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**IRSTI 14.35.07** 

https://doi.org/10.51889/2959-5762.2024.84.4.018

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# INCULCATION OF FUTURE TEACHERS OF FINE ARTS TO INNOVATIVE ACTIVITIES BASED ON THE PROCREATE GRAPHIC PROGRAM

### Abstract

In the modern digitized era, illustrators and designers design graphic illustrations based on professional design programs. This is because the computer and the Internet have changed not only social relations, but also the production process. The Minister of Science and Higher Education of the Republic of Kazakhstan, Sayasat Nurbek, in his public lecture «Skills and competencies in the context of digital transformation», spoke about the advantages of digitalization of universities. This means that the development of the education sector, the turn of its dynamics to new changes, reflects a new milestone in the development of the country as a whole. As you know, the main problem of today is the introduction of innovative thinking and innovative activities, the basis of which is knowledge, new digital technologies, new thinking possibilities of human consciousness. Therefore, something is always being updated in digital art, and new technologies are emerging every day. Of course, this opens up new opportunities in improving the digital competence of future fine art teachers. He hones his creativity with the help of various professional design programs, allows you to prepare didactic materials necessary for the learning process using modern technologies. In order to become a sought-after specialist in the future, digitalization, training and the use of various modern technologies are important in the process of training future teachers of fine arts in universities. The interest of future teachers of fine arts in the graphic editor «Procreate» causes the relevance of the article, since it is at the highest level.

Keywords: innovation, innovative activity, teacher, Procreate graphics program, skills

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# ПРИОБЩЕНИЕ БУДУЩИХ ПЕДАГОГОВ ИЗОБРАЗИТЕЛЬНОГО ИСКУССТВА К ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ НА ОСНОВЕ ГРАФИЧЕСКОЙ ПРОГРАММЫ PROCREATE

### Аннотация

В современную оцифрованную эпоху иллюстраторы и дизайнеры проектируют графические иллюстрации на основе профессиональных дизайнерских программ. Это потому, что компьютер и интернет изменили не только социальные отношения, но и производственный процесс. Министр науки и высшего образования РК Саясат Нурбек в своей публичной лекции «Навыки и компетенции в условиях цифровой трансформации» рассказал о преимуществах цифровизации вузов. Это означает, что развитие сферы образования, поворот ее динамики к новым изменениям, отражает новую веху в развитии страны в целом. Как известно, главной проблемой сегодняшнего дня является внедрение инновационного мышления и инновационной деятельности, основой которой являются знания, новые цифровые технологии, новые возможности мышления человеческого сознания. Поэтому в цифровом искусстве всегда что-то обновляется, и с каждым днем появляются новые технологии. Конечно, это открывает новые возможности в повышении цифровой компетентности будущих педагогов изобразительного искусства. Оттачивает свое творчество с помощью различных профессиональных дизайнерских программ, позволяет готовить дидактические материалы, необходимые для процесса обучения, используя современные технологии. Для того чтобы стать востребованным специалистом в будущем, в процессе подготовки будущих педагогов изобразительного искусства в вузах имеет значение цифровизация, обучение и применение различных современных технологий. Интерес будущих педагогов изобразительного искусства к графическому редактору «Procreate» вызывает актуальность статьи, поскольку она находится на высшем уровне.

**Ключевые слова:** инновации, инновационная деятельность, педагог, графическая программа Procreate, навыки.

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# БОЛАШАҚ БЕЙНЕЛЕУ ӨНЕРІ ПЕДАГОГТЕРІН PROCREATE ГРАФИКАЛЫҚ БАҒДАРЛАМАСЫ НЕГІЗІНДЕ ИННОВАЦИЯЛЫҚ ӘРЕКЕТКЕ ДАҒДЫЛАНДЫРУ

# Андатпа

Қазіргі цифрландырылған заманда иллюстраторлар мен дизайнерлер графикалық иллюстрацияны кәсіби дизайндық бағдарламалар негізінде жобалауда. Себебі, компьютер мен ғаламтор әлеуметтік қарым-қатынасты ғана емес, өндіріс процесін де өзгертті. ҚР Ғылым және жоғары білім министрі Саясат Нұрбектің «Цифрлық трансформация жағдайындағы дағдылар мен құзыреттер» атты көпшілікке арналған дәрісінде ЖОО цифрландырудың артықшылықтарын баяндаған. Бұл дегеніміз, білім беру саласының дами түсуі, оның динамикасының жаңа өзгерістерге бетбұрыс жасауы, еліміздің тұтас дамуындағы жаңа белестің көрініс табуын көрсетеді. Жана белестің негізі білімнің, жаңа цифрлық технологиялардың, адамзат санасының жаңаша ойлау мүмкіндіктерінің тізгіні болатын инновациялық ойлау мен инновациялық әрекеттің қолданысқа түсуі бүгінгі күннің басты мәселесі екені белгілі. Сондықтан цифрлық өнерде әрдайым бір нәрсе жаңартылып, күн сайын жаңа технологиялар пайда болуда. Әрине, бұл болашақ бейнелеу өнері педагогтерінің цифрлық құзыреттілігін арттыруда жаңа мүмкіндіктерді ашады. Әртүрлі кәсіби дизайндық бағдарламаларды пайдаланып, өз шығармашылығын шыңдайды, заманауи технологияларды қолдана отырып, оқыту үдерісіне қажетті дидактикалық материалдарды дайындауғ мүмкіндік береді. Болашақта сұранысқа ие маман болу үшін жоғарғы оқу орындарында болашақ бейнелеу өнері педагогтерін дайындау барысында цифрландыру, әртүрлі заманауи технологияларды үйрету және қолдану маңыздылыққа ие. «Procreate» графикалық редакторына деген болашақ бейнелеу өнері педагогтерінің қызығушылығы жоғарғы деңгейде болғандықтан мақаланың өзектілігін тудырады.

**Түйін сөздер:** инновация, инновациялық әрекет, педагог, procreate графикалық бағдарламасы, дағдылар.

**Introduction.** Minister of Science and higher education of the Republic of Kazakhstan Sayasat Nurbek in a public lecture «Skills and competencies in the context of digital transformation» outlined the advantages of digitalization of universities. This means that the development of the education sector, the transition of its dynamics to new changes, reflects a new milestone in the entire development of our country. It is known that the main problem today is the introduction of innovative thinking and innovative activity, the basis of which is knowledge, new digital technologies, and the ability of the human mind to think in a new way.

The direction of improving the quality of education in the country will ensure the integration of the innovation process at all levels of Education. Innovative processes in the field of education are directly related to the special preparation of future teachers for innovative activities, which are being prepared at the University. This is a bright factor that shows that the innovation process in the field of education depends on the interconnectedness of all its levels. The education sector, responding to the modern needs of society and the labor market, allows each Specialist, each teacher in the field of pedagogy to quickly and in a timely manner adapt to modern socio-economic realities. This opportunity itself is an important condition for the successful and sustainable development of each teacher, teacher and the entire educational sphere as a whole.

As a result of the demographic growth in the country, the demand for quality education has increased day by day. The shortage of places in domestic universities and general education schools is not decreasing. In this context, the effectiveness of digital technologies and the advantages of suitable learning platforms in the education system are particularly important. Today, many centers of additional education are widely using digital learning platforms. This, in turn, is beneficial for both students and parents and teachers. First, the student receives education at a convenient time for him. Secondly, the student develops digital literacy and IT skills. One of them is the Procreate graphics program. It is obvious that this graphic program will become an indispensable tool for the future teacher in preparing various tasks in his professional activities. With the help of the Procreate graphics program, it is designed to draw images of any direction, create animated videos and graphic works in 2D format. This, in turn, will help the future teacher prepare a variety of didactic tasks for conducting classes, develop students' creative qualities, and increase their interest in the subject of Fine Arts.

Most of the theoretical and practical research on the problem of preparing a future teacher for innovative activity implies that the theory of innovation has been formed, and within the framework of this theory there are various points of view and conclusions. Actions in education are the basis for the fact that the theory of innovation is formed in several directions. At the same time, the process of training teachers in modern times of wide development of information and digital technology requires daily development and improvement [1]. Since the issue of teacher training has always been one of the most relevant topics, this issue has been considered in detail by scientists. In this regard, we will focus on the pedagogical and philosophical views of scientists on the importance of teacher training.

Basic provisions. In a Message to the People of Kazakhstan dated September 1, 2023, Head of State Kassym-Jomart Tokayev noted the need for further improvement of work on maximum digitalization – one of the main factors of competitiveness in the modern world. In addition, «the education system needs energetic and qualified specialists. Universities are obliged to be responsible for the high–quality training of specialists». In his speech, the head of state noted: «The development of science is our most important priority... In general, the country's educational and scientific sectors face a difficult task. It is not only time, but also the ability to always go one step ahead and offer the latest news», he said, stressing the importance of preparing for innovation. This suggests that there are information technologies and a replacement for the realities of the modern innovation process, innovation activity. After all, it is known that a person who has worked with a new technology is not an innovator, the main problem lies in mastering the skills of innovative thinking by specialists, in forming the skills of innovative action.

Many valuable new directions implemented in the process of training future teachers in higher education institutions, as well as intellectual, innovative, didactic, IT-literacy in this system, the content of Education, which is considered potential values, will serve as reliable criteria for the possibility of special training of future teachers for innovative activity in higher education and its quality organization. It is obvious that tomorrow, when we go to school, the field of life practice will also be recognized by the quality of education of future teachers.

To date, the lack of a special study of the skills of future Fine Arts teachers to innovative activity on the basis of the Procreate graphic program and the lack of consolidation of work in this direction in higher educational institutions lead to the fact that when entering school, a full-fledged specialist in education focused on innovative activity is not formed.

It should be noted that this issue is relevant not only for universities, but also for general secondary schools. In connection with this, it is known that many misunderstandings arise. The curricula presented in the updated content of education are innovative derivatives, technologies aimed at education with a direction based on an innovative system. And it is known that specialists with higher pedagogical education are not specially trained for innovative activities, so they begin to implement the updated school curriculum with a traditional methodological system. In connection with this, on the basis of the Procreate graphic program, the relevance of special training of future teachers of Fine Arts in innovative activities, systematization of its theoretical and methodological approaches and the definition of a special methodological and technological system developed based on it is revealed.

Scientists who have contributed to the development of various aspects of the training of future teachers indicate ways to increase the methodological, theoretical and practical level of classes conducted for university students, the conditions for achieving unity and consistency of general pedagogical training of students. The diversity of teacher training means the importance of this process, and due to its specifics, we would like to focus on the main ones. The problem of preparing future teachers for professional activity was studied in the domestic scientific literature, the preparation of teachers for the system of value orientation of the personality the subject nature of pedagogical activity and communication was considered by H.T.Sheryazdanova [2], the formation of professional competence of Future Teachers B.T.Kenzhebekov [3], etc.

The problems of preparing future specialists for creative activity in the country are reflected in the works of scientists Z.A.Isaeva [4], M.M.Mukanov [5], G.zh.Menlibekova [6] and others. In the works of these authors, they clarified the structure, content and essence of creative activity through methods and methods of implementation in the educational process.

To ensure the effectiveness and accessibility of training future teachers, there is a need to introduce innovative technologies and information digital technologies into the educational process. This, in turn, involves the development of cognitive interests of students in the educational process. Higher education institutions in the country began to move to the world education system. The University uses various innovative methods to train qualified specialists who will increase the competitiveness of Kazakhstan. The program «academic mobility» is being implemented in a number of universities in the country. Innovations in the training of future teachers are also considered as the main mechanism of the above direction, such as the development of a system of multi-stage educational grants for higher education, obtaining double diplomas, the creation of a system of specialized educational institutions of Applied education taking into account regional specialties, the modernization of teaching methods, the development of online training systems.

According to N.N.Nurakhmetov, one of the first scientists to consider innovation in the field of Kazakhstan's pedagogy, the innovation process (trend) is a phenomenon determined by the creation, management, use and dissemination of innovations in educational organizations [7]. Recognizing innovation as closely related to the content of education, methodology, technology, organization of educational work, management of the school system, the scientist proposes the following

classification of innovation: a separate type of innovation, a modular type of innovation, a systematic type of innovation. For our part, we add to this classification of the scientist – the implementation of each of these types of innovation will directly depend on innovative activity.

In her work, Taubaeva Sh.T. defines pedagogical innovation as the doctrine of the creation of pedagogical innovations, their evaluation, as well as the assimilation by the pedagogical community of these innovations and their use and application in pedagogical practice [8]. According to the scientist, this definition of pedagogical innovation is distinguished by its new nature, because here the creation, assimilation and application of pedagogical innovation is determined in unity. We add this opinion of the scientist, that is, the opinion of considering the development, development and application of the pedagogical innovation process in unity.

K.Kabdykayrovich's identification of methodological positions that increase the effectiveness of the use of innovative technologies can be considered as complementary to didactics [9].

Domestic scientist A.E.Zhumabaeva gives the term «innovation» the meaning of «innovation». And the novelty is a tool, considering that the update is the process of mastering this tool. The innovation process is a comprehensive action that introduces innovation, creates conditions for application. At the same time, it was noted that the innovative learning system directly contributes to the development of individual abilities, special capabilities, as well as independent creative search of students [10].

Research Materials and methods. We consider the innovative activity of future teachers of Fine Arts, which is the basis of our research work, as a means of training on the basis of the Procreate graphic program. In this regard, we decided to give a description of this program. Procreate is a pixel graphics application created for digital drawing, coloring, illustration and animation. The app is designed with the iPad's artistic capabilities in mind, and for many artists who rely on Procreate, the convenience of the apps, especially when used in conjunction with Apple Pencil, gives the process the impression of creating drawings on paper. High sense, combined with portability, functionality and simple integration with existing workflows, continues to be widely used even among experienced commercial and professional artists. Procreate is a digital application whose interface is very intuitive and easy to use and consists of a complete set of artist tools. In addition, the program consists of a quality work leaflet and 136 different brushes, a convenient interface in the choice of colors, endless layers.

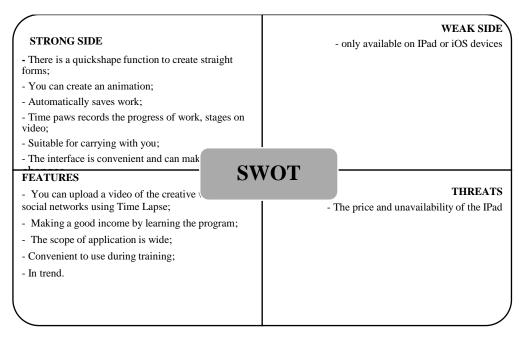


Figure 1. SWOT analysis for Procreate

Any program has features, strengths, and weaknesses (Fig.1). The first and most important thing is mobility (mobility). Since Procreate is an iPad app, you can take your device with you everywhere. This way it is convenient to work in any place. The second thing to note is a convenient, intuitive interface and easy control of inputs. There is no need to look for the shutdown, rollback button or remember the keyboard shortcut: just press the screen with two fingers. Minimum icons-bring maximum features. In the settings, you can edit brightness, contrast, sharpness and other basic things to create outstanding illustrations, or change the overall color scheme of the picture. In addition, during the drawing process, it has the ability to change the canvas to the size of the picture and record the drawing process on video using Procraete Automatic Time Lapse. The most important function of Procreate is: high image quality and accurate color delivery [11].

No, even the most professional and good program can do without flaws. The most important and only drawback of Procreate is that since the program is only supported on iOS, first of all it is necessary to have an iPad or iPhone. May not be affordable in terms of price. But, given the opportunities provided and the strong points of the program, its weak point can be solved.

Some of the most popular materials shared on social networks are slow – moving videos about the work processes of artists, illustrators, a long video accompanied by a voice describing the techniques used by the artist, or short edited clips synchronized with music. In principle, such images turn visual art into perfomance. Slow motion videos are made public on Instagram, Twitter, TikTok, and YouTube, most of which have an average of tens of thousands of views. In addition to the ability to save layers, which has been a standard function of many drawing programs for decades, Procreate allows you to create a work by capturing the frame image and process of the drawing process. Slow motion allows viewers to observe the artist's brushstrokes, including parts that have been reshaped, repainted, or completely removed. It is worth noting that the built-in Screen Recording feature records only what is drawn on the canvas, and not the entire user interface of the program. When stop notes are available, they can complement the information that provides the viewer with layers that allow them to contextualize the artist's workflow and the techniques used in creating the work.

Procreate time lapse offered the ability to capture the drawing process in Version 3, released in November 2015. This feature is included in Procreate, but performers have the ability to disable slow motion recording. Slow recordings are included in the Procreate file, but can be exported as a 30-second video or «full-length». Users have the ability to watch videos in the app by adjusting the playback speed [12].

Procreate Dreams is designed for the same purpose as the award-winning Procreate digital painting app, which means it is designed for both beginners and professional animators. «This program helps both professionals and beginners get creative, allowing them to fully immerse themselves in the process of working and fall in love with their craft again», commented Claire D'este, Product Director of Procreate Dreams recently [13].

According to illustrator Irina Rudakova: «This application is suitable for those who are ready to invest first, and then enjoy drawing. Or for those who have an iPad in hand and have been hesitant to work on Procreate for a long time. It is also convenient to draw at any point, without carrying a book of paints and sketches with any «tools». Convenience is the main feature of Procreate, which is suitable for both beginners and professionals. I think such a program is worth the extra money» [14].

Liz Kobler Brown in her author's book «Creating manuscripts using Procreate on the iPad» States: «after a lot of research on the most convenient technology for developing and using software, it was decided to buy and use Procreate on the iPad in children's book illustration. Procreate made it possible to scan physical thumbnails and translate them into digital form for further processing and coloring. The Procreate app allows the artist to work in layers and use

repetitive experiences to quickly add ready-made characters to other pages of the book. The Procreate application is widely used by professional illustrators and meets the needs of the modern final product. The possibility of using Adobe Illustrator was considered, but it was much more expensive and less convenient for inexperienced users» [15].

So, for artists and illustrators, drawing with Procreate on a graphics tablet promotes the possibility of realizing the skills of an academic school and taking advantage of computer graphics:

- 1. Mobility. The ability to quickly create sketches for sending to the customer and the convenience of taking them with you in any place;
- 2. Multifunctionality. The ability not only to draw, but also to automatically record the workflow on video, you can independently make changes to the program setting and interface;
- 3. Quality. The interface is easy to use and allows you to perform high-quality effects of oil paint, watercolors, various graphic materials such as charcoal, pastels, sangina and others in electronic form. The format of the uploaded works is high-quality and rich in color;
- 4. Modernity. Has the necessary materials and interface to perform illustrations in the current trend. Animation, execution of a 3D model, a color scheme, a set of brushes provide ample opportunities for the effective design of modern graphic illustration.

From this we can see that the Procreate graphics program was distinguished by mobility, multifunctionality, quality and modernity, demonstrating its effectiveness in comparison with other professional graphics programs.

The main goal of the practical part of the research work was to identify students 'interest in the professional design program «Procreate» by taking a survey. To conduct an assessment of the study, an author's questionnaire was developed. We decided to divide the survey into 2 stages.

The survey included students of the Department of art education and design of the Abai Kazakh National Pedagogical University, Faculty of Arts. For the survey, the Google Forms platform application was used via WhatsApp and Telegram networks.

In order to assess what professional graphic programs are most often used by Future fine arts specialists in their production and at what level it is necessary to introduce new technologies into the curriculum, students were asked 2 types of questionnaires «the level of use of professional graphic programs by students of Fine Arts» and «the need to introduce drawing in modern professional graphic programs into the educational program». In the first survey, the effectiveness of traditional drawing in general and drawing in professional graphics programs was determined. And in the second survey, it was to determine the interest and need of students in the Professional Graphics Program Procreate.

**Results and Discussion.** In total, more than 80 students took part in the survey, taking into account the Kazakh and Russian groups together, as can be seen from Table 1. 45.2% of them are students of the specialty «graphic design», 54.9% cover other specialties of Design: «Fine Arts. Painting» (19.4%), «architectural design» (19.4%), and «Fine Art. Graphics» (16.1%).

Table I – Students of the Department of art education and Design who took part in the survey

«Graphic design»	45,2%
«Visual arts. Painting»	19,4%
«Architectural design»	19,4%
«Visual arts. Graphics»	16.1%

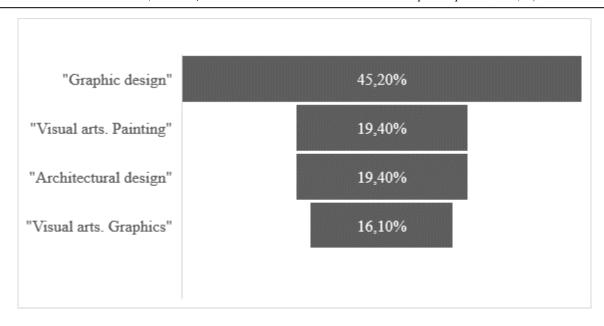


Figure 2. Number of participants in the survey from the Department of art education and design

After conducting this survey with students, the results were analyzed as follows and conclusions were made based on the data obtained.

The purpose of the questionnaire  $\mathbb{N}_{2}$  1 «The level of use of professional design programs by students of the Specialty Fine Arts» is to determine the effectiveness of traditional drawing and drawing in professional design programs. Students were asked questions specified in table 2.

Table	2 –	Survey questions	: No 1
Incic	_	Dui ve y question	, , , _ 1

An instrument often used by	Traditional (pen, paper, pencil, etc.)	62,9%
students in their work	Computer	42,9%
	Tablet, stylus	42,9%
The importance of professional	5 (very important)	80%
design programs	4 (important)	8,6%
	3 (not very important)	8,6%
	2 (it doesn't matter)	2,9%
	1 (it doesn't matter at all)	0%
Professional design program, often used by students in their	Adobe Photoshop, Illustrator, Indesign T.6	34,3%
work	3Dmax	2,9%
	Corel DRAW	31,4%
	Procreate, SketchPad	14,3%
	Other programs	17,1%

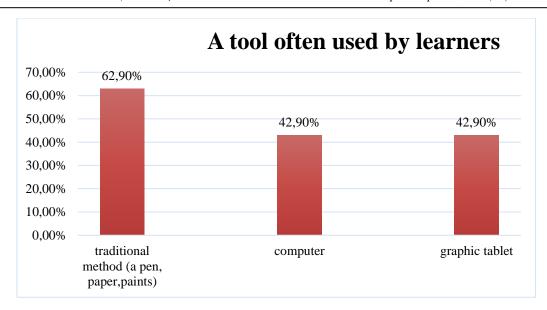


Figure 3. Tools that we often use in drawing

It is known that the vast majority of students resort to the traditional help of a pen and paper in the process of drawing. But today, thanks to the development of technology, it has become much more affordable and convenient to work in such things as computers and tablets. It should be noted that the number of people who draw with a tablet and stylus, as well as with a computer, shows the highest result (fig.3). This means that the scope of application of various technologies in drawing is expanding.

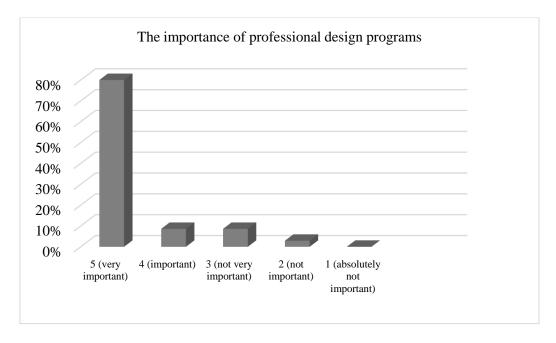


Figure 4. Professional design programs for students
Importance

The importance of professional design programs for various specialties of the Department of art education and design was covered in a survey. According to the indicator, the vast majority meant that professional graphics programs are very important. It is also important that professional design programs in general are accessible and convenient (figure 4).

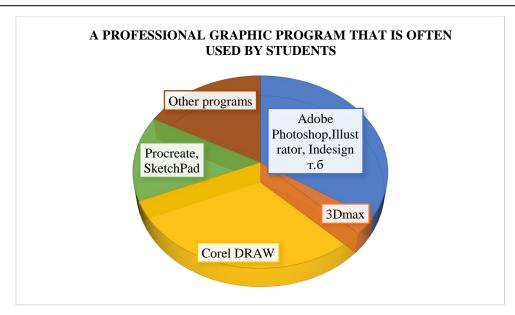


Figure 5. Frequently used graphics programs

There are not many professional graphic programs that are often used, creative, easy to use, with an extensive interface. Any artist, illustrator, designer will work in a program or application suitable for him. Questions were asked in the questionnaire in order to find out the professional graphic program most often used by students. And it is known that the vast majority also draw Adobe programs and CorelDRAW. But Procreate shows the average level in modern programs that work on tablets, such as SketchPad, and IPad (figure 5). This means that these programs, which are gaining modern popularity, are in demand.

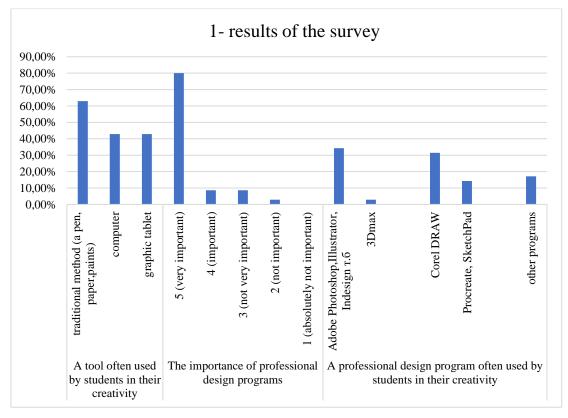


Figure 6. Survey results № 1

Based on the results of the survey No 1, 62.9% of students choose traditional ones (pen, paper, pencil, etc.) in their creativity (drawing, sketching, designing), 42.9% resort to the help of a computer and tablet, stylus. When evaluating the importance of professional design programs by 1-5, depending on each specialty, you can see that 80% is very important, 8.6% is not very important, and 2.9% is not important. Adobe Photoshop, Illustrator, Indesign (34.3%), Corel DRAW (31.4%), procreate, SketchPad (14.3%) and other programs for tablets and Ipad (17.1%) are the most commonly used professional design programs in their work (figure 6).

Survey No2 was taken to determine the level of use of professional design programs, including Procreate, by students with modern trending technologies, such as IPad and tablet, and to assess the need to introduce new technologies into the curriculum. During the analysis of the students 'response, the results shown in Table 4 were revealed.

*Table 3 – Survey questions №2* 

Use of IPad or tablet by learners	Yes	32,3%
•	No	29%
	I want to try drawing	38,7%
The opinion of educators about the	Suitable for carrying with you	82,5%
effectiveness of working on an IPad	Now in trend	21,1%
or tablet	It is convenient to download applications	31,6%
	Not effective	3,5%
Knowledge and application of	Yes I know and use	9,7%
Procreate	Yes, I only have a hearing	58,1%
	No I don't know	16,1%
	I want to know	16,1%
	Not interested	0%
Approach to the introduction of	1 (I don't support it at all)	0%
drawing on an IPad or tablet into	2 (do not support)	0%
the educational program	3 (moderately supported)	12,9%
	4 (support)	12,9%
	5 (I support at the highest level)	74,2%

According to the chart (figure 7), the number of respondents who used an IPad or tablet during the drawing process was 32.3%, while the number of non-users was 29%. And it is gratifying that 38.7% of students showed that they would like to try drawing on these devices in the future.

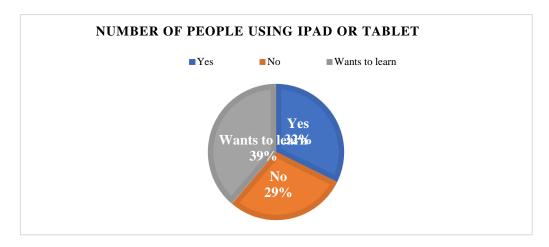


Figure 7. Number of people using digital devices

While the majority of students showed that the efficiency of working on an IPad or tablet is acceptable to carry with you (82.5%), 31.6% found it convenient to download applications and is currently in trend (21.1%), that is, in demand. In addition, according to the survey respondents, the IPad is suitable for working with details, saving time, making changes to work at any stage. And also expressed the opinion that the work can be downloaded quickly and efficiently (figure 8).

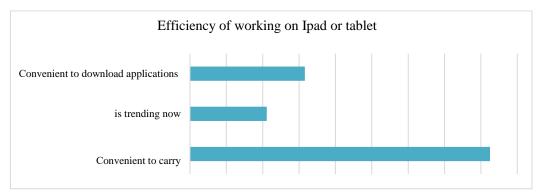


Figure 8. Efficiency of working on IPad or tablet

Now, with the development of modern technologies, there are more and more applications for working on devices. One of them is the Procreate application, which is used today by any illustrator, artist. The Procreate application is now gaining great popularity due to its availability and capabilities. Therefore, the survey asked questions to determine the number of students who know and use the Procreate application for drawing on the IPad, that is, a professional design program (figure 9). According to the results of the response of the respondents, the number of people who have heard about this application (58.1%) is very large, while the number of people who have used it in their work is only 9.7%. But the number of people who want to know about this application showed 16.1%. This means that students have heard a lot about the mentioned application and want to use this program in drawing in the future.

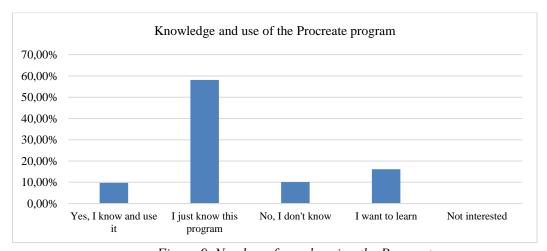


Figure 9. Number of people using the Procreate program

We would like the IPad to include a training course on drawing on said device in the educational program, taking into account the possibilities and efficiency of drawing through the Procreate application. Therefore, when studying the attitude of students to the introduction of drawing on an IPad or tablet, you can see that 74.2% support 5 points, that is, at the highest level. The average number of supporters (12.9%) and non-supporters at all (0%) showed a small indicator (figure 10).

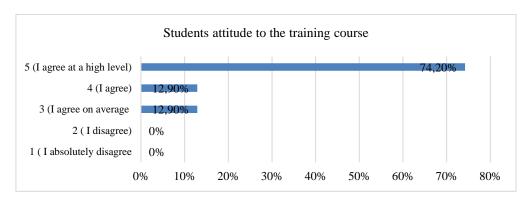


Figure 10 – Learners 'approach to implementing a training course on how to draw illustrations in Procreate

Summing up the survey, we determined the effectiveness of drawing on modern technologies, such as computers and tablets. And often learned the existing professional design programs. According to the results of the second survey, the fact that students are voluntarily mastering the Procreate program outside the classroom indicates their interest in this application. At the same time, the vast majority of students support the inclusion of drawing in the curriculum at the highest level. That is, you can clearly see the obvious need for a professional design program Procreate.

**Conclusion.** The theoretical and methodological foundations of accustoming future Fine Arts teachers to innovative activity on the basis of the Procreate graphic program are determined; a structural model of accustoming future Fine Arts teachers to innovative activity on the basis of the Procreate graphic program is developed, criteria and indicators, levels are determined; a methodology for accustoming future Fine Arts teachers to innovative activities based on the Procreate graphic program has been developed, a pedagogical experiment has been conducted, and as a result of the study, it is proposed to introduce effective approaches to the teaching process.

In accordance with the signed calendar plan for the implementation of scientific, scientific and technical projects on the basis of the Rector's grant within the framework of the Order No. 05-04/329 of 14.05.2024, Abai Kaznpu was prepared according to the project «Accustoming future Fine Arts teachers to innovative activities based on the Procreate graphic program».

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