

Marketing Technologies in Management Pedagogical Education: Modern Challenges

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The article develops a research hypothesis, which consists in the fact that the development of a system of marketing technologies in educational institutions, ensuring their competitiveness, high quality satisfaction of educational requests of teachers with the aim of increasing their professional competence, will become possible if:

- marketing will be perceived by the managers of the educational institution as an integral part of the management system of the educational institution with its special services that ensure the satisfaction of the modern educational professional requests of teachers;*
- marketing technologies in pedagogical education institutions will be used as a system for identifying and satisfying the educational requests of teachers, taking into account the social and pedagogical situation in the country;*
- developed a model for the development of the marketing technology system in institutions of additional pedagogical education;*
- conditions for the implementation of the system development model and the application of marketing technologies will be created in pedagogical education institutions to identify and meet the educational needs of teachers.*

Keywords: educational system, educational institutions, technology, educational process, system of marketing technologies

INTRODUCTION

In order to comprehend the essence of marketing in the field of education and see how it manifests itself in the market of educational services, it is necessary to analyze a wide range of its elements and aspects. First of all, these are the subjects of marketing relations and the functions of these subjects in the market, the scope and objects of marketing, its target orientation and problematic content. Their consistent consideration will eventually allow us to approach the definition of marketing in the field of education, the subject of this scientific, applied and academic discipline.

A very simplified point of view is widespread that marketing is a kind of special system of intra-company management. If this were the case, then the only type of marketing subjects in education would be the educational institutions themselves, and marketing would become their internal affair, to which, by definition, neither the state nor the consumers themselves could be related. Meanwhile, the subjects of marketing are all market entities, and not just manufacturers and intermediary firms.

The real participants in marketing relations are not only educational institutions, but also consumers (individuals, enterprises and organizations), a wide range of intermediaries (including employment services, labor exchanges, registration, licensing and accreditation of educational institutions, etc.), as well as public institutions and structures involved in the promotion of educational institutions on the market.

A special role among the subjects of marketing is played by the personality of the student, listener. This is not just a material carrier of educational services, a treasury of transferred knowledge, not only their user in the labor process, but also their only end consumer. A person differs from other consumers in that he uses the educational potential not only to create material and other benefits, not only to earn a living, but also for himself, to satisfy his own needs directly, primarily cognitive needs.

It is this person, personalized carrier, owner, user and end consumer who makes a specific choice of his future specialty and specialization, terms, place and form of training, sources of its financing, as well as the choice of a future place of work (or the next stage of education) and the whole complex of conditions for implementation, acquired potential. Thanks to and around this personal choice, all other subjects of the market and marketing, united by this central subject, meet and establish their relations.

The paradox is that just this central subject - the personality - is the most defenseless, little-informed newcomer to marketing in comparison with other subjects. Therefore, it is the personality of the student (including the potential one) that should be in the center of attention, information flows and communications, other marketing efforts and concerns, as well as an obligatory and respected participant in all transactions in this area (Jiang, Du, & Dong, 2017).

With this in mind, the significance and roles of other consumers are determined, among which are firms, enterprises, institutions and organizations, including in this capacity the governing bodies. Acting as intermediate (rather than final) consumers, they form a more or less organized demand for them and present it on the market. Now many firms prefer only short-term provision, and specialists are recruited in such a way as not to pay for the services of the university (for example, by transferring employees from other enterprises). However, such a conjuncture and such a strategy cannot be long-term.

In any case, consumer organizations retain such functions as:

- informing educational institutions and structures, intermediaries and individuals about the demand;
- establishing special requirements for quality and for their future employees from the standpoint of professional and job requirements, appropriate participation in quality assessment;
- determination of the place, effective conditions for the future labor activity of graduates and observance, fulfillment of these conditions;
- full or partial reimbursement of costs, payment or other forms of compensation for services rendered.

Educational institutions act as subjects that form the offer, provide and sell. Let us first of all focus on educational institutions of higher and secondary schools.

In higher education, there are the following types of educational institutions: university, academy, institute, college.

Universities develop education, science and culture by conducting fundamental scientific research and teaching at all levels of higher and postgraduate education in the widest range of areas. These are the leading centers for the development of education in general.

The academies operate mainly in one of the areas of science, technology and culture, and act as leading scientific and methodological centers in their field of activity. They train highly qualified specialists and retrain the leading personnel of a particular industry (group of industries).

Institutes as independent educational institutions or as structural subdivisions of universities, academies, institutes implement educational and professional programs at a level not lower than basic education in a number of areas of science, technology and culture and carry out scientific research.

Colleges implement educational and professional programs of higher education of the first level and secondary professional level.

General educational institutions provide different levels of general education: primary - 3-4 years, basic - 5-6 years, secondary (complete) - 10-11 (12) years. Recently, their services have become more and more diverse in terms of content, primarily in terms of the depth of education profiling: class profiling, in-depth study of subjects, additional education, differentiated education. Individual educational institutions provide humanitarian (gymnasium) or natural science, technical (lyceums) education.

A number of educational institutions aim theirs at meeting the needs of the population, regardless of age and level of education. Thus, evening and open (shift) general education schools are provided, taking into account the opportunities and features for the implementation of professional programs of primary and additional education in the forms of full-time, correspondence, family education, self-education, external studies. Education centers, along with general education programs at various levels, provide programs of primary vocational and additional education that are socially significant for their region in accordance with the license (Mojsa-Kaja et al., 2015).

There are also general educational institutions focused on specific categories of students, for example, persons serving sentences in places of deprivation of liberty, incl. juvenile convicts - evening (shift) general education schools at corrective labor institutions, general education schools in educational labor colonies.

From a marketing point of view, the functions of an educational institution include:

- providing students with educational services, transferring the desired and necessary knowledge, skills and abilities (both in content and volume, and in terms of assortment and quality);
- production and provision of related educational institutions, as well as the provision of influences that shape the personality of a future specialist;
- providing information and intermediary services to potential and real students and employers, including agreeing with them the conditions for future work, the size, procedure and sources of funding, etc.

Educational institutions, as entities that form and implement the offer to the market, play a decisive role in the development of marketing in the field of education (Borle, P., Reichel, K., Niebuhr, F., & Voelter-Mahlknecht, S. 2021).

Intermediary structures on the market are still in the process of formation, deployment of their marketing activity. These include employment services and labor exchanges, educational funds, associations of educational institutions (for example, universities or business schools) and enterprises, specialized educational centers, etc. They contribute to effective promotion in the market and can perform functions such as:

- accumulation, processing, analysis and sale (provision) of information about market conditions, advising other entities;
- participation in the processes of accreditation of educational institutions, implementation of promotional activities, legal support;
- formation of sales channels, organization of the conclusion and assistance in the implementation of transactions;
- participation in financing, lending and other forms of material, resource support for producers and consumers, incl. - through the system of personal state and other educational loans.

The role of the state and its governing bodies (including local ones) is especially significant in marketing, in contrast to the marketing of other goods and services. Everywhere in countries with a market economy, the state provides legal protection of marketing entities (primarily consumers) from monopoly, bad faith in business, advertising, ensuring the quality of goods and services, maintains statistics, promotes large-scale market research, etc.

In the field of education, the state is called upon to perform rather specific functions that are essentially not performed by other entities on the required scale. In developed countries (for example, in the USA), the first duty of federal educational authorities is to initiate, support and strengthen favorable public opinion (“public relations”), a positive image of social institutions of education, incl. both among the population and in the circles of employers (Jarmas & Raed, 2018).

The state all over the world finances education (primarily in the direction of its fundamentalization and humanization) and provides guarantees for long-term investments of other entities in this area, applies tax incentives and other forms of market regulation in order to ensure the development of priority specialties, forms and methods of training specialists, development education in general.

In conditions, having abandoned the centralized, “paternalistic” methods and forms of education management traditional for our country, the state continues to bear the responsibility of the guarantor of the humanism of education, the unity of cultural and educational space in a multinational society, the general accessibility and adaptability of education, its secular nature, freedom and pluralism, democracy of management and autonomy of educational institutions.

The state establishes lists of professions and specialties for which education is conducted, forms the basic features of the range of educational services. It conducts certification and state accreditation of educational institutions, creates a state system of certification and diagnostic centers (state certification service), i.e., acts as a guarantor of quality, its compliance with educational standards (Keller & Kesberg, 2017).

The functions of marketing include research and forecasting of market conditions, identifying promising and the need for renewal, determining the optimal values of volume, quality, assortment and service, pricing, communication activities, promotion and sales, as well as their support in the consumption process. Marketing must ensure its own reproduction and development, solving the problems of personnel for the implementation of marketing activities in education.

The specificity of marketing is partly manifested as the specificity of services as such, partly as the specificity of scientific, intellectual services. But there are also features arising from the very essence and, above all, the exclusivity of the “source material” of the sphere of education - the student’s personality, which actually plays a decisive role in the market choice, incl. technologies and conditions for their provision, actively participates in the very process of providing educational services.

AIM

Despite numerous world studies in the field of educational marketing, a number of theoretical and practical questions related to the development of marketing technologies, which are one of the means of improving the quality of educational services due to today’s large choice and high competition between various educational organizations, remain unanswered. Until now, the very concept of “marketing technologies” is treated ambiguously. However, the requirements for improving the qualifications of teachers in accordance with their requests in the conditions of the formation of a new educational paradigm gave rise to the study of the essence of marketing technologies in the system of additional pedagogical education.

The mechanism of implementation of marketing technologies in the management system of pedagogical education remains insufficiently studied, which makes the problem of our study especially relevant.

During the study of the development of marketing technologies in the institution of pedagogical education in modern socio-economic conditions, the following contradictions were revealed:

- between the recognition of the importance of active adaptation, the institution of additional pedagogical education to the competitive environment and the absence of well-established mechanisms for its solution;
- between the need to apply in practice effective marketing technologies for the development of an educational establishment of additional pedagogical education and the lack of understanding in the administration of the importance of reorienting existing education management structures to create conditions for their implementation;
- between the desire of the leaders of the education system to ensure the quality of educational services, to attract the maximum number of students and the inability to form the necessary marketing structures with the involvement of specialists capable of developing and implementing this marketing strategy;
- between the objective necessity of applying marketing technologies in the structure of additional pedagogical education and insufficient theoretical and practical development of this problem.

The need for practice, the inadequacy of theory development, and the identified contradictions determined the research problem: the need to overcome the discrepancy between the requests of consumers of educational services and the possibilities of their satisfaction by the system of additional pedagogical education using marketing technologies used to achieve the goals of the development of consumers and providers of additional teacher education services. The research problem determined the choice of the topic of the scientific article.

Object of research: system of additional pedagogical education.

The subject of research: development of the system of marketing technologies in pedagogical education.

The purpose of the research: to theoretically substantiate the need for the development of a system of marketing technologies in pedagogical education institutions, which ensure high quality of meeting the educational professional needs of teachers and leaders of educational institutions (Menghi et al., 2019).

MATERIALS AND METHODS

The theoretical and methodological basis of the study was: the provisions of the general theory of management and management; research in the field of education management, as well as the basic principles of marketing as a methodology for the activity of any enterprise in a market economy; theories and practices of marketing; education marketing concepts; work in the field of marketing of additional education; in the field of management of educational systems; areas of pedagogical innovation.

The article uses the ideas of system-activity-justice, personality-oriented and competence-based approaches, modeling and designing objects in integral systems.

Research methods:

- theoretical (analysis, synthesis, interpretation, modeling);
- practical (participant observation, peer review, questioning, free interviews, marketing research methods);
- methods of mathematical statistics (Mancini et al., 2022).

Research methods: theoretical: study and analysis of pedagogical, psychological, philosophical, sociological literature on the problem of research, legislative and regulatory documents; systematization, classification, terminological analysis, pedagogical modeling, retrospective analysis, generalization of existing pedagogical experience; empirical: pedagogical experiment; diagnostic methods (testing, conversation, observation, questioning, self-assessment, self-analysis, mutual assessment), professional activity motivation methodology, pedagogical interpretation of the research results (Psyadlo, 2019).

Under the marketing of education, we understand a socially oriented process aimed at strengthening the competitiveness of an educational institution due to a more complete and high-quality satisfaction of the educational needs of students.

The methodology of the systematic approach is applied as the main one when considering the development of marketing technologies in teacher education.

Considering marketing technologies as a system, it is impossible not to say about them as the most important component of the marketing system.

In my opinion, the marketing of educational services in additional pedagogical education is an open and self-developing system that forms the philosophy of market thinking, determines the strategy and tactics of actions and behavior of the subjects of the pedagogical education market: educational institutions, consumer organizations, students, government bodies and intermediary structures, and also studies and analyzes their relationships and mutual influence.

In modern conditions, the concept of interaction, cooperation of management entities at various levels in order to ensure their effective operation is of particular relevance in the management of the educational system.

Science considers management as an activity from the point of view of target orientation to obtain a substantive result and as the impact of one system on another, a subject on an object, leading to a change in the latter.

Based on the foregoing, a marketing approach has been implemented in the management system of an educational institution, and marketing technologies are considered as the basis for a systemic restructuring of the management of teacher education.

In economics, it is customary to note five main marketing technologies: segmentation, targeting, positioning, analysis, forecasting.

- Segmentation (segmentation) - dividing the market into segments in order to study consumer demand.
- Targeting allows you to select from among consumers the target audience for which this or that group of goods or services is intended.
- Positioning - taking a more advantageous position of the product in the market.
- The analysis includes a study of the market for services and goods, the demand for various services and products, the study of consumer attitudes towards this type of product.
- Forecasting is an assessment of the prospects for the development of the traffic police market of its segment, trends, market conditions for a certain time period.

As shown by a theoretical analysis of these marketing technologies, they objectively exist in the management system for advanced training of teachers and managers. However, in the context of the modern educational paradigm of development, these marketing technologies are modified and supplemented by new educational marketing technologies, which, in accordance with the goals of their application, acquire modern content (Borle, P., Reichel, K., Niebuhr, F., & Voelter-Mahlknecht, S. 2021).

We believe that marketing technologies in additional pedagogical education are a system of ways and methods for managing the process of increasing the professional competence of teachers and managers, which has the goal of studying and adequately meeting their needs for professional improvement by means of educational services.

Thus, the technology of market segmentation (in this case, educational services) involves studying the requests of teachers by districts of the region, by subject, by the level of training of teachers, experience and length of service, and finally, by the identified problems and difficulties of the teachers themselves. Each individual direction has its own methods and methods for establishing a group of teachers' requests and specific tasks for their implementation are solved (for example, a request from subject teachers of a particular district of the region to develop a methodology for implementing educational standards in their subject).

The diagnostic technology complements the rest both in the production sector and in the field of education, and is an independent stage of the marketing research process, is, in this case, not so much a diagnostics of the competitive environment (as in the manufacturing sector), but a process necessary for a more complete and accurate understanding of the needs of teachers - consumers of educational services. Part of the diagnostics is the procedure for the most accurate study of the needs and professional difficulties

of teachers, in order to create a personalized, student-oriented educational product (an individual educational route for a teacher, a modular program on a specific topic for a group of teachers, etc.).

The targeting technology in this context involves the selection of a group from the already existing general target audience for individual specific courses and programs, setting the goal of classes depending on the requests of teachers.

Positioning technology in our case includes the creation of a positive image of an educational institution. A necessary condition for it is the development of technology for promoting both the image of the institution itself and the product of its educational activities. In the work we have revealed and shown various forms of promotion and implementation of educational services. The possibility of positioning through advertising activities or through the promotion of a particular educational service is disclosed.

The technology of analysis involves a significant number of components, which in turn are technologies. For example, marketing research involving the analysis of an educational product (for example, a program of offered courses), an analysis of the possibility of bringing the course to the market, an analysis of the possibilities of its implementation in certain conditions, an analysis of the needs of educators, their possible difficulties and the possibility of overcoming them with the help of the proposed course, or programs, etc.

The analysis also provides for the study of the resources of the internal environment, including personnel, necessary for the implementation of a given course of the program or state task. Analysis of the external environment: problems and opportunities, conditions and threats from the outside, for the successful satisfaction of this request, the implementation of this program or course.

Prediction technology involves predicting certain marketing activities. For example, the introduction or elimination of this course, depending on demand or its absence.

It is also important to predict the demand for certain educational services, based on a preliminary study of demand, or on the basis of regulatory documents, or the identification of hidden, unconscious problems.

The functioning of the system depends more on how its parts interact with each other than on how each of them works independently. Therefore, the systematic approach used in the study allows us to consider educational marketing technologies, firstly, as a developing whole (a subsystem of the marketing system), secondly, in causal relationships and internal contradictions of its elements, thirdly, in the interaction of various forms development of these elements (García-Carmona, M., Marín, M.D., & Aguayo, R. 2019).

Most researchers perceive development as a process of transition from one state to another, more perfect; transition from the old qualitative state to a new qualitative state; from simple to complex; from lowest to highest; from less perfect to more perfect.

In the article, the development of marketing technologies in the education of teachers is understood as a purposeful process of implementation and gradual improvement, improvement of both the technologies themselves and marketing activities related to planning, research, analysis and management of the activities of an educational institution of teacher education based on the identification and satisfaction of educational professional requests, interests and problems of teachers.

One of the criteria for the development of marketing technologies, we consider the variety of different types of technologies and their systematic application in marketing activities. The purpose of their development is the transformation of the system of marketing technologies into a coherent system of marketing of educational services, covering the entire complex of management of an educational institution, namely: awareness by the administration of the institution of the need for marketing activities; reorientation of structures and divisions for marketing activities, with the inclusion of the largest number of specialists; creation of special marketing structures with the transfer of either specific functions or constant monitoring of marketing activities in the institution. In this regard, we distinguish different levels of development of marketing technologies: low, initial, medium and high (Maslach, C., Schaufeli, W.B., & Leiter, M.P. 2001).

Exploring marketing technologies as the basis for a systemic restructuring of the management of teacher education, we found that the restructuring of the management mechanism of an educational institution involves not only changing the target settings, but also organizing the interaction of marketing technologies in a single system. For example, diagnostic and targeting technologies; research and analysis technologies; technologies for promotion and implementation, etc. This is also connected with the rethinking of some

concepts. For example, the “product of educational activity”, defined as the result of activity and expressed not only in educational services, but also in those professional competencies that teachers have acquired as a result of training. An educational service is understood as an activity to assist the consumer in mastering the content of education. Hence, “educational services” are services provided in the process of carrying out educational activities, the result of which is the achievement by citizens of a certain level of education and training or their mastery of a number of certain competencies.

Modern concepts of teacher education also involve special approaches to the teacher as the subject and object of the educational process. In modern conditions, the teacher can act not only as a customer and consumer, but he himself can be considered as a producer of educational services or act as an expert. The article discusses the various functions and roles of the teacher as a subject and as an object of marketing activities (Voskoboinikova V. V., Kalko K. O., Kulesha-Liubinets M. M., Nikolaievska Yu. V., Samoiliuk O. V., Rybalko P., Drogovoz S. M. 2021).

The analysis of the data obtained and the further course of the study made it possible, at the next stage of the formative experiment, to develop a model for the development of the marketing technology system in institutions of additional pedagogical education.

The target component of the model is the development of marketing management through marketing technologies that allow increasing the competitiveness of similar ones and qualitatively improve the satisfaction of the professional educational needs of teachers.

The development model of the marketing technology system includes all of the above types of basic technologies. Identified new technologies specific to the activity: technology of creating an educational product (program, course, etc.); technology for promoting specific courses, taking into account the target audience (teaching and non-teaching workers); technology of tender and grant activities as an integral part of marketing communications technologies, etc.

The content component of the model includes three blocks of educational marketing technologies used by marketing structures based on a systematic study of the requests and needs of teachers and the requirements of regulatory documents that determine the implementation of the state task.

The main conditions for the implementation of the model for the development of marketing technologies include: awareness by managers of the need for marketing activities; mastering the basics of marketing management by the heads of the institution; development of a plan for the strategic development of a teacher education institution based on marketing technologies; monitoring the quality of teacher education during the period of training and the formation of professional competence of teachers; readiness for structural changes related to marketing activities (Zozulia I, Zozulia O, Melnychuk S, Luts L., et al 2020).

Thus, the analysis of the functioning of teacher education institutions in the system of market relations and the results of research confirm the regularity and necessity of developing a system of marketing technologies and its particular relevance for the market of educational services of teacher education (Grant, A.M. 2013).

The study showed general trends in the development of educational institutions of teacher education in a market environment, ways to solve common problems outlined here.

The conducted experimental work allowed us to draw the following general conclusions:

1. Directions for reforming the system of teacher education are closely related to its systemic restructuring based on the development of marketing technologies.
2. The marketing activities of educational institutions of teacher education serve as a means of motivation for professional development, contribute to the reflection of teachers as producers of a high-quality educational product, and help teachers to realize their competitiveness as subjects of the educational space.
3. The development of the system of marketing technologies allows not only to increase the number of students, but also to significantly improve the range and quality of educational services.

4. Systematic marketing activity of educational institutions of teacher education is the result of the development of marketing technologies and acts as a means of implementing the didactic and pedagogical principles of teacher education:
 - personalization of the advanced training system;
 - development of project activities of teachers;
 - development of network interaction and computer literacy of teachers;
 - serves as a means of motivation to improve the qualifications of teachers.
5. Adequate application of marketing technologies enables the educational institution to win the competition for the consumer in the period of ongoing socio-economic and structural changes in society. (Reynolds, M. 2020).

The results of the study make it possible to identify the links between ensuring the quality of educational services and the use of marketing technologies in managing the development of a general education institution as a factor in monitoring and evaluating this quality.

The course and results of the study, the experimental work carried out, fully confirmed the viability of the hypothesis put forward.

It has been proved that the development of a system of marketing technologies in teacher education institutions provides a high quality of professional competence improvement for teachers based on the identification and satisfaction of their professional and educational needs and requirements.

The study of the development of the marketing technology system opens up new opportunities for studying educational marketing, marketing of general education institutions: identifying innovations in education and disseminating them with the help of marketing technologies; studying the patterns of management of educational institutions of various types in market conditions (Odynets, Tetiana, Yuriy Briskin, Borys Dolinsky, Valentina Todorova, Pavlo Vindiuk, Anzhelika Yefremova, and Petro Rybalko, 2021).

DISCUSSION

Theoretical significance of the study:

- systematized understanding of the concept of “marketing technologies” in different methodological approaches (system-activity, personality-oriented, competency-based, marketing, technological);
- the theory of vocational education was supplemented by the development and theoretical substantiation of new marketing technologies, consisting in identifying professional educational needs and needs of teachers, predicting the effectiveness of advertising educational services, and applying marketing communications technologies in activities;
- developed and substantiated criteria for ranking the effectiveness of the development of marketing technologies in the institution of teacher education (low, initial, medium, high);
- the theory of management of an institution of additional pedagogical education was supplemented with a system of marketing technologies for diagnostics, segmentation, targeting, positioning, forecasting, which make it possible to increase the efficiency of the institution’s activities based on the systemic interaction of these technologies.

Practical significance of the study:

- developed and implemented in the activities of educational institutions a set of technologies that provide favorable conditions for the development of the marketing system;
- with the participation of the author, new forms of dissemination of advanced pedagogical experience were developed and introduced into the work of an educational institution: a teacher is a producer of educational services; a teacher is a consumer of educational services (a product of educational activities), implemented through regional annual exhibitions of innovations, which are various forms of products of educational activities of teachers.

The reliability and validity of the main provisions and conclusions of the study is due to the methodological validity of the initial theoretical provisions, the integration of research search with practical

activities, the synthesis and analysis of practical and experimental material; organization of experimental work using a set of methods.

CONCLUSIONS

In order to achieve the goal of the article and confirm the hypothesis put forward, overcoming the above-mentioned contradictions, the solution in the work has the form:

1. A theoretical analysis of the problem of the development and application of the system of marketing technologies in pedagogical education has been carried out, the conditions under which they will work will be investigated.
2. A system of marketing technologies for pedagogical education has been identified and developed, which will ensure effective satisfaction of the professional educational needs of the country's teachers.
3. The mechanism of creating conditions for the successful functioning of the marketing technology system development model has been studied.
4. The development model of the system of marketing technologies has been developed taking into account the existing conditions and the socio-pedagogical situation in the country.

REFERENCES

- Arvidsson, I., Leo, U., Larsson, A., Håkansson, C., Persson, R., & Björk, J. (2019). Burnout among school teachers: Quantitative and qualitative results from a follow-up study in southern Sweden. *BMC Public Health, 19*, 655. <https://doi.org/10.1186/s12889-019-6972-1>
- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' Self-Efficacy: The Role of Personal Values and Motivations for Teaching. *Frontiers in Psychology, 10*(1645). <https://doi.org/10.3389/fpsyg.2019.01645>
- Borle, P., Reichel, K., Niebuhr, F., & Voelter-Mahlknecht, S. (2021). How Are Techno-Stressors Associated with Mental Health and Work Outcomes? A Systematic Review of Occupational Exposure to Information and Communication Technologies within the Technostress Model. *International Journal of Environmental Research and Public Health, 18*(16), 8673. <https://doi.org/10.3390/ijerph18168673>
- Bravo, A.K., Buenaflores, N.B., Baloloy, J.I., Guarte, L., Osinaga, A.M., Salartin, A., & Tus, J. (2021). Amidst the Covid-19 pandemic: The job burnout and job satisfaction of public school teachers in the Philippines. *International Journal of Advance Research and Innovative Ideas in Education, 7*(3), 2979–2993. DOI: 10.6084/m9.figshare.14832399.v1
- Carroll, A., Forrest, K., Sanders-O'Connor, E., Flynn, L., Bower, J.M., Fynes-Clinton, S., . . . Ziaei, M. (2022). Teacher stress and burnout in Australia: Examining the role of intrapersonal and environmental factors. *Social Psychology of Education, 25*, 441–469. <https://doi.org/10.1007/s11218-022-09686-7>
- Cuervo-Carabel, T., Martínez, N., Arce Garcia, S., & Fernandez, I. (2018). Technostress in Communication and Technology Society: Scoping Literature Review from the Web of Science. *Archivos de Prevencion de Riesgos Laborales*, pp. 18–25. DOI: 10.12961/apr1.2018.21.1.04
- Definition and Selection of Competencies. (2003). *Theoretical and Conceptual Foundations (DESECO). Strategy paper on key competencies. An overarching. Framework of reference for an assessment and research program—OECD* (Draft). Retrieved from <http://www.deseco.admin.ch>
- Freudenberger, H.J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice, 12*(1), 73–82. <https://doi.org/10.1037/h0086411>
- Gamage, K.A.A., Dehideniya, D.M.S.C.P.K., & Ekanayake, S.Y. (2021). The Role of Personal Values in Learning Approaches and Student Achievements. *Behavioral Sciences, 11*(7), 102. <https://doi.org/10.3390/bs11070102>

- Grant, A.M. (2013). Outsource inspiration. In J.E. Dutton, & G. Spreitzer (Eds.), *Putting positive leadership in action*. Retrieved from https://faculty.wharton.upenn.edu/wp-content/uploads/2013/12/Grant_OutsourceInspiration.pdf
- Jiang, X-R., Du, J-J., & Dong, R-Y. (2017). Coping style, job burnout and mental health of university teachers of the millennial generation. *Eurasia Journal of Mathematics Science and Technology Education*, 13(7), 3379–3392. <https://doi.org/10.12973/eurasia.2017.00734a>
- Keller, J., & Kesberg, R. (2017). Regulatory focus and human values. *Psihologija*, 50(2), 157–186. <https://doi.org/10.2298/PSI160809004K>
- Maslach, C., & Leiter, M.P. (1999). Teacher burnout: A research agenda. In R. Vandenberghe, & A.M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 295–303). Cambridge University Press. <https://doi.org/10.1017/CBO9780511527784.021>
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Menghi, M.S., Rodriguez, L.M., & Oñate, M.E. (2019). Differences in burnout dimension values in educators with and without symptoms or health problems. *Propósitos y Representaciones*, 7(3), 179–197. <http://dx.doi.org/10.20511/pyr2019.v7n3.338>
- Mojsa-Kaja, J., Golonka, K., & Marek, T. (2015). Job burnout and engagement among teachers – Worklife areas and personality traits as predictors of relationships with work. *International Journal of Occupational Medicine and Environmental Health*, 28(1), 102–119. <https://doi.org/10.13075/ijomeh.1896.00238>
- Mosleh, S.M., Kasasbeha, M.A., Aljawarneh, Y.M., Alrimawi, I., & Saifan, A.R. (2022, June 20). The impact of online teaching on stress and burnout of academics during the transition to remote teaching from home. *BMC Med Educ*, 22, Article 475. <https://doi.org/10.1186/s12909-022-03496-3>
- Odynets, T., Brisikin, Y., Dolinsky, B.T., Todorova, V.K., Vindiuk, P., Yefremova, A., & Rybalko, P.F. (2021). The effect of hatha yoga on range of motion and strength in patients with breast cancer. *Physiotherapy Quarterly*, 29(1), 56–60. <https://doi.org/10.5114/pq.2020.99755>
- Reynolds, M. (2020). State of the Internet amid coronavirus pandemic. *S&P Global Ratings*. Retrieved from <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/state-of-the-internet-amid-coronavirus-pandemic-8211-s-p-podcast-59001571>
- Vilardaga, R., Luoma, J.B., Hayes, S.C., Pistorello, J., Levin, M.E., Hildebrandt, M.J., . . . Bond, F. (2011). Burnout among the addiction counseling workforce: The differential roles of mindfulness and values-based processes and work-site factors. *Journal of Substance Abuse Treatment*, 40(4), 323–335. <https://doi.org/10.1016/j.jsat.2010.11.015>
- Voskoboinikova V.V., Kalko K.O., Kulesha-Liubinets M.M., Nikolaievska Yu. V., Samoiliuk O.V., Rybalko P., & Drogovoz S.M. (2021). The effectiveness of music therapy as a non-drug approach to the correction of various pathological processes in the body. *Pharmacologyonline*, 3, 2026–2031. Retrieved from https://pharmacologyonline.silae.it/files/archives/2021/vol3/PhOL_2021_3_A213_Voskoboinikova.pdf
- Zozulia, I., Zozulia, O., Melnychuk, S., Luts, L., Kronivets, T., & Karmazina, C. (2020). Protection of the Right to Information on One’s Health by Authorized State Bodies. *Systematic Reviews in Pharmacy*, 11(10), 803–806. doi:10.31838/srp.2020.10.12