## EXPERIENCE IN THE IMPLEMENTATION OF INTEGRATIVE TECHNOLOGIES "FORMATION OF PSYCHOLOGICAL READINESS FOR INNOVATIVE ACTIVITY" AND "DEVELOPMENT OF INDIVIDUAL COMPETITIVENESS COMPETENCIES", IN INNOVATIVE CONDITIONS OF DIGITALIZATION AND STEM EDUCATION

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**Abstract:** The article presents two author's technologies: 1) "Technology for the formation of psychological readiness for innovative activity" (V. Chudakova, 2008-2016). 2) . "Technology for the formation of psychological competencies of individual competitiveness in the conditions of innovative activity" (V. Chudakova, 2016-2022),

**Key words:** innovative activity, innovativeness, individual competitiveness, psychological and organizational technology, competence.

Competence individual competitiveness. Digitalization is an urgent problem and the most important direction of qualitative changes in modern education. Let us present an integrative toolkit for the implementation of proprietary technologies in innovative conditions of digitalization and STEM education. *The first "Technology No. 1"* [1-3; 4] "Psychological and organizational formation of psychological readiness of personnel of educational organizations for innovative activities" (Chudakova V., 2008-2016). *Second "Technology No. 2"* [1; 4] "Technology for the formation of psychological competencies of individual competitiveness in the conditions of innovative activity" (V. Chudakova, 2016-2023).

"Technology No. 1". Let's consider the first technology that we developed and implemented into practice, "Psychological-organizational technology for the formation of psychological readiness of personnel of educational organizations for innovative activities" (hereinafter referred to as "Technology No. 1") (V. Chudakova) [1-3; 4], which is an effective methodological and practical tool. It consists of two parts that correspond to the external and internal conditions of innovative activity. Let's consider the content and results of the implementation of "1. A model of examination and correction of the organizational and innovative environment of educational organizations (external conditions), which in turn consists of two models. "1.1. Model of examination of the organizational-innovative environment of educational organizations", presented in the author's publications " [1-3]. "1.2. Corrective model for creating a favorable organizational and innovative environment for educational organizations" [1; 2]. "2. Models of examination and correction of psychological readiness of personnel of educational organizations for innovative activities (internal conditions)", which in turn consists of two models of examination and correction of internal conditions: "2.1. A model for examining the internal psychological readiness of organizational personnel for innovative activities" [1-4]. The results of introducing this model into the practice of organizations made it possible to study: 1. *The target indicator* "innovativeness" (author V. Chudakova, 1677 people took part in its validation), which made it possible to determine the "level of innovativeness" (positive, zero, negative) and the "trend of innovativeness "(theoretical-intellectual; emotionalpractical) 2. Prognostic indicators of internal conditions of readiness for innovative activity: - satisfaction with professional activity; - self-awareness as a professional; -

individual psychological characteristics and emotional-volitional control. The results of the empirical study and mathematical and statistical processing of examination data made it possible to: – determine the characteristics of the personnel of educational organizations "with positive innovativeness" and "negative innovativeness", and to identify their differences; – determine the system of key factors and the structure of their relationships, personal determinants and conditions that help/hinder the innovative activities of organizational personnel; – to find out the dynamics of the formation of psychological readiness of organizational personnel for innovative activities at different stages of experimental research [1-4]. "2.2. Corrective multi-level model of reflective-innovative training, coaching (hereinafter referred to as RIT), for its implementation we have developed the RIT program, it provides the opportunity for participants to: discover new opportunities for successful innovative solutions to many problems of professional activity, effective formation of personality using her personal efforts and reserves; ensure that a person searches within himself for mobilizing factors to overcome difficulties, extreme and problematic situations [2].

"Technology No. 2". "Psychological and organizational technology for the formation of competencies of individual competitiveness in the conditions of **innovative activity of the organization"** [1; 4] . The relevance of its development is confirmed by the fact that one of the priority tasks of education is the creation of conditions for the formation of a competitive personality; we have developed our own "Technology for the formation of competencies of individual competitiveness in the conditions of innovative activity of an organization . " It consists of two interrelated and complementary integrative models: "1. Diagnostic model for the examination of competencies of an individual's competitiveness" [1: 4] . To implement it, we have selected, experimentally tested, reliable and valid integrative psychodiagnostic examination methods (questionnaires, tests); experiment; methods of mathematical statistics (correlation, factor analysis) using modern data processing programs. A mathematical and statistical processing of the empirical data of the experiment results was carried out during the ascertaining and control-analytical stage. In the process of its implementation, modern digital and STEM methods were used, mathematical and statistical analysis was carried out (factor and correlation analysis), we obtained the following results: *mechanisms and latent (hidden) structure of factors* of priority competencies that are necessary for the formation of individual competitiveness competencies in the conditions of innovative activity were identified organizations that stood out as the main factors: Factor 1. Goal-setting competencies, in particular, mastering effective strategies for setting and achieving goals; defining your mission and purpose. Factor 2. Motivational competence, in particular the ability to create positive motivation. Factor 3. Competencies in overcoming psychological problems and developing stress resistance, in particular: mastering the skills of flexible response to the situation; the ability to reach a new level of managing your conditions; the ability to acquire emotional stability in difficult life situations and the ability to quickly adapt; mastering methods of getting rid of feelings of insult, guilt, addictions and other complexes; the ability to reshape the consequences of psychological trauma and other traumatic memories; the ability to develop stress resistance and the ability to quickly adapt; the ability to use methods of reshaping fears, phobias, anxiety, pessimism and depression. Factor 4. Communicative competence: mastery of technologies for effective interaction with people (colleagues, managers, students, parents, relatives, etc.); ability to establish relationships of trust and cooperation; ability to resolve interpersonal contradictions. Factor 5. Special (specific) competencies: overcoming conflicts and

resolving interpersonal contradictions; mastering the art of public speaking; overcoming professional stress and professional burnout syndrome. Factor 6. Innovative competence: state of the level of innovativeness (positive, zero level, negative innovativeness) and trends in innovativeness (intellectual-theoretical orientation, emotional-practical orientation). "2. Corrective-developmental model of reflective**innovative training, coaching**, we have developed two original programs of special psychological training: general and individual. In the process of developing this special course, the main factors influencing the formation of competencies of a competitive individual in the rapidly changing conditions of innovative activity were taken into account. Which we identified at the diagnostic stage based on the results of mathematical and statistical analysis. 1). Individual RIT program psychotechnologies for the formation of competencies of a competitive personality in fastchanging conditions of innovative activity." 2). General program: "Training of expert trainers and scientific and methodological support "Technologies for the formation of competencies of individual competitiveness in the conditions of innovative activity of the organization" [1; 4]. Its implementation makes it possible to introduce "Technology" into educational practice, not only by the author, but also by expert trainers trained by specialists, independently in the educational process.

**Conclusions.** To summarize, we note that the introduction of the author's "Psychological-organizational technology for developing the readiness of organizational personnel for innovative activity" (V. Chudakova, 2008-2016) and "Psychological-organizational technology for developing individual competitiveness competencies in the conditions of innovative activity of an organization" (V. Chudakova , 2016-2022), opens up prospects for further improvement of the training / retraining / advanced training system; We implement "Technologies" in educational and scientific organizations of Ukraine (2016-2023), and are also successfully implemented within the framework of international projects of the commonwealth of Vera Chudakova's educational programs in the Republic of Uzbekistan (2018-2023) and the Republic of Kazakhstan (2021-2023).

## Literature:

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## YOSHLARGA PSIXOLOGIK BILIMLARNING ZARURIYATI HAQIDA

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Annotatsiya. Ushbu maqolada insonlar oʻz sogʻligini muhofaza qilishi, psixologik savodxonligini asrashi uchun ham psixologik bilimlarga ega boʻlishi bugungi kunning dolzarb masalalari haqidagi fikrlar yoritiladi. Shuningdek talaba yoshlar bilan psixologlar oʻrtasida ish hamkorligi yetarli darajada emasligi, yoshlarimizning psixologik bilimlarga ega boʻlishiga ishtiyoqining pastli haqidagi muammolar oʻrganiladi. Mazkur yoʻnalishda Psixolog V.V.Boykoning amalga oshirilgan ilmiy-tadqiqot ishlari tahlil qilinadi. "Psixologik yonish" rivojlanishining sabablari, "Psixologik bilimlar" shaxsiy xususiyatlarning shakllanishiga oʻz ta'sirini koʻrsatib, muhim ahamiyatga ega ekanligini ta'kidlaydi.

**Kalit soʻzlar:** psixologik savodxonlik, psixologik bilimlar, stress, psixologik zoʻriqish, kasbiy beorlik, psixologik yonish, Professor-oʻqituvchilar, talabalar, psixologik salomatlik.

Hozirgi har qanday vaziyatda inson hayot kechirishi uchun psixologik bilimlarning talab darajasida boʻlishi ijtimoiy zaruratga aylandi. Psixolog mutaxassislarimiz yuzaga kelayotgan salbiy psixologik vaziyatning oldini olish va uni qayta tiklashga alohida e'tibor berib kelmoqda. Insonlar o'z sog'ligini muhofaza qilish, psixologik savodxonligini asrash uchun ham psixologik bilimlarga ega boʻlishi bugungi kunning dolzarb masalalaridan hisoblanadi. Bugungi kunda Jahon sogʻliqni saqlash tashkiloti odamlardagi kasallikning 45% stress bilan bogʻliq ekanligini koʻrsatib beradi. Boshqa mutaxassislar esa uning 2 baravar koʻrsatkichini aytib oʻtgan. Bu koʻrsatkichlar oldin yoshi katta insonlarda uchrasa, hozir esa talaba yoshlarimizda ham tez-tez psixologik zoʻriqishlarni kuzatamiz. Talaba yoshlardagi psixologik muammolar doimiy charchogni, ba'zan bosh ogʻrigʻini, uyqusizlikni, sogʻliqning yomonlashganini his qilishi kabi murojaatlari bunga isbot bo'la oladi. Ish yoki o'qish ularni qoniqtirmaydi, aksincha, nafratlantiradi. Kishi oʻzini noqulay, qoʻlidan ish kelmaydigandek his qiladi va haqiqatan ham aniq kasbiy yutuqlar pasayadi, shuningdek, chidamlilik hamda zukkolik ham. Koʻpchilik odamlar hayoti davomida boʻlayotgan nojoʻya xatti-harakatlardan ruhiy siqilish (depressiya)ni yoki "stress"ni oʻzidan oʻtkazadi. Bunday qiyin vaziyatda qolgan odam oʻzini har xil narsalar bilan chalgʻitishadi. Talaba yoshlar bilan psixologlar oʻrtasida ish hamkorligi yetarli emasmi? Talaba yoshlarimiz psixologik bilimlarga ega boʻlishiga ishtiyoq yoʻqmi? Shu kabi savollarga javob topish uchun ilmiy izlanishlardan foydalanib magola tayyorlashni mag'ul ko'rdik.

Shaxsdagi his-hayajonlarning zoʻriqishi «psixologik zoʻriqish» deb aytadigan boʻlsak, insondagi bu holatida aybdorlik hissi va ezilish kuzatilmaydi, aksincha asabiylashish, tajovuz va gʻazablanish kuzatiladi. Aniqlanishicha, kasbiy "psixologik zoʻriqish" oʻz faoliyatiga jiddiy zarar yetkazadi – ham iqtisodiy, ham ruhiy-hissiyotli. Xususan, juda tajribali uchuvchilar uchish oldidan qoʻrquv his qilishadi, oʻzlariga boʻlgan