



Look Up Full Text



Export... Add to Marked List

1 of 1

PEDAGOGICAL CONDITIONS FOR THE DEVELOPMENT OF COGNITIVE INDEPENDENCE FOR HUMANITARIAN STUDIES IN THE PROCESS OF MATHEMATICAL EDUCATIONBy: Ivanova, AV (Ivanova, Augustina Vasilievna)^[1]; Golikov, AI (Golikov, Alexei Innokentievich)^[2]; Skryabina, AG (Skryabina, Alevtina Gavrilovna)^[3]; Gogoleva, IV (Gogoleva, Irina Vasilievna)^[4]; Darbasova, LA (Darbasova, Laura Agitovna)^[5]REVISTA GENERO & DIREITO
Volume: 9 Issue: 2 Pages: 667-685
Published: 2020
Document Type: Article**Abstract**

The relevance of this study is determined by the modern requirements related to both the structure of the learning process and the results of training and educating the younger generation in the context of globalization and informatization of a rapidly changing society. This manuscript is focused on discussing the development of cognitive independence, through humanities classes, among students studying mathematics at a basic level of the new federal state educational standard. The purpose is to find pedagogical conditions that contribute to the development of the cognitive independence of students in humanities while studying mathematics at a basic level. The authors provide a logical and didactic analysis of the existing basic-level mathematics textbooks and describe the features of the students in the humanitarian classes. The authors substantiate the pedagogical conditions required for the development of cognitive independence among these students: enrichment of the content of the humanitarian subject areas with an educational and methodological complex aimed at developing cognitive independence; the involvement of students in the humanitarian classes to develop an independent cognitive process under the condition of using the educational information environment. These conditions are said to activate mental activity, contributing to the development of cognitive independence in the study of mathematics. The authors describe pedagogical approaches (activity-oriented, personality-oriented, information-communicative, and competency-based approaches) that contribute to the development of students' cognitive independence. The authors present the research methods (assessment of motivation for learning activities, observation of the manifestation of students' strength-will during tasks, the quality of knowledge in mathematics). The authors conducted an experiment on the implementation of sound pedagogical conditions, the results of which are described in this manuscript. The introduction of the proposed pedagogical conditions into the educational process is of practical importance and is expected to contribute to the effective development of cognitive independence, through humanitarian classes, among students studying mathematics.

Keywords

Author Keywords: independence; cognitive activity; students; pedagogical conditions; approaches

Key Words Plus: STUDENTS; ENGAGEMENT

Author Information

Reprint Address: Ivanova, AV (reprint author)

+ Ammosov North Eastern Fed Univ, Pedag Inst, Dept Primary Educ, 2 Lenin Ave, Yakutsk 677000, Republic Of Sak, Russia.

Addresses:

- + [1] Ammosov North Eastern Fed Univ, Pedag Inst, Dept Primary Educ, 2 Lenin Ave, Yakutsk 677000, Republic Of Sak, Russia
- + [2] Ammosov North Eastern Fed Univ, 58 Belinsky Str, Yakutsk 677000, Republic Of Sak, Russia
- + [3] Ammosov North Eastern Fed Univ, Inst Math & Informat, Dept Methods Teaching Math, 48 Kulakovskiy Str, Yakutsk 677013, Republic Of Sak, Russia
- [4] Yakutsk State Agr Acad, Fac Engr, Appl Mech, 3rd Km Sergelyakhskoe Highway, Bld 3, Yakutsk 677007, Republic Of Sak, Russia
- [5] Yakutsk State Agr Acad, Fac Engr, Appl Mech, 3rd Km Sergelyakhskoe Highway, Bld 3, Yakutsk 677007, Republic Of Sak, Russia

E-mail Addresses: lvaya1@bk.ru

Publisher

UNIV FEDERAL PARAIBA, CIDADE UNIV, JOAO PESSOA, PB 58059-900, BRAZIL

Categories / Classification

Research Areas: Social Issues

Web of Science Categories: Social Issues

Document InformationLanguage: English
Accession Number: WOS:000517538400036
ISSN: 2177-0409
eISSN: 2179-7137**Other Information**IDS Number: KR3SN
Cited References in Web of Science Core Collection: 36
Times Cited in Web of Science Core Collection: 0

See fewer data fields

Citation Network

In Web of Science Core Collection

0

Times Cited

Create Citation Alert

36

Cited References

View Related Records

Use in Web of Science

Web of Science Usage Count

0

Last 180 Days

0

Since 2013

Learn more

This record is from:
Web of Science Core Collection
- Emerging Sources Citation Index

Suggest a correction

If you would like to improve the quality of the data in this record, please suggest a correction.

1 of 1

Cited References: 36

Showing 20 of 36 [View All in Cited References page](#)

(from Web of Science Core Collection)

1. Modernization of education in Russia: the key problems and solutions Times Cited: 1
By: Avanesov, V.S.
Public education Issue: 1 Pages: 20-32 Published: 2017
2
2. [Methodical Peculiarities Of Development Of Students' Cognitive Independency](#) Times Cited: 1
By: Balabekova, Maskura G.; Asanaliyev, Melis K.; Ospanova, Gulnaz A.; et al.
2ND CYPRUS INTERNATIONAL CONFERENCE ON EDUCATIONAL RESEARCH (CYICER 2013) Book Series: Procedia Social and Behavioral Sciences Volume: 89 Pages: 612-616
Published: 2013
3. E-learning system application for physical education and sports specialist training Times Cited: 1
By: Barakhasanov, V.P.; Barakhasanjva, E.A.; Olesov, N.P.; et al.
Theory and Practice of Physical Culture. Volume: 7 Published: 2018
C.4
[\[Show additional data\]](#)
4. Peculiarities of quality management of teachers e-learning training in the Arctic regions Times Cited: 3
By: Barakhasanova, E.A.; Vlasova, E.Z.; Golikov, A.I.; et al.
EDUCATION Volume: 38 Issue: 55 Pages: 25 Published: 2018
[\[Show additional data\]](#)
5. Schoolchildren in a digital educational environment: conditions, preferences, and security Times Cited: 1
By: Barakhsanova, E.A.; Mulgarov, I.I.
Problems of modern teacher education Issue: 61-2 Pages: 64-66 Published: 2018
6. The quality of education and the quality of training Times Cited: 1
By: Bepalko, V.P.
Public education Issue: 3-4 Pages: 105-114 Published: 2017
7. [Using contextualized tasks to engage students in meaningful and worthwhile mathematics learning](#) Times Cited: 2
By: Clarke, Doug; Roche, Anne
JOURNAL OF MATHEMATICAL BEHAVIOR Volume: 51 Pages: 95-108 Published: SEP 2018
8. Title: [not available] Times Cited: 11
By: Fetiskin, N.P.; Kozlov, V.V.; Manuylov, G.M.
Socio-psychological diagnosis of the development of personality and small groups Published: 2002
Publisher: Publishing house of the Institute of Psychotherapy, Moscow
9. Ideas and problems of advanced education Times Cited: 2
By: Gafurova, N.V.; Osipova, S.I.
Siberian pedagogical journal Issue: 4 Pages: 9-14 Published: 2013
10. [Opportunities to learn: Mathematics textbooks and students' achievements](#) Times Cited: 9
By: Hadar, Linor L.
STUDIES IN EDUCATIONAL EVALUATION Volume: 55 Pages: 153-166 Published: DEC 2017

11. Technologies of a personality-oriented approach in education Times Cited: 1
By: Isakhanova, Z.S.
Questions of pedagogy Issue: 6 Pages: 31-32 Published: 2017
12. Title: [not available] Times Cited: 1
By: Istratova, O.N.; Exacusto, T.V.
Reference psychologist of high school Published: 2010
Publisher: Phoenix, Rostov-on-Don
13. Levels and indicators of the formation of independent cognitive activity of students in humanities Times Cited: 1
By: Ivanova, A.V.; Skryabina, A.G.; Stepanova, L.V.
Modern problems of science and education Issue: 4 Published: 2018
Access date: 12.07.2018
URL: <http://www.science-education.ru/article/view?id=27743>
14. Natalia Anatolievna Ivanova Pedagogical conditions for supporting the personal self-development of a fifth-grade pupil in the process of mathematical education Times Cited: 1
By: Ivanova, Avgustina Vasilievna; Everstova, Valentina Nikolaevna; Bugaeva, Aya Petrovna; et al.
2018 / Revista ESPACIOS. Volume: 39 Issue: 23 Pages: 18 Published: 2018
[\[Show additional data\]](#)
15. Teaching Model of Pupils' Research Competence Formation in the Context of Humanitarian Subject-oriented Classes of General Education School: Functional and Organizational Characteristics Times Cited: 3
By: Kazarina, Lidiya; Khasanshin, Yuri; Smyshlyayeva, Larisa
XVTH INTERNATIONAL CONFERENCE LINGUISTIC AND CULTURAL STUDIES: TRADITIONS AND INNOVATIONS (LKTI 2015) Book Series: Procedia Social and Behavioral Sciences
Volume: 206 Pages: 241-246 Published: 2015
16. Психологические барьеры на путях изучения математики в современной школе Times Cited: 1
Psychological barriers on the ways of studying mathematics in a modern school ([View record in Russian Science Citation Index](#))
By: Клепиков, В.Н.
By: Klepikov, V.N.
Педагогика Issue: 6 Pages: 33-38 Published: 2017
Pedagogika Issue: 6 Pages: 33-38 Published: 2017
17. Didactic terminology operated by Russian future and practicing teachers: comparative analysis Times Cited: 2
By: Koshkina, Elena; Bordovskaia, Nina; Bochkina, Natalia
FUTURE ACADEMY MULTIDISCIPLINARY CONFERENCE ICEEPSY & CPSYC & ICPSIRS & BE-CI Book Series: Procedia Social and Behavioral Sciences
Volume: 217 Pages: 42-48
Published: 2016
18. The principle of selection of the content of general education Times Cited: 1
By: Krasnova, L.A.
The Pedagogical Journal of Bashkortostan Issue: 6 Pages: 51-54 Published: 2016
19. Педагогическая деятельность в электронной среде: перспективы нового качества Times Cited: 1
Pedagogical activities in the electronic environment: a new quality perspectives ([View record in Russian Science Citation Index](#))
By: Лаптев, В.В.; Носкова, Т.Н.
By: LAPTEV, V.V.; NOSKOVA, T.N.
Педагогика Issue: 10 Pages: 3-13 Published: 2016
Pedagogika Issue: 10 Pages: 3-13 Published: 2016
20. Description and evaluation of a large-scale project to facilitate student engagement in learning mathematics Times Cited: 4
By: Lin, Fou-Lai; Wang, Ting-Ying; Yang, Kai-Lin
STUDIES IN EDUCATIONAL EVALUATION Volume: 58 Pages: 178-186 Published: SEP 2018

21. [An international perspective on knowledge in teaching mathematics](#) Times Cited: 1
 By: Maher, Carolyn A.; Sigley, Robert; Sullivan, Peter; et al.
 JOURNAL OF MATHEMATICAL BEHAVIOR Volume: 51 Pages: 71-79 Published: SEP 2018
22. Title: [not available] Times Cited: 1
 By: Markova, A.K.
 Formation of motivation for learning at school age: a manual for the teacher
 URL: <http://shag.com.ua/markova-a-k-formirovanie-motivacii-ucheniya-v-shkolenom-voznras.html>
23. Middle school mathematics teachers' orientations and noticing of features of mathematics curriculum materials Times Cited: 1
 By: McDuffie, AmyRoth; Choppin, Jeffrey; Drake, Corey; et al.
 International Journal of Educational Research
 In press corrected proof, Available online 8 October 2018
[\[Show additional data\]](#)
24. Problems and Modernization Trends of Ungraded Schools of the Russian North Times Cited: 4
 By: Neustroev, N. D.; Nikolaeva, A. D.; Neustroeva, A. N.; et al.
 International Electronic Journal of Mathematics Education Volume: 11 Issue: 10 Pages: 3415-3424 Published: 2016
[\[Show additional data\]](#)
25. The development of cognitive competence of future bachelors in the process of teaching mathematics Times Cited: 1
 By: Osipova, S.I.; Bratukhina, N.A.; Bugaeva, T.P.; et al.
 The Pedagogic Journal Volume: 7 Issue: 5A Pages: 100-107 Published: 2017
[\[Show additional data\]](#)
26. [Effects of physical activity and breaks on mathematics engagement in adolescents](#) Times Cited: 4
 By: Owen, Katherine B.; Parker, Phillip D.; Astell-Burt, Thomas; et al.
 JOURNAL OF SCIENCE AND MEDICINE IN SPORT Volume: 21 Issue: 1 Pages: 63-68 Published: JAN 2018
27. Implementation of a system-activity approach in a modern school lesson Times Cited: 1
 By: Petunin, O.V.
 Society: sociology, psychology, pedagogy Issue: 8 Pages: 62-64 Published: 2016
28. Cooperation of different ages as a condition for the formation of meta-subject competencies of students Times Cited: 1
 By: Prokopyeva, M.M.; Abramova, N.N.
 Scientific and methodological journal Concept Volume: 6 Pages: 46-49 Published: 2017
29. Cognitive independence is the key competence and competence of the individual Times Cited: 1
 By: Pustovoitov, V.N.
 Bulletin of the Pyatigorsk State Linguistic University Pages: 290-294 Published: 2010
30. Factors affecting the selection and content of educational material in mathematics in humanitarian classes Times Cited: 1
 By: Rakhmatullina, A.O.; Krutikhina, M.V.
 Scientific and methodological electronic journal Concept Volume: 6 Pages: 26-30 Published: 2015
 URL: <http://e-koncept.ru/2015/65206.htm>

Showing 30 of 36 [View All in Cited References page](#)

Web of Science



Search Search Results

Tools Searches and alerts Search History Marked List

Cited References: 36

(From Web of Science Core Collection)

From: PEDAGOGICAL CONDITIONS FOR THE DEVELOPMENT OF COGNITIVE INDEPENDENCE FOR HUMANITARIAN STUDIES IN THE ...More

2 of 2

Add to Marked List

Find Related Records >

- 31. **Building Students' Hard and Soft Skills through Innovative Teaching Approaches to Mathematics**
 By: Rohaeti, E.E.
 Journal of Southwest Jiaotong University Volume: 54 Issue: 5 Published: 2019
 URL: <http://jsju.org/index.php/journal/article/view/366>

Full Text from Publisher

Times Cited: 1
 (from Web of Science Core Collection)
- 32. **In search of motivation to study mathematics**
 By: Sedova, E.A.
 Mathematics in the school Issue: 4 Pages: 63-66 Published: 2015

Times Cited: 1
 (from Web of Science Core Collection)
- 33. **The Preferences Of Cognitive Style Among University Students From Various Study Fields**
 By: Simuth, Jozef, Jr.; Sarmany-Schuller, Ivan
 Conference: Proceedings of 6th World Conference on Educational Sciences Location: Grand Hotel Excelsior Convention Center, Valletta, MALTA Date: FEB 06-09, 2014
 PROCEEDINGS OF 6TH WORLD CONFERENCE ON EDUCATIONAL SCIENCES Book Series: Procedia Social and Behavioral Sciences Volume: 191 Pages: 2537-2540 Published: 2015

Full Text from Publisher [View Abstract](#)

Times Cited: 1
 (from Web of Science Core Collection)
- 34. **Effective adaptive training of students in Russian pedagogical universities to use e-learning technologies**
 By: Vlasova, E. Z.; Barakhsanova, E. A.; Goncharova, S.; et al.
 Education Volume: 39 Issue: 23 Pages: 10 Published: 2018
[\[Show additional data\]](#)

Times Cited: 3
 (from Web of Science Core Collection)
- 35. **Implementation of interactive teaching methods in the context of Federal State Education Standards**
 By: Yafizova, R.A.; Koshevarova, Yu.A.; Nikolaev, A.D.; et al.
 Global scientific potential Issue: 5 Pages: 29-31 Published: 2016
 62
[\[Show additional data\]](#)

Times Cited: 1
 (from Web of Science Core Collection)
- 36. **The didactic potential of electronic educational resources in the organization of students' independent work**
 By: Ziyautdinova, S.M.; Ziyautdinov, M.D.; Rajabaliev, G.P.
 The world of science, culture, education Issue: 6 Pages: 45-47 Published: 2015
 55

Times Cited: 1
 (from Web of Science Core Collection)

Add to Marked List

2 of 2