ERD 2019

Education, Reflection, Development, Seventh Edition

THE LINGUISTIC CONDITIONING OF KNOWLEDGE: APPROACH FROM THE PERSPECTIVE OF EDUCATIONAL DISCOURSE

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Abstract

The epistemology of education is a marginal discipline, connecting philosophy with pedagogy in an interdisciplinary manner, from the perspective of theoretical conceptualizations, the methodology of scientific knowledge and specific practices in the field of education sciences. Over time, various disciplinary fields such as philosophy of language, philosophy of education, logic, rhetoric, and so on have recognized the linguistic conditioning of human knowledge. The educational discourse must be built on sources and principles, focusing on the presentation, critical analysis and transfer of information from the field of education, with the end goal of cementing that knowledge. In the educational process, the emphasis is on rationality, cognition, the search and explanation of phenomena, events and logical relationships between them so that those who learn can access and assimilate content from different scientific domains. The quality of knowledge may depend on the conceptual tools and experimental practices used in educational practice. Respecting the rigors of pedagogical language in an educational environment that ensures cognitive socialization positively influences educational communication, the development of trainers' skills and the achievement of educational goals. The study undertaken at the level of some students from the Pedagogy and Philosophy specialties focused on the teacher providing an educational discourse in which the emphasis was on elaborating and exposing logical pedagogical messages, coherent explanations, critical analysis, constructive confrontations of ideas etc., as well as on the students' practice of argumentation, debate and reflection techniques, taking into consideration to what extent the functional character of the discourse was assured.

1. Introduction

The criteria for constructing a pedagogical explanation, a logical analysis of the educational discourse, for the elaboration and exposure of pedagogical theories, the practice of critical thinking tools or the argumentation of ideas through educational language etc. are elements of content of the epistemology of education, being subjects related to the functionality of the educational discourse.

The educational discourse is a specialized one, which is carried out from a transdisciplinary perspective, in accordance with the language and rules of communication determined by the cultural norms specific to a society in a certain spatial and temporal context. Therefore, language is a producer, preserver, and transmitter of contextual experiences. As a consequence of this aspect, the communicative behavior may or may not be regulated depending on the degree of awareness of the differences of individuals' perception of the world (Borţun, 2002). The pedagogical language has the task of legitimizing the educational activity on both a theoretical and practical level (Reboul, 1989), presenting an intense instructional and cognitive impact.

The educational discourse requires a logical analysis focused on the coherent and argumented construction of messages, as well as the value of a sentence's truth, and their content and value (Parret, 1983). This type of discourse must allow the stimulation of cognitive processes and assertive communication with others, the development of the ability to solve problems, the elimination of inhibitions in communication, identification and application of personal solutions and behavioral learning patterns in different contexts, an increase in self-confidence and motivation for knowledge (Stan, 2014).

In this context, the production of ideas must be stimulated by problematization techniques, appropriate to the educational interests and needs of the educators. The intensive instructional character of the educational discourse leads to action, fundamentally contributing to the assimilation of knowledge.

2. Problem Statement

Communication at the educational level is not only about emitting and receiving messages, but also about participating at all levels to an infinite number of exchanges that cross and interfere with each other. These interrelationships underpin the acquisition and restructuring of information that leads to learning and knowledge. Furthermore, the educational communication is oriented towards satisfying one of the fundamental desires of man, expressed in antiquity philosophy, that of reducing uncertainty, which determines the search for information for the purpose of adaptation (Cuilenburg, Scholten, & Noomen, 1998). The need to convey or learn ideas, information, opinions or feelings from our peers is a fundamental feature of man, one that has conditioned existence and evolution but has always been in accordance with social norms and rules (Dulamă & Ilovan, 2015, 2017; Dulamă, Ilovan, Bagoly-Simó, & Magdaş, 2019; Ilovan, Jordan, Havadi-Nagy, & Zametter, 2016). The contribution to educational communication must correspond to what is required from the transmitter, the status of the conversation, the direction or purpose of the discussion in which someone is engaged (Grice, 1979). The process of selecting epistemological content refers to cognitive capacities, structural schemes of thought or concepts previously assimilated by those who are about to be trained/educated. At the same time, it is also necessary to respect the quantity of information that is appropriate to the context, the quality of the

conversation - which leads to argument and veracity - the relation, - which refers to the bonds that are formed between the participants to a dialogue - and the way - which requires clarity in speech. All these requirements organize the potential core of communication and induce, in the view of Grice (1979), a reflexive character necessary for the discourse.

Presently, the increase in the information flow (the increase in the quantity and quality of information relayed per unit of time) determines the amplification of the dynamic character of the communication process. Given the large amount of information that is being circulated in the instructive-educational act today, as well as the need for informational quality, the educational discourse must fulfill a reactive function, aimed at the personal involvement of students in learning and comprehension (by practicing cognition), in research and personal introspection (through the practice of reflection), expressing their own ideas and practical solutions (by practicing the demonstrative and argumentative discourse) (Sălăvăstru, 1995).

The educational discourse can be simultaneously appreciated as a humanist discourse, through its contribution to the development of the individual's personality, to expanding the boundaries of student knowledge and training and promoting the autonomy of thinking. The incitive valence of the educational discourse includes implicit and explicit interrogations on various events, phenomena, objects etc. addressed in the informative-formative context. Explicit queries are the questions the teacher addresses, the requirements included in the exercises etc. The art of asking questions is a problem debated in the education studies from Socrates to the present day. Implicit queries appear when the text presents a certain level of ambiguity. The multiple reference creates a state of tension for the receiver, which is released by searching for and finding a solution. The characteristics of the educational discourse also include its functionality, ie the extent to which the information presented is productive and efficient (Dulamă & Ilovan, 2016).

3. Research Questions

The targeted questions at the beginning of our research were:

1.To what extent does the teaching staff's educational discourse focusing on elaborating and exposing logical pedagogical messages, coherent explanation, critical analysis, constructive confrontation of ideas etc., determine the functional character of the informative-formative discourse?

2.Can the involvement of students in educational activities in which a pedagogical language is practiced in accordance with the particularities of the logical and critical educational discourse, according to the model promoted by the teacher, equally lead to positive effects in the development of communication skills and knowledge?

4. Purpose of the Study

The purpose of the study was to identify the degree of functionality of the teacher's educational discourse from the perspective of epistemology, by analyzing its impact on the knowledge and development of the students' communication abilities.

Assuming that the teacher can be a model for the students, practicing argumentation, debate, critical analysis, etc. associated with the educational discourse they are familiar with, should determine the development of communication skills and thinking strategies involved in the effective acquisition of knowledge.

5. Research Methods

The program involved the use of the following research methods and tools:

- The activity of assessing the functional character of the teacher's educational speech, from the perspective of the impact on information-training of students, based on a questionnaire addressed to the students;

- Performing a formative experiment based on a program that included two types of activities:

a. the organization of discussion networks, which involved communication based on texts with different interpretations. This method was aimed at placing the students in situations requiring thinking, reflection and personal opinion statements related to the topic of discussion;

b. debating, argumentation and critical analysis of the issue in question. This involved the systematic training of students in organizing collective debates focused on argumentative speeches. These have been supported by encouraging reflection on some of the criteria assessment questions of the argumentation, such as:

- on which elements of theory is my argumentation focused on?

- is the theory clearly stated, concise and explained in detail?

- am I using enough examples to support my argumentation?

- do I have enough evidence as starting points in support of the central point of the theory?

- is all the evidence adequately documented and evaluated?

- are the raised arguments relevant and ordered logically?

- are there correlative elements specific to argumentation that indicate "cause and effect" reasoning?

- is the language used in a specialized manner, clear and intelligible?

- do I manage to optimally combine the elements of verbal, nonverbal and paraverbal communication with the characteristics and reactions of the audience?

- are the presented conclusions likely to convince the audience?

Our research involved a group of 28 students from the Faculty of Psychology and Education Sciences, specializing in Pedagogy, and 36 students from the Faculty of Geography at the Babeş-Bolyai University of Cluj-Napoca, specializing in Geography of Tourism, of which 29 are in the first year of study and 35 in the second year. Of these, 13 are boys and 51 are girls. The subjects' age ranged between 19 and 26 years old.

6. Findings

The first step consisted in an appreciation of the characteristics and functional character of the teacher's educational discourse, from the perspective of the informative-formative impact on the students.

The evaluation was carried out on a three-step scale (great, average and small extent), the maximum score being 3 and the minimum being 1.

Table 01. Assessing the extent to which the teacher's educational discourse has a functional character

Qualities of the teacher's educational discourse	To a great extent		To an average extent		To a small extent	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Exposing logical pedagogical messages	43	67.18	21	32.81	0	0.0
Mean	2.67					
A coherent and detailed explanation	55	85.93	9	14.06	0	0.0
Mean	2.85					
Critical analysis of contents	47	73.43	14	21.87	3	4.68
Mean	2.68					
Constructive confrontation of ideas with students	32	50.0	30	46.87	2	3.12
Mean	2.46					

The sample's mean values indicate that all components of the teacher's educational discourse play an important functional role, operationalized by favoring the understanding of exposed issues and the acquisition of practical and theoretical knowledge with a scientific character and the development of students' communication skills. With a lower mean value determined at the sample level (2.46), we have the constructive confrontation of ideas with the students, although there is no major difference compared to the other analyzed components (table 01).

Regarding the second course of action, this involved an analysis of the context of collective discussion and debate, where the argumentative discourse was exercised. The activities that preceded the evaluation of the results were focused on the following aspects:

- *enhancing the interactive nature of lessons* - students being permanently and systematically involved in solving learning tasks especially with a team or group;

- *ensuring a permanent control over the specialized language used in the transmission of information*, so that students can practice, according to the specialization, scientific communication, demonstrating both communication skills and acquiring knowledge in the field;

- *encouraging students to express their opinions* on the topic proposed in the debates, but also on the general educational aspects deriving from the organization and development of educational activities;

- *asking students to routinely use argumentation or critical analysis*, knowing that argumentation favors the acquisition and manipulation of knowledge, assuming more than a practice of communicative skills.

The evaluation of the results obtained in the discussion networks and the argumentative speech was carried out in two distinct stages (IS - the initial stage and FE - the final evaluation), at a three-month interval, in order to observe the differences that emerged as a result of the formative training achieved

during the intervention, for the specialized disciplines. The synthetic results obtained by the students are expressed as averages, calculated according to the rating scale, which includes five reference points (1 - minimum level of achievement and 5 - maximum level).

The evaluation of the results of activities carried out in the form of discussion networks revealed the following aspects, which can be seen in table 02:

Table 02. The average of the scores obtained in evaluations within the discussion networks of the disciplines of Geography and Pedagogy

Evaluated component	Averages (IS-FE) - Geography	t	p	Averages (IS-FE) - Pedagogy	t	p
Understanding the different perspectives of text interpretation	2.96-3.93	3.345	.002	2.45-3.36	3.049	.004
Involvement through personal reflection	2.93-4.28	4.803	.000	3.00-3.43	1.420	.161
Issuing personal opinions	2.76-3.29	1.619	.111	2.96-4.18	3.960	.000

The discussion network implied communication based on a text that involves different interpretations, which resulted in the students' involvement in thinking, reflection and personal opinion statements related to the subject of the discussion, focusing on elements of critical analysis.

The results showed that the understanding of different perspectives of interpretation of the text progressed from the initial stage of the evaluation to the final one, when the averages recorded at the level of the students in both specializations proved to be higher (3.93, respectively 3.36), the difference being significant ($p < 0.05$). At the same time, Geography students proved to be more reflexive, so at the stage of involvement through personal reflection they obtained the average of 4.28 at the second evaluation, which is significantly higher compared to the average from the initial evaluation (2.93). By comparison, Pedagogy students made greater progress in the personal opinion area (an average of 4.18 in the final assessment compared to 2.96 at the initial assessment), demonstrating a significant difference ($p < 0.05$).

The results recorded in the evaluations of the argumentative type are illustrated in Table 03, where the evolution and the progress made by the students are highlighted by comparing the results between the first and the last debate in each of the two specializations:

Table 03. The average scores obtained in the evaluations of argumentative discourses during the debates for the disciplines of Geography and Pedagogy

Evaluated component	Debate averages (IS-FE) - Geography	t	p	Debate averages (IS-FE) - Pedagogy	t	p
Respecting the argumentative speech structure	2.65 – 3.15	1.684	.098	3.11- 4.14	3.354	.001
Lexical Marks Specific to Speech Discourse	2.96-3.93	3.345	.002	2.36 - 2.61	0.879	.383
The textual dimension of argumentation	2.65 - 3.96	4.979	.000	2.50 – 3.93	5.620	.000

The linguistic dimension of argumentation	2.62 - 4.04	4.978	.000	3.07 – 4.11	3.787	.000
The discursive dimension of argumentation	2.54-2.96	1.534	.131	2.79-2.86	0.272	.787

The highest scores (averages over 4.00) are recorded in the last debates for both specializations, in the case of the textual and linguistic dimensions of the argumentation, which shows that both the clarity of the exposition as well as the students' persuasion power in the argumentation process were affected by a significant increase, validated by the value of the t test(p <0.05). Values above the average of 4.00 are also highlighted in the case of observing the structure of the argumentative discourse for the debates held by the students from the Pedagogy specialization. This leads us to assume that the students of Pedagogy specialize in a higher degree regarding the exercise of respecting an organized structure, due to the fact that they have knowledge and methodical training in working with students compared to the students from the Geography specialization. The lexical brands specific to the argumentative discourse were more present for the Geography students, where, at the last evaluation, this component demonstrated that there was significant progress compared to the initial evaluation (p <0.05).

Although the results of the two specializations differed partially, overall there was a performance that denotes both better knowledge and understanding of the information specific to the specializations, as well as better communication skills, which is a transversal competence, targeted by the modern educational system.

7.   Conclusion

The content of education is built in relation to a certain stage of social development and the requirements of the social context. Thus, intertextuality occurs at the confluence of education sciences with related sciences: philosophy, psychology, sociology, logic, biology, with the educational discourse having intertextual connections with the philosophical, moral, religious or historical discourses.

The issue of education based on the competence and high professionalism of the teaching staff is of concern to researchers at the international level. Wragg (1995), from Exeter University, is aware of the information explosion of recent years. To meet this challenge, the teacher needs to be empowered not only with information, but with the skills to process them. The cubic curriculum model is suitable for the 21st century educator. Starting from the triangle model of intelligence, designed by Guilford (1967), the three dimensions of the competency cube, proposed by Wragg (1995), are: educational disciplines; transcurricular springs (aesthetic, social, reflexive, imaginative, language, thinking, political, citizenship) and teaching / learning styles (leading to imitation, observation, teamwork, discovery, exposure).

Researches in the field on the educational discourse attempt to epistemologically substantiate and critically analyze the terms used. The scientific rigidity of pedagogical language does not consist in its transformation into a technical one, but in an operational one. Currently, the beneficiaries of the instructive-educational act must acquire the skill to transfer the knowledge and experience gained in the educational process to the broad, social, natural life. These will be applied in common contexts of life, supporting any actionally efficient deed. Any communication competence formed in school but used exclusively in that formal environment loses consistency and value, being an artificial product.

Coherence is a characteristic specific to dialogue in education, which is established through meaningful relationships determined by the communicative nature of language, by its cognitive side, by the quality of the transmitter for which discourse becomes an instrument in achieving a goal. An effective discourse will act as a stimulus to the cognition and emotional disposition of the interlocutors, positively influencing them. We can integrate the educational discourse into a list of tools that provide experiential learning, aimed at acquiring knowledge, but also skills and competencies, including professional ones, in didactic contexts (Răduț-Taciu, Stan, & Bocoș, 2018).

The finality of competent communication can be expressed by the idea of crystallizing scientific experience, ensuring its conversion into knowledge structures, efficient operational systems (skills, qualifications, abilities), explicit or implicit attitudinal-motivational sets regarding cultural models. Last but not least, this concerns the possibility of transforming cognitive, social and emotional experiences into standalone products, into elements of civilization, by means of communication.

Student engagement in activities that require active involvement, initiative spirit, systematic communication in all its forms, allows the successful completion of didactic tasks and, last but not least, assimilation of knowledge in an attractive and tireless manner.

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