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Рассмотрены проблемы образования, нанотехнологий, динамики и прочности механических систем, информатики и кибернетики, экономики и управления.

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Для ученых, инженеров, работников и аспирантов ВНЗ.

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Рассмотрены проблемы образования, динамики и прочности, материаловедения, нанотехнологий, экономики и управления.

Для научных и инженерных работников, специализирующихся в области изучения этих проблем.

Розглянуті проблеми освіти, динаміки і міцності, матеріалознавства,
нанотехнологій, економіки та управління.

Для науковців та інженерних працівників, які спеціалізуються в
області вивчення цих проблем.

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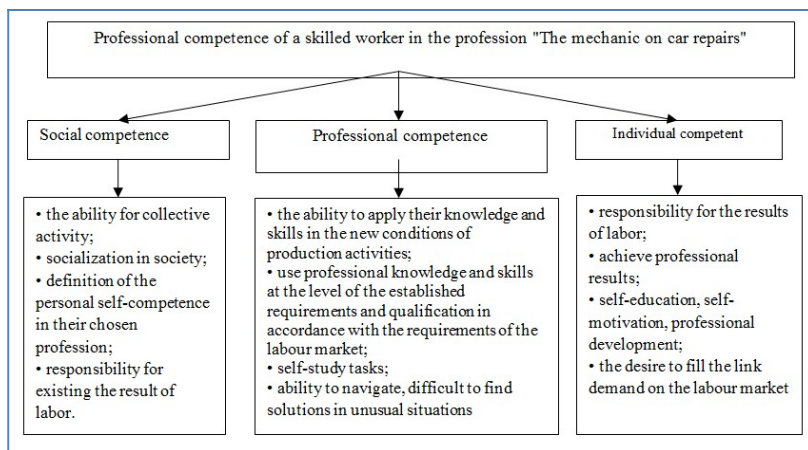
IT ENSURE THE FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE OF MECHANICS ON REPAIR OF CARS

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Professional competence of a skilled worker, motor profile, for example, the mechanic on car repairs, and competence of the future master, worker, modern service station of cars with a different focus. Professional competence is a system of universal knowledge, abilities, skills in performing internal employees and external contractors on repair, maintenance, diagnostics and adjustment of a modern car. New standards for the development of the automobile industry and enterprise, the introduction of new technical tools pose high demands to professional training of skilled workers [11]. According to the qualifications of the mechanic on repair of the cars must have a thorough knowledge not only of vehicle unit, but also from electrical, electrical engineering, material science and other related disciplines as a single unit [9]. Components of professional competence of a skilled worker, motor profile can be represented in a diagram [9].

Each component of professional competence is essential, which in turn encourages teachers and trainers to search for new forms and methods of transmission of educational material. Summarizing teaching practices and analyzing the learning process in vocational and technical institutions see children who come to training, have a very low level of knowledge on

general subjects, weak self-motivation, unawareness of the profession. Another problem is the insufficient level of consciousness, slow assimilation of new material, which leads to loss of interest in the chosen profession. Subsequently, these factors will have a negative impact on employee morale, productivity, quality of work [5].



The educational process in vocational and technical institutions, unfortunately, today has the following features: the discrepancy between theory and practice; lack of connection between cycles of disciplines: natural Sciences and mathematics, General, special; violation of differentiation of instruction. To solve these problems, we need to use well-chosen educational material, which should be based on the latest information. Modern technology theoretical training combined with quality training and production practice will allow you to get a guaranteed result in the preparation of high-quality specialist. Competence-based approach aimed at self-production solution to students problems. After all, the task of the specialist road transport industry not only to perform their own work, but also be able to navigate in unusual situations [3; 4]. Thus, need to move vocational education from the qualification model to the competence is obvious. Competence-based model is able to pick up the vocational education system to a qualitatively new level, and its participants adequately adapt to the labour market and later life. For the transition of vocational education to competence-based models are required the following factors: computerization of the educational process; socio-business partnerships with employers; modernization of material-technical base of training qualified workers. Informatization of educational process [7]. Modern educa-

tion is impossible without the active involvement of means of information computer technologies, electronic resources.

The most common types of e-learning [2]: educational presentations; training tests; training videos and animations; e-posters; electronic manuals; Teaching presentations. Presentation of the educational material not only in the form of oral or written messages, but also in a dynamic form, using photos, video clips, highlighting the essential elements of color promotes better assimilation of the topic. Thanks to the perception of colors, dynamics, aesthetic performance of the presentations of students' use of all channels of information perception: visual, auditory, logical, and emotional. Visibility, underline, rotation, color images, graphics, animated, music, video improve the perception of the material [1]. Training tests. Almost every topic you can pick up the problem and test questions, the answers to which can be a specific result of learning. The test form of control is always popular among students, as in the tests database of questions is quite wide, can easily be updated, and students are always eager to pass the test perfectly (as scores not a teacher). Training videos and animations. Most electronic educational tools according to the special technology includes both informational text material to a specific lesson or topic, and visual illustrative materials, animated examples, video. Diverse 3D MAX animation not only reveal the structure of the device, reproduce the operation of the node or unit. Footage of production processes significantly improve the level of mastering the subject that is studied, especially the videos are appropriate in the study of new technologies in particular branches of production [11]. Electronic posters allow teachers to demonstrate new material in unconventional and extremely usually form, "to concentrate" academic information in the form of reference notes, which can be used both at the stage of learning new material, and on the stages of consolidation and control [2]. The Central guiding element of the information and communication component of the space of vocational education can be a electronic textbook. Educational material in the electronic textbook can be divided into sections or modules that include theoretical information, test questions, exercises, tests with different types of tasks, context-sensitive help. The transition from one module to another is performed quickly with hypertext links. Skillfully selected graphic and illustrative material, animated slides activate informative activity of students, promote their professional growth. Advantages of e-manuals: dynamic phenomena are vividly illustrated by animation; check their own level of knowledge is carried out through the control tests; update material, corrections, additions. In the practical use of electronic textbooks in the classroom have the opportunity of designing educational material on the big screen to all students simultaneously. The use of interactive techniques helps to make the lesson interesting, lively.

Animations, videos, photographs, drawings, diagrams contribute to the active understanding of the material. Electronic materials based on multimedia technology incorporated in the content library, you can quickly and quickly be updated in accordance with the development of technology, and will be useful throughout the time of professional activity. Today in Ukraine, unfortunately, has not developed an effective system of social partnership. Searches of the social partners, the establishment of relations with them depend entirely on the initiatives of the VET. The state target program of development of vocational education for 2011–2015 specifies that VET is one of the basic priorities of socio-economic development, therefore, policy should be focused on [6]: creating an effective and flexible system of vocational training, focused on socio-economic development (employment for working professions at least 90 % of graduates of vocational educational institutions); modernize the material-technical base of the state vocational educational institutions; the introduction of a new procedure for the formation and placement of state order for training skilled workers; equip state vocational-technical educational institutions of modern computer systems, connecting them to the Internet; the increase in funding and investment for the development of vocational education; strengthening the role of local Executive authorities and bodies of local self-government in the formation of the working potential, allowing to take into account the needs of regional labour markets; the development of social partnership and consolidation of efforts of Central and local Executive authorities and local governments, educational institutions, employers, scientific and public associations; the increase of prestige of working professions [8]. For the development of social partnership is important: to upgrade normative-legal base of interaction between vocational schools and employers on a reciprocal basis; to better inform the public about the requirements of the labour market, employment, offers vocational and technical institutions; to provide state support for programs of retraining and improvement of professional skills in the area of tax policy.

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ПРОФЕСІЙНА ІДЕНТИЧНІСТЬ МАЙБУТНІХ ФІНАНСИСТІВ ЯК ОСНОВА ПРОФЕСІЙНОЇ КУЛЬТУРИ

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Професійну культуру фахівців з фінансів і кредиту визначає ціннісний професійний простір, певне культурно-освітнє середовище для підготовки майбутніх фінансистів, здатних самостійно працювати в галузі економіки, управління та адміністрування. Очевидно, щоб стати повноцінним фінансистом з високим рівнем теоретичної і практичної підготовки, необхідно ідентифікувати себе з професією, сприймати її культуру, інтегруватися до неї ще в процесі професійного навчання. У реальному житті до коледжів і технікумів поступають на навчання переважно випускники 9 класу, які отримали базову загальну середню освіту. При цьому далеко не всі мають уявлення про професію фінансиста, яку вони придбають після закінчення конкретного навчального закладу. Тому в процесі професійної підготовки молодшого спеціаліста з фінансів і кредиту важливе місце займає формування професійної ідентичності як основи мотиваційної готовності до реалізації себе на обраній професійній ниві, входження в професійну спільноту, постійного самодослідження і розвитку своєї особистості, “образу Я”. Вивчення питання формування професійної ідентичності майбутніх молодших спеціалістів з фінансів і кредиту потребує розгляду сутності поняття “ідентичність” (середньолат. *identicus* < *idem* – однаковий, тотожний), тобто означає однаковість, тотожність, рівнозначність [4, с. 292]. Метою нашого дослідження є з’ясування суті поняття “професійна ідентичність” та виявлення її характерних особливостей,