RDES-Scope of the state exam and its content

Methodological Aspects of Educational Research

1. Theoretical research: The relationship between research questions and the chosen design and the overall linking of the theoretical background to the proposal of the research project with respect to the ethical principles.

- 1.1 How do research questions determine the choice of research design and methods?
- 1.2 How can theoretical frameworks be translated into methodological decisions in educational research?
- 1.3 How can researchers ensure coherence between research questions, research design, data collection, and data analysis while addressing ethical considerations

2. History and current state of quantitative research in education, theoretical background.

- 2.1 What are the key characteristics and methodological principles of quantitative research in education?
- 2.2 How are variables operationalized and measured in quantitative educational research? Give examples.
- 2.3 How are statistical methods used to analyze data and answer educational research questions? Give examples.

3. The history and the current state of qualitative research in pedagogy, the theoretical basis and the choice of qualitative methodology.

- 3.1What are the specifics of qualitative research and give concrete examples of when we use it?
- 3.2 What research designs and analytical methods do you know in qualitative research?
- 3.3 What research tools do you know in qualitative research and try to apply them to specific research problems?
- 3.4 Define traditional, evolved and constructivist approaches to grounded theory.

4. Discourse analysis of the influence of various philosophical trends of the 19th and 20th centuries on the development of pedagogy as a scientific discipline.

- 4.1 What are the differences between the technical and situated sides of discourse

analysis.

- 4.2 Try to explain how the researcher should position themselves in the discourse analysis?

5. Changes in the paradigm of curricular discourse, determinants and theoretical context of the curriculum and research.

- 5.1 Basic definition of theoretical approaches. Aims, goals, objectives and role of curriculum. Curriculum theory and goals of national education policy (in national and international perspective).
- 5.2 Curriculum theory and goals of national education policy (in national and international perspective). Analyse basic question about national education in the context of curriculum: What educational purposes should the school seek to attain? What educational experiences can be provided that are likely to attain these purposes?
- 5.3 Teacher preparation for the lesson. Achieving the learning objectives through dependent didactic categories (curriculum, learning tasks, teaching methods, organizational forms). Methodological approaches to the research of educational practice.

6. Research in the teaching quality, as the basic of quality management.

- 6.1Prerequisities for teachers (university studies, practical experience, training in schools, teacher professionality, quality development, results and effects, further education courses)

7. Action Research as a way to teacher professionalism development.

- 7.1 Difference between action research and traditional research
- 7.2 Models and the process of action research
- 7.3 How can teachers plan and implement action research cycles to improve their teaching practice?

8. Research in new trends of virtual education.

- 8.1 How can virtual learning environments be investigated using different research methods?
- 8.2 How can researchers measure student engagement and learning outcomes in virtual education?

Recommended reading literature：

Kelly, A. V. (2009). *The curriculum: Theory and practice*. London, UK: SAGE.

Routledge (2022). *Curriculum design. A Routledge Chapter Samples.* Routledge.

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Klikauer, T. (2017). Management education: Fragments of an emancipatory theory. Cham, Switzerland: Springer International Publishing.

Šmelová, E., Petrová, A., & Souralová, E. (2012). Pre-school education in the context of curriculum: Children's readiness for compulsory school attendance in the context of selected EU countries - Czech Republic, Slovakia, Slovenia, Poland. Olomouc, Czech Republic: Palacký University.

European Commission/EACEA/Eurydice. (2018). Structural indicators for monitoring education and training Systems in Europe - 2018. Eurydice Report. Luxembourg: Publications Office of the European Union..

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European Commission/EACEA/Eurydice. (2018). The organisation of school time in Europe. Primary and general secondary education - 2018/19. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union.

European Commission/EACEA/Eurydice. (2018). The structure of the European education systems 2018/19: Schematic diagrams. Eurydice facts and figures. Luxembourg: Publications Office of the European Union..

Burkovičová, R., Lipnická, M., & Falkiewicz-Szult, M. (2016. The theory and practice of preschool education in the context of the curriculum in the Czech, Slovak and Polish Republics. Ostrava, Czech Republic: Ostravská univerzita, Pedagogická fakulta.

Matorera, Douglas (2018). Quality Management System in Education. Steve Tschwete Institute of Learning.

Vlasic, Suzana & Smiljana vale & Danijela puhar (2009). Quality Management in Education. Josip Juraj Strossmayer University of Osijek, Croatia, vol. 5, pages 565-573

Kashyap, Diksha. Educational Management. Meaning, Definition and Types. Retrieved from:https://www.yourarticlelibrary.com/educational-management/educational management-meaning-definition-and-types/63721

Creswell, J. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE.

Denzin, N., & Lincoln, Y. (2011). *The SAGE handbook of qualitative research* (4th ed.).

Thousand Oaks, CA: SAGE.