5. Bertolotto M, Quaia E, Galli G, Martinoli C, Locatelli M. Color Doppler sonographic appearance of renal perforating vessels in subjects with normal and impaired renal function. *Journal of Clinical Ultrasound*. 2000; 28(6): 267-276. doi: 10.1002/1097-0096(200007/08)28:6<267::aid-jcu1>3.0.co;2-p
6. Bertolotto M, Catalano O. Contrast-enhanced Ultrasound: Past, Present, and Future. *Ultrasound Clinics*. 2009; 4(3): 339-367. doi: 10.1016/j.cult.2009.10.011
7. Sidhu PS, Cantisani V, Dietrich CF, Gilja OH, Saftoiu A, Bartels E, et al. The EFSUMB guidelines and recommendations for the clinical practice of contrast-enhanced ultrasound (CEUS) in non-hepatic applications: update 2017 (long version). *Ultraschall Med*. 2018; 39 (2): e2–e44. doi: 10.1055/a-0586-1107
8. Emanuel AE, Meijer RI, van Poelgeest E, Spoor P, Serné EH, Eringa EC. Contrast-enhanced ultrasound for quantification of tissue perfusion in humans. *Microcirculation*. 2020; 27(1): e12588. doi: 10.1111/micc.12588
9. Borsukov A.V., Bekezin V.V., Kozlova E.U. standardization of quality evaluation of doppler ultrasonography of the kidneys in children with obesity and metabolic syndrome. *Vestnik of Smolensk State Medical University*. 2015; 14 (2): 34-37. (In Russ.)
10. Borsukov A.V., Gorbatenko O.A., Venidiktova D.Yu., Pulatova I.Z. Drug for contrast-enhanced ultrasound examination: new dimension in early diagnosis of angioneurosisclerosis in patients with type 2 diabetes on non-alcoholic fatty liver disease background. *Medical alphabet*. 2020;1(30):37-41. (In Russ.) <https://doi.org/10.33667/2078-5631-2020-30-37-41>

Esubulatova A.Zh¹, Voinov K.N.²
Original and effective teaching

¹*West-Kazakhstan Agrarian-technical University
(Kazakhstan, Ural'sk)*

²*ITMO University
(Russia, Saint-Petersburg)*

doi: 10.18411/sr-10-04-2021-66

Abstract

Teaching is the constant process in our life. It makes our parents, teachers/pedagogues at school or in the universities, mentors, experts, coaches, well-known academic, preachers and so on. The additional such factor maybe (and do indeed) Internat. Moreover, the common link among people is essentially exchanged as well. Many persons prefer have short conversation using SMS-communications, and it isn't face-to-face unfortunately. In any transport (metro, bus, trolleybus) a man seeks interesting or useful information but has not noticed persons' associates. It's not good. We can see the next negative situation at home in a family. For example: let's suppose that one student arrived home. Members of his family ask him about his routine business. And they usually here that everything is OK. Even during his eating, he tries to read the information which he sees in his mobile telephone or in the plane-table. Besides, he sends different short communications and gives answers. There are not any friendly dialogs with his family (father, mother, grandfather, grandmother, brother or sister). That's why in this article you can understand the new way how to exchange such negative situation in full.

Keywords: original lessons, teachings, contact in a family, common dialogs, common discussion.

Аннотация

Обучение – постоянный процесс нашей жизни. Им пользуются наши родители. Учителя/педагоги в школе или в университетах, наставники, эксперты, тренеры, известные академики, проповедники и др. Дополнительный фактор – интернет и общая связь между людей путём общения, смс-сообщений, но часто, к сожалению, дистанционно. В транспорте люди часто ищут информацию в мобильных устройствах, не обращая внимания на окружающих. Даже дома молодёжь почти не разговаривает с родителями или с родными. Статья показывает путь изменения такой негативной ситуации, объясняя возможный путь усиления общего диалога в семье.

Ключевые слова: оригинальные лекции, обучения, контакт в семье, общие диалоги, общие дискуссии.

Text 1. How to teach

What are the main tasks during of teaching for students, pupils or listeners in the general case? Here they are: to teach such way it is would be interesting, correctly and clearly; to use such way of teaching which helps for the listeners learn and memorise the basic formulas, positions and the essence for the very long period of a man's life.

o realize these positions in practice the teacher/pedagogue must always give lessons (or practical or laboratory actions) on the up and up (to speak "with fervour"). Talented teacher, like an outstanding artist on a stage, has to work during the lesson very energetically giving both theory and interesting/important practical examples. Any teacher/pedagogue must see the all listeners constantly and very attentively to stop those ones who try to think not about the gist of this pursuit. In such case teacher can ask such student/pupil about the topic of the subject or invite to the blackboard to explain one of the new position linked with the discipline. It compels the young man to interrupt any thoughts which were not tied with the essence of this lesson.

If it is possible, any teacher must show the ocular demonstrations connected with this lecture material. It helps for listeners to strengthen the process both of training and learning right in the lecture-hall.

The next recommendation is very important, namely: before the words "The lesson is over" teacher must give for the listeners one home task which students or pupils must solve to the next lesson. And for those of them who more right solve the task our teacher (from time to time) will give some present (the gift can be edible /banana, small chocolate/, uneatable /book, article, post-card, small toy and so on/) and at last the additional mark to the examination or to the test in the future.

Text 2. How to get splendid result from teaching many important educational disciplines.

Let's consider the next situation. So, there are seven more important educational disciplines: tribology, mathematics, physics, strength of materials, programming, drawing and foreign language (English).

Consequently, there are seven specialized chairs where able to read and write pedagogues usually give lessons having the high qualification.

Now let's to put the next task: try to unite these specialists in one team in which each of them will help to another colleague in the other chairs giving only separate (but significant) information during the semester.

Beforehand, the next work must be done:

- Gather from each chair about five important questions with short answers by each discipline. Consequently, there are only 35 ($5 \times 7 = 35$) questions in all the answer for them any student or pupil must know the right answer for different disciplines.
- Create the common link among the whole chairs handing the questions with answers to each chair in this way in order to the reiteration for one question is from four till six times (it is the doctor's recommendation for any person if he/she has the average intellectual level to learn the definite and important information practically by heart.

And so, we have seven chairs and, for example, five questions for each discipline (**I, II, III, IV, V** with answers, of course). The common links are given in the next figure.

Analysis of this chart shows that each chair helps to another one applying in the educational disciplines from four till 6 times different important fragments from various subjects which heighten and strengthen the knowledge for each student or pupil: I=6; II=5; III=6; IV=4; V=6; VI=6 and VII=6 time. If somebody by the different reasons couldn't attend all lessons, he or she can still get the important information maybe during 3 or four time (not zero!).

Some practical examples in accordance with this methodology of teaching.

1) About tribology. Tribology is the science about a friction and wear and tear. In a mathematical discipline they use, for example, the next formulas to describe the deterioration process:

$$y = ax^2 + bx + c \text{ or } y = (ax^{2/3} + bx)^{1/2}.$$

In physics they describe the damping for oscillations. In strength of materials they give formulas which can show the change in the strains in the part if it has the definite wear. In the section of programming they use MathCad version to describe the situation linked with the development of the corrosion process. In the drawing they depict the roughness on the surface of the part.

The similar way we have to use in practice for the all disciplines. Only in this case the knowledge of students and pupils will be the highest. Moreover, this knowledge will be saved in the man's head during very many years till pension and even further. Indeed, many of very elderly persons remembers the old formulas, rules, definitions, laws, calculations and so forth if they were taught by the method which is rather close to that has just described right now above.

Text 3. Recommendations for teachers/pedagogues.

There are some advices how effectively to teach different disciplines both lectures and laboratory or practical works.

- ✓ Any lecturer must be in a "good shape": is quite enough, to be very talented, possess the sense of humour, to be as the erudite person, competent and many-sided.
- ✓ Periodically he/she has to change the timbre of the voice, interrupt the monotonous in the speech and in an actions.

They must suggest to solve at home different and new technical tasks or problems. For example:

- how to cut across the rubber ring sealing but you don't see any leakage for a long period of operation;

- how to increase the term of operation for the asphalt covering against the transport vehicles (motor-cars, lorries and so on) which are moving practically on the straight lines in the definite places and leave rather deep longitudinal ditches from the tyres; *note*: the roughness must not be more than 7 mm in accordance with the State standard;
- how make so, if you go or even run on the liquid mud, but don't splash your trousers, skirt, stockings and raincoat. And so on.

Teacher/pedagogue must let know for everybody beforehand that students/pupils don't search for the answers in Internet, in different publications, in patents, books, in reference books and so on. Only honest decision must be evaluated by merit!

The victor gets those presents which were enumerated above in the solemn atmosphere and usually under the applause of his/her friends/colleagues.

Text 4. About the friendly contact in a family.

It was entirely unexpectedly, that my lessons, examples and especially home tasks call out the definite very positive interactions into the many families whose young people attend my lectures. Having home task students/pupils try to solve it at home. If they have with it any problem, they turn to the parents for help or to brother or sister. And this "team" begin to think intensively (like a brain storm) and offer different versions to find the best.

Sometimes one man among the members of family is working in the plant in the capacity of a designer or as a technologist (maybe, as the computer programmer or leading an engineer). This group of people must have the conversation, dialog. From time to time they can argue to prove that namely only this version is the best.

In these situations, they forget in full for a long time about sms-communications, about Internet, computer, conversation with friend about dancing, weather, party, to go for a walk and so on. Each person wants to find the right answer and get a prize in the class-room.

I know cases if student call by telephone to the relatives (they are living in another city rather far from the place where the university is disposed). In the difficult cases such search of the right answer takes several days. We have just secured the very good result, namely: many people begin to have conversations, dialogues and friendly discussions (including both students and their parents) connected with the task – how to solve this problem correctly!

Conclusion

There are effective methods how to captivate students/pupils to learn educational material with great interest, how to unite the family through common dialog and discussions in the attempt to solve the new task or problem. Some ways how to give lessons and how to encourage the creative young people are demonstrated in here.

1. Tribology: International encyclopaedia. Vol. VI. Technological ways to increase the reliability for the mobile tribo-joints during their work /Edited by prof., academician K.N. Voinov. SPb., Nestor-History, ISBN 978-5-906108-03-6, 2013. – 404 pages.
2. Tribology: International encyclopaedia. Vol. VII. Rational design for the tribo-junctions. /Edited by prof., academician K.N. Voinov. SPb., Nestor-History, ISBN 978-5-906108-06-7, 2014. – 264 pages.
3. Tribology: International encyclopaedia. Vol. VIII. Methods of calculation for the pairs of friction and for the separate elements /Edited by prof., academician K.N. Voinov. SPb., Nestor-History, ISBN 978-5-906108-09-8, 2014. – 272 pages.
4. K.N., Voinov. Problems and decisions in the questions of friction/deterioration: monograph. SPb.: Nestor-History, 2015. – 500 pages.
5. A.S. Makarenko. Selected pedagogical works. Moskva: Vol. I and II, 1978.
6. K.D. Ushinskiy, S.F. Egorov. Pedagogical works (in six volumes), M.: Pedagogics, 1988.
7. Journal of Teaching in International Business: Special Issue on International Entrepreneurship.
8. International journal on Lifelong education and Leadership. Vol. 3 No 1. 2017.
9. Journal: Proceedings of the Russian State Pedagogical A. I. Gertsen University. Saint-Petersburg. 2014-2020.

10. Altyn Esbulatova, Kirill VOINOV. How Can Live Together Very Old Owner And His Beloved Dog. RAS MEDICAL SCIENCE, Issue Type: Volume 1, Issue 1. - 5 pages.
11. Kirill Voinov, Altyn Esbulatova. Water as our life and Helper. Juniper Publishers. Annals of Reviews and Research, Volume 5, Issue 5 – July 2020. DOI: 10.19080/ARR.2020.05.555673. - 4 pages.
12. Kirill Voinov, Altyn Esbulatova. Novelties Connected With Lubricants. Journal of Multidisciplinary Engineering Science and Technology (JMEST), ISSN: 2458-9403. Vol. 6, Issue 1, January – 2019. (9379-9383). - 5 pages.
13. Xu Fang, Kirill Voinov, Altyn Esbulatova. Results of Investigations and Recommendations How to Reduce Excessive Weight in People. ICECBB, Dec. 2019, SCI Journal Publishing. International conference and Exhibition on Computational Biology and Bioinformatics. Lausent, Taiwan, 2019. <http://www.icecbb2019.org/index.htm>

Kurysheva E.S.

The main stages of the process of formation and development of inclusive education in the United States in the context of multicultural educational policy

*Volgograd State Pedagogical University
(Russia, Volgograd)*

doi: 10.18411/sr-10-04-2021-67

Information about funding sources or grants:

The research was carried out with the financial support of the Russian Foundation for Basic Research in the framework of research project No. 19-313-90028 (the topic "Formation and development of inclusive education in modern secondary schools in the United States in the context of multicultural education policy").

Abstract

This article identifies the main stages of the formation of inclusive education (segregative, integrative, inclusive), reveals the evolutionary nature of inclusive education. The article analyzes the content of the main document regulating the right to education of children with alternative development - The Law on Education of Persons with Disabilities (1975).

Keywords: inclusion, inclusive education, integration, segregation, periods of development of inclusive education.

The United States, a country of cultural, ethnic, linguistic, religious, and social diversity, has a long tradition of research and practice in special education and inclusive practices. A retrospective analysis of the process of formation and development of inclusive education in the United States allows us to divide it into the following main periods: segregative (until the 1970s); integrative (1970s-1980s); inclusive (from the late 1980s to the present).

Let us consider briefly the main historical moments in each of these periods, as a result of which the system of training of persons with alternative development underwent reform.

The segregative period (until the 1970s). According to the historians of American education (L. Wagoner, Jr. [2], Wayne J. Smith, Jr. Urban [2], Reese William John [9], J. Rury [9], J. Wayne [9]), the period between 1900 and the 1970s is called the phase of segregation or isolation. People with developmental disabilities have been isolated from their ordinary fellow citizens for centuries. The first law in the country concerning persons with disabilities was passed in 1798.

In the first half of the 20th century, the laws on compulsory universal school attendance for children under 16 were not applicable to students with disabilities. The period from 1820 to 1920 is called by historians the time of the adoption of important laws on compulsory education in the country, among which are The Law on the Provision of Free