

PERCEPTION OF ALTERNATIVE INTERPRETATIONS OF SOCIAL PHENOMENA AMONG PRE-SERVICE TEACHER EDUCATION STUDENTS

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Abstract

The paper presents the results of a pilot study focused on how pre-service teacher education students perceive and interpret alternative explanations of social and political phenomena. The research is based on the assumption that the ability of future teachers to critically evaluate information, verify its sources, and distinguish between fact and interpretation represents a key competence in their professional development. The aim of the pilot inquiry was to capture individual strategies, patterns of reasoning, and value frameworks that students apply when confronted with unverifiable or alternative narratives about reality. The study employed a qualitative research design using the semi-structured interview method with master's degree students in teacher education programs. The sample included participants from different fields of study and academic years in order to identify potential variations in thinking Styles. The collected interviews were analyzed through open and axial coding to uncover recurring patterns in argumentation and information assessment. Findings indicate that while students declare the importance of critical thinking, its practical application is often constrained by a lack of methodological confidence in verifying sources and a tendency to rely on intuitive judgments of credibility. The results of this pilot study provide a foundation for a more extensive research project that will explore the relationship between media literacy and the professional preparedness of future teachers within the context of higher education.

Keywords: *Critical thinking, alternative interpretations, pre-service teachers, qualitative research, semi-structured interview.*

1. Introduction

Contemporary society is characterized by a dynamic increase in information, its rapid circulation, and the growing presence of alternative interpretations of social and political phenomena, which are often not based on verified facts (Phillips, Elledge, 2023). In the educational environment, this situation places increased demands on the development of critical thinking, media literacy, and the ability to reflectively evaluate information. This issue is particularly important in the training of future teachers, who will not only be mediators of knowledge in their teaching practice, but also important actors in shaping the attitudes, values, and ways of thinking of their students. The ability to distinguish between fact, interpretation, and manipulation is one of the basic professional competencies of a teacher in a democratic society. Alternative interpretations of reality, disinformation narratives, and conspiracy theories are not just a media phenomenon, but directly enter the school environment through the experiences, opinions, and beliefs of students and pupils. The training of future teachers should therefore systematically develop their ability to work critically with information, analyze argumentation strategies, and reflect on their own value frameworks.

2. Aim of the paper and research questions

The aim of the paper is to present the results of a pilot qualitative study focused on analyzing the ways in which students of teacher training programs perceive, interpret, and evaluate alternative explanations of social and political phenomena. The paper focuses on capturing the individual thinking strategies, argumentation procedures, and value frameworks that students apply when working with information from unverified or alternative sources. The specific aim of the pilot survey is to identify differences in the approach to evaluating information depending on the field of study (approval subjects) and year of study, as well as to point out the limits and potential for the development of critical thinking in the context of the professional training of future teachers.

In line with the set objective, the following research questions were formulated:

- How do students of teacher training programs interpret alternative explanations of social and political phenomena?
- What argumentation strategies and criteria for assessing the credibility of information do students use?
- What role do personal experiences, values, and field of study play in shaping their attitudes toward alternative interpretations of reality?

3. Pilot research methodology

The pilot research was conducted using a qualitative research design, which allows for a deeper understanding of the subjective meanings, interpretative frameworks, and argumentation strategies of the respondents. The chosen approach reflects the research objective of capturing the ways of thinking of students in teacher training programs when confronted with alternative explanations of social and political phenomena in their natural complexity. The research sample consisted of second-cycle university students studying to become teachers, with participants selected through deliberate selection. The pilot study included five first-year students and five second-year students. The pilot nature of the research was also reflected in the limited number of participants, which allowed for a detailed analysis of individual statements. Data collection was carried out through semi-structured interviews, which provided a framework for systematic interviewing while leaving room for spontaneous responses from respondents. Semi-structured interviews are more demanding in terms of technical preparation. The order of questions can be changed or supplemented, but the core of the interview is clearly defined (Hendl, 2016). The interview questions focused on the perception of alternative interpretations of social phenomena, methods of verifying information, assessing its credibility, and reflecting on one's own attitudes towards these phenomena. The interviews were conducted in a safe and confidential environment, recorded with the consent of the participants, and then transcribed verbatim.

4. Data analysis

The analysis of the collected data was carried out using a qualitative analytical strategy that combined open and axial coding (Švaříček & Šed'ová, 2007). The aim of the analysis was to identify recurring patterns of meaning in the respondents' statements, capture their argumentation strategies, and reveal the value frameworks through which students of teacher training programs interpret alternative explanations of social and political phenomena. In the first phase of open coding, the respondents' statements were divided into meaningful units based directly on the language and formulations used by the participants. These codes reflected individual ways of thinking, emotional reactions, assessments of the credibility of information, and approaches to verifying it. Subsequently, within the framework of axial coding, the individual codes were systematically linked into broader analytical categories, which made it possible to capture the relationships between declared attitudes and actual strategies for working with information.

The analysis revealed a significant difference between the declared need for critical thinking and its practical application. Respondents often emphasized the importance of critically evaluating information, but their statements also revealed uncertainty in methodological procedures for verifying sources and a tendency toward intuitive or value-based assessment of information. Differences were also found between first- and second-year master's students, with older students showing a higher degree of self-reflection and professional responsibility.

Table 1. Typical student responses – comparison of grades.

A. First-year master's students	B. Second-year master's students
Nature of responses: • rather declarative, general • strong emphasis on "critical thinking," but weaker operationalization • more frequent intuitive evaluation of sources	Nature of responses: • more reflective, more specific • more frequent links to teaching practice • higher degree of self-reflection and critical distance
Typical responses: • they mainly follow information on news portals and social networks	Typical responses: • distinguish between alternative interpretations and misinformation • more frequently mention the need to verify sources and compare information

• they perceive alternative interpretations as "different opinions" or "conspiracy theories" • they assess credibility based on "familiarity with the source," not methodology • they verify information only in exceptional cases • they consider critical thinking important, but do not know exactly how to develop it in students • they perceive professional preparedness as "future," not yet fully developed	• are aware of their own limitations in methodological certainty • recognize the importance of media literacy as part of teaching professionalism • mention the need for systematic preparation within university studies • reflect on the value and ethical aspects of working with information
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In analyzing interviews with students in teacher training programs, we identified four main axial categories. Strategies for assessing the credibility of information include rejecting or accepting information, familiarity with the source, media authority, comparing sources, absence of systematic verification, intuitive judgment, and personal experience. Argumentative and value frameworks reflect value beliefs, emotional reasoning, selective choice of facts, and the importance of critical thinking. Self-assessment of professional readiness includes the need for methodological support, insufficient preparation, teacher responsibility, the need for further education, and awareness of limitations, with students emphasizing the importance of their own professional growth. Reflection on one's own competence includes personal uncertainty and the need for systemic change, which shows that the development of critical thinking in students requires a combination of individual competencies and broader organizational measures.

5. Conclusion

Based on the analysis of the interviews, it can be concluded that students of teacher training programs are aware of the importance of critical thinking and media literacy as key competencies for the teaching profession. At the same time, however, their statements reveal that the practical application of these competencies is often limited by a lack of methodological certainty, an ambiguous understanding of concepts, and the absence of systematic strategies for verifying information.

A significant finding is the difference in the degree of reflexivity between first- and second-year master's students. While first-year students formulated their answers mainly at a declarative level, second-year students more often reflected on their own limitations, professional responsibility, and the need for targeted preparation in working with controversial and alternative interpretations of social phenomena.

The pilot study points to the need for the systematic development of critical thinking and media literacy in the preparation of future teachers, not only at the level of theoretical knowledge, but especially through practically oriented methodological procedures. The findings also provide a basis for more extensive research focused on the connection between teachers' professional preparedness and their ability to navigate the complex information environment of contemporary society.

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