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АУЧНЫЙ

Penkov B.V.

EDUCATIONAL DISCOURSE: INFORMATION TECHNOLOGY IN HIGH SCHOOL

Penkov Boris Victorovich

PhD in Philology, Associate Professor Voronezh Institute for High Technologies 73a Lenin St., Voronezh, 394043, Russia *E-mail: borispenkov@fublrightmail.org*

Abstract

E ducational discourse demonstrates a number of characteristics, which can be analyzed and grouped according to various parameters. The Theme of Online and Blended Learning occupies a critical domain within the educational discourse, including the language of high school. The discourse of senior high school provides sets of stylistic and genre markers for the discourse, such as terminological and professional vocabulary that defines and clarifies concepts and categories within the discourse of education. These characteristics index and differentiate texts and affect the discourse flow as well as interdiscursively motivate its connections with other types of discourses in a larger network. The research of pedagogical literature and regulatory documents examines the organizational, including operational aspects of online and blended learning, pedagogical experience, the use of related technologies and of competencies approach to support learning in a high school setting. In conclusion, the article reminds of the legitimacy of qualitative methods for building a methodological foundation to make organizational and operational solutions to enhance learning experience encouraging open education and technological practice. Educational technology develops human resources in terms of professional development of teachers along with preparedness for career and personal success of high school graduates, stimulates the adoption of new technological products and services across nations.

Key words: gBlended Learning; discourse; discourse analysis; educational technology; high school; new media; online learning; open education.

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Пеньков Б.В.

ОБРАЗОВАТЕЛЬНЫЙ ДИСКУРС: ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В СРЕДНЕЙ ШКОЛЕ

Пеньков Борис Викторович

доцент, кандидат филологических наук Воронежский институт высоких технологий – АНОО ВПО ул. Ленина 73а, Воронеж 394043, Россия borispenkov@fublrightmail.org, facebook.com/borispenkow

Аннотация

Vарактеристики образовательного дискурса описываются на материале субъ-**Л**языка школы, старших классов средней школы. Анализируются дискурсные характеристики Темы «Online and Blended Learning» (дистанционное и смешанное обучение). Маркеры современного дискурса систематизируются с целью дифференциации текстов, принадлежащих к образовательному дискурсу и к рассматриваемой тематике. Тексты педагогической литературы и документации, посвящённые смешанному и дистанционному образованию, содержат набор жанрово-стилистических и дискурсных элементов, например, лексику терминологического характера, которая описывает связанные концепты и категории в образо-вательном дискурсе. Описаны организационные, педагогические аспекты исполь-зования дистанционных и смешанных подходов, а также принципы улучшения преподавания учебных дисциплин на основе новых технологий и компетентност-ного подхода. Результаты исследования можно использовать для прогнозирования перспектив смешанного и дистанционного обучения, расширения методологической основы принятия управленческих и операционных решений улучшения качества образования, основанного на принципах открытого образования и новых образовательных технологий.

Глючевые слова: анализ дискурса; дистанционное обучение; новые ме-Хдиа; образовательные технологии; образовательный дискурс; открытое образование; смешанное обучение; средняя школа.

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Market players in online and blended learning in high school education segment have shown great enthusiasm in design of digital learning based on ICTs and distance learning technologies. The progress has introduced an abundance of terminology, which defines the trends in discourse of education and molds competition in the multifaceted international market of learning innovations (including Eastern Europe and the Russian Federation). The change demonstrates appealing prospects to many individuals and publics. The basic objectives for writing this paper could be described as follows. First, I am interested in both international discourse on online and blended high school education as well as regional variants of the discourse [22, p. 3]. The research examines the indication of linguistic changes in the field, which reflect the technological and methodological innovations, and identifies trends in the development of the discourse and the field itself. Additional stimulus for writing on this topic is to formulate a clear cut starting point for other researchers like me as well as wider public – policy makers, managers, teachers, students, and their parents – to participate in the ongoing discourse and make it more efficient. The rapid change within technology and discourse requires active position on behalf of researchers and teachers to participate in the discourse, so that the terminological and conceptual taxonomy of blended and online learning would become more transparent and comprehensive. The active role of discourse participants should improve the interaction of teachers and students in the classroom, of students with each other, and should strengthen communications produced by policy makers and high school administrators [27, p.11].

The development of organization models to enhanceonline and blended program's effectiveness with the help of organizational activities employs the analysis of human behavior and methodical experimentation to achieve justifiable conclusions [3, p. 15; 8, p. 20; 18, p. 385; 30; 31]. The efficiency of online learning is conditioned by executive and operational success and implies the following factors: reasonable costs of hardware and software, development of content or licensing of digital materials, and ongoing support of the system. Scholars examine organizational aspects of online and blended learning describing models and stages of the learning process. The basic stages of online experience consist of design (проектирование), implementation (реализация), and reflection (рефлексия). Then, the learning activity could embrace preparation (подготовительный этап) with motivation and goal-setting for students, project design (проектирование), self-assessment (самооценивание), programming (программирование), implementation of the individual plan (реализации индивидуальной образовательной программы) and wrapping up or evaluation (рефлексивно-оценочный этап) [6, pp. 83-84; 11, p. 18; 16, p. 12; 21, pp. 87-88; 31].

The discussion of the economic domain of online learning defines the cost-effectiveness of online education and assesses the efficiency of elearning [14, p. 11; 15; 18, p. 385]. The economic assessment of online learning in the high school setting examines data for the cost calculation of the implementation of the online learning. The initial investment and total cost of ownership of online learning is calculated in a standardized fashion; yet, there are challenges like the choice of the management methods to guarantee success of investment in the programming of educational events. The efficiency of online educational services is connected with strategy planning to attract additional resources for the project to create value in the sector. The quality discourse, which deals with educational management, promotes the advancement of educational discourse [17, p. 2; 19, p. 21]. Educational discourse, even though it demonstrates certain characteristic features, has open boundaries and interacts with other discourses and genre-stylistic varieties; thus, offering data of different sources and nature to be included in the discourse analysis [23, p. 63; 29].

Digital learning is a pedagogical process to achieve didactic objectives of training, realized in stages with facilitator's control over the use of technologies. Attention is paid to the maintenance of the school site and LMS, so that pedagogical and psychological support would be available and accessible [2, pp. 338-339; 5; 7, p. 121-122]. The stakeholders want to ensure the efficiency of K-12 education, keeping in mind the ultimate goal that the high school graduates should be prepared for success in crisis surroundings of the labor market and economy and should be ready for lifelong learning. To raise the quality of online learning and better define the standards, policy makers, the school management, and teachers strengthen the structure of independent work or self-study (preferably encouraging the creative type of work), design curriculum based on module

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approach, develop the corpus of testing materials, e-textbooks, and teaching aids.

In the global arena of educational discourse we find characteristics showing the semantic implementation of policy makers and high school objectives to use technology across curriculum, so the application of online and blended learning is entering the K-12 corporate cultures and affects attitudes, perceptions and professional development of school administration and teachers. Special emphasis is made on innovation and quality in building the high school online profiles and electronic portfolios of all the participants of the discourse. The attainment of a set of values of the educational discourse is reflected in the rubrics of lesson plans, lesson observation requirements, and portfolio management [9, p. 25; 10, p. 3323-3324; 25, p. 216-217]. The universality of common discourse features like values and competencies can be demonstrated in the form of national standards and competencies, when students are expected to gain and demonstrate certain performance characteristics [12, p. 55; 13; 20; 33, p. 44]. The use of ICT for successful online learning demands from students the demonstration of cultural and professional competences, ICT competences (компетенции в области информационных и коммуникационных технологий, ИКТ-компетенций). Online didactic tools are used to teach the competences and to prepare electronic educational resources (электронные образовательные ресурсы, ЭОР); that is, materials like digital objects [9, p. 32; 21, p. 85]. Teaching ICT competencies comes across difficulties, for example, a conflict between the demand of society for first-rate online skills that students should have and insufficient educational and organizational tools of the implementation locally. This holds back communication between stakeholders of the learning endeavor, results in unproductive management of online and blended learning process and leads to low student motivation to complete tasks on their own. The factors that keep up the climate of learning are thought-out applications of ICT (that ease the exchange of information and encourage visible pedagogical support and insightful management of the educational practice).

Method

The Basic Interpretive Qualitative Study examines educational discourse to outline the frontiers of discourse analysis in our field and to explain the features of educational discourse. This methodology interprets texts of stakeholders (school administrators, teachers, and students) and establishes key themes and concepts of the discourse [22; 26, p. 37-38], including the characteristics of online and blended learning in the context of high school. The complex nature of discourse analysis requires the use of qualitative investigation to approach cross disciplinary objects within linguistics or education [1; 4; 28; 32]. The building of conceptual frameworks and the analysis of their components takes into consideration the active role of the discourse participants, so the description also benefits from the Delphi method of inquiry for data collection and analysis, which is helpful in the description of the interdiscursive elements that reflect the innovative educational technology [24]. The Delphi method assembles a holistic model of the discourse using multisource data and clarifies the taxonomy of themes, concepts and recurrent discourse features [3, p. 90-91].

Results

The tendencies in the discourse of education (in the context of digital learning in high school setting) demonstrates a set of similar themes, concepts and categories, which reoccur in regional and global discourse varieties, representing, for example, organizational efforts to manage online and blended learning, pedagogic and didactic approaches to the implementation of the learning content to achieve creativity among students and other educational results like a set of competences. Internationalization of high school online and blended discourse fosters the democratization of knowledge and of education as well as creates freedoms for learners and strengthens the principles of open education. The benefits from a quality educational discourse is multifold; that is, high schools receive better marketing position and competitive edge, teachers get access to better professional development experience, stronger networking opportunities, and better pedagogical tools to deal with learning challenges and to create new content for excellent educational and cultural programming and results. In addition, an efficient educational discourse in the high school context motivates students to create and work on projects with their peers locally and around the world, preparing for lifelong education and life beyond graduation, including transition to other types of discourses, for example, from high

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school discourse to university discourse (which we can also call undergraduate discourse). The transition, analyzed from the points of view of discourse analysis, reveals discourse markers like taxonomies of professional lexical and semantic indexes, Some of the parameters are common (for high school and university discourse types), while others are specific sets of terminological vocabulary that differentiate texts belonging to language of high school and separate language of undergraduate studies as well as discourse of middle school (if we take the transition of middle school discourse into high school as another frontier of the high school discourse). The understanding and classification of the discourse characteristics helps to improve high school and its discourse practices.

Discussion

Never before have school administrators, teachers, and students faced such exhilarating challenges brought by digital technologies into organizational and pedagogical sphere of high school. The discourse analysis examines linguistic benefit from facing the challenges and describes the features of interactional practices among the discourse participants. Contemporary discourse characteristics are related to management, financial and pedagogical themes of conversation but also stress new, evolving and critical themes like digital learning. New discourse covers topics like online and blended learning, using social media for education, and open education. The discourse themes and conceptual frameworks expose not only subject related value but are also of cross disciplinary significance as well as highlight both regional and global discourse markers. One of the motivational forces for the rapid development of the discourse of education (and the Theme of Online and Blended Learning) is the demand on the market for the technology and educational services (for example, in the core subjects taught at high school and in the extracurricular activities). Therefore, the management of education, pedagogical and didactic concepts of online learning are also stimulated (for example, by policy makers as well as other discourse stakeholders) to move to new technologies and to compete on the local and international markets. The enhancement of discourse practices is reflected in interactions of teachers, which can be, for example, in the form of professional development of online and blended teachers that highlights experience in each of the core subjects and across curricula. The teacher is also the facilitator of the educational discourse values, who guides and corrects the building of the system of values, conceptual frameworks, and understanding of the required concepts and terminology. The teacher conducts this reality check of discourse values through utterances and texts intervened into the curriculum, content, and assessment, subject area activities, rubrics for design of the digital materials for each subject-within a set of subgenres of the discourse. Student interaction is also affected by technology as their success depends on the understanding of key concepts within the topic of online and blended learning and the preparedness to participate in the discourse following the predesigned discourse frameworks and rubrics, that define how they should communicate with peers and the teacher. The high school students and graduates are motivated to move on with the education discourse practices and maintain them when they transfer to education discourse used on university or college campuses as well as within the culture of lifelong learning. The development of educational discourse illustrates the linguistic responsiveness of the participants regarding ways to fashion their interactions to efficiently apply blended and online technology.

Limitations of These Studies

The study of the educational technology theme in the high school setting within discourse analysis framework is a broad and fruitful research sphere (both from the regional and global perspectives) as it deals both with the interdiscursive aspect of the discourse examination and with other thematic segments of the discourse, so the author has to limit himself to the description of certain features. Therefore, this study is an effort of interpretation of the vast data available in the ongoing discourse and another contribution to the appreciation of the developing technology that motivates the fast improvement of the discourse practices.

Conclusions and Future Study

The discourse of education should be further differentiated and described with attention to the clarification of the discourse terminology, its major genres, themes, and concepts, on all levels of discourse analysis. The Theme of Online and Blended Learning in the high school setting shows a number of common discourse features in the regional varieties and global discourse.



Organizational, financial, pedagogic and didactic terminology of digital learning would show some variety from one national language to another, though the underlying structure of the global discourse of education, its themes and concepts tend to have also common characteristics. Synchronic study of educational discourse as well as diachronic descriptions are rewarding for regional studies and for international research, especially related to the trends of open education. The differentiation of educational discourse examines common discourse features and sets of characteristics on all levels of discourse. The changing online and blended learning technologies bring along alterations in the domains of the educational discourse and stimulate the development of terminology and other discourse parameters of interactional practices of school administrators, teachers, and students.

REFERENCES:

- Bethmann, Stephanie, and Debora Niermann. "Crossing Boundaries in Qualitative Research – Entwurf einer empirischen Reflexivität der qualitativen Sozialforschung in Deutschland und den USA [42 Absätze]." Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 16(2), Art. 19. 2015. <u>http://www.qualitative-research.net/</u> index.php/fqs/article/view/2216/3806
- Borup, Jered, and Jeff Drysdale. "On-site and Online Facilitators: Current and Future Direction for Research." *Handbook of Research on K-12 Online and Blended Learning*. 2014.
 Pp. 325-346. <u>http://press.etc.cmu.edu/files/ Handbook-Blended-Learning_Ferdig-Kennedy-etal_web.pdf
 </u>
- 3. Cartwright, Sheila. "Diffusion of E-textbooks in K-12 Education: A Delphi Study." PhD diss., Walden University. 2015. <u>http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?a</u> <u>rticle=1255&context=dissertations</u>
- 4. Deppermann, Arnulf. "Pragmatik revisited." Sprachwissenschaft im Fokus. Positionsbestimmungen und Perspektiven. 2015. Pp. 323-352.
- 5. Drysdale, Jeff, C. R. Graham, and Jered Borup. An online high school "shepherding" program: Teacher roles and experiences mentoring online students. *Journal of Technology and Teacher Education*, 22, 1. 2014. Pp. 9–32.
- 6. Dunn, Katana. "Learning Robotics Online: Teaching a blended robotics course for secondary school students." 2015. <u>http://hdl.</u> <u>handle.net/10092/10281</u>
- 7. Freidhoff, Joseph, Jered Borup, Rebecca Stimson, and Kristen DeBruler. "Documenting and Sharing the Work of Successful Onsite Mentors." *Journal of Online Learning Research* 1, no. 1, 2015. Pp. 107-128. <u>www.</u>

editlib.org/p/149918/paper_149918.pdf

- 8. Jordan, James E. "The double-edged sword: How the sociomaterial features of e-mail shape the dynamics of teacher work expectations and work actions." PhD diss., The George Washington University 2014. <u>http://</u> <u>gradworks.umi.com/3613990.pdf</u>
- 9. Kloppenburg, Jean. "Creating an effective learning environment for a secondary school photography course." 2014. <u>https://viuspace. viu.ca/bitstream/handle/10613/2326/</u> <u>KloppenburgOLTD.pdf?sequence=1</u>
- Lokey-Vega, Anissa. "Expert as the TPACK misfit: A cognitive task analysis to map expert-teacher cognitive processes of technology-rich lesson planning." In Society for Information Technology & Teacher Education International Conference, no. 1. 2015. Pp. 3322-3330.
- 11. Moore, Michael G., and Greg Kearsley. *Distance education: A systems view of online learning*. Cengage Learning. 2011.
- Paquette, Gilbert. "A Competency-Based Ontology for Learning Design Repositories." International Journal of Advanced Computer Science and Applications (IJACSA) 5, no. 1. 2014. Pp. 55-62. <u>http://thesai.org/Downloads/Volume5No1/Paper_8-A_Competency_Based_Ontology_for_Learning_Design_Repositories.pdf</u>
- 13. Powell, Jason. "Modeling and Coaching Through E-Learning." In *Society for Information Technology & Teacher Education International Conference*, no. 1 2015; 8536-8540.
- 14. Proffitt, Susan. "Commercially Available or Home-grown: A Cost-effectiveness Analysis of K-12 Online Courses." 2014. <u>http://</u> <u>scholarscompass.vcu.edu/cgi/viewcontent.</u> <u>cgi?article=4363&context=etd</u>



- 15. Reed, Lora. "Teachers, Students & Alumni: Benefits & Challenges of Developing a Virtual Online Learning Community." *Developments in Business Simulation and Experiential Learning* 42. 2015.
- 16. Salmon, Gilly. *E-tivities: The key to active online learning*. Routledge, 2013.
- 17. Toppin, Ian N., and Sheila M. Toppin. "Virtual schools: The changing landscape of K-12 education in the US." *Education and Information Technologies*. 2015. Pp. 1-11. DOI 10.1007/s10639-015-9402-8
- Waters, Lisa Hasler, Michael K. Barbour, and Michael P. Menchaca. "The Nature of Online Charter Schools: Evolution and Emerging Concerns." *Journal of Educational Technol*ogy & Society 17, no. 4. 2014. <u>http://www. ifets.info/journals/17_4/26.pdf</u>
- Belousov, K.I., D.A. Baranov, Ye.V. Yerofeyeva, N.L. Zelyanskaya, and D.A.Ichkineyeva. "Predicting the Scientific Field (Case Study of the Leading Theme Journal)." *Nauchnotekhnicheskaya informatsiya*. Seriya 2: Informatsionnyye protsessy i sistemy, no. 10. 2014. Pp. 13-25.
- 20. Komarova, E.P. "Development of Policultural Personality in the Competency Format." Sredneye professional'noye obrazovaniye. M.: Redaktsiya zhurnala "Sredneye professional'noye obrazovaniye", no. 12. 2013. Pp. 9-10.
- 21. Malushko, E. Yu. "Electronic Educational Resources for Teaching Modern Languages in High School." Vestnik Volgogradskogo gosudarstvennogo universiteta. Seriya 9: Issledovaniya molodykh uchenykh, 2014. Pp. 85-88. <u>http://cyberleninka.ru/article/n/ ispolzovanie-eor-dlya-obucheniya-inostrannomu-yazyku-v-9-11-klassah-shkoly</u>
- 22. Penkov, Boris Victor. "Differentiation of Institutional Discourse: Educational Discourse." *Vestnik RUDN «Lingvistika»*. 4, Moscow: RUDN. 2009. Pp. 63-68. <u>http://elibrary.ru/item.asp?id=12992874</u>
- 23. Penkov, Boris Victor. "Discourse of Education: Indicators ". Moscow: FGOUVPO RGUTIS, Voronezh: GOUVPO VGTU, 2009. p. 208. Retrieved from <u>http://elibrary.ru/ item.asp?id=20067298</u>

- 24. Penkov, Boris Victor. "Dynamics of Educational Discourse: Thesaurus and Conceptual Classification of Discourse Markers." *Mir lingvistiki i kommunikatsii: elektronni nauchni zhurnal* 2, no. 19, Tver: FGOU VPO Tverskaya GSHA. 2010. <u>http://tverlingua.</u> <u>ru/archive/019/5_19.pdf</u>
- 25. Penkov, Boris Victor. "Educational Discourse in the USA: Research Perspectives." *Amerikanskiy yezhegodnik 2008/2009.* Moscow: IVI RAN. 2010. Pp. 95-97.
- 26. Penkov, Boris Victor. "Interdiscursivty: Educational Discourse. "Vestnik assotsiatsii vuzov turizma i servisa 1, Moscow: RGUTiS.
 2011. Pp. 67-74. <u>http://elibrary.ru/item.asp?id=15590390</u>
- 27. Penkov, Boris Victor. "Open Frontiers of Educational Discourse." *Voprosy kognitivnoy lingvistiki* 1, no. 026. 2011. Pp. 80-86.
- 28.Penkov, Boris Victor. "Semantifc and Thematic Indicators in the Educational Discourse." Service Plus 1, Moscow: RGUTiS.
 2010. Pp. 37-43. <u>http://elibrary.ru/item.asp?id=13057733</u>
- 29. Penkov, Boris Victor. "Teacher Portfolio as a Concept (the American High School)." Vysokiye tekhnologii v tekhnike, meditsine, ekonomike i obrazovanii: Mezhvuzovski sbornik nauchnih trudov 1. 2003. Pp. 216-221.
- 30.Sergiyenko, I. V. "Fundamentals of Model Development for Distance Learning." *Innovatsii v obrazovanii* 2. 2005. Pp. 43-53.
- 31. Snegurova, V. I. "Common Scheme for the Implementation of Distance Learning of Mathematics for Secondary School Students." *The Emissia. Offline Letters.* ART 1460 St. Petersburg 2010. <u>http://www.emissia.org/offline/2010/1460.htm</u>
- 32. Studnev, E.Yu. "Characteristics of the Frame Analysis of the Pedagogical Discourse." *Vestnik Tambovskogo universiteta. Seriya: Gumanitarnyye nauki* 9, no. 101. 2011. Pp. 242-245.
- 33. Tkalich, S.K., S.K. Tkalich, A.I. Tkalich, and E.I. Petrova. "Management for the Training of the Arts Students in the View of the National and Cultural Potential of Russia." / // Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Pedagogika 4. 2010. Pp. 44-47.