Formation of Media Educational Skills of a Future Teacher in the Professional Training

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Abstract: The article deals with the solution of the problem of media education skills formation of the future teacher in the process of vocational training. The concept of "media education skills of the future teacher" is interpreted as a set of intellectual and practical actions that provide the ability of the individual to perform actions in search consciously, selection, processing, analysis, creation of media texts of different styles and genres, projecting and preparation of the results of media education activities. The groups of media-educational skills of the future teacher-dictionary are distinguished: language-communicative, analytical-interpretative, text-genre skills, information-technological, projecting.

The model of media and educational skills formation of future language-teachers in the process of vocational training is developed and implemented. The model covers theoretical and methodological, substantive-procedural and diagnostic-resultant blocks, and is based on personal, competence, praxeological, cultural, text-centric approaches, involves taking into account didactic principles of interdisciplinary integration and aesthetics value of media texts. The effectiveness of the selected forms, methods and means, the result of which are formed by the ability to perceive, critically read, analyze, interpret, create media texts of different styles and genres through the creative application of professional theoretical knowledge, practical skills and techniques of media analysis, has been empirically confirmed. The sample size comprised the experimental group (EG) – 132 students and the control group (CG) – 124 students. Exclusive author's tests were developed to confirm the validity of the results, which were processed according to Pearson's criterion.

Keywords: *media education, skills, media literacy, media culture, media text, professional training, language-teachers.*

1. Introduction

The dynamic development of mass media as a powerful component of the humanitarian security of the state actualizes the need for the formation of media culture, media and educational skills of the person in the institution of general secondary education. The importance of media education and media literacy as an integral element of formal and informal education, information hygiene of consumers of information, intelligent behaviour with information in civil society is emphasized in the documents of the UNESCO Declaration on Media Information Literacy, media literacy and media literacy digital technologies" (2014).

The general education school needs teachers who can work effectively in an increasing volume of information, can analyze, interpret and produce media texts, design and deliver lessons and educational activities using media products.

We characterize media education as a process of learning, self-study through the media, as a scientific and educational sphere of activity aimed at forming psychological protection against manipulation and the development of media culture.

Within the article, we focus on the formation of media literacy skills of future language-teachers. In the context of dynamic growth of information, knowledge of the psychology of media communication, thoughtful reading, interpretation of media text, determining the connection between the components of content, structure and linguistic design of media texts, creation of media text with structural, semantic, linguistic features are essential; evaluation of media texts concerning the principles of academic integrity; mastering the techniques of communicative interaction in the network space; use of media education tools to solve the problems of development, education and upbringing of students.

The study of practical experience has made it possible to find out that the professional activity of the language-teacher is subordinated to the implementation of strategic tasks of reforming the general secondary education, the introduction of a new educational and methodological provision of linguistic and literary subjects, including using media education, aimed at forming a personality with innovative thinking, creative skills and active life position.

The hypothesis of the study: the formation of media education skills of future language-teachers will be more effective if implemented in the process of professional training model of media education, which provides

the unity of purpose, content, structure, stages, appropriate forms, methods, realized in the process of learning during pedagogical practice, in extracurricular work, and as a result of the step-by-step implementation, media education skills of the experiment participants are formed.

2. Literature Review

The theoretical basis of the study are the works that substantiate the theoretical and methodological foundations of media education and media literacy (Pérez-Tornero & Tayie, 2012), proposals for the development of person's media education in the direction of the development of participation, critical and aesthetic thinking culture; autonomy in decision-making, measurement and metrics to determine new media competence: language; technology; interaction processes; production and distribution processes; ideology and values, aesthetic dimension (Ferrés & Piscitelli, 2012).

Experts' publications present practical experience of using social media in education (Hasiloglu, Calhan, & Ustaoglu, 2020), ways of interpreting media of different genres to avoid misunderstandings (Garrett et al., 2020), developing media literacy and participant literacy educational process (Alcolea-Díaz, Reig, & Mancinas-Chávez, 2020; Romero & Gómez, 2015). Also, experts explore the digital competence of students (Pöntinen & Räty-Záborszky, 2020), technology students (Yezhova, Pashkevich, & Gryn, 2019), postgraduate teachers (Kuzminskyi et al., 2019), and teachers (Falloon, 2020), integration of digital technologies (Vidal-Hall, Flewitt & Wyse, 2020), use of digital portfolios (Gonzalez & Gomez, 2020), digital video games (Coleman & Money, 2020), visual media in the educational process (De Castro, 2017; Tezer, Ucar, & Tepe, 2020),

Our study took into account the suggestions of scholars Sime and Themelis (2020) to include such competencies as television tutors in the professional development of teachers and teaching practices, to use multimedia in teaching translation (Zhang, Sun, & Peng, 2020), to develop skills in future teachers select specialized software (Semenikhina, Semenog & Drushliak, 2019), and develop cognitive models of knowledge (Semenog et al., 2019).

Research by Zhang, Sun, Peng (2020) made it possible to clarify more clearly the understanding of the need for multimedia education, the updating of teaching methods, the content of information technology skills, to create independently quality media texts/media products and to translate

existing ones, to play them as author or moderator in different forms of presentation in social networks.

The research practices of English language teaching professionals using social media form the basis of hands-on, individual and independent work in language and teaching disciplines (Rwodzi, de Jager, & Mpofu, 2020). Report by Jones et al. (2020) enriched theoretical and practical ideas, knowledge about creating pedagogically appropriate media texts, and applied various types of critical reading; determine the relationship between content components, structure, and linguistic design of media texts. The work by Scull et al. (2020) prompted to take into account the motivational stage of formation of media education skills specificity of students emotional and personal interest in media education activities, to develop appropriate tasks of heuristic conversation, discussion questions according to the development of critical thinking, the formation of informational, analytical-interpreting, text-genre skills.

The scientific studies of Pöntinen, Räty-Záborszky (2020) made it possible to express a meaningful content of the language-teachers preparation for pedagogical practice, taking into account the knowledge about psychological peculiarities of participants in the educational process, more reasonably select and use pedagogically appropriate media texts according to the topic or stage of the lesson.

Coleman, Money's (2020) analysis of scientific work contributed to the actualization of attention to the interaction of teachers, students, media professionals, which facilitated in the pedagogical experiment the disclosure of student's personality, the formation of project skills.

However, the experience learned is not sufficiently reflective on the content, forms and methods of forming the media-literacy skills of future language-teachers in the course of vocational training, which led to the creation of a resource centre for the professional development of Ukrainian language and literature teachers at A. S. Makarenko Sumy State Pedagogical University. To fulfil the tasks of the Center's research direction, the laboratory "Media-Culture of the Teacher-Dictionary" works. Testing the formation model of future media literacy teachers was carried out as an interdisciplinary project of the Departments of Informatics and Ukrainian Language and Literature based on the resource centre for the professional development of Ukrainian language and literature teachers.

3. Research Methodology

3.1. The purpose of the article is to develop, theoretically substantiate and experimentally test the model of language-teachers media literacy skills formation in the process of vocational training.

The goal was to achieve the following objectives:

1) describe the nature and structure of language-teachers media literacy skills;

2) to develop a model of language-teachers media literacy skills formation in the process of vocational training

3) to experimentally confirm the effectiveness of the model of language-teachers media literacy skills formation in the process of vocational training.

3.2. Participants

Students, future teachers-linguists from A. S. Makarenko Sumy State Pedagogical University, Alexander Dovzhenko Glukhiv National Pedagogical University, Donbas State Pedagogical University, South Ukrainian National Pedagogical University named after K. D. Ushynsky, Kherson State University (total – 256 participants) are involved into the experiment. They studied at 2-4 undergraduate courses in specialities 035.01 "Ukrainian language and literature" and 014 "Secondary education (Ukrainian language and literature)". The age of the participants in the experiment is 18-25 years. The sample size comprised the experimental group (EG) – 132 students and the control group (CG) – 124 students.

All participants agreed to participate in the experiment. The ethics of the experiment participants adhered. The experiment was conducted according to the decision of the joint meeting of the Research Laboratory "Academic Culture of the Researcher" of the Department of Ukrainian Language and Literature and Department of Informatics of A. S. Makarenko SSPU, protocol # 6 of the 30 of November 2016.

3.3. Methods

In the process of research, we used a set of methods:

theoretical: terminological analysis for clarification key concepts, a generalization of leading methodological provisions and substantiation of the leading idea of research, pedagogical modelling to build a model of

media education skills formation of future vocabulary teachers in the process of vocational training;

empirical: questionnaire, pedagogical (ascertaining and formative) experiment to determine the effectiveness of the model of media education skills of future language-teachers formation in the process of vocational training

statistical: Student's criterion for assessing averages to determine likely shifts in levels of media education.

Diagnostic tools were used to test the effectiveness of the model of media education skills of future language-teachers formation, the choice of which was determined by the groups of media education skills (linguistic, analytical, interpretive, textual and genre skills, information and technological skills).

P-1 The Language and Speech Assessment Test (authors idea) includes 20 questions related to the rules for writing media texts, knowledge of the rules for speaking, the ability to perceive media texts, and more. Each correct answer was rated at 1 point.

P-2 Michelson's Communication Assessment Test (Kolmogorova, 2002) provides an opportunity to test the ability to recognize typical verbal and non-verbal means, critically examine media texts, to recognize facts and judgments of media information, to possess communication and ethics techniques. According to the results of the test, the number of negative responses to given situations is calculated. Their percentage influences the assessment of the communication skills level.

P-3 Writing a critical essay on a given topic (authors idea) involves testing the ability to critically evaluate media text, formulate one's thoughts, and defend them in one's own media product. The critical essay was rated at a maximum of 20 points and included the following evaluation criteria (up to 4 points each): volume (120-200 words); adherence to the structure of the text (precise compositional construction, internal logic); availability of the author's approach to the disclosure of the topic (the author knows and reasonably applies theoretical concepts, terms, generalizations, ideas); thesis argumentation (arguments, examples, evaluative judgments, conclusions); language essay design.

P-4 Media Critical Analysis Test from Yachmenyk Questionnaire (2019) aims to test the ability to structure, separate information from one or more media sources, distinguish between important and minor media message details, determine the relationship between content components, structures, and linguistic design belonging to different styles and genres. The test includes 19 questions, with a positive answer of 5 points.

P-5 The test of the ability to develop a media product from Yachmenyk Questionnaire (2019) provides for testing the formation of skills to compose a text of different types, styles and genres, taking into account the structural-semantic and linguistic stylistic features, to argue, to fix their position in the text of a certain. In different situations, points were scored on a scale from 0 to 5.

P-6 The Medialinguistic Literacy Test from Yachmenyk Questionnaire (2019) includes 14 questions to test styling skills, evaluate media texts for regulatory purposes, edit text errors, and edit one of the correct ones. The correct answer was rated at 1 point.

P-7 Individual task for using digital technologies for media education product cases (author) connected to finding, analyzing, and developing a copyrighted media product to solve a social problem. The evaluation criteria were: the reliability of the selected sources (up to 5 points), the quality of the data analysis (up to 5 points), the quality of the justification of the solution to the problem (up to 5 points), the correctness of the choice of specialized software for creating author media (up to 5 points), the quality of the visual presentation of the product by multimedia (up to 5 points), compliance with the principles of academic integrity (up to 5 points).

P-8 The individual task for integrating information into different styles and genres and creating a media education product (authors idea) that involves converting a given media text and it further presentation. The individual task is rated 10 points: we took into account literacy (up to 2 points), style (up to 2 points), broadcast quality (up to 4 points), presentation on social networks (up to 2 points).

P-9 Media Literacy Test from Yachmenyk Questionnaire (2019) involves testing the ability to select media texts for a specific didactic purpose, editing media texts for a specific educational event. The test provides 11 test questions with multiple answer formats (one of several, several of several, to match, to sequence) The maximum score is 100.

P-10 The individual task of developing a fragment of a lesson on the use of media (authors idea) was estimated at 30 points. Assessed: the ability to reasonably select and use according to the topic or stage of the lesson pedagogically appropriate media (up to 10 points), create book trailers, models of motivators, collages (up to 10 points), videos (up to 10 points) using specialized software.

The described diagnostic techniques form the basis for determining the formation of media education skills in future language-teachers at three levels: low, medium, high (Table 1).

Table 1. Media education groups and their diagnostics

Source: Authors' own conception

Media education groups	Diagnostic code	Score distribution by level		
		Low	**Middle**	**High**
Language and communication skills	P-1	1-8	9-15	16-20
	P-2	70-100	40-69	0-39
Analytical and interpretative skills	P-3	0-8	9-15	16-20
	P-4	0-35	40-70	75-95
Text-genre skills	P-5	0-35	36-75	76-100
	P-6	0-5	6-10	11-14
Information technology skills	P-7	0-10	11-18	19-25
	P-8	0-4	5-8	9-10
Designing skills	P-9	0-40	41-70	71-100
	P-10	0-10	11-20	21-30

Respondents with the low level of media education have an elementary knowledge of the conceptual apparatus of media education, types and genres of media texts, features of media texts creation, have incomplete knowledge of the psychology of media communication, the technology of building lessons, educational activities, group work. It is difficult for students to select, analyze, interpret information from one or different media sources, to create a media text (media product), to identify essential details that promote or interfere with media communication; distinguish between essential and minor details of the message about their role in understanding what is being heard; adhere to the requirements for structuring the logic of presentation; apply different types of critical reading of media texts on familiar and new topics; determine the relationship between content components, structure, and linguistic design of media texts belonging to different styles and genres. Insufficiently, students can remove, process, produce, retransmit, plan media texts; create oral, electronic, written media text with structural, semantic, linguistic features; evaluate media texts for regulatory purposes; to conduct discussions and to defend and substantiate their own opinion, to make arguments.

Students with an intermediate level of media education have higher levels of knowledge of the conceptual apparatus of media education, unique professional terminology; they are aware of the importance of the psychology of media communication, can create with the help of a teacher media text, write a text of different types (electronic, television, radio), styles and genres, apply different types of critical reading of media texts on familiar and new topics with the help of the teacher; identify the relationship between content components, structure, and linguistic design of media texts belonging to different styles and genres; create oral, electronic, written media text with structural, semantic, linguistic features; adhere to the principles of academic integrity when creating media text. It is sometimes difficult for students to understand the hidden content of a message, to resist the manipulation of consciousness and propaganda by the media. With the help of the teacher determine to what extent this information is reliable, establish analogies with other media texts, determine the target audience, the presence of the author's position, the views of the author covered in the text, analyze the social position of stereotypes/values, social orientations and the positions that the media demonstrates. Students are not motivated to carry media cultural values, the ability to select and use pedagogically appropriate media text according to the topic or phase of the lesson.

Respondents with a high level of media education skills have a high level of desire for continuous professional and personal improvement, knowledge of the conceptual apparatus of media education, particular professional terminology, the psychology of media communication. They can create media texts, compose media texts, compile media texts; determine the connection between the components of content, structure and linguistic design of media texts, create media texts with structural, semantic, linguistic features; evaluate media text for regulatory purposes, adhere to the principles of academic integrity when creating own media text; create online media projects on a partnership basis; have communication techniques in the network space according to the purpose and situation of communication. Can model author's lessons, different types of visualization, trying out own media education projects, applying media education tools to solve the problems of development, education and upbringing of students.

It was used xi-square criterion to test the hypotheses about the statistical uniformity of the samples of CG and EG at the ascertaining stage of the experiment and their statistical difference after the formative stage, which is used to compare the objects of two sets by the level of a specific

property. The criterion applies to two independent samples with independent elements on a scale of at least two positions.

The idea behind the criterion is: for CGs and EGs, the number of students is divided by level (3 categories – low, medium, high). The values are entered in the table (Table 2).

Table 2. Distribution of students by levels

Source: Authors' own conception

Group		Level		
		Low	Middle	High
EG students)	(N_E=132	O_{E1}	O_{E2}	O_{E3}
CG students)	(N_K=124	O_{K1}	O_{K2}	O_{K3}

Null and alternative hypotheses are being constructed:
Ho "Score distribution by levels in CG and EG is the same";
Ha "Score distribution by levels in CG and EG is different".

The xi-square test was used to evaluate the hypothesis (Hrabar & Krasnianskaia, 1977).

The experimental value of T was calculated by the formula:

$$T_{exp} = \frac{1}{N_E * N_K} * \sum_{i=1}^{3} \frac{(N_E * O_{K\ i} - N_K * O_{E\ i})^2}{O_{E\ i} + O_{K\ i}}$$

For the significance level of 0,05 and the number of freedom degrees 3-1 = 2, we have the critical value of the statistics T_{cr} = 5,991. Provided the $T_{exp} < T_{cr}$ null hypothesis is accepted, otherwise – the alternative.

Following the "Methods of conducting a comparative pedagogical experiment," we determined the conditions for conducting a pedagogical experiment. Conditions that did not vary, we included the number of hours for training courses.

The conditions that varied were as follows:
– in EG during lectures, practical classes, individual and independent work on linguistic-methodical, pedagogical, informative

disciplines, the pedagogical practice was paid constant attention to the integration of media education component; and in KG – attention was paid to the presentation of educational material with traditional informative and explanatory character or with elements of media educational tasks;

  − EG students systematically performed test tasks P1-P10 to check the formation of language, information, analytical, interpretive, text-genre, projecting skills; and KG students we offered the traditional tasks of the disciplines;

 − the course "Media-Culture of the Language-Teacher" was taught in EG, for KG students not;

  − EG students in the course of group work prepared an electronic portfolio, videos on the basics of academic culture, conducted media diaries; KG students also participated in the work of the groups, but the media educational component was not used systematically;

  − EG students during pedagogical practice were directed to fulfil the tasks of media didactics; formation of media library for lessons and circle work, modelling of plans-synopsis of lessons, circles, educational events, while in KG – work was directed to fulfil traditional tasks of practice.

3.4. Model formation of future language-teachers media literacy skills in the process of vocational training

  The basis of the research is the idea of professional development, self-development and self-realization of the language-teacher, which in the conditions of the New Ukrainian School is capable for effectively carrying out language and literature training of young people, can perceive, critically read, analyze, interpret, create media texts of different styles and accomplish creative search based on the achievements of pedagogy, psychology, philology, computer science. Problem-solving is sufficient if the process of future language-teachers professional training concerning the model of media-educational skills formation made. It ensures the unity of purpose, content, structure, stages, appropriate forms, methods. It is realized in the process of mastering students in vocationally-oriented courses, during practical courses, in extracurricular work (Figure 1).

Figure 1. Model formation of media literacy skills of future vocabulary teachers in the process of vocational training
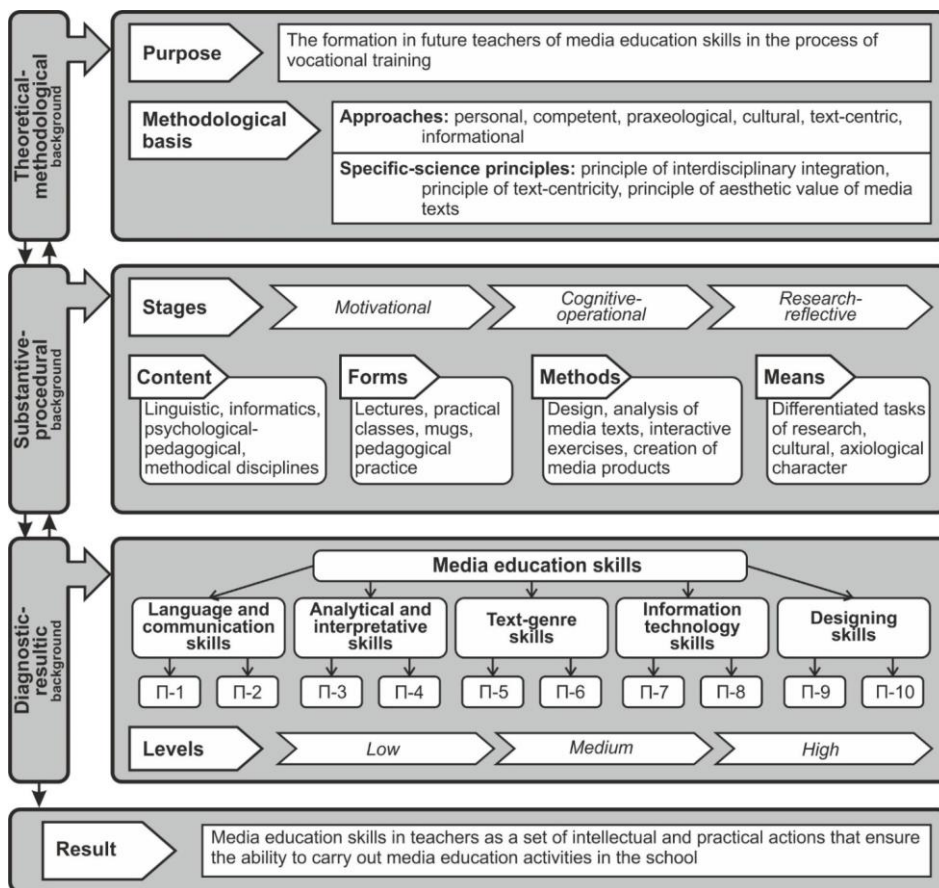
Source: Authors' own conception

The *theoretical and methodological block* provides the goal, task, takes into account the position of personally oriented, competent, cultural, text-centric, praxeological, informational approaches, specific principles of interdisciplinary integration, text-centricity, the aesthetic value of media texts; expresses the idea of the educational process orientation on the formation of future language-teachers media skills.

The choice of methodological basis is made due to the following factors. According to the *personal approach*, the integral personality of the student, his or her desire for safe and effective interaction of *teacher-information-media-student*, ability to critically understand the values of media

education as a fundamental component of the humanitarian security of the native country is essential; the ability to quickly understand a complicated, uncertain situation and quickly make the right decision. Adherence to the provisions of the *competence approach* makes it possible to direct the educational process to the formation of media education skills as an integral component of the professional competence of the language-teacher. We apply a *praxeological approach* in the process of performing such actions as formulating a problem, planning a sequence of actions, searching for the necessary information from different media sources, organizing it in different ways; exercise self-control, self-esteem, self-correction.

The *substantive-procedural block* of the model expresses its practical implementation through the stages: motivational, cognitive-operational, research-reflexive (Table 3).

Table 3. The content of stages of media educational skills formation

Stages	Content
Motivational (1st-year students)	– fulfilment of tasks with a media education component with the purpose of formation of emotional and personal interest of students in media education activities, development of critical thinking, the formation of informational, analytical-interpretative, text-genre skills in occupations on professional language, ICT issues; inclusion of elements of heuristic conversation, discussion questions, tasks to check the ability to analyze, compare, summarize media information; – participation in the work of a scientific circle on media culture as a component of the resource centre of professional development of teachers of Ukrainian language and literature, whose activities are directed to the formation of tolerant communicative behaviour in the social network; preparation of media diary, electronic portfolio.
Cognitive-operating (2nd and 3rd-year students)	– formation of analytical-interpretive, text-genre, language and communication skills of students (discipline of the language, pedagogical cycle); – supplementing the course on teaching the mother

Stages	Content
	language with the issues of media didactics, forming a media library for lessons and circle work, and modelling lesson plans, circles, educational events using media education; – tasks fulfilment of a research character to master the culture of students work with the media text of different types and genres (course "Media-culture of teacher-dictionary"); – preparation of critical essay projects on media communication and netiquette, media-educational quests in the activities of the media culture circle; – participation of students in training, workshops "Top 10 online tools for an effective lesson in the Ukrainian language", in discussions with the invitation of vocabulary teachers, in competitions of social projects; in scientific conferences, round tables, webinars.
Research and reflection (4th-year students)	– formation of information, analytical, interpretive, text-genre, language-communication, projecting skills of students in the resource centre of professional development of the teacher of Ukrainian language and literature and laboratory "Media-culture of teacher-dictionary": – tasks for the development of skills to determine the most effective methods of collecting and processing media information, to prove the correctness of the research position, to evaluate the media product created by another student and to create own media text, to plan experimental media educational work in school; – preparation of projects, multimedia presentations for the social network Facebook, videos on the basics of academic culture, development of the culture of media hygiene in the process of group work; – preparation of lesson plans, educational activities using media texts.

Source: Authors' own conception

Diagnostic and performance block of the model, taking into account the provisions of competence and text-centred approaches, presents a diagnostic toolkit for assessing the formation of media education skills, which is based on their typology and provides for the determination of low, medium and high levels of formation of media education skills based on author's techniques made by researchers.

The step-by-step implementation of the model results in the formation of media-literacy skills of future language teachers, which facilitates media education activities in a comprehensive educational institution.

The developed model of formation of future language-teachers media-educational skills differs from similar practices by the sequence of formation of media-educational skills in three stages (motivational, cognitively-operative and research-reflective), integration of media education teaching methods (project, analysis of media texts, interactive exercises, creation of media texts), systematic use of control to check the formation of linguistic, information, analytical, interpreting, text-genre and projecting skills.

4. Results

4.1. Theoretical results of the nature and structure of media education skills study

Following the terminological analysis of the researchers and the experiment conducted, the following interpretations are offered. The term "language-teacher media culture" is interpreted as an integrative formation of personality, which implies the ability of the individual to interact with the media effectively and combines value attitudes, aspirations for development and self-development in the field of media education, linguistic, speech, communicative knowledge and media-educational skills, which formation provides dialogic interaction, value-willed reflection and regulation of behaviour in the information space.

Based on experimental work, the components of language-teacher media-culture are determined: cognitive, practical-activity and motivational-value (Figure 2).

Figure 2. Components of language-teacher media culture
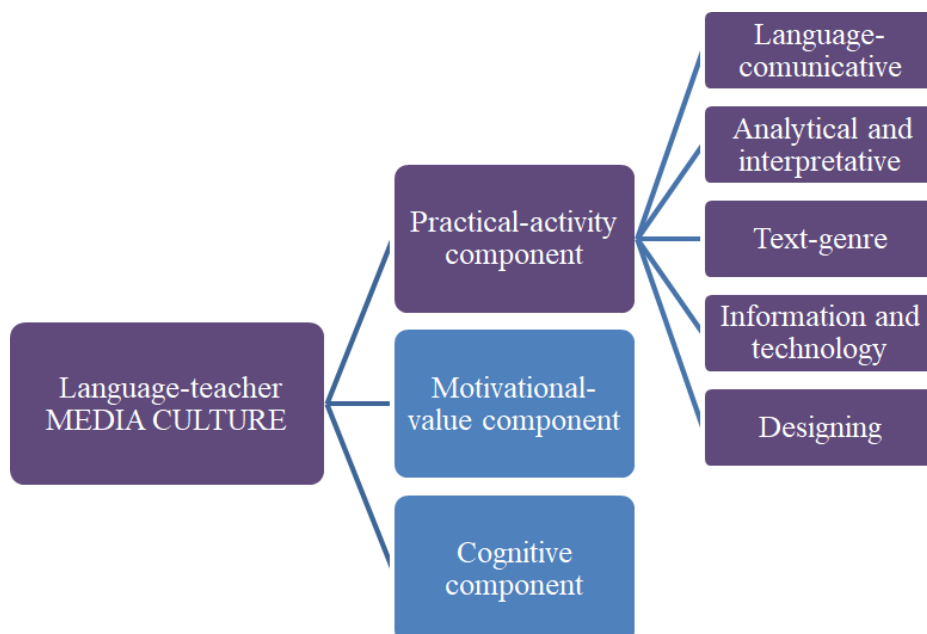
Source: Authors' own conception

Within the article, we focus in detail on the practical-activity component that covers media education skills groups. Media education skills are defined as a set of intellectual and practical actions that ensure the ability of a person to perform actions in search consciously, to do a selection, processing, analysis, creation of media texts of different styles and genres, projecting and preparation of the results of media education activities (Table 4).

Table 4. Characteristics of media education groups skills

Media education groups skills	Characteristic of skills
Language and communication skills	Ability to perceive media, hypertext, both graphic and audiovisual; to recognize typical verbal and non-verbal means that indicate the presence of manipulation, propaganda, hidden content of the message, critically consume/check media text (oral and written), in particular, expressed non-verbally; to have the techniques of communicative interaction in the network space following the purpose and situation of communication, to determine the purpose of the author of media text, to recognize facts and judgments of media information, to adhere to the principles of ethics of communication; determine the aesthetic value of media text
Analytical and interpretative	ability to structure, isolate information from one or more media sources, topics and micro-topics, distinguish between essential and minor details of media communication, determine the connection between content components, structure and linguistic design of media texts belonging to different styles and genres
Text-genre skills	ability to compose a text of different types (television, radio), styles and genres (news, note, message, interview, essay, essay, reportage) taking into account structural, semantic, linguistic features; argue, tolerate their position on a particular problem in the text; stylize, evaluate media text for regulatory purposes, handle text errors, edit
Information and technology	Ability to integrate information into different styles and genres (including hypertexts in the digital environment), create self-quality media texts/media products and present them, play them as the author or moderator in various forms of presentation on social networks, video hosting, electronic newspapers interact on the network, adhere to the basics of safe behavior in digital space, identify and protect yourself from manipulation in digital space; use digital technologies to search, verify and organize information; collaborate online in media projects that

Media education groups skills	*Characteristic of skills*
	result in a ready-to-use media product; adhere to the principles of academic integrity in working with media texts, compile electronic vocabularies, encyclopedias and electronic test programs
Designing skills	ability to reasonably select and use pedagogically appropriate media text according to the topic or stage of the lesson; create layouts of newspapers, book trailers, motivators, collages, social media audio videos, and videos using specialized software

Source: Authors' own conception

4.2. Statistical analysis of empirical data on pedagogical experiment results

Changes in the levels of media education skills formation were investigated based on the comparison of two groups – Control (CG) and Experimental (EG) at the beginning and the end of the pedagogical experiment.

Since each type of skill is an equal component of media education skills, we provide qualitative analysis for the average values of indicators.

The data of the ascertaining stage of the pedagogical experiment are shown in Table 5.

Table 5. The results of the ascertaining stage of the experiment (persons)

Diagnostic code	Low		Middle		High		T_{exp}	Conclusion about groups
	CG	EG	CG	EG	CG	EG		
P-1	59	61	60	65	5	6	0.074	Statistically identical at the beginning of the experime
P-2	60	64	60	60	4	8	1.214	
P-3	59	60	64	68	1	4	1.681	

P-4	72	71	51	55	1	6	3.48 3	nt
P-5	69	71	53	57	2	4	0.59 1	
P-6	70	75	49	53	5	4	0.19 1	
P-7	51	56	72	73	1	3	0.99 2	
P-8	55	54	63	63	6	15	3.62 0	
P-9	80	88	42	41	2	3	0.34 3	
P-10	79	83	44	48	1	1	0.02 3	
The average value (%)	52.7 %	51.7 %	45.0 %	44.2 %	2.3 %	4.1 %		

Source: Authors' own conception

According to empirical data of the ascertaining stage of the pedagogical experiment, the low level of media education skills formation was established in 52.2% of CG students and 51.2% of EG students; the average level was recorded in 45.0% of KG students and 43.7% in EG students. It is due to the reproductive nature of media education in the process of educational and practical training in the institution of higher pedagogical education.

The results of diagnostics gave grounds for organizing and carrying out further activities to form awareness of theoretical bases of media education, knowledge of the culture of research work with media texts of different types and genres, knowledge of media communication, peculiarities of using media education in the pedagogical activity.

The forming stage of the experiment ended with a similar to the ascertaining stage diagnostics. Data on the results of the forming stage of the pedagogical experiment are presented in Table 6.

Table 6. The results of the forming stage of the experiment (persons)

Diagnostic code	Low		Middle		High		T_{exp}	Conclusion about groups
	CG	EG	CG	EG	CG	EG		
P-1	39	32	75	86	10	14	1.860	
P-2	45	49	74	66	5	17	6.930	
P-3	53	15	66	81	5	36	46.000	
P-4	67	22	53	77	4	33	49.712	Statistically different at the end of the experiment
P-5	54	26	63	70	7	36	29.505	
P-6	57	31	57	63	10	38	24.089	
P-7	31	26	87	87	6	19	6.955	
P-8	40	25	77	88	7	19	9.493	
P-9	65	58	52	64	7	10	1.921	
P-10	69	54	51	66	4	12	7.510	
The average value (%)	41.9%	25.6%	52.8%	56.7%	5.2%	17.7%		

Source: Authors' own conception

According to the analysis, the number of students with a high level of media education skills almost quadrupled for EG (17.7%) and doubled for CG (5.2%); with an average level of media education skills, the dynamics are about 10% for each group: 56.7% in the EG (instead of 52.8% in the CG). The number of students with a low level of media education for EG decreased by almost half (25.6%) and only 10% for CG.

According to the analysis, the best results in the EG were facilitated by the application of a comprehensive approach to learning: providing the media with an educational orientation, engaging students in the tasks of research, cultural, direction; mastering the culture of working with media texts; implementation of media educational projects during pedagogical practice; interaction of teachers, students, media professionals, which facilitated the disclosure of student's personality.

The dynamics of the levels of formation of media education skills by types are presented in Table 7.

Table 7. Dynamics of levels of media education skills formation

Diagnostic code	Low		Middle		High	
	CG	**EG**	**CG**	**EG**	**CG**	**EG**
P-1	-16.1%	-22.0%	12.1%	15.9%	4.0%	6.1%
P-2	-12.1%	-11.4%	11.3%	4.5%	0.8%	6.8%
P-3	-4.8%	**-34.1%**	1.6%	9.8%	3.2%	24.2%
P-4	-4.0%	**-37.1%**	1.6%	16.7%	2.4%	20.5%
P-5	-12.1%	-34.1%	8.1%	9.8%	4.0%	**24.2%**
P-6	-10.5%	-33.3%	6.5%	7.6%	4.0%	**25.8%**
P-7	-16.1%	-22.7%	12.1%	10.6%	4.0%	12.1%
P-8	-12.1%	-22.0%	11.3%	18.9%	0.8%	3.0%
P-9	-12.1%	-22.7%	8.1%	17.4%	4.0%	5.3%
P-10	-8.1%	-22.0%	5.6%	13.6%	2.4%	8.3%

Source: Authors' own conception

According to Table 7, we observe a better dynamic of educational results of EG students. In essence, the dynamics of the low level of media educational skills regarding the dynamics in CG are almost twice as large; the dynamics of the high level of all parameters is much greater. High-level students had a culture of research on media of different types and genres, knowledge of media communication; analytical-interpretative, text-genre, language-communicative; information-technological, project skills, which facilitated the creation and use of the author's media-educational product (media text) in the process of group work and pedagogical practice. We explain this through the purposeful formation of media education skills in EG based on the developed model.

In particular, the higher level of formation of *language and communication skills* in the EG was influenced by the performance of tests for testing knowledge of media education, the ability to read media texts critically, to recognize facts and judgments of media information, to possess methods of communicative interaction and ethics of communication; *analytical and interpreting skills* – performing problem-seeking tasks, writing a critical essay, performing a test for critical analysis of media text; evaluation of a media product created by another student; *text and genre skills* – performing test tasks for assessing the ability to compose media texts of different types, styles and genres, taking into account structural, semantic and linguistic features, to edit the text; *Information and technology skills* – preparation of e-portfolio for the course "Media Education"; preparation multimedia presentations on the social network Facebook, videos on the basics of academic culture, development of media hygiene culture in the process of group work; *project skills* – fulfillment of the media didactics tasks (to select media texts for a specific didactic purpose, to edit media texts for a specific educational event; to prepare projects for media communication and netiquette, media education quests); formation of media library for lessons and group work and modeling plans-synopsis of lessons, educational events (to develop a fragment of a lesson on use of media text; to participate in competitions of social projects (to create book trailers, models of motivators, collages, videos).

Text-genre skills gained the highest dynamics at a high level in EG – by 24.2% (diagnosis P-5) and 25.8% (diagnosis P-6) in CG, this indicator increased by only 4%. We explain this by engaging EG students to participate in language competitions, scientific conferences, completing tasks for compiling and editing media texts.

Maximum in an absolute dimension of dynamics was found for low level in EG according to the index of analytical and interpreting skills: 34.1% (diagnosis of P-3) and 37.1% (diagnosis of P-4), while in CG only 4.8% and 4.0%. We explain this for EG students by systematically writing a critical essay, periodically conducting a test for critical analysis of media text.

Thus, at a significance level of 0.05, the effectiveness of the model of media educational skills formation of future language-teachers has been confirmed by statistical estimates.

5. Discussion

The results of the experiment confirmed the effectiveness of the model of media educational skills formation of future language-teachers proposed by the authors.

The model corresponds to the world practice of preparation of language-teachers and differs from analogues in its orientation to media education skills (integration of media education component in the content of linguistic, informative, pedagogical and methodological disciplines, development and introduction of specialised education courses and axiological character, constant monitoring of media education skills development based on specially designed diagnostics of the device). The model can be recommended for introduction into the international practice for teacher training in native and foreign languages, history, elementary school, and journalists.

The developed model of media-educational skills formation can be adapted for teachers of other specialities, taking into account subject-specificity, the introduction of author's (for example, "Media-culture of teacher-dictionary") or development of similar variant courses ("Methods of teaching native language", "ICT").

It is essential to actively involve students in research and circle work, which is based on analysis, comparison, critical evaluation of media texts with an obligatory discussion of results, presentation of them at scientific, cultural and educational events of different levels.

The public request for the formation of media education skills of future teachers actualizes the need for communicative interaction between participants in the educational process of institutions of general secondary and higher pedagogical education. It can be implemented through a resource centre for the professional development of teachers, whose activities will be aimed at teaching teachers of language, pedagogy, informatics, journalists, psychologists of joint interactive lessons, interdisciplinary training, master classes on current media educational technologies and infomediary hygiene;

Necessary for the implementation and dissemination of the results of the resource centre is a virtual platform, which through the Internet, networking allows future teachers and working teachers, improve their professional level and develop their own media culture.

The prospects for the study are establishing cooperation with Ukrainian and European higher education institutions. Areas of further activity are conditioned by participation in the ERASMUS projects Jean Monnet Module "Europeanization of doctoral programs in the field of education theory based on interdisciplinary and inclusive approaches",

"Study and distinguish: Infomedia literacy" (IREX). It involves stakeholders in the process of modernizing specialist training through best teaching practices. Considerable attention is given to training courses for pedagogical staff that can be provided by a resource center for the professional development of a language-teacher.

6. Conclusions

In the article, the model of the formation of media-educational skills of future language-teachers in the process of vocational training is offered. It covers theoretical-methodological, substantive-procedural, diagnostic-effective blocks.

The theoretical and methodological unit provides the statement of purpose, takes into account the position of personally oriented, competence, cultural, text-centric, praxeological, informational approaches, specific principles of interdisciplinary integration, text-centricity, aesthetic value.

The substantive-procedural block of the model expresses its practical implementation through stages (motivational, cognitive-operational, research-reflexive) and briefly characterizes the disciplines, the content of which is deepened by the media-educational component, forms (lectures, practical classes, circles, pedagogical methods) analysis of media texts, interactive exercises, creation of media products) and tools (differentiated tasks of research, cultural and axiological nature).

The diagnostic-results block of the model presents a diagnostic toolkit for assessing the formation of media education skills, which is based on their typology and provides for the determination of low, medium and high levels of formation of media education skills based on the author methodologies and ones concluded by the researchers.

The effectiveness of the model was confirmed as a result of a pedagogical experiment, which was attended by (EG – 132 people and CG – 124 people) students of the Sumy A. S. Makarenko Sumy State Pedagogical University Alexander Dovzhenko Glukhiv National Pedagogical University, Donbas State Pedagogical University, South Ukrainian National Pedagogical University named after K. D. Ushynsky, Kherson State University (total – 256 participants). They studied at 2-4 undergraduate courses in specialities 035.01 "Ukrainian language and literature" and 014 "Secondary education (Ukrainian language and literature)".

Statistical analysis by the xi-square test confirmed the statistical similarity of the experimental and control groups at the beginning of the pedagogical experiment and the statistical difference at the end. We explain

the better dynamics in the levels of media education skills by introducing a model of media education skills formation in the process of vocational training.

The results of the pedagogical experiment confirmed a significant decrease in the number of EG students with low levels of media education. At the same time, the number of respondents who have a high level of linguistic, analytical, interpretive, text-genre, information-technology, designing skills have increased. It is confirmed by the positive dynamics recorded by ten diagnoses.

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