Faculty of Education in Science and Technology's Guidelines for the Submission of a PhD Research Proposal and Candidacy Exam

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1. General Overview

The *summarized description of the research proposal* serves as the basis for the PhD candidacy examination. The purpose of this examination is to assess:

- The **feasibility and scientific merit** of the proposed research;
- The candidate's **understanding of the research background and literature**;
- The candidate's **capacity, training, and suitability** for pursuing a PhD-level research project.

Length: The document should be no more than **25 pages of text**, written either in **Hebrew** or **English**. These **do not** include a title page and references. Additional appendices can also be attached, but the proposal should remain complete without them.

2. Required Structure of the Proposal

Title Page (use the formal page)

Must include:

- Title: *"Summarized Description of a Research Proposal for PhD"*
- Research title in **Hebrew**
- Research title in **English** (exact translation)
- **Student's full name and ID number**
- **Head Advisor's name (or names in the case of co-advisors)**

Main Sections. The order of the sections is flexible; some prefer to have the research questions and significance immediately follow the rationale, for example.

1. **Abstract** (recommended 200-500 words)
   Concise summary of the proposed research: research gap and its theoretical and

practical significance, research objectives and questions, research approach and methods, and anticipated impact.

2. **Glossary of Key Terms** *(if needed)*
   Define field-specific terminology and acronyms.
3. **Introduction / Rationale** (1-2 pages)
   Present the context and urgency of the research problem. Highlight the theoretical, societal, scientific, or educational importance of the topic. Lead the reader to the current research done to address the research problem.
4. **Literature Review and Theoretical Framework**
   Summarize and synthesize the state of the field, and identify gaps that will be addressed in your work. Present key theories, terms, or models informing the research.
5. **Research Aims, Questions** (in some groups also the corresponding **Hypotheses**)
   Present the main research aim(s) and the specific research question(s). The research questions should be specific to the context and variables being examined.
6. **Research Contribution and Significance**
   Explain how your project will potentially contribute to:

   - Advancing theoretical, empirical, or methodological knowledge in the field of education or related disciplines

   - Addressing practical, pedagogical, or policy-related challenges in educational settings

7. **Methodology**
   This section should provide a detailed explanation of how the research will be carried out to answer the research questions. It must demonstrate that the research design is appropriate, feasible, ethical, and aligned with the stated research questions.

   The section should also demonstrate comprehensive data collection suitable for a PhD project, as well as an awareness of how similar questions have been studied in the past, along with an understanding of the limitations of existing research tools (utilize relevant references).

   - **Research Design / Methodological Approach**
     Describe the overall approach and design of your study and justify the choice in relation to your research questions and theoretical framework.

   - **Research Population and Sampling**
     Specify who the participants are (individuals, organizations, documents, etc.), how they will be selected (including the sampling strategy), and any relevant demographic or contextual details. Refer to the inclusion/exclusion criteria, as well as the estimated sample size.

   - **Data Collection Procedures**
     Explain how data will be collected (e.g., interviews, surveys, observations, digital

ethnography). Include timelines, settings, and recruitment processes. Clarify how the data collection procedures will be administered and by whom.

- **Research Instruments / Tools**
  Describe the specific tools (e.g., interview guides, survey instruments, coding schemes) and justify their choice. Explain how these tools were/will be developed or adapted, and how their validity and reliability will be ensured.

- **Data Analysis**
  Outline the techniques you will use to analyze the data (e.g., thematic coding, statistical testing, content analysis). Justify your choice and explain how the analysis links back to your research questions.

- **Ethical Considerations**
  (i) Address how informed consent will be obtained, how anonymity and confidentiality will be preserved, and how potential risks will be mitigated. Mention any institutional review or ethics approval obtained or planned.

  (ii) Add a statement detailing whether and in what ways GenAI tools were used in the writing of the proposal. You may refer to the faculty's guidelines on the ethical use of GenAI.

8. **Trustworthiness and Limitations**

   Explain how you ensure credibility, dependability, and transparency. Acknowledge limitations and risks, explain what you do to address them.

9. **Preliminary Results** *(recommended)*
   Share early findings from pilot studies, fieldwork, or research tools/educational material development. For direct PhD track students, include master's results if relevant.

10. **Work Plan and Timeline**
    Present a structured plan of activities with estimated timeframes (Phase, Activities, Estimated Timeline in months).

11. **Bibliography**
    Full list of cited references, formatted in a consistent academic style **APA7**.

12. **Appendices** *(if applicable)*
    Attach relevant materials, such as:

- Interview guides or questionnaires
- Tables explaining your coding scheme, preliminary results figures
- Ethics approvals or participant letters

Candidacy Examination Procedure

The PhD candidacy exam in our faculty includes two components: written and oral.

Written Component

- The exam is a take-home and lasts up to **96 hours (4 days)**.
- You will receive **four questions** from your examiners (typically four faculty members, at least one external to the Technion). Each question is based on your submitted proposal and its surrounding literature, but may refer you to additional literature that you don't know yet.
- You must answer **all four questions** independently. Each answer should be **no more than five pages, including references**.
- Add a statement detailing whether and in what ways GenAI tools were used in answering the exam.
- The examiners receive your written answers before the oral exam, so they may (or may not) address them in the oral phase.

Tips for success:

· Clear your schedule in advance — no teaching, meetings, or childcare responsibilities if possible.

· Prepare food ahead of time. Make sure to take time to rest, exercise, and clear your mind, particularly before going to sleep each night.

· Work in a quiet, focused space — if needed, relocate for a few days (e.g., stay with family, use Technion's library).

· Create a dedicated folder for each examiner, with subfolders for each question.

· Different people have different strategies for completing the test. One option is to start with the easiest question or with the question you feel most confident answering to build momentum. Another option is to read all questions thoroughly and write out a general scheme for each question, then devote several hours to each question for the first two to three days. The last day or two can be spent perfecting, rereading, and completing the answers.

· Consider quoting from your examiners' publications when relevant — it shows engagement with their work.

· Ask past students (especially those with the same examiners) for examples of questions or tips.

- If you need access to educational sources outside Technion, reach out to colleagues with access to other university libraries.

You cannot reach out to colleagues and students to get their feedback on your exam.

Oral Examination

- Usually held **2–3 weeks after** the written component.
- The same examiners who read your proposal and wrote the questions now ask follow-up questions in person (or via Zoom).
- The **purpose of the oral exam is to engage in constructive academic dialogue and improve your work, not to fail you**.
- You'll have a chance to explain your reasoning, expand on written answers, or clarify methodological and theoretical choices.
- It's common for examiners to ask why you didn't use a particular theory or approach — this is normal. Consider responding by either justifying your choices or acknowledging that a different theory/ approach could be equally helpful for your research. Share your thoughts on the advantages and disadvantages of different approaches.
- Listen and write down comments (or ask to record). The examiners have seen many research projects succeed and fail, and they want to help you.
- If you are unsure how to respond to a question, say that you need more time to think. It's completely normal not to take in everything on the spot.
- Try to keep an open mind and not be defensive. It is your thesis, and if you and your advisor don't like an idea or suggestion, it will not be implemented.

Typical structure for the oral exam (90-120 minutes):

Introduction (2-3 minutes)

Closed discussion between the examiners (you are not present)

Your presentation (15–20 minutes)
Summarize:

- Your research question and significance

- (very short) Theoretical background and key frameworks
- Methodology and work plan
- Any preliminary findings or pilot work

Discussion & Q&A (40–50 minutes)

Committee members may ask about:

- Theoretical foundations and alternative approaches
- Methodological rigor and feasibility
- Limitations and possible improvements
- Broader implications of your work

Closed discussion between the examiners (you are not present)

Announcement of the results and revisions requested

What if an examiner is from another field?
This happens. For example, you may have an examiner from engineering with no background in qualitative methods or education. Don't panic. Aim to explain clearly and with humility why your strategy is justified. Your clarity and arguments are part of what's being evaluated.

Evaluation & Results

At the end of the oral exam, you will be asked to step out while the committee deliberates. Possible outcomes include:

- Approval of the proposal and confirmation of candidacy
- Approval with some revisions (usual)
- Request for major revisions and a second examination
- Rejection of the proposal (rare)

If a second attempt is required, clear written guidance will be provided. A second failure typically results in the **discontinuation of the PhD track**.

After Passing

- You officially become a **PhD Candidate**
- Your **stipend may increase**

Preparation Tips

- You should practice your presentation with your advisor/lab members before presenting in your exam, emphasizing clarity and structure
- Anticipate methodological or theoretical questions
- Conduct mock Q&A with peers or your advisor
- Rest before the oral — clarity often improves with calm focus

We all, in the Faculty of Education in Science and Technology, wish you luck.

Your success is our success.

You might also find helpful:

Our recent graduate, Michal Topaz, suggested tips for the exam (in Hebrew)

Ido's informal summary of all master's and PhD submissions and exam regulations (in Hebrew)