WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

TEACHING PERSPECTIVE BASED ON INNOVATIVE TECHNOLOGIES

Valiyev A'zamjon Nematovich
Associate Professor of Tashkent State
Pedagogical University named after Nizami,
Faculty of Vocational Education, Engineering and
Computer Graphics Departure

Sheraliyev Sanjarbek Karimberdiyevich
First year Master's degree student in Tashkent State
Pedagogical University named after Nizami,
Departure of Engineering Graphics and Design Theory
ssh19902310@gmail.com

Annotation
This research article is going to clarify the issues that occur in the higher education in teaching the students about constructive drawing subjects of Perspective material. Things that become obstacles for students are the use of media, teaching methods, evaluation of high ratings and subjective factors of educators. The purpose of writing this article is to create learning innovations in these subjects so that the paradigm that is built will be positive again, so that the interests and motivations of students will increase with the presence of these innovations. This study uses the research and development method with several stages including problem identification in constructive drawing learning, data search using questionnaires and interviews, the initial step of data analysis as a basis for application, then implementing and implementing innovation by teaching digital constructive images, the last stage is processing data from the implementation process and obtained positive results, students are easier to use media, the level of understanding increases and teaching patterns are more innovative using new media technology.

Keywords: Perspective, constructive drawing, perspective systems, beam, prism, pyramid, create learning innovations, innovation, computer medium, teaching methods, transferring knowledge.

Introduction

The purpose, content, forms, methods and tools of the educational process are traditional categories that are used to analyze educational processes in pedagogy. The same categories arise as the subject of pedagogical activity, which constitutes the

educational process in a particular science, specialty or specialty. The legislative and criteria of pedagogical and educational activity, which purposefully orientate the mentioned pedagogical categories, serve as a systematizing factor. Over the long periods, the size of the pedagogical categories indicated has become sufficient to achieve the objectives of society at the level of scholar. It is known that the qualifications and skills that must beacquired in knowledge become more complex [1].

Learning innovation is something that is important and must be owned or done by educators. This is because learning will be more lively and meaningful. The willingness of educators to try to find, explore and look for various breakthroughs, approaches, methods and learning strategies is one of the supports for the emergence of various new innovations. This challenge is felt in the institution that will be researched by the author, which is related to the resources of educators to the influence of technological developments which create new challenges for students regarding one of the Constructive Drawing courses.

Background

The reasoning about the use of computer in teaching process, the role and importance of instructional technology has also been reflected in the work of a number of pedagogical scholars. For Example, L.V.Lutsevich understands the technology of processing, transmission and dissemination of information in a computer, the creation of computational and programmatic tools of Informatics, when it is called the technology of teaching in a computer medium [2]. M.I.Jidanov interpreted this term in a broader sense. In his opinion, it is the methods of collecting, organizing, storing, processing, transmitting and describing information and the use of a complex of technical means that imposes the human knowledge of the technology of teaching in a computer medium, developing its technical and social process management capabilities. B.I.Mashbits and N.F.Talisman describes the technology of teaching in a computer tool as a set of different types of teaching programs ranging from simple programs that control knowledge to artificial intellect based learning system [3].

Scientific Review

The theory and scientific concept of this learning innovation as a basis for exploring and managing constructive image learning innovations, perspective material. Perspective comes from the Italian word "Prospettiva" which means a picture of a view or viewpoint. All theory about perspective is an art technique for creating an illusion of three-dimensions (depth and space) on a two-dimensional (flat) surface [4].

WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

Perspective is what makes a painting seem to have form, distance, and look "real". The same rules of perspective apply to all subjects, whether it's a landscape, seascape, still life, interior scene, portrait, or figure painting:

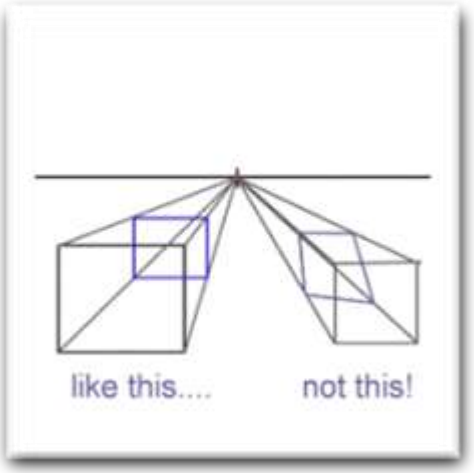


Figure 1: Theory of one-point perspective object (1)

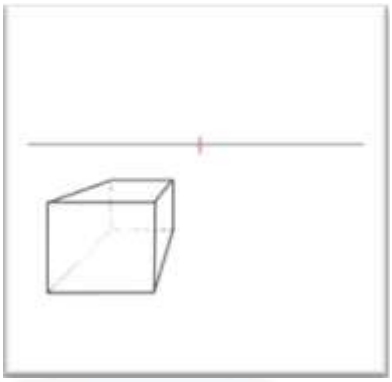


Figure 2: Theory of one-point perspective object (2)

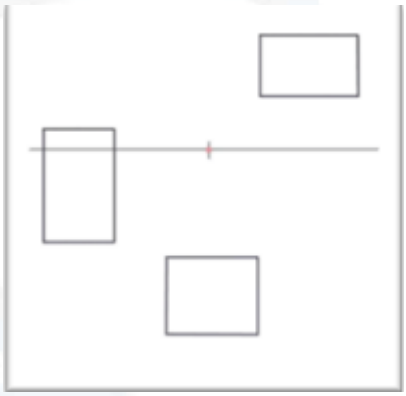


Figure 3: Theory of one-point perspective object (3)

All perspective systems are based on two basic methods, namely free hand drawing and measured drawing. Measured perspective drawing is used to accurately interpret an object or object. Drawing tools are used for this method, and the size scales are taken directly from the plan drawing. Freehand images are used to provide an explanation (detail) of an image. Object positions derive from a combination of

guesswork (approximate system) and construction with nearly precise estimates. There is no need for exact and precise measurements [5].

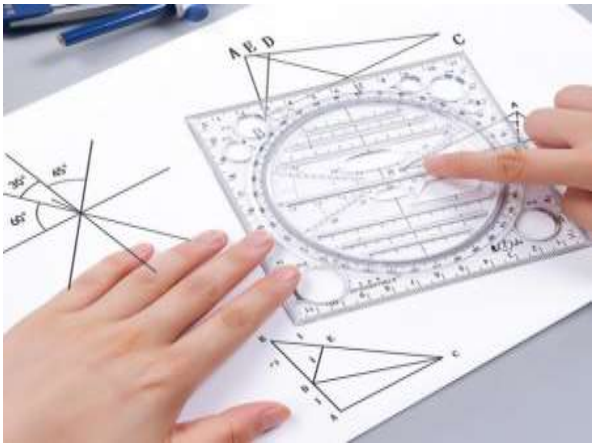
Research Methods

The methodology is influenced by the theoretical perspective approach that the writer uses to support an explanation or interpretation framework that allows the researcher to understand the data and relate it to events or other data based on the theoretical support used. In the process of this research, the authors used the Research and Development model. The initial stage of research that describes the process of creating works from problem identification in the field, leads to problem development and becomes a research problem formulation using data analysis based on questionnaires and questionnaires. In this research process, materials and sampledata become an instrument in research which will later be developed in the field application process. Development, which describes the process of implementing applied research on the subject of research. The Research and Development pattern in a sense is a research pattern that has several stages in the formulation of conclusions in research starting with the initial stage of research to the final stage with several developments from the results of previous research, to support the research process it is selected as a research application to the ongoing analysis anddata search. The quantitative process in research is a combined process of quantitative and qualitative, namely the process of processing data with numerical counting techniques and formulated with certain formulas and producing conclusions from these calculations as well as descriptive qualitative processing by describing some of the findings in the field in narrative form. Sample data obtained from each analysis and study using a quantitative approach. The quantitative method carried out by the author has a scientific basis of Statistics which is a science that is related to the methods of data collection, analysis until drawing conclusions based on the data collection and food analysis carried out. Basically, these statistics can be divided into two activities, namely the first is the collection and processing of data presented in tables or graphs to facilitate the information conveyed. From this first activity is descriptive statistics. Then the second is drawing conclusions that are contrary to the processing of the data. This second activity is called inferential statistics. Judging from the definition of statistics above, of course it is based on the main characteristics of these statistics [6].

WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

Arguments And Discussion

The novelty aspect of this research is not entirely new in substance to teaching and learning methods, but the novelty here is more about solving problems in the process of transferring knowledge with digital assistance. Mastery of digital media as a supporting tool in the learning process as well as the development of stimulus in research so that it doesn't seem scary and the previous dogmatic factors are preserved until now:



Learning with Conventional Media

Learning with a Digital Media

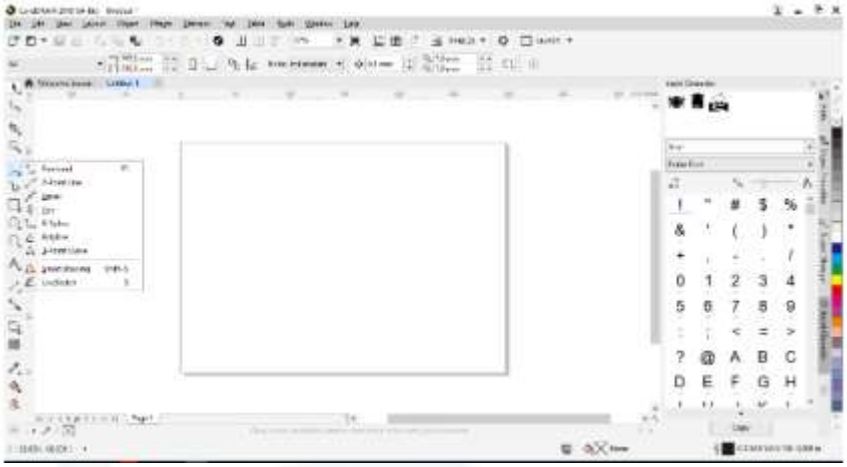
The picture above simply shows the difference between old and new ways of teaching.

- Preparation: Providing props or supporting media in the implementation of learning in the classroom. Opening lectures with some basic information delivery related to greetings and news to students. Observe and regulate class conditions by submitting attendance for lecture administration data.
- Implementation: Explaining a procedure or process in a lecture, including reminding students in preparing media, tools and needs in supporting lectures as well as explaining the lecture implementation policy on timely attendance. Explain the policy for assessment of learning outcomes Carefulness, cleanliness, on time. In this implementation, all students will be able to follow the learning well. At this meeting the educator explained the introduction to the lecture containing an explanation of the objectives and competencies expected of the course; lecture procedures; tasks and evaluation systems in the implementation of Constructive Drawing II. At the second meeting the authors explain the meaning of constructive drawing II. Explain the theory of constructive drawing II. Explain the basic concepts of aesthetics in constructive drawing II. Explain the theory of drawing. One-point perspective is lost with the concept manual as an introduction. Explain the theory of

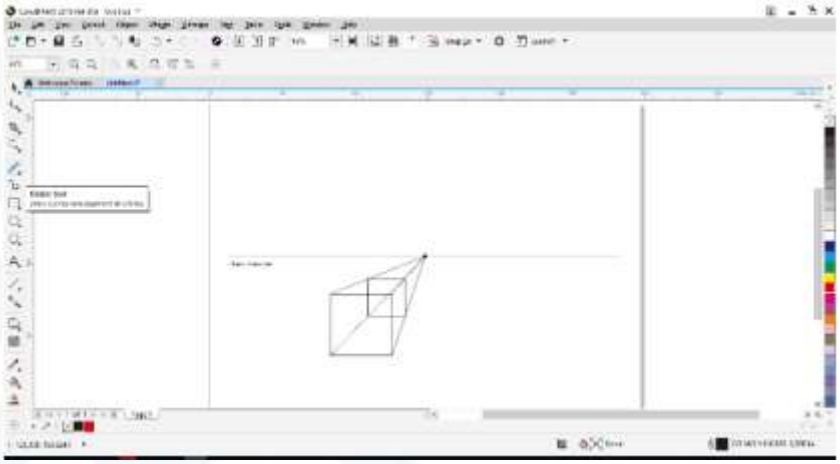
WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

drawing. One point of perspective is missing with digital concepts as the core of learning. Describes the use of constructive drawing tools. II. Able to explain about the use of applications in constructive drawing I Missing Points with digital media. When the learning process is running, the writer holds a question and answer session with students when there is information that is not clear.

•Evaluation**:** Provide opportunities for students to continue learning independently. Make the task of learning to draw constructively with the practical task of drawing the perspective of multiple objects; beam, prism, and pyramid with the technique of 1 Point Missing Perspective Using Digital Media. Analyze Reference Image obtained in Game / Image. Creating and Developing 1TH Perspective Forms with the Style of Each Task in A3 Digital Print [7]. Asking questions to students when there is information that has not been conveyed. Learning Method:



First steps to draw 1TH perspective with digital media.



Last steps to draw 1TH perspective with digital media.

Conclusion

All graphic objects of the operating system, as well as all other images, must somehow be created or inserted into the computer. To insert graphic images into the computer, special external devices are used. With them we got acquainted. The most common device is the scanner. At the last moment, the scope of application of digital cameras is also increasing. Their difference from ordinary cameras is that the image is not chemically reduced to a photo pylon, but is recorded in the microcircuits of the camera's memory. From there, information can be transmitted to the computer by cable. Some digital cameras also have the ability to record data to a removable disk as a file. And we know perfectly well that transferring information from a disk to a computer is not so difficult.

In computer graphics, the image comes in contoured, colored, and toned views. The contoured image is based on lines. And the tone and color images are based on surfaces. Such an image is conditionally called "Photo". Most of the graphic data extraction devices are designed for image and drawing extraction. All of these devices are designed to manually input contour messages outside the scanning system. They are able to form drawings on the display screen itself, at the same time they also insert drawings into the computer. One of the modern issues of teaching drawing science is its wide application of computer technology in teaching. It has been theoretically proved that computer graphics programs create favorable opportunities for the rapid mastering of educational materials by students, as well as an important role in increasing the effectiveness of their mastering. It was found that the use of software pedagogical tools, which are universally convenient for eliminating the problems in the teaching of drawing science, is purposeful.

References

1.Маматов, Д. К., and Ш. У. Собирова. "ОСОБЕННОСТИ ОРГАНИЗАЦИИ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ." (2017)

2.Umedullaevna, SobirovaSharofat, and KarimovaRuxsora. "INNOVATIVE TECHNOLOGIES IN THE EDUCATIONAL PROCESS." International Engineering Journal for Research & Development 5. CONGRESS (2020)

3.Islamovna M.F., Umedullaevna S.S. SHADOW FORMATION IN PERSPECTIVE //International Engineering Journal for Research & Development. – 2020. – Т. 5. – №. 4. – С. 5-5

4.S. Shawer, “Communicative-based curriculum innovations between theory and practice: implications for EFL curriculum development and student cognitive and affective change”, Journal The Curriculum, Volume 21, 2010 - Issue 3. 2010.

5.Y. Nagai and J. Gero, Design Creativity, Journal of Engineering Design Volume 23, Issue 4, 2012.
6.F. Cownie, “Gratitude: does it have a place within mediapractice education?”. Journal of Media Practice Volume 17, Issue 2-3. 2016.
7. Learning Innovation of Constructive Drawing in One Point Perspective Subject | Salsa SolliNafsika and Zakarias S. Soeteja Advances in Social Science, Education and Humanities Research, volume 519 Proceedings of the 3rd International Conference on Arts and Design Education (ICADE 2020) www.researchgate.net/publication/349116319
8.Valiev, A. (2021). ABOUT THE FEATURES OF THE PERSPECTIVE OF SIMPLE GEOMETRIC SHAPES AND PROBLEMS IN ITS TRAINING. Збірник наукових праць SCIENTIA. вилучено із https://ojs.ukrlogos.in.ua/index.php/scientia/article/view/10540
9.Валиев Аъзамжон Нематович. (2021). Об Особенностях Перспективы Простых Геометрических Фигур И Проблемах В Ее Обучении. CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES, 2(4), 54-61. Retrieved from http://cajotas.centralasianstudies.org/index.php/CAJOTAS/article/view/116
10.Валиев, А., Рихсибаева, Х., & Отабеков, У. (2017). Развитие пространственного мышления учеников при обучении черчения (на примере темы" Виды"). Молодой ученый, (13), 527-533.
11.Gulomova, N. (2021). Use of interactive methods for students in teaching drawing lessons (on the example of views). ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL, 11(1), 1637-1642.
12.Аширбаев , А. (2021). ЧИЗМАЧИЛИК ТАЪЛИМИНИНГ УЗВИЙЛИГИНИ ТАЪМИНЛАШ ВА УНИ ТАКОМИЛЛАШТИРИШ МАСАЛАЛАРИ. ГРААЛЬ НАУКИ, (6), 434-439. https://doi.org/10.36074/grail-of-science.25.06.2021.082
13.Muratov, H. (2021). THE IMPORTANCE OF ORGANIZATION AND MANAGEMENT INDEPENDENT EDUCATION IN THE LEARNING PROCESS. Збірник наукових праць ΛΌГΟΣ. https://doi.org/10.36074/logos-09.04.2021.v2.40
14. Аширбаев, А. (2021). Chizmalarga o ‘lcham qo ‘yishda yuzaga kelishi mumkin bo ‘lgan tipik xatolar va ularning oldini olish omillari. Общество и инновации, 2(3), 7-15.
15.Усмонов, Б. Ш., Дадабоева, Д. И., & Валиева, З. Т. (2021). NX-ЭТО ИНТЕГРИРОВАННОЕ РЕШЕНИЕ ДЛЯ ПРОЕКТИРОВАНИЯ ПРОДУКТОВ, РАЗРАБОТКА И ПРОИЗВОДСТВО. Scientific progress, 2(1), 825-834.

16. Gulomova, N. (2021). “Uzatmalar” mavzusini o‘qitishda “iSpring Quiz Maker” dasturidan foydalanib, talabalarga nostandart testlar orqali bilish faolligini faollashtirish. Жамият ва инновациялар, 2(5), 8–18. https://doi.org/10.47689/2181-1415-vol2-iss5-pp8-18
17. Gulomova , N., Sherimova , M., Nabiyev , A., & Homidova , D. (2021). MUHANDANSIK GRAFIKASINI O‘QITISHDA ZAMONAVIY PEDAGOGIK VA INNOVATSION TEXNOLOGIYALAR. Збірник наукових праць ΛΌГОΣ. https://doi.org/10.36074/logos-10.12.2021.v3.42
18. Gulomova, N., Abdusalomova , X., & Abdusalomova , M. (2021). YOSH AVLODNI TARBIYALASHDA AMALIY SAN’AT TA’LIMINING O‘RNI VA AHAMIYATI. Збірник наукових праць ΛΌГОΣ. https://doi.org/10.36074/logos-01.10.2021.v2.33
19. Gulomova, N. (2021). CHIZMA GEOMETRIYA, CHIZMACHILIK DARSLARIDA TALABALARGA TESTLAR ORQALI ULARNING BILIMINI ANIQLASH. ГРААЛЬ НАУКИ, (4), 404-408. https://doi.org/10.36074/grail-of-science.07.05.2021.075
20. Malikov, K. G. (2020). Theory and practice of construction of axonomertic projects. European Journal of Research and Reflection in Educational Sciences Vol, 8(9).
21. Gafurovich, M. K. (2021). Axonometry New Practical Graphical Methods For Determining System Parameters. Psychology and Education Journal, 58(2), 5710-5718.
22. Kozim, M., Zilola, F., & Sanjarbek, S. (2019). DETERMINATION OF THE PARAMETERS OF THE DEFAULT ISOMETRIC VIEW USING METHOD OF RECTANGULAR AUXILIARY PROJECTION. European Journal of Research and Reflection in Educational Sciences Vol, 7(12).
23. Халимов, М. К., Ташимов, Н. Э., & Маликов, К. Г. (2015). ЧИЗМАЧИЛИК ФАНИНИ ЎҚИТИШДА ДИДАКТИК ЎЙИНЛАРДАН ФОЙДАЛАНИШ МЕТОДИКАСИ. In Сборники конференций НИЦ Социосфера (No. 51, pp. 118-121). Vedecko vydavatelske centrum Sociosfera-CZ sro.
24. Байдабеков, А. К., Мурадов, Ш. К., Адилов, П. А., & Ташимов, Н. Э. Кривые второго порядка-как сечения поверхностей второго порядка по наперед заданным параметрам.
25. Мурадов, Ш. К., Халимов, М. К., Мирзалиев, З. Э., & Рамазанова, Г. С. (2017). Определение параметров формы и положения кривых 2-го порядка. Молодой ученый, (7), 454-457.

26. Мирзалиев, З. Э., Халимов, М. К., Маликов, К. Г., & Абдухонов, Б. Х. (2017). Методика использования нового механизма для построения аксонометрических проекций. Молодой ученый, (8), 1-6.
27. Moxir, X., Nurbek, A., Qudrat, B., Elbek, X. J., & Boburmirzo, K. K. (2020). CHIZMACHILIK VA CHIZMAGEOMETRIYA FANLARIDA BURCHAK TOPISHNING BAZI USULLARI. ФИЗИКА МАТЕМАТИКА ФАНЛАРИ журнали, 4(1), 47-52.
28. Kholmuratovich, M. K., Mardanaqulovich, A. S., Ravshanovich, J. R., Sharifovna, K. U., & Shodiyevna, B. O. (2020). Methodology of Improving Independent Learning Skills of Future Fine Art Teachers (On the Example of Still Life in Colorful Paintings). International Journal of Psychosocial Rehabilitation, 24(05).
29. Jabbarov R., & Rasulov, M. (2021). FURTHER FORMATION OF STUDENTS' CREATIVE ABILITIES BY DRAWING LANDSCAPES IN PAINTING. Збірник наукових праць ΛΌГОΣ. https://doi.org/10.36074/logos-30.04.2021.v2.09
30. Халимов, М. К. Сравнение продуктивности учебной доски и проектора в преподавании предметов, входящих в цикл инженерной графики / М. К. Халимов, Р. Р. Жабборов, Б. Х. Абдуханов, А. А. Мансуров. — Текст : непосредственный // Молодой ученый. — 2018. — № 6 (192). — С. 203-205. — URL:https://moluch.ru/archive/192/48066/
31. Xalimov, M., & Farxodova , Z. (2021). DEVELOPING STUDENTS' CREATIVE ABILITIES BY MAKING PROBLEM SOLUTION SITUATION IN DRAWING SUBJECT. Збірник наукових праць ΛΌГОΣ. https://doi.org/10.36074/logos-30.04.2021.v2.62