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# **PERSPECTIVES OF WORLD SCIENCE AND EDUCATION**

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## TABLE OF CONTENTS

1.	ABDULLAYEVA D. N. THE BENEFITS OF USING MULTIMEDIA TECHNOLOGY IN THE LEARNING PROCESS.	14
2.	ARTEMOV A. V., NEVEROVA O. G., ILYINA S. I., GOLOVCHENKO V. G. INEVITABILITY AS A CONSEQUENCE OF ACCIDENT: AGING OF THE ORGANISM AS AGING OF THE TISSUE SYSTEM.	17
3.	BABUKHADIA M. THE TYPOLOGICAL ANALYSIS OF GRAMMATICAL MEANS EXPRESSING MODALITY.	23
4.	BALANCHIVADZE I. THE IMPORTANCE OF DEVELOPMENT ASSESMENT IN ENACHANCING THE QUALITY OF TEACHING.	29
5.	CHUBINA T., FEDORENKO YA. THE ACTIVITY OF THE ROMAN CLUB – ONE OF THE WAYS TO SOLVE GLOBAL MODERN PROBLEMS.	37
6.	CHARKVIANI N. THE TYPES OF AKTIONSART IN THE LANGUAGES OF DIFFERENT SYSTEMS (THE ANALYSIS OF ENGLISH AND GEORGIANMATERILAS).	45
7.	CHERNOVOL O. INTRODUCTION OF INTERACTIVE FORMS OF LEARNING AS A MEANS OF FORMATION OF THE LINGUISTIC PERSONALITY OF FOREIGN STUDENTS.	55
8.	DUDAR YA. O. TO THE QUESTION OF AUTOBIOGRAPHICAL COMPONENT IN NOVEL “THE CHANGELING” BY OE KENZABURO.	62
9.	DUDCHENKO V. МЕТОДОЛОГІЯ ЗАБЕЗПЕЧЕННЯ НЕЗАЛЕЖНОСТІ ЦЕНТРАЛЬНОГО БАНКУ.	66
10.	DUDENKO V. G., HARMASH I. V., LIUBOMUDROVA K. S., VDOVICHENKO V. YU. POSSIBILITIES OF PERSONAL IDENTIFICATION BY ANATOMO-MORPHOLOGICAL FEATURES OF THE EXTERNAL EAR.	69
11.	DUDINA O. V. AN ACTUAL SPEECH REPERTOIRE OF THE EXPLANATORY COMMUNICATIVE STRATEGY OF TEACHER’S PEDAGOGICAL DISCOURSE AT ENGLISH CLASSES.	72
12.	DEMETRADZE N., KURDADZE E. COMMUNICATIVE APPROACH - THE METHOD AND THE GOAL OF TEZHING.	79
13.	GAISTRUK N., KARTELIAN R., YURII O., GAISTRUK A. SOCIAL MEDIA THERAPY AS A METHOD OF INFLUENCING INDICATORS OF NEUROENDOCRINE ADAPTATION IN YOUNG PEOPLE WITH TENSION HEADACHE.	89
14.	GURANDA D., SOLONARI R., GURANDA D. OPTIMIZATION OF SEMISOLID PHARMACEUTICAL FORMS FOR CHILDREN.	96

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**POSSIBILITIES OF PERSONAL IDENTIFICATION BY ANATOMO-  
MORPHOLOGICAL FEATURES OF THE EXTERNAL EAR**

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**Abstract:** In order to more accurately determine the personality using the anatomical data of the auricle, a morphometric study of the external ear was performed in 52 Ukrainian students of both sexes aged 18-25 years. The following parameters were studied: the shape of the auricle, its bilateral size, the shape of the earlobe, the length of the earlobe, the type of tragus of the ear. The result of the study was as follows: the right and left ears of the same person are not identical; to increase the accuracy of the method of identification of the person behind the outer ear, it is necessary to increase the number of parameters for measuring the anatomical structures of the ear.

**Keywords.** Individual anatomy, external ear, morphometry, identification.

**Introduction.** Analysis of the anatomical features of the external ear is one of the most advanced techniques in biometric identification of humans, which is gradually being implemented in the US, UK and other countries. As early as the 1980s, French

police officer Alfonso Bertillon began using anthropometry to identify the perpetrators, including measuring the size of auricle [1, p.167]. From 1948 to 1962, in California, Sheriff Alfred Janarelli collected photographs of right earwigs and measured them geometrically, claiming to be unique to each individual [2, p.1011].

**The purpose** of our study was to determine the major anatomical and morphological properties of the ear lobes used to identify the individual, and to identify the frequency of occurrence of these parameters with regard to sex to improve the effectiveness of the methods proposed by Alfred Janarelli (1949) [3, p.12].

**Materials and methods.** To assess the features of the structure of the external ear of individuals, we conducted a visual inspection of the ears with their subsequent photographing and measurement of the main parameters. We examined both outer ears (right and left) of 52 Ukrainian students aged 18 to 25 who were born and resided in the city of Kharkiv, 34 of them female and 18 male. All subjects have a mesophysical type of skull.

To study the anatomical and morphological features of the external ear, we chose the following parameters: the shape of the ear, its bilateral size, the shape of the ear lobe, the length of the ear lobe, the type of tragus [4, p. 48, 5, p.17-20].

**Results.** According to the visual evaluation of the shape of the ear, we have obtained the following results: among the investigated, the majority has an oval shape of the ear - 32 people (61.53%), among them 20 are female, 12 - male. The triangular shape has 14 subjects (26.9%), including 9 female and 5 male. A separate group consisted of 4 individuals (7.7%) female, with a marked difference between the forms of the right and left ears.

The bilateral size of the ears in the studied female ranges from  $5.4 \times 2.5$  to  $7.2 \times 3.3$  cm, in the male -  $5.9 \times 3.2$ - $7.3 \times 3.6$  cm. Note that the sizes of the right and left ears of the same person differ from 0.1 cm to 0.3 cm (the right ear is larger in size).

The most common form of ear lobe in the subjects - round, is present in 27 persons (51,9%), among which 21 persons are female and 6 - male. The triangular shape was revealed in 17 people (32.6%), among them 10 persons were male and 7 were female. The rectangular form of the urine is present in only three subjects (15.3%), of which



7 are female and 1 male. Fused ear lobe is present in 10 people (19.2%), including 8 female and 2 male, free in 41 people (78.8%), of which 27 are female and 14 male. The length of the ear lobe in the studied female is from 1.3 cm to 2.1 cm, in males - 1.5-2.0 cm.

The type of tragus in all subjects was defined as one-wave, with the expressed tragus being present in 31 people (59.6%), among them 25 were female and 6 were male; smoothed kid is observed in 18 people (34.6%), of which 10 are male and 8 female.

### **Conclusions:**

1. For the external ear of each person there is an individual set of anatomic and morphological features that can be successfully used for identification of the individual.
2. The right and left ears of the same person are not identical, they differ in size, rarely in the form that proves the uniqueness of each ear.
3. When using the outer ear to identify a person, the possibility of changing the length of the ear lobe due to the wearing of ear ornaments should be considered.
4. To increase the level of authenticity of the method of identification of the person behind the external ear, it is necessary to increase the number of parameters for measuring the anatomical structures of the ear.

### **LITERATURE:**

1. Fooprateepsiri R., Kurutach W. Ear based personal identification approach forensic science tasks // Chiang Mai J. Sci. 2011. Vol.38, No.2. P.166-175.
2. Cameriere R., De Angelis D., Ferrante L. Ear identifications: a pilot study// J/ Forensic Sci. 2011. Vol. 56, No. 4. – P. 1010-1014.
3. Kumar A., Wu C. Automated Human identification using ear imaging // Sci. Verse Applications. 2011. P. 10-16.
4. Царьов Р.Ю. Біометричні технології: навч. посіб. [для вищих навчальних закладів] / Р.Ю. Царьов, Т. М. Лемеха. – Одеса: ОНАЗ ім. О.С. Попова, 2016.
5. Новоселов В.П., Савченко С.В., Пяткова Е.В. Ушная раковина как объект для идентификации личности. – Томск : STT, 2016.