm Tartu Ülikooli pusa.

Küsimustiku täitmiseks kulub umbes 8 minutit.

Kui Sul on sellega seoses küsimusi, palun kirjuta katri.lamesoo@ut.ee

1. Mõttele oma õppimiskogemusele distantsõppes möödunud õppeaastal 2020/2021.

Palun märgi, kuivõrd sa nõustud järgmiste väidetega.

Sellisel viisil korraldatud õppeprotsess ...

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| soodustab õppimist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| suurendab töökoormust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| on sobiv lahendus ainult kriisiolukordadeks | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tekitab õppetööst võõrandumist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| suurendab emotsionaalset koormust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| takistab õppimise kui terviku tajumist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. Kui vajalikuks sa hindad distantõppes järgmisi õppimistegevusi võrreldes kontaktõppega?

| | Vähem vajalik kui kontaktõppes | Sama mis kontaktõppes | Rohkem vajalik kui kontaktõppes |
|--|--------------------------------|-----------------------|---------------------------------|
| õppejõu saadetud materjalide lugemine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| õppejõu soovitatule lisaks mujalt materjalide otsimine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| iseseisvate kirjalike tööde koostamine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| digioskuste omandamine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| esitluste koostamine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| praktiliste tööde tegemine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| rühmakaaslastega suhtlemine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| loengud | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Kui pädevaks sa pead ennast järgnevates tegevustes?

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Oskan veebist faile alla laadida, salvestada ja üles laadida. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan kasutada kiirklahvikombinatsioone. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan avada veebibrauseris uut sakk (tab'i). | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan täita veebivorme. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan muuta privaatsussätteid. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan ühenduda WiFig. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan ühenduda veebiplatvormidega (Zoom, Teams jts). | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan vaevata leida veebist vajalikku infot. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan vaevata kasutada veebiplatvormide (Zoom, Teams) erinevaid tööriistu. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tean, mis infot ei tohiks veebis jagada. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tean, millal ei tohiks infot veebis jagada. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Olen veebis suheldes sõnades ja tegudes ettevaatlik. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan luua videot. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Oskan koostada infograafikat. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Oskan kujundada veebilehte. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tunnen ennast oma loodud sisu veebi üles pannes kindlalt. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. Kas Sa õppisid lõppenud õppeaastal mõnda õppeainet, milles käsitleti teadusliku uurimistöö meetodeid (kvalitatiivsed, kvantitatiivsed)?

- Jah, võtsin uurimismeetodite õppeainet.
- Jah, õppisin meetodeid mõne muu aine raames.
- Ei õppinud uurimismeetodeid.

5. Kui Sa ei õppinud uurimismeetodeid, siis jäta see küsimus vahele ja liigu küsimuse 7 juurde.

Kui Sa mõtled ainele, milles Sa õppisid uurimismeetodeid, siis mil määral Sa nõustud järgnevate väidetega?

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Minu arusaamine teadusliku uurimistöö põhimõistetest suurenes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mõistan nüüd paremini teadusliku uurimistöö etappe. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mõistan nüüd paremini uurimismeetodeid. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tunnen, et oskan kasutada andmeanalüüsi programme. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Teaduslik uurimistöö huvitab mind nüüd varasemast rohkem. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Meil oli võimalusi suhelda teadlastega nende uurimistöö teemal. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Kuulsin uusimatest arengutest oma teadusvaldkonnas. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tutvusin oma õppejõu teadustööga. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tutvusin oma instituudi teadustöötajate tööga. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud julgustas mind otsima alternatiivseid seletusi uurimistulemustele. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Minu eriala huvitab mind nüüd varasemast rohkem. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud tõi näiteid teaduse rakendamisest praktikas. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sain teada, mis tüüpi uurimusi tehakse minu erialal. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sain teada, kuidas minu erialal teadusuuringute tulemusi kasutada saab. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

6. Jätkub: kui Sa mõtled ainele, milles Sa õppisid uurimismeetodeid, siis mil määral Sa nõustud järgnevate väidetega?

| | Täiesti nõus | Pigem nõus | Nii ja naa | Ei nõustu | Üldse ei nõustu |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Õpitust on mulle kasu ka teiste ainete juures. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õpitust on mulle nüüd või tulevikus kasu tööalaselt. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Arvan, et õpetajal ei lähe neid teadmisi tööalaselt vaja. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud julgustas mind tegema iseseisvat uurimistööd. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud andis regulaarselt koduseid ülesandeid. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud andis minu töödele isiklikku tagasisidet. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Õppejõud teavitas meid, kuidas toimub teadmiste kontroll. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Veebis toimuvad eksamid olid minu jaoks raskemad. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Üldiselt said õppejõud õpetamisega selles olukorras hästi hakkama. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Üldiselt olen ma distantsõppes toimunud uurimismeetodite õppimisega rahul. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7. Mõned üliõpilased õppisid teadusliku uurimistöo meetodeid iseseisvalt, väljaspool oma ülikooli õppekava.

Kas Sina osalesid eelmisel aastal mõnel sellisel kursusel?

Jah

Ei

8. Kui vastasid eelmisele küsimusele jaatavalt, siis mis oli selle kursuse nimi?

9. Kes seda kursust korraldas?

Tartu Ülikool

Mõni muu ülikool

Mõni teadusasutus

Mõni erialaorganisatsioon

Muu

10. Nüüd palume Sul veidi mõelda oma pädevustele teadusliku uurimistöö alal.

Mis tasemel on Sinu oskused järgnevate tegevuste osas?

| | Oskan väga hästi | Veidi oskan | Nii ja naa | Eriti ei oska | Üldse ei oska |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| leida asjakohast teoreetilist kirjandust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tuvastada teadmislünki oma uurimisvaldkonnas | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| sõnastada uurimisteemat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| leida teoreetilist raamistikku teadusartiklist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| põhjendada uurimisteema olulisust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| sõnastada kvantitatiivset uurimisküsimust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| seostada kvantitatiivset küsimust teooriaga | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| mõista epistemoloogilisi eeldusi | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| valida kohased kvantitatiivsete andmete kogumise protseduurid | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| viia läbi kvantitatiivsete andmete kogumine | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| määratleda mõõdetavad tunnused | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| valida andmete kogumise instrumenti | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tunda ära kvantitatiivse uurimuse puhul valiidsusprobleemi | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Oskan väga
hästi

Veidi oskan

Nii ja naa

Eriti ei oska

Üldse ei oska

kasutada statistilisi
meetodeid

tõlgendada
kvantitatiivseid
tulemusi

11. Järgneb: mis tasemel on Sinu oskused järgnevate tegevuste osas?

| | Oskan väga hästi | Oskan veidi | Nii ja naa | Eriti ei oska | Üldse ei oska |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| sõnastada kvalitatiivset uurimisküsimust | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| põhistada uurimisküsimust kirjandusega | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| seada uurimiseesmäärke vastavalt paradigmat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| valida kvalitatiivseid andmekogumisviise | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| kasutada kvalitatiivseid andmekogumisviise | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| võtta arvesse usaldatavusprobleeme | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| kasutada sobivaid analüüsivahendeid | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tõlgendada kvalitatiivseid tulemusi | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| arvestada uurimiseetikaga | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| rakendada uurimiseetikat | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| arvestada autorluse küsimusi | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tulemustest järeldusi esile tuua | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| kirjutada uuringuaruannet | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| kasutada viitamist | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tulemusi suuliselt esitleda | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| võrrelda tulemusi kirjandusega | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Oskan väga
hästi

Oskan veidi

Nii ja naa

Eriti ei oska

Üldse ei oska

tuvastada oma töö
piiranguid

12. Kas Sa kaitsesid lõppenud õppeaastal oma lõputööd?

Jah

Ei

13. Kui Sa ei kaitsnud lõputööd, siis palun liigu edasi küsimuse 18 juurde.

Kui Sa kirjutasid ja kaitsesid kevadel lõputööd, palun märgi ära meetodid, mida Sa kasutasid.

Küsimustikud

Individuaalintervjuud

Fookusrühmaintervjuud

Sisuanalüüs

Välitöö või vaatlus

Eksperiment

Other

14. Kui Sa kirjutasid ja kaitsesid kevadel lõputööd, siis kui kindlalt Sa tundsid end oma valitud meetodit kasutades?

- Väga ebakindlalt
- Üsna ebakindlalt
- Nii ja naa
- Üsna kindlalt
- Väga kindlalt

15. Kui Sa kirjutasid ja kaitsesid kevadel lõputööd, siis kuidas Sa kogusid oma andmed?

- Ainult veebi kaudu
- Silmast-silma
- Kombineeritult nii veebis kui silmast-silma

16. Kui Sa kirjutasid ja kaitsesid kevadel lõputööd, siis kui palju Sa said tuge oma juhendajalt?

- Üldse mitte
- Vähe
- Mingil määral
- Palju
- Väga palju

17. Kui Sa kirjutasid ja kaitsesid kevadel lõputööd, siis kui palju Sa said tuge oma kursusekaaslastelt?

- Üldse mitte
- Vähe
- Mingil määral
- Palju
- Väga palju

18. Kui peaksid tulevikus tegema iseseisvat uurimistööd, siis kui kindlalt Sa ennast selles tunneksid?

- Väga kindlalt
- Üsna kindlalt
- Nii ja naa
- Üsna ebakindlalt
- Väga ebakindlalt

19. Mis õppekaval õppisid?

- Eripedagoogika (BA)
- Humanitar- ja sotsiaalainete õpetamine põhikoolis (BA)
- Koolieelse lasteasutuse õpetaja (BA)
- Kutseõpetaja (BA)
- Loodus- ja reaaliaianete õpetamine põhikoolis (BA)
- Klassiõpetaja (INT)
- Eripedagoogika/logopeedia (MA)
- Haridustehnoloogia (MA)
- Haridusinnovatsioon (MA)
- Põhikooli mitme aine õpetaja (MA)
- Õpetajaharidus (MA)

Other

20. Mitmendal aastal õppisid

- 1.
- 2.
- 3.
- 4.
- 5.

Other

21. Sinu sugu

N

M

22. Suur tänu kaasabi eest!

Kui soovid osaleda Tartu Ülikooli pusa loosimises, siis palun kirjuta siia oma e-posti aadress, et saaksime Sinuga võidu korral ühendust võtta.