

DOI: <https://doi.org/10.32353/acfs.6.2022.08>
UDK 343.98:37(004)

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Possibilities of Using Webinars in the Training of Forensic Experts



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Abstract. The research paper is devoted to the study of the possibility of implementing information technologies for training and improving the qualifications of forensic experts on the example of using webinars as one of the forms of distance learning. The main forms of conducting webinars, which can be used for the training of forensic experts, are presented. Requirements for conducting webinars in the system of training forensic experts were analyzed and their main strategies were identified. According to the results of the presented material, the advantages of using webinars for the training of forensic experts, and the wider implementation of information technologies in the educational process have been determined.

Key words: forensic expert, expert specialty, training, education, advanced training, methods, tools, teaching, innovations, webinar, training, seminar, knowledge, skills.

Problem statement. Modern conditions of the development of Ukrainian society and socio-political processes require the solution of many complex theoretical and practical issues. Changes in society associated with increasing the effectiveness of the fight against crime are the result of improving the quality of training of forensic experts and the implementation of the latest methods of work and training.

As A. V. Kofanov points out, reforming the activities of law enforcement agencies in relation to forensic expert support for the disclosure and investigation of crimes requires a change in the attitude of specialists to their official activities. It is clear that implementation of this task is impossible without high-quality training of high-level specialists. The quality and efficiency of expert activity are directly related to the level of its theoretical understanding, the degree of development of methodological, legal, and organizational foundations of its implementation, ensuring the achievements of scientific and technical progress, as well as improving the quality of selection, training, and retraining of experts¹.

Training programs for forensic experts, regardless of their status (a private expert or an employee of a forensic expert institution (FEI) provide for internships in certain specialties, during which subjects are studied in the field of specialty and writing educational examinations.

Centralized training or advanced training (on the basis of the state FEI) requires time, space, and material resources from the employee. At the same time, the information they receive (mostly by studying a number of topics on their own) is purely theoretical and has no practical basis.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Disclaimer

The funder had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Contributors

The author contributed solely to the intellectual discussion underlying this paper, case-law exploration, writing and editing, and accept responsibility for the content and interpretation.

Declaration of Competing Interest

The author declare that they have no conflict of interest.

¹ Кофанов А.В. Деякі аспекти проблематики підготовки судових експертів, їх взаємодії з керівництвом та оцінки проведених ними досліджень. Криміналістичний вісник №2 (20). 2013. С. 107 - 115.





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POSSIBILITIES OF USING WEBINARS IN THE TRAINING OF FORENSIC EXPERTS

Summary

The qualification of forensic experts, regardless of whether they are specialists of state forensic expert institutions or private experts, plays an important role in criminal and civil proceedings, as it affects the correctness and objectivity of a particular decision.

In order to obtain the qualification of a forensic expert in a certain specialty, each department trains its experts. Private experts are trained in forensic expert institutions of the Ministry of Justice of Ukraine.

In the process of training, employees applying for the qualification of a forensic expert face a number of problems related to the organization of the educational process, which in one way or another affects the quality of the acquired knowledge.

One of the solutions to these problems, to increase the efficiency and quality of the training process, is to change the format of classes with the introduction of modern information technologies; various forms of electronic and distance learning. Webinars are such a relatively new training format for the training of employees applying for the qualification of a forensic expert.

They provide real-time training based on modern communication technologies that allow for the transmission of audio and video information, with training materials and sometimes video. Feedback with students is taken out of the lecture time and takes place via chat or in voice mode.

Thanks to the introduction of webinars, it is possible to diversify the learning process, stimulate active independent work of listeners, increase their intellectual development, expand the opportunities for consulting sessions.

The development of such multimedia tools to provide online training in certain areas of training forensic experts will contribute to the optimization of the training process.

The presented study aims to present the possibility of using webinars as one of the forms of distance interactive learning to improve the educational process of training forensic experts.

Analysis of Essential Researches and Publications. Such scientists as O. A. Syzonenko, O.A. Nazarov, V. M. Barniak, I. V. Perevozova, S. V. Yevdokimenko, I. A. Volkova, P. I. Repeshko, V. M. Sherstiuk, N. I. Klymenko, etc. paid attention to issues on training and undertaking an internship for forensic experts, their skill certification in their scientific papers. However, changes in living conditions in recent years, associated with certain restrictions such as the imposition of quarantine, and military aggression of Russian troops, impose a certain imprint on the traditional methods and forms of obtaining of specialists and require their further improvement, introducing information technology tools into training².

The issue on the implementation of webinar-oriented platforms and conducting classes based on them was studied in the works of Ukrainian researchers, namely, L. Breskina, N. Morze, O. Ihnatenko, V. Tsarenko, Yu. Bohachkova, K. Barantseva, S. Sveshnikova, L. Kalachova, S. Lytvynova, etc.

Various aspects of using webinar environments (virtual classes) in education were also considered by foreign scientists: D. Keegan, E. Schwenke, H. Fritsch, R. Griffin, D. Ddintsis, Yu. Frolov, M. Fokieiev, and others. Alongside this, there is no (or a small amount of) systematic research on the issue of the implementation of electronic forms of training (advanced training) for the training of forensic experts, including the holding of webinars, determination of priority ways of developing innovative training methods which in turn corresponds to the principles of novelty.

This Article Purpose is a systematic analysis of approaches to conducting webinars as an innovative form of forensic experts' training on the basis of state forensic expert institutions of Ukraine, the determination of methods of conducting webinars, their shortcomings, and advantages.

Main Content Presentation. Specific expertise in the form of conducting forensic examinations is widely used both in criminal procedural activities and during the consideration of civil cases. This means that the qualifications and experience of a forensic expert may affect the correctness and objectivity of a particular decision.

Currently, forensic expert activity in Ukraine is carried out by specialists of state institutions and private experts.

In particular, the legislation prescribes that these can be "state specialized institutions, their territorial branches, expert institutions of communal ownership, as well as forensic experts who are not employees of specified institutions, and other specialists (experts) from the relevant fields of knowledge"³.

In accordance with law of Ukraine "On Forensic Examination", state-specialized institutions include: scientific research institutes of forensic examination of the Ministry of Justice of Ukraine; scientific research institutes of forensic examination, forensic medical and forensic psychiatric institutions of the Ministry of Health of Ukraine; expert services of the Ministry of Internal Affairs of Ukraine, the Ministry of Defense of Ukraine, the Security Service of Ukraine and State Border Guard Service of Ukraine⁴.

The legislation stipulates that court experts can be specialists who have:

- relevant higher education, educational and qualification level not lower than a specialist;
- received appropriate training;

² Аксьонов В.В., Кожевніков В.В. Електронне навчання в криміналістиці: суть, підходи та модель реалізації. Підприємництво, господарство і право. 2021. №5 (303). С. 253-257.

³ Про судову експертизу. Закон України від 25.02.1994 № 4038-ХІІ. URL:<https://zakon.rada.gov.ua/laws/show/4038-12>

⁴ Там само.



Валерій Кожевніков

МОЖЛИВОСТІ ВИКОРИСТАННЯ ВЕБІНАРІВ У ПІДГОТОВЦІ СУДОВИХ ЕКСПЕРТІВ

Статтю присвячено дослідженню можливості впровадження інформаційних технологій для підготовки та підвищення кваліфікації судових експертів на прикладі використання вебінарів, як однієї з форм дистанційного навчання. У цьому контексті зазначено недоліки централізованої підготовки фахівців на сучасному етапі та самостійної підготовки. Представлено основні форми проведення вебінарів, які можливо використовувати для підготовки судових експертів. Проаналізовано вимоги до проведення вебінарів у системі підготовки судових експертів та визначено їх основні стратегії. За результатами викладеного матеріалу визначено переваги використання вебінарів для підготовки судових експертів та ширшого впровадження в освітній процес інформаційних технологій. Метою статті є системний аналіз підходів до проведення вебінарів як інноваційної форми підготовки судових експертів на базі державних судово-експертних установ України, визначення методів проведення вебінарів, їхніх недоліків та переваг.

Ключові слова: судовий експерт, експертна спеціальність, підготовка, освіта, підвищення кваліфікації, методи, засоби, викладання, інновації, вебінар, тренінг, семінар, знання, навички, навчання.

- received the qualification of a forensic expert in a certain specialty.

The procedure for conducting attestation and assigning or depriving a forensic expert of qualification classes is determined by ministers and other central bodies of the executive power, the sphere of management of which includes state specialized institutions that carry out forensic expert activities. The procedure for assigning the qualification of a forensic expert to specialists or depriving specialists who are not employees of state-specialized institutions of the qualification of a forensic expert is determined by the Ministry of Justice of Ukraine⁵.

That is, each department currently prepares its experts independently. Specialists of state-specialized forensic expert institutions are trained in the same institutions and specialists who are not employees of state-specialized institutions (private experts) are trained in institutions of the Ministry of Justice of Ukraine (hereinafter referred to as MJU) since it is MJU that is entrusted with the task of monitoring the organization of activities forensic experts who are not employees of state-specialized institutions⁶.

Thus, training of employees of the Expert Service of MIA, who claim to be awarded the qualification of a forensic expert, is carried out according to the training programs of the forensic expert in the relevant expert specialty⁷. Such programs include training in the areas of general training (consisting of a module of legal and psychological training and a module of forensic photography and video recording in forensic expert activity) and special training (consisting of one or two modules of the basics of research in a certain type of expert specialty).

Training (internship) of employees of NRIFE of MJ and specialists who are not employees of state-specialized institutions and intend to obtain and/or confirm the qualification of a forensic expert is carried out in 2 stages:

according to the training program on theoretical, organizational, and procedural issues of forensic examination;

according to the training program in a certain expert specialty⁸.

In the process of training, employees applying for the qualification of a forensic expert face a number of problems that in one way or another affect the quality of the acquired knowledge.

So, for instance, the educational material, which in the training programs for certain expert specialties at NRIFE of MJ should be taught in the form of lectures or practical classes, is mostly not taught, but is worked out during a practical internship with a certified expert, without attending lectures and participating in practical classes in the general understanding of these concepts⁹.

The structure of the training course for each of the training modules in the training programs for certain expert specialties in the divisions of the Expert Service of MIA provides for work with the head of the training form (from 65% to 80% of training hours) and individual work (from 20% to 35% of training hours), which in most cases comes down to self-study for the entire training course.

⁵ Про судову експертизу. Закон України від 25.02.1994 № 4038-XII. URL: <https://zakon.rada.gov.ua/laws/show/4038-12>

⁶ Кисіль Н.В., Гуцул В.О., Ярошевець В.М. Підготовка судових експертів в установах Міністерства юстиції України: проблемні аспекти та можливі зміни в законодавстві. Експерт: парадигми юридичних наук і державного управління. 2021. №6 (18). С. 67-78.

⁷ Положення про Експертно-кваліфікаційну комісію МВС та порядок проведення атестації судових експертів Експертної служби МВС. Наказ ММВС України № 675 від 21.09.2020 URL: <https://zakon.rada.gov.ua/laws/show/z0022-21#Text>

⁸ Про затвердження Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : наказ Міністерства юстиції України від 03 березня 2015 № 301/5 URL: <http://zakon.rada.gov.ua/laws/show/z0249-15> (дата звернення 02.07.2022).

⁹ Аксьонов В.В., Кожевніков В.В. Електронне навчання в криміналістиці: суть, підходи та модель реалізації. Підприємництво, господарство і право. 2021. №5 (303). С. 253-257

POSSIBILITÉS D'UTILISER LES WEBINAIRES POUR LA FORMATION DES EXPERTS JUDICIAIRES

L'article est consacré à la recherche de possibilité de mettre en œuvre les technologies de l'information pour la formation et l'amélioration des qualifications des experts légistes en utilisant l'exemple de l'utilisation des webinaires comme l'une des formes d'apprentissage à distance. Dans ce contexte, les lacunes de la formation centralisée des spécialistes au stade actuel et de la formation indépendante sont indiquées. Les principales formes de conduite de webinaires qui peuvent être utilisées pour la formation des experts légistes, sont présentées. Les exigences pour la conduite de webinaires dans le système de formation des experts judiciaires ont été analysées et leurs principales stratégies ont été déterminées. Sur la base des résultats du matériel présenté, les avantages de l'usage de webinaires pour la formation d'experts judiciaires et la mise en œuvre plus large des technologies de l'information dans la procédure éducative ont été déterminés. L'Objectif de l'article est une analyse systématique des approches de la conduite de webinaires en tant que forme innovante de formation d'experts judiciaires sur la base des institutions étatiques d'expertise judiciaire d'Ukraine, la détermination des méthodes de conduite de webinaires, leurs inconvénients et avantages.

Mots clés : expert judiciaire, spécialité d'expertise, formation, éducation, formation avancée, méthodes, moyens, enseignement, innovation, webinaire, formation, séminaire, connaissances, compétences, formation.

This is mostly explained by the fact that managers of the employees' training, who apply for the qualification of a forensic expert, usually have a significant number of job duties of a forensic expert nature (related to conducting expert research, monitoring the quality of expert proceedings performed by subordinate experts, participation in court hearings on matters of performance of examinations, etc.), as well as of an organizational nature (participation in meetings of laboratories (departments), document maintenance, participation in scientific events, etc.). In addition, the vast majority of internship supervisors do not have sufficient teaching experience to prepare a lecture course and ensure effective training¹⁰.

On the other hand, centralized training or advanced training requires time, space, and material resources from employee, as well as various obstacles that may prevent the employee from fully participation in the training (family, household, medical, etc.). This has been felt especially acutely in recent years due to the introduction of quarantine measures due to COVID-19 mass diseases, and currently due to the attack and armed aggression of Russian troops on the territory of Ukraine.

One of the solutions to the problematic issues of improving the efficiency and quality of the process of training employees who claim to obtain the qualification of a forensic expert is to change the format of conducting classes, with the implementation of modern information technologies, and various forms of electronic and distance learning.

One of the interactive and modern methods of training and advanced training is conducting lessons in the form of webinars.

"Webinar" (Internet seminar) is a form of conducting interactive training sessions with students over the Internet using special software. At the same time, students and the teacher are at a distance from each other and interact through a computer connected to the Internet. Webinar participants can hear and see each other, being in different cities, countries, on different continents¹¹.

The new (for the training of employees applying for the qualification of a forensic expert) format of training - webinars provide for conducting sessions in real-time based on modern communication technologies that allow for the transmission of audio and video information. Most often, the teacher conducts sessions in lecture mode with the transmission of educational materials, and sometimes video images. Feedback with students is carried out outside the lecture time and takes place in chat or voice mode.

According to N. Morze and O. Ihnatenko, a webinar is a technology that makes it possible to fully reproduce the conditions of a common form of organization of education, namely, seminar and laboratory classes, lectures, etc.¹².

So, the webinar is a modern form of training, carried out via the Internet using special software, an interactive, convenient, cost-effective form of communication between a teacher and a student, which rationalizes and optimizes the training process (qualification improvement).

Webinars in the training system can be classified depending on:

purpose: commercial and non-commercial (taking into account the paid training of private experts in the units of NRIFE of MJ);

use of technical means: no presentations (only audio communication format); with presentation materials (video format without image); with presentation materials and video communication; combined;

¹⁰ Кисіль Н.В., Гуцул В.О., Ярошовець В.М. Підготовка судових експертів в установах Міністерства юстиції України: проблемні аспекти та можливі зміни в законодавстві. Експерт: парадигми юридичних наук і державного управління. 2021. №6 (18). С. 67-78.

¹¹ Диндис Д. Методические особенности проведения вебинаров на краткосрочных курсах по методике "in-class". URL: <http://www.trainings.ru/library/articles/?id=13183>

¹² Морзе Н. В., Ігнатенко О. В. Методичні особливості вебінарів як інноваційної технології навчання. Інформаційні технології в освіті: зб. наук. пр. Херсон: ХДУ, 2010. Вип. 5. С. 31-39.



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MÖGLICHKEITEN DER NUTZUNG VON WEBINAREN IN DER SCHULUNG VON FORENSISCHEN EXPERTEN

Die Qualifikation von Sachverständigen, unabhängig davon, ob es sich um Sachverständige staatlicher Sachverständigeninstitute oder private Sachverständige handelt, spielt in Straf- und Zivilverfahren eine wichtige Rolle, da sie die Richtigkeit und Objektivität einer bestimmten Entscheidung beeinflusst.

Um die Qualifikation eines forensischen Sachverständigen in einem bestimmten Fachgebiet zu erlangen, bildet jede Abteilung ihre Sachverständigen aus. Private Sachverständige werden in forensischen Sachverständigeninrichtungen des Justizministeriums der Ukraine ausgebildet.

Während des Ausbildungsprozesses stehen Mitarbeiter, die sich um die Qualifikation eines forensischen Experten bewerben, vor einer Reihe von Problemen im Zusammenhang mit der Organisation des Ausbildungsprozesses, die sich auf die eine oder andere Weise auf die Qualität des erworbenen Wissens auswirken.

Eine der Lösungen für diese Probleme, um die Effizienz und Qualität des Ausbildungsprozesses zu steigern, besteht darin, das Unterrichtsformat durch die Einführung moderner Informationstechnologien, verschiedener Formen des elektronischen Lernens und des Fernunterrichts zu ändern. Webinare sind ein solches relativ neues Trainingsformat für die Ausbildung von Mitarbeitern, die sich um die Qualifizierung zum Forensiker bewerben.

Sie bieten Echtzeit-Schulungen auf der Grundlage moderner Kommunikationstechnologien, die die Übertragung von Audio- und Videoinformationen mit Schulungsmaterialien und manchmal Videos ermöglichen. Feedback mit Studierenden wird aus der Vorlesungszeit herausgenommen und findet per Chat oder im Sprachmodus statt. Dank der Einführung von Webinaren ist es möglich, den Lernprozess zu diversifizieren, die aktive unabhängige Arbeit der Zuhörer anzuregen, ihre intellektuelle Entwicklung zu steigern und die Möglichkeiten für Beratungssitzungen zu erweitern.

Die Entwicklung solcher Multimedia-Tools zur Bereitstellung von Online-Schulungen in bestimmten Bereichen der Ausbildung von Forensikern wird zur Optimierung des Schulungsprozesses beitragen.

Stichworte: Forensiker, Sachverständiger, Training, Ausbildung, Weiterbildung, Methoden, Tools, Lehre, Innovationen, Webinar, Training, Seminar, Wissen, Fähigkeiten.

type of communication: with chat (when there is a voice and/or "printed" chat); without using chat;

structure: webinar-lecture; webinar training; webinar-seminar, etc.

Now let's analyze advantages of conducting webinars in the system of training employees as forensic experts in certain expert specialties.

Predominantly, it is economy and convenience. Employees of state institutions (Expert Service of MIA or NRIFE of MJ) do not need to go on business trips, spend public funds, or private experts to spend their own money on accommodation and meals. Current employees do not need to leave their workplace, as webinars can be held outside working hours which allows you not to be distracted from learning new information. In addition, the following factors are prioritized:

absence of time limits, the available record allows to optimize working time;

creation of a database of educational webinars, which can be viewed at a convenient time for the listener;

ability to take your own notes during the webinar;

a webinar is a ready-made electronic product that can be the result of joint activities of the teacher and listeners¹³.

Another of the main advantages is the rationality of learning the material. Presentation of materials in the form of webinars always takes place with the help of examples from practice, which makes it possible to better learn the material using the demonstration of visual slides

The literature describes various types (forms) of conducting classes during the organization of webinars: consultation seminar, provocation seminar, Socratic dialogue, seminar with elements of group work, meeting seminar, visualization seminar, web conference (online conference)¹⁴.

Discussing training programs for forensic experts, it is possible to include the following stages of conducting webinars in the course structure:

informative webinar is general in nature, includes more interactive forms of work, informs more than teaches;

education webinar – provision of new information on a certain relevant topic (similar to a lecture in the education process, and can also be used as a short-term seminar (from a few hours to days) on the topic of both general and specific training with answers to questions and discussions. Training can be conducted using special software designed for organizing webinars;

webinar training – method of checking the students' performance of seminar tasks and practical classes, implemented in the form of several classes. Training is conducted by using two platforms at the same time – for webinars and organizing control over independent work in the distance learning system. Webinar training is a series of five or more classes (sessions), after each of which participants are given homework. In addition, participants get access to educational materials in the form of presentations, audio and video files placed in the listener's personal cabinet. The duration of sessions (online interaction between students and the teacher) can vary from one academic hour to 5-6 hours (with short breaks after every hour and a half of work). For instance, training is offered, the sessions of which are held 5 times a week, and the duration of each training day is from 4 to 7 hours. Each module of theoretical material (the first part of the day) will end with instructions on how to perform certain practical tasks. After a break and consultation, the study group was provided with management decisions on the problem and analyzed the positive and negative consequences of this decision.

¹³ Морзе Н.В. Вебінари як засіб підвищення кваліфікації викладачів. Інформаційні технології і засоби навчання. 2014. Т. 42. № 4. С.118-130.

¹⁴ Нагаева И. А. Дистанционное обучение. Инновации в образовании. Саарбрюкен, Германия: LAMBERT Academic Publishing, 2011. 168 с.

consultation webinar (webinar-support) – this is the conduct of individual online consultations on solving certain problems. One of the requirements for high-quality and effective conducting of such consultations is to provide the teacher with information on the issue so that they will be able to prepare a thorough answer. It is possible to include

class webinar – connecting listeners engaged in webinar mode to a classroom session allows to obtain a synergistic effect due to the interaction of listeners with different experiences¹⁵.

During the preparation and conducting of the webinar, the purpose and tasks of the lesson, content, and level of preparedness of the audience play an important role. This leads to various strategies for holding webinars¹⁶, which include:

1. Instrumental strategy. The webinar is used as a source of knowledge, skills and abilities, a tool for building competencies.

2. Interactive strategy. The webinar is designed not only for the transfer of knowledge, skills and abilities, but also for the appropriate reaction of the listener to them.

3. Presentation strategy. The webinar is aimed at the prescription of educational material mainly without a critical attitude to the content of the discipline. At the same time, it cannot be allowed that only the teacher speaks all the time, there must be dialogues in the discussion of certain issues.

Special mention should be made of the design of the webinar's educational content. The practice of conducted webinars clearly showed that the presentation of educational materials requires an approach based on the context and preparation of the target audience.

The content of the webinar for its use in the training of forensic experts should be as follows: text, sound, graphics, animation, video.

The teacher monitors the balance of interaction of these resources. The analysis of the literature on the reason of these issues shows that the use of the text reduces the effectiveness of teaching in cases where listeners feel discomfort when reading from the screen, or the text is not adapted for use in electronic form, or there is too much text. As practice shows, it is better to present such material in the form of slides with reference material¹⁷. The next stage of the webinar is the organization of high-quality feedback with listeners which allows the teacher to see how the discipline is learned, what is interesting, and what questions arise. The last stage of the webinar should be a survey of listeners, where they determine their needs for such knowledge and skills, and give their evaluations of the acquired knowledge – whether it is theoretical or practical, whether it is necessary for further activities.

Conclusions. The qualification of forensic experts, both in criminal and civil proceedings, plays an important role, as it affects the correctness and objectivity of one or another decision. The initial training of employees applying for the qualification of a forensic expert depends on the organization of educational process and the introduction into the structure of training programs of innovative forms of



¹⁵ Третьяченко Г.П. Використання інноваційних технологій у підвищенні рівня професійної компетентності державних службовців. URL: <http://reposit.nupp.edu.ua/bitstream/PolNTU/3708/3>

¹⁶ Динцис Д. Методические особенности проведения вебинаров на краткосрочных курсах по методике "in-class". URL: <http://www.trainings.ru/library/articles/?id=13183>

¹⁷ Нараева И. А. Дистанционное обучение. Инновации в образовании. Саарбрюкен, Германия: LAMBERT Academic Publishing, 2011. 168 с.

conducting classes, which include the webinar - an innovative educational method that rationalizes and improves the process of training and improving the qualifications of forensic experts, since the practice of conducting them, firstly, diversifies the learning process, secondly, stimulates the active independent work of students, thirdly, increases their intellectual development, fourthly, expands the possibilities of conducting advisory classes, fifthly, ensures the development of permanent variable information base taking into account the requirements of modern society, sixthly, ensures the effective use of budget funds.

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Received by Editorial Board: 26.11.2022

Suggested Citation:

Kozhevnikov, V. (2022). Possibilities Of Using Webinars In The Training Of Forensic Experts. *Archives of Criminology and Forensic Sciences*. 2 (6). 103-109. DOI: <https://doi.org/10.32353/acfs.6.2022.08>

