

# European Journal of Research and Reflection in Educational Sciences

Volume 8 Number 10, 2020 Part II  
ISSN 2056-5852



Progressive Academic Publishing, UK  
[www.idpublications.org](http://www.idpublications.org)

# European Journal of Research and Reflection in Educational Sciences

Volume 8 Number 10, 2020 Part II  
ISSN 2056-5852

Progressive Academic Publishing, UK  
[www.idpublications.org](http://www.idpublications.org)

## Editor-in-Chief

Dr. Elizabeth Kilbride, UNITED KINGDOM

## Editorial and Review Board

Dr. Md. Mokter Hossain, The University of Alabama, Tuscaloosa, USA  
Dr. Fadzli bin Adam, Universiti Malaysia Terengganu, MALAYSIA  
Dr. Alba Robert Dumi, Professor & Dean, Vlora University, ALBANIA  
Dr. Jacob Mapara, Associate Professor, Great Zimbabwe University, ZIMBABWE  
Kunyuan Qiao, Graduate Research Assistant, Peking University, Beijing, CHINA  
Dr. Abdelhamid Nabil Deghidi, Lecturer, Majmaah University SAUDIA ARABIA  
Dr. Abbas Ali Zarei, Imam Khomeini International University, Qazvin, IRAN  
Dr. Faheem Ahmad, Research Scientist, North-West University, SOUTH AFRICA  
Abdussalam Shibani, Lecturer, Coventry University, UNITED KINGDOM  
Abbas Rahdar, Head, Department of Physics, University of Zabol, Zabol, IRAN  
Dr Abdul Jaleel Kehinde Shittu, Senior Lecturer, Universiti Utara Malasia, MALAYSIA  
Ali I.Al-Mosawi, Technical Institute of Babylon, IRAQ  
Dr. Mohammad Hadi Dehghani, Tehran University of Medical Sciences, Tehran, IRAN  
Dr. Gehad Mohamed Saleh, Professor of Geology, Nuclear Materials Authority (NMA), Cairo, EGYPT  
Dr. Kasi Eswarappa, Centre for Women Development and Gender Studies, National Institute of Rural Development (NIRD), Rajendranagar, Hyderabad, INDIA  
Dr. Mohammed Viquaruddin, Assistant Professor, Deogiri College, Aurangabad, INDIA  
S. Kannan, Ph.D. Research Scholar, Department of History, Annamalai University, Annamalainagar, Tamil Nadu, INDIA  
Dr. Pragnesh B. Parmar, Smt. B.K. Shah Medical Institute and Research Center, Vadodara, INDIA  
Dr. Gunvanti B. Rathod, Smt. B.K. Shah Medical Institute and Research Centre, Vadodara, INDIA  
Akramova Gulbakhor Renatovna – Candidate pedagogical sciences, docent of Department of Theory of Primary Education, Faculty of Preschool and Primary Education, Bukhara State University, UZBEKISTAN  
Shirinov Muzaffar Kucharovich, Institute of retraining and professional development of personnel and specialists of the system of Public Education named after Abdulla Avloniy, UZBEKISTAN

*European Journal of Research and Reflection in Educational Sciences (EJRRES)* is a peer-reviewed research journal published by Progressive Academic Publishing, UK. The journal is indexed with Google Scholar, ROAD Directory of Open Access Resources, UK and Impact Factor International, UK. For this journal we welcome manuscripts in the following areas:

Teaching and Learning, Learning Theories and Teaching Methodologies, Educational Psychology, Philosophy of Education, Sociology of Education, Special Education, Literacy, Primary, Secondary and Higher Education, Educational management, Leadership and Management, Educational Research, Curriculum and Instruction, Educational Change, Teacher Education, Pre-service and In-service Teacher Education, Teaching Practice and Internship, Professional Development of Teachers, Teacher Educator and Trainer Trainers, Distance Education, Teacher Education through Distance Education, Virtual Education, Investment in Education and ant other areas related to Educational Studies.

**How to Submit Manuscripts:** Manuscripts can be submitted online through our website [www.idpublications.org](http://www.idpublications.org). Alternatively, authors can submit manuscripts as an email attachment to: [editor@idpublications.org](mailto:editor@idpublications.org).

**Publisher's Address:** Progressive Academic Publishing, Somerset House, Birmingham Business Park, Birmingham, United Kingdom, Post Code: B37 7BF.

**Website:** [www.idpublications.org](http://www.idpublications.org)

**Email:** [editor@idpublications.org](mailto:editor@idpublications.org)

# European Journal of Research and Reflection in Educational Sciences

Volume 8 Number 10, 2020 Part II  
ISSN 2056-5852

## Articles in this issue

1. Babaeva Sh. (2020). Modeling native language learning by designing education. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 1-9.
2. Nikadambaeva, K. B., Rizaeva, D. K. & Nikadambaeva, D. R. (2020). Project technology in online teaching of “principles of development of the press” in the context of the coronavirus pandemic. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 10-15.
3. Akramova, F. A. (2020). Main requirements: psychological service for families. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 16-18.
4. Karimovna, N. N., Izzatullaevna, T. Z. & Gayratovna, N. N. (2020). Innovative technologies in physics education. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 19-22.
5. Badriddinovich, K. B. (2020). The implementation of the model of formation of professional competencies of the future teachers of physics. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 23-26.
6. Rizakulyevna, C. M. (2020). Knowledge of nature by learning theory and experiment. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 27-30.
7. Adizov, B. R. & Nusratov, A. N. (2020). The socio-political life in the khanate of Bukhara and the possibilities of usage of “Muzakkiri Akhbab” tractate in clarifying development of pedagogical thought. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 31-35.
8. Nematova, S. I. (2020). Scientific approaches to the issue of professional competence of teacher. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 36-40.
9. Abdullaeva, S. N. & Rizamuhamedova, G. (2020). Methodological bases for the analysis of comics in the work of A. S. Griboedov: woe from wit. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 41-47.

10. Murodovna, R. M. (2020). Pedagogical technology of legal consciousness development in pupils of primary classes. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 48-52.
11. Husanboy, T. (2020). Problems of oral and written speech in the process of communicative competence of primary school students learning French as a foreign language. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 53-58.
12. Bakhtiyarova, T. M. (2020). Socio-historical stages of formation of mathematical concepts in preschool children (on the example of Uzbekistan). *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 59-68.
13. Khaitboevich, B. B. (2020). Some features of protection of students from the threat of harmful information in the educational process. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 69-72.
14. Zakirova, S. A., Pîrvan, L. R. & Zunnunova, U. G. (2020). Challenges and prospects in art higher education of Uzbekistan and Romania. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 73-76.
15. Kuylievich, K. J. (2020). Features of using circular training exercises to increase mobility in physical education lessons. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 77-83.
16. Nigbaevna, R. D. (2020). Application of monitoring in physical education and sports. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 84-89.
17. Ergashev, J. J. & Yusupov, A. I. (2020). *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 90-95.
18. Mamatkulova, N. (2020). Independent study skills as a key to success in higher education system. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 96-100.
19. Imomkulova, O. N., Jurakulov, M. S., Totliev, U. Kh. & Khaydarov, Kh. I. (2020). On the methodology of forming quantitative representations in preschool children. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 101-104.
20. Khusanov, Z. J. & Tursunmetov, K. A. (2020). Aspects of independent study and repeating of physics by students. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 105-109.
21. Bakhtiyarovich, H. A. (2020). Problems of development of physical culture and sports organizations. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 110-113.

22. Nurmatova, S. M. (2020). Issues of popularization of basketball sports among women. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 114-116.
23. Abdurakhmonovich, A. S. (2020). Planning of training load of highly qualified athletes with locomotor system damage. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 117-123.
24. Djumakulov, G. (2020). Factors of education of intellectual qualities in students of academic lyceums. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 124-128.
25. Umirova, D. (2020). Authenticity and authentic materials: history and present. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 129-133.
26. Abdirimova, I. (2020). Methods and tools for the implementation of project activity in education. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 134-138.
27. Tadjibayev, M. S. (2020). Shadow theory and hermeneutic pragmatism. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 139-144.
28. Tadjibayev, M., Shegay, A. & Krivosheeva, G. (2020). The development of realism in American literature. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 145-150.
29. Achilov Nurbek Norboy o'g'li, Bekqulov Qudrat Shaydulloyevich, Ko'kiyev Boburmirzo Baxodir o'g'li & Jumayev Isroil Omandovlat o'g'li (2020). Methods of developing creative abilities in children. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 151-153.
30. Nuritdinovich, T. F. (2020). Use of national moving in organizational sports holidays. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 154-157.
31. Sharifovna, T. Z. & Erkinovna, U. V. (2020). Characteristics of specialties and organization of the pedagogical process. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 158-161.
32. Kholiqjonovna, S. M. (2020). Issues of orientation of students to research work. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 162-165.
33. Kuchkarova, M. O. (2020). Teaching a course in theoretical physics according to the principle of continuity. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 166-169.

34. Erkinovna, G. U. (2020). Methodological recommendations on the organization of teaching a foreign language based on blended learning at the professional development courses for pedagogical staff from higher education institutions (HEIS). *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 170-177.
35. Khurshida, A. (2020). Methodological and theoretical research on the development of international higher education institutions. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 178-182.
36. Norqizilovich, K. S. & Kabilovna, O. N. (2020). The role of language and law in the development of the Uzbek language. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 183-186.
37. Djalolov, Sh. (2020). Monitoring of physical activity of junior schoolchildren at physical education lessons. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 187-189.
38. Raxmatillayevna, S. G. (2020). Development of auditive speech in students. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 190-194.
39. Djurayeva, Y., Orazova, F. & Kayumova, G. (2020). Applying independent education in foreign language classes and its problems. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 195-199.
40. Botirova, S. (2020). Forming patriotic spirit within pedagogical education cluster. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 200-205.
41. Bagapova, G., Kobilova, N. & Yuldasheva, N. (2020). The role of distance education and computer technologies in teaching foreign languages. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 206-211.
42. Djabborova, F. O. (2020). Ways of developing listening skills of English learners in ESL and EFL classroom. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 212-216.
43. Mavlanova, S. (2020). Youth policy and educating young people in the spirit of spiritual enlightenment and patriotism. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 217-221.
44. Mannopova, E. T. (2020). Intelligent information systems in improving the education management system in Uzbekistan. *European Journal of Research and Reflection in Educational Sciences*, 8 (10), Part II, 221-230.

Progressive Academic Publishing, UK  
[www.idpublications.org](http://www.idpublications.org)

## INNOVATIVE TECHNOLOGIES IN PHYSICS EDUCATION

Nasirova Nigora Karimovna, Tuksanova Zilola Izzatullaevna & Nasirova Nargiza Gayratovna  
Senior teachers of Department of Physics  
Bukhara State University

### ABSTRACT

The article discusses pedagogical technologies used in physical education, the criteria for the use of pedagogical technologies and its role of pedagogical technologies in revealing the meaning of physical phenomena in the case of physics. Experience has shown that the use of pedagogical technologies has increased the level of physical knowledge.

**Keywords:** Pedagogical technology, educational process, educational system, teaching elements, interactive method, teacher and student.

### INTRODUCTION

Innovative technologies in physics education are a driving force of the learning process or a set of activities that renew the professional activity of the teacher in the pursuit of a predetermined goal and guarantee the final result in education.

One of the ways to further develop and improve the reform of the education system in our country is to bring advanced innovative technologies into the educational process. Today, interactive methods, which are an element of advanced innovative technology, are widely used. Interactive is derived from the English word 'inter', which means 'between', 'in between', which means activity between two things. Interactive method is the development of personal qualities, activating the acquisition of theoretical and practical knowledge of physics by increasing the activity between students and the teacher in the process of teaching physics.

### Materials and Methods

The interactive method helps to increase the effectiveness of the lesson through teacher-student collaboration, encourages the student to think independently. Each student tries to find the answer individually, in pairs, in groups, independently, actively participates in the set goal, thinks, writes, remembers formulas, speaks, try to cover the problem with evidence and bases appropriate to their experiments in physics. This will be remembered for a long time by the participants.

The main reasons why educational institutions today pay special attention to the use of innovative technologies in the teaching of physics are:

First, in the breadth of opportunities is to implement personality-enhancing physical education in innovative technologies.

Second, innovative technologies provide an opportunity to widely introduce a systemic activity approach to the process of teaching physics.

Third, innovative technology encourages the physics teacher to pre-design the technological chain, from the objectives of the science teaching process to the establishment of a diagnostic system and control of the process.

Fourth, because innovative technology is based on the use of new tools and information methods in the teaching of physics, their application ensures the implementation of the requirements of the "National Training Program".

The correct introduction of innovative technologies in the process of teaching physics leads the physics teacher to act as the main organizer or consultant in this process. This requires more independence, creativity, and willpower in the student's acquisition of physical concepts.

The application of any innovative technology in the process of teaching physical knowledge in different sections of a physics course depends on the individual character, to whom the physics teacher teaches physics and who teaches the student science.

## RESULTS AND DISCUSSIONS

The use of innovative technologies in physics class will satisfy the desire of young people to express their attitudes to important life achievements and problems, give them the opportunity to think, to justify their views. The content of teaching physics courses can be expressed in different ways:

- The teacher's live speech, the main part of his research is devoted to the question of what should be the teacher's speech. The teacher performs this task in his or her written and oral activities. Because the fluency, conciseness, expressiveness and logic of the teacher's language is a guarantee for the conscious and thorough understanding of the teaching material by students "[2, 45].
- Questions, assignments, problems, cards, visual aids, chain words, programmed materials, tests, etc. are the forms of educational material.

It serves the purpose of adapting the process of mastering the topics related to the sections of the physics course to students, the organization, management, control of education. For example, according to the needs of teaching and learning, the subjects of the physics course enter into different forms of educational content and begin to act in the form of educational element, stage (consisting of several elements), period (consisting of several stages). Therefore, each of the learning element, stage and period can be considered as a specific independent didactic phenomenon.

In order to teach a didactic phenomenon in the process of teaching the subjects of the physics course, there must be three constant components:

1. Teaching topics for the department (teacher activities).
2. The student's mastery of the topics in the section.
3. Study material. As a result of the interaction of these components, the educational

learning elements, the learning phase consisting of several learning elements and the learning period are formed. In turn, here are the types of interactions that play a role in the development of teaching materials on the topics of the physics course sections:

- The influence of the teacher of the topics of the section on the teaching material. In this case, the teacher brings the teaching material on the department in acceptable forms according to the need to study the knowledge of the department of physics. Describe the rules given in physics textbooks, bring the rules to the reader in as simple and interesting forms as possible, introduce the rules, definitions into formulas, diagrams, comparison tables, problem forms;

- The impact of each of the modified forms of thematic teaching material on the section is felt in teaching activities. Definitions of physical quantities and their units, representing different views of nature and natural phenomena, make the laws pertaining to the section easier.

As the explanation ensures the popularity of the teacher's speech, the presentation of drawings, tables, learning problems posed by the department and the choice of problem-based learning.

Along with the organization and management of departmental education, the teacher assesses the knowledge, skills and abilities of the student mastering the department, all these processes are carried out due to changes in content and form in the curriculum material. In this case, changes in the teaching process under the influence of the teaching material are considered as changes in content, and changes in the teaching material as a result of the influence of the teacher are considered as changes in form.

## CONCLUSION

We have focused on changes in the content and form of educational activities in the process of teaching physics courses.

1. The impact of the study material on the student by section; usually in the transfer of any knowledge the learning material affects the learner who is mastering the material with ease or difficulty, simple or complex. The content of the student's mastery of the material changes due to various changes that occur in the student - the definition of the sections of the physics course, rules, interest in learning the laws, the desire to apply the knowledge gained in the course, the introduction of memory and thinking in the material, and processes such as transferring to the required learning situations.

2. The effect of the teaching material on the physics course for the student. In this case, there are changes in the form of teaching the subjects of the physics course, that is, the comments of the author of the textbook or the transformation of the teacher's speech into his own speech.

In short, in the application of the teaching of physics course topics as a social phenomenon, there are changes in content and form in both reading and teaching activities.

## REFERENCES

1. M.F. Atoyeva. Interdisciplinary relations in physics course at specialized secondary education. *The Way of Science*. – Volgograd, 2016. – №9 (31). – P.22-24.
2. M.F. Atoyeva. The significance of periodicity at teaching physics. *The Way of Science*. – Volgograd, 2016. – № 10 (32). – P.62-64.
3. M.F. Atoyeva. Use of Periodicity in Teaching Physics. *Eastern European Scientific Journal*. –Düsseldorf-Germany, 2017. № 4. –P. 35-39.
4. M.F. Atoyeva. Didactic foundations of inter-media relations in the training of university students. *International Scientific Journal. Theoretical & Applied Science*. p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online). Year: 2020 Issue: 06 Volume: 86, P. 124.
5. M.F. Atoyeva, R. Safarova. Pedagogical integration as a means of forming professionally important qualities among students of a medical university. *Academicia*. ISSN: 2249-7137 Vol. 10, Issue 8, August 2020. Impact Factor: SJIF 2020 = 7.13 *ACADEMICIA: An International Multidisciplinary Research Journal* <https://saarj.com>.
6. Use of alternative energy sources at the natural sciences lessons. SK Kakhkhorov, HO Juraev, MF Atoeva. *The Way of Science*. 36, 148
7. S Fayziev. Investigation of the magnetic structure of FeBO<sub>3</sub>:Mg/III *INTERNATIONAL SCIENTIFIC CONFERENCE OF YOUNG RESEARCHERS 1* (1), 105-107.2019

8. RA Khaydarov, RR Khaydarov, O Gapurova, NK Nasirova. VOC Degradation in the Atmosphere by Nanophotocatalysts//Disposal of Dangerous Chemicals in Urban Areas and Mega Cities, 139-150.2013
9. Ochilov, MN Narzullaev. Increasing the efficiency of solar heat treatment of liquid foodstuffs with the help of reflecting systems//Applied solar energy 32 (3), 78-79.1996
10. S Astanov, BE Niyazkhonova. Luminescent properties of vitamins in monomeric and associated states in a polar solvent//Journal of Applied Spectroscopy 55 (5), 1103-1106.1991
11. DR Djuraev, AV Karimov, DM Yodgorova, AA Turaev. THE PRINCIPLES OF INCREASING THE SENSITIVITY OF TRANSISTOR STRUCTURES TO EXTERNAL INFLUENCES//Euroasian Journal of Semiconductors Science and Engineering 1(1),36.2019
12. DR Dzhuraev, LN Niyazov, KS Saidov, BY Sokolov, L Khaydarova. The spontaneous orientation phase transition in terbium-yttrium ferrite-garnet//2011
13. MS Mirzaev, KA Samiev, SM Mirzaev. Experimental Study of Distance between Evaporator and Condensate of Inclined Multistage Desalination Plant//Applied Solar Energy 55 (1), 36-40.2019