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A photograph of a modern building with a glass and steel facade, viewed from a low angle looking up. The building's structure is a complex grid of white beams and glass panels, with some interior lights visible. The sky is blue with some green foliage visible on the right side.

CONFERENCE PROCEEDINGS

9-10 NOVEMBER 2020
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3. In the Index Selection dialog box, select an index, if the one you want to search is available, or click Add and then locate and select the index to be searched, and click Open. Repeat as needed until all the indexes you want to search are selected.
4. Click OK to close the Index Selection dialog box, and then choose Currently Selected Indexes on the Look In pop-up menu.
5. Proceed with your search as usual, selecting other options you want to apply, and click Search.

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EDUCATION IN DOCUMENTARY AND APPLIED PHOTOGRAPHY AS PART OF THE TRAINING OF STUDENTS IN THE PROFESSIONAL FIELD PUBLIC COMMUNICATIONS AND INFORMATION SCIENCES. PROJECT RESULTS

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Abstract

Visual culture, as an essential part of visual literacy, is an interdisciplinary concept and is of importance for future-oriented transcultural thinking. Providing a positive educational environment that stimulates individual interests, opportunities for high qualification and effective career development of students, PhD students and young scientists studying in the professional field “3.5 Public Communications and Information Sciences” is a prerequisite for the successful implementation of visual literacy. The increase of the scientific culture of the society relates to the overcoming of technical, cultural, social, and other challenges. In 2019 a project financed by the Bulgarian National Science Fund of the Bulgarian Ministry of Education and Science started, entitled “Creation and development of educational and scientific facilities for documentary and applied photography as part of the training of students in the professional field “3.5 Public communications and information sciences” (2018-2020), Contract № KP-06-M30/3 from 13.12.2018, led by Chief Assistant Doctor Kamelia Planska-Simeonova. The main objective of the project was the research and practical activities related to the formation of the visual literacy of students who are trained in specialties in the professional field “3.5 Public Communications and Information Sciences” at ULSIT in courses dedicated to documentary and applied photography. The goal of this paper is to present the results of a survey that aims to determine the level of knowledge, mastery and application of visual literacy among students in the above-mentioned professional field. The questionnaire includes an assessment of: Awareness of the concept of “visual literacy”; Degree of mastery and application of visual literacy; Critical thinking when working with images; Self-assessment. The questionnaire was divided into 3 sections, namely – Profile of the respondent; Awareness; Self-assessment of knowledge and skills; and respondents had to answer to 24 questions. The following specific methods are used to achieve the purpose of the research and to solve the research tasks: statistical method, surveys, synthesis, graphic representation, and tabular presentation of the processed and summarized information. An analysis of the results of the conducted survey is performed and summaries and recommendations for future development are created. The results of the survey show the current state of students’ attitude and knowledge of visual literacy.

Keywords: visual literacy, Public Communications and Information Sciences, project, ULSIT, education, results.

1 INTRODUCTION

Teaching with images can help develop students’ visual literacy skills, which contributes to their overall critical thinking skills and lifelong learning. Major research trends in European social sciences and humanities from the field of visual culture are: visual images studies, visual literacy studies, visual practices studies, visual culture studies, visual media studies, visual communication studies, visual representation studies, visual semiotic studies and visual rhetoric studies. In this context, the relevance and importance of science is determined by the knowledge-based economy and the development of new market oriented majors in attractive areas of knowledge that require the syncretistic involvement of various arts, as it is the graphic art of Photography [1].

In the project “Creation and development of educational and scientific facilities for documentary and applied photography as part of the training of students in the professional field “3.5 Public communications and information sciences” (2018-2020), a study was carried out aiming to explore the formation of students’ visual literacy in the professional field of “Public Communications and Information Sciences” at University of Library Studies and Information Technologies – Bulgaria (ULSIT) in hours of documentary and applied photography. The new trends in perceiving information and students’ attitude are analysed.

2 METHODOLOGY

The main reason for the preparation of the survey "Forming the visual literacy of students in the professional field "3.5 Public Communications and Information Sciences" is to obtain the necessary information related to the need to increase the visual literacy of future specialists in library and information sciences, library management, information resources of tourism, press communications, etc., studying in the professional field "3.5 Public Communications and Information Sciences" at ULSIT. Due to the results obtained, the working hypothesis of the study can be confirmed. There is also information about the groups of professionals that are interested in visual literacy.

The goal of the empirical research is to establish, analyse, and summarize how familiar students are with concepts in the field of visual literacy, what is their visual culture, what is their critical thinking and how they evaluate their own skills.

In the framework of empirical research, the goal is achieved by solving the following research tasks:

- 1 To establish and analyse students' awareness of the concept of "visual literacy",
- 2 To establish and analyse the degree of mastery and application of visual literacy,
- 3 To establish and analyse students' critical thinking when working with images,
- 4 To analyse the opinion of students and their self-esteem for their visual literacy.

3 RESULTS

The use of digital content in the form of photographic images in the fields of: journalism, public communications, public relations, management, advertising, tourism, and for the needs of cultural institutions, such as libraries, archives and museums that require staff that have the necessary visual literacy and visual culture. Creating conditions for the development of creativity contributes to training professionals with more skills and competencies in the field of new technologies in the creative industries. The scientific interest in the creation and development of the educational and scientific base for documentary and applied photography is related to the introduction of a new discipline "Visual literacy and visual thinking" in ULSIT and the need to provoke the attention and stimulate creativity of students through constructivist approach of the "learning by doing" method. The issue in question is extremely topical, because such a Visual Education literacy approach has not been applied to such majors as Library and Information Management, Archives and Documentary Studies, Cultural Heritage, Press Communications, Media Information and Advertising [2].

3.1 Hypothesis

The researched problems become relevant in view of the increased role of visual literacy in secondary and higher education. Visual culture is a necessary resource for current virtual communication.

A basic hypothesis that supports the present study is that it is necessary to create new habits in students in terms of visual culture and visual literacy. First, it is necessary for them to become authors of visual content, and for this they must have the knowledge and experience to create a visual product (photographic image). Secondly, visual literacy requires students to acquire new technical skills on the one hand and to develop critical thinking on the other. That is why the development of a new discipline tailored to the students' professional background and the creation of a learning base is a step in the right direction to promote creativity, innovation, and research.

3.2 Project Results – "Forming the visual literacy of students undergoing training in the professional field "Public Communications and Information Sciences" at ULSIT in hours of documentary and applied photography

The study covers approximately 682 students from ULSIT, specializing in the professional field "Public Communications and Information Sciences", majoring in Library and Information Management, Archives and Documentary Studies, Library Studies and Bibliography, Press Communications, Information Resources of Tourism, Communications and Information, Public Policies and Practices. In addition to them, the online survey also includes students in master's degree in the professional field of 4.6 "Information Sciences", majoring in Digital Marketing and Web Design, considering their interest and willingness to participate in the study.

The empirical research was conducted in the period 21.09.2019-21.02.2020. The communication with the respondents was carried out by the official e-mails of each separate course of students. An online survey was sent to a total of 57 courses, an average of 12 people per course, which makes approximately 682 students, and in percentage terms – 21%. In addition to the online survey, traditional cards in print form were distributed to university students.

The questionnaire was divided into three sections, namely – Profile of the respondent; Awareness; Self-assessment of knowledge and skills; and includes an assessment of:

- Awareness of the concept of “visual literacy”,
- Degree of mastery and application of visual literacy,
- Critical thinking when working with images,
- Self-assessment.

In section 1, Profile of respondents, the results show that most respondents have completed their secondary education. Students majoring in the following Bachelor's Degree specialties: Press Communications, Library and Information Management, Library Studies and Bibliography, Information Resources of Tourism (Table 1.), show the greatest interest in the survey respectively and in the experimental training in the educational and scientific base. Some of the respondents, although active students at ULSIT, do not indicate their current major, but what they have completed before their studies. The answers indicate: International Relations, High School of Natural Sciences and Mathematics, electrical engineering, etc. In four of the questionnaires there is no answer in what major the student is studying.

The project envisages surveying students from the following Master's Degree specialties – Library Collections, Library and Information and Cultural Management, Business and Administrative Information Technologies and Communications, Protection of the Cultural and Historical Heritage in the Republic of Bulgaria, Publishing Business and Electronic Resources, Cultural Tourism, Cultural and Historical Heritage in the Modern Information Environment, Media Information and Advertising, Document and Archive Management, Museum and Art Management, Religious Cultural Heritage, Management and Information in Strategic communications, Chitalishte work, State, Spirituality and Leadership practices, Cultural Policies and Intercultural Relations in Southeast Europe. Because the students from the mentioned master's programs do not have one official e-mails, there are no completed questionnaires from these courses, and we cannot consider their awareness of visual literacy.

Table 1. Profile of the respondents

Specialties	respondent
Library and Information Management	22
Archives and Documentary Studies	2
Library Studies and Bibliography	17
Press Communications	42
Information Resources of Tourism	15
Communications and Information	10
Public Policies and Practices	9

To the question: “Are you a specialist or are you studying in a professional field” the results show 44% are trained in the professional field “3.5 Public Communications and Information Sciences”, 43% are trained in other professional field, 8% Informatics and Computer Science, 5% National Security, and there is no participation from students trained in the professional field “History and archaeology”. In the analysis of the results, the students that indicated the answer “other” are actually students from specialties in the professional field “Public Communications and Information Sciences”, therefore over 85% of the respondents.

Most respondents are female. Regarding the age group in which the respondents fall, from 19 to 30 years – 80 respondents, from 31 to 40 years – 42 respondents, 41 to 50 years – 19 respondents, over 51 – one respondent. Therefore, the highest percentage of students is under the age of 30.

To the question “Have you studied visual arts disciplines?” 81 respondents answered “no”, 42 – “yes”, 18 – “not sure” (Figure 1.)

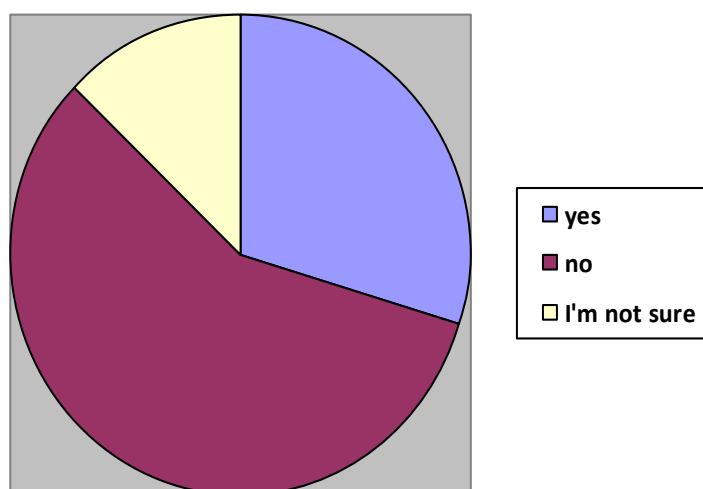


Figure 1. Answers to the question „Have you studied visual arts disciplines?“

Section 2 of the questionnaire, “Awareness” contains questions such as: What knowledge do you need to have in the digital age?, In which areas do you think visual literacy is most needed/applied?, What do you think is visual literacy?, In your opinion, Digital visual literacy is..., How do you create a visual message? What do you think are the visual components that make an impact in a visual message? Do you need to have visual literacy? and others.

The research shows that to the question “What knowledge do you need to have in the digital age?”, the respondents can indicate more than one of the answers – “Basic Literacy” (80 of the respondents), “Digital Literacy” (106), “Information Literacy” (118), “Visual Literacy” (74), “Other” (9). Therefore, young people need a complex of different competencies.

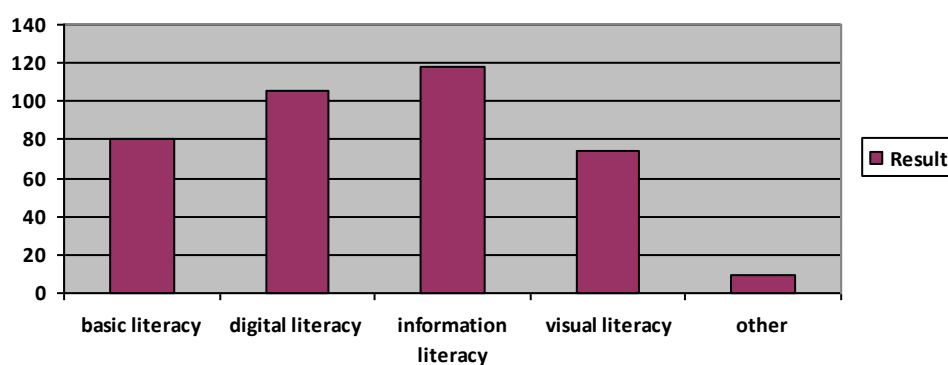


Figure 2. Result to the question „What knowledge do you need to have in the digital age?“

To the question “In which areas do you consider that visual literacy is most needed/applied?” (Figure 3), the possible answers are: in reading and writing, in working with information and communication technologies, in activities related to painting and arts, all the mentioned areas, other. 66 of the students believe that all these areas are needed, 44 people – believe that it is needed when working with information and communication technologies, 40 people – in activities related to painting and arts.

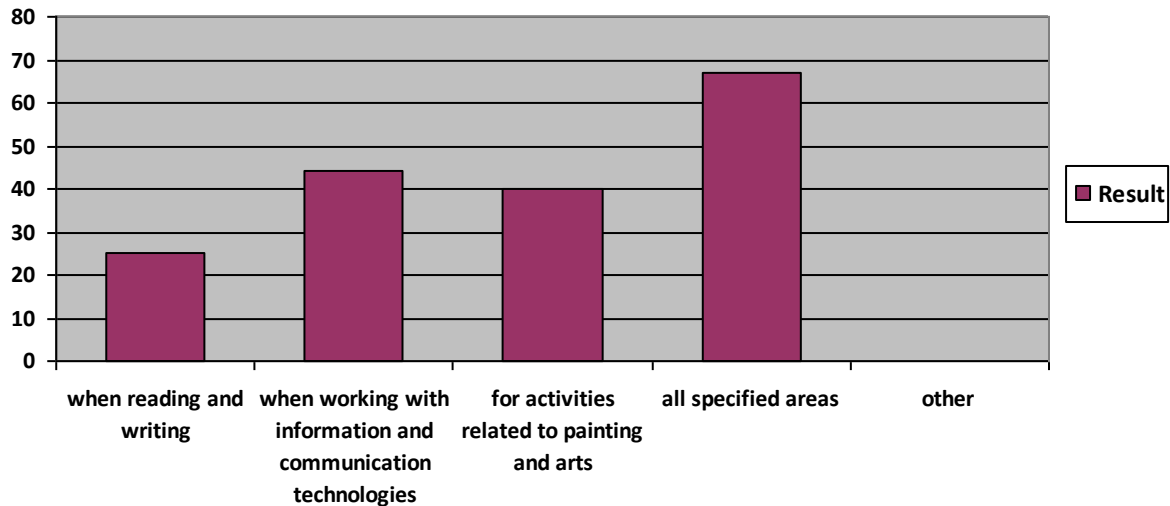


Figure 3. Result to the question „In which areas do you consider that visual literacy is most needed / applied?“

Figure 4 shows what students think about visual literacy. 102 of the students believe that visual literacy is developing their abilities to analyse and use visual materials, such as photographic images, graphic design, or multimedia materials.

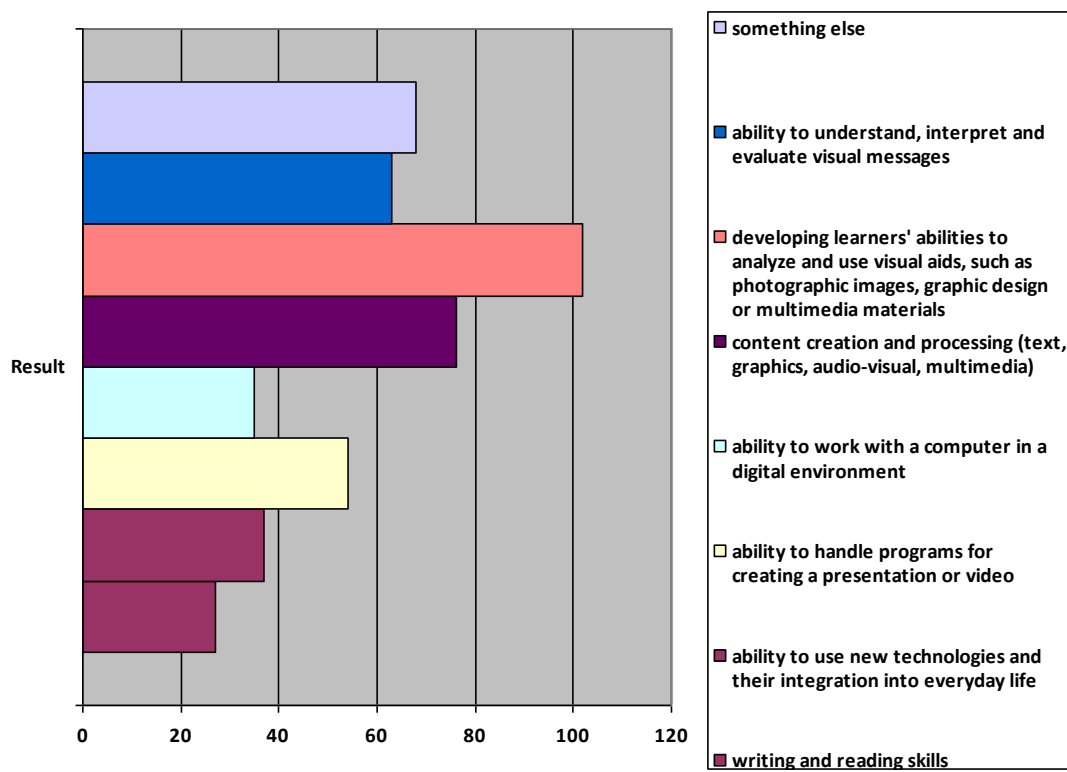


Figure 4. Result to the question „What do you think is the concept of visual literacy?“

There is also a question in the questionnaire, which aims to show what students think about digital visual literacy. The answers are varied and the boundaries less clear (Figure 5).

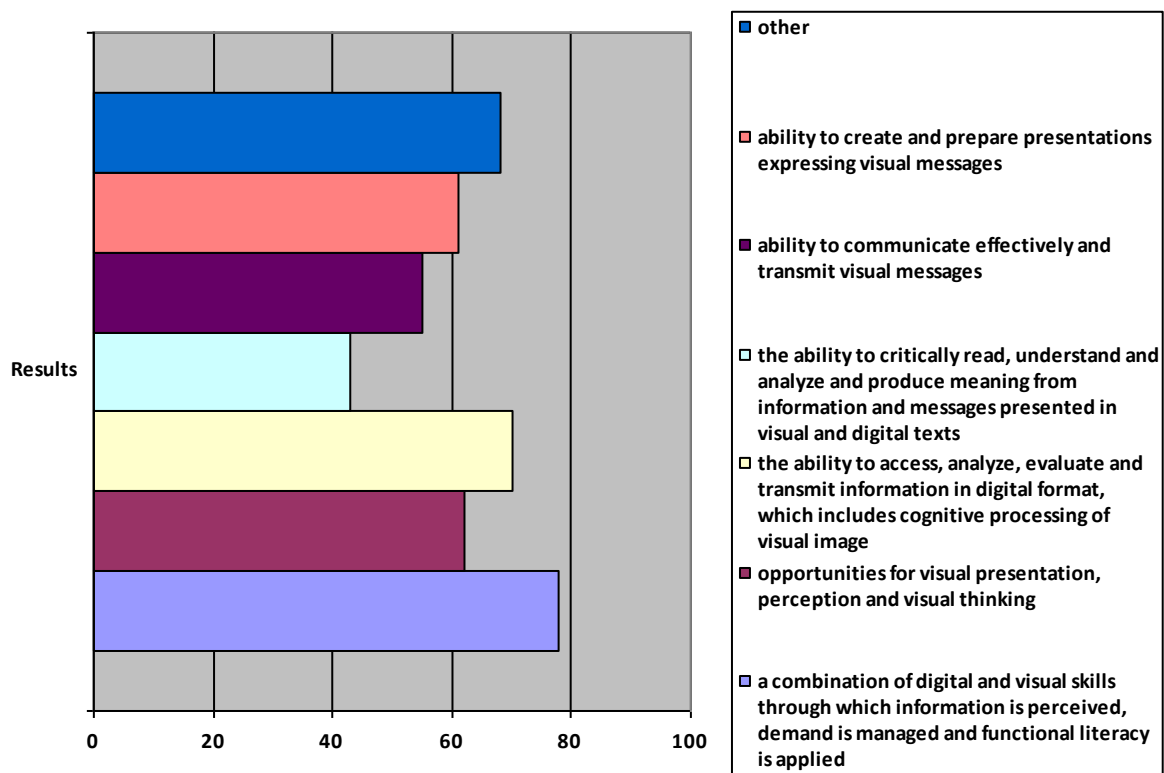


Figure 5. Result to the question „In your opinion, digital visual literacy is...”

To the question “How do you create a visual message?” most students answer that they create visual content through photos, presentations, images, and drawings.

To the question “What do you think are the visual components that make an impact in a visual message?” 43% answer with illustration, diagram, signs, symbols, table, vector or raster image, 31% Fine arts, graphic design, computer graphics and 3D visualization, 26% visible actions, objects and symbols – natural or man-made.

To the question “Do you need to have visual literacy?” 89% say “yes”, 9% “I cannot judge”, 1% “no”, 1% other (“It may be a gift, but also to be mastered to some extent, depends on what area?”)

Another question in the study aims to answer whether disciplines such as art history, semiotics, media and culturology, communication studies, visual ethnography and anthropology and critical theory are related to visual literacy and 77% answered “yes”, 18% “I cannot judge”, 5% “no”, but 3 respondents did not indicate an answer.

Section 3 “Self-assessment of knowledge and skills” includes questions related to how students assess their knowledge of visual literacy, whether they have visual thinking, what is critical and creative thinking.

The results presented in Figure 6. “How do you assess your knowledge of visual literacy?” show that 65% of students think they have some knowledge, and 23% cannot judge.

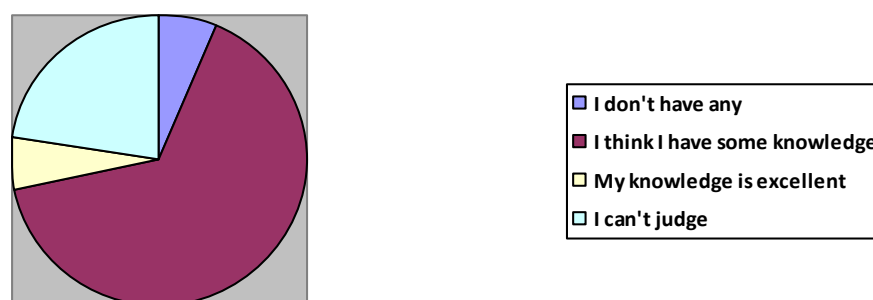


Figure 6. Result to the question „How do you assess your knowledge of visual literacy?”

To the question “Do you have visual thinking” – 56% of respondents think that they apply visual thinking to some extent, 23% think they use their visual thinking, 18% cannot judge whether they have or do not have visual thinking, and 3% say they do not have such one.

The questionnaire contains the question “What do you think is critical thinking and creative thinking” and the respondents had to fill in the table, using the possibilities listed in the subsections. The goal is for students to indicate from the provided possibilities which one is characteristic for critical thinking and which for creative thinking; the results are illustrated in Figure 7. Some of the respondents do not use all possible answers.

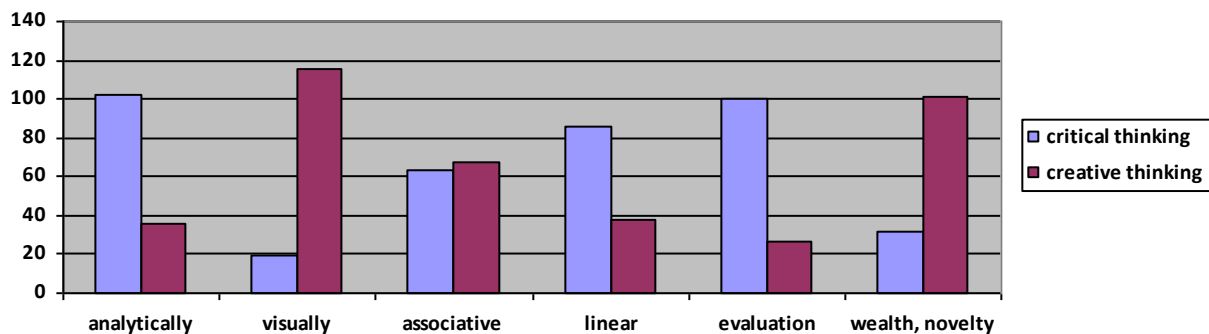


Figure 7. Result to the question „What do you think is critical thinking and creative thinking?“

According to the answers of the respondents critical thinking could be described as analytical, linear, evaluation and creative thinking could be described as visual, associative, wealth, novelty.

Therefore, it can be summarized that many students have judged that critical thinking is analytical, linear, and evaluative. Regarding creative thinking, a high percentage of respondents indicate that it is visual, associative and richness and novelty. It can be said that regarding the concept of “associative” students are not convinced whether it is a characteristic of critical or creative thinking.

In Section 3 of the questionnaire “Self-assessment of knowledge and skills” are shown several images through which we can analyse the visual culture of students.

Students have the task to determine the type of figure (Figure 8.1), according to its shape. Figure 8.2 shows the scale and results. More than 100 respondents said they saw a 3D figure. Two of the respondents did not comment.



Figure 8.1
Question “What is the type of the shown figure, according to its shape?”

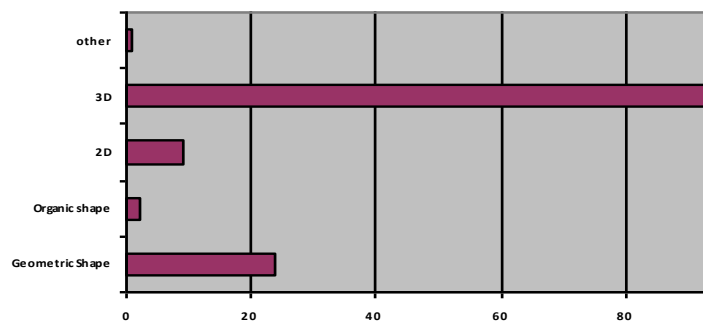


Figure 8.2 Result to the question “What is the type of the shown figure, according to its shape”

In the next question “What is the principle of design in the given visual example” (Figure 9.1) the results are as follows: 61% think that design is contrast, 28% accent, 5% unity, 4% movement, 2% rhythm (fig. 9.2), and four of the respondents did not indicate any of the possibilities. Therefore, it can be concluded that students use and trust their visual literacy and sense. The illustration is an example of contrast in design. There is another question related to the respondent's self-assessment, but with another image (Figure 10.1), the results show (Figure 10.2) that 77% of respondents define the design principle in the figure as “movement”, only five of the respondents did not answer on this question. This indicates that there is visual literacy among the student community.

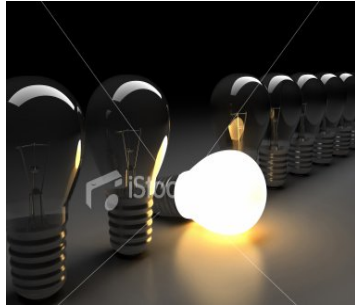


Figure 9.1 Question "What is the design principle in the given visual example?"

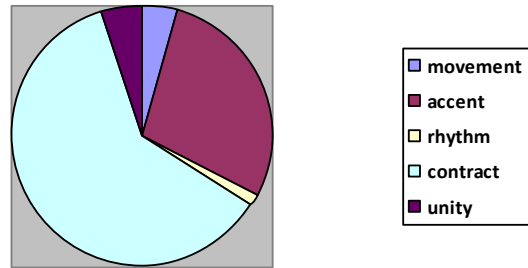


Figure 9.1. Result to the question "What is the design principle in the given visual example?"



Figure 10.1 Question "What is the design principle in the given visual example?"

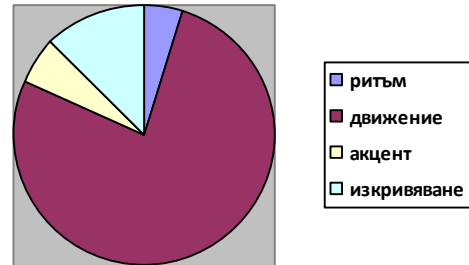


Figure 10.1. Result to the question "What is the design principle in the given visual example?"

The survey included a few more images to test how much students trust their logic after being confronted with a series of questions related to visual literacy.

Figures 11.1, 12.1 and 13.1 include images reminiscent of IQ test questions. From the results (figures 11.2, 12.2 and 13.2) it can be concluded that the students are doing satisfactorily. They have visual literacy and look for logic in giving an answer, but the results are not definite, students are confused. In fact, through these images reminiscent of the IQ test, we show that visual literacy is necessary, because for the correct choice of answer it is necessary to apply visual culture and logical thinking.

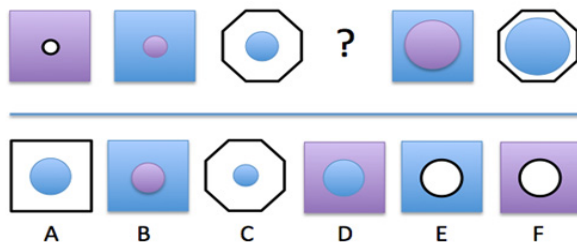


Figure 11.1 Question "Which image should be put in place of the "?"

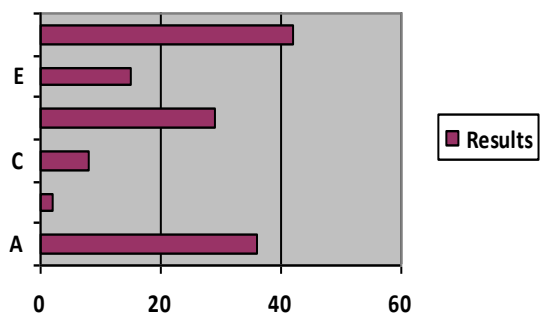
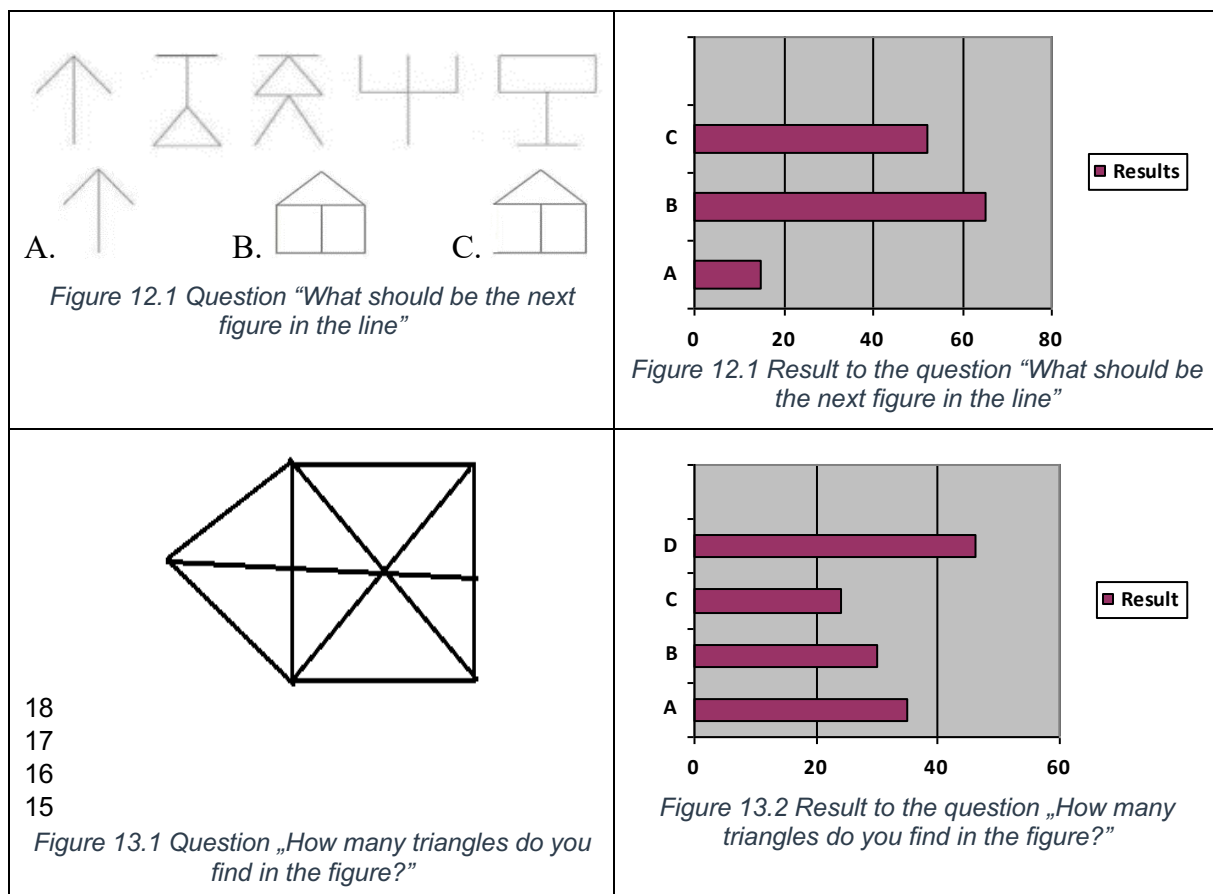


Figure 11.2 Result to the question "Which image should be put in place of the "?"



3.2.1 Conclusions from the survey

As a result of the conducted empirical research the following conclusions can be made:

- Interest in visual literacy from students in the professional field "3.5 Public Communications and Information Sciences" at ULSIT is a fact – 21%.
- The study includes representatives from the specialties: Library and Information Management, Archives and Documentary Studies, Library Studies and Bibliography, Press Communications, Information Resources of Tourism, Communications and Information, Public Policies and Practices. The results of completed surveys of master students in professional field 4.6 are also analysed, which shows the multifaceted application of visual literacy in another professional field.
- The main group of respondents fall into the age category from 19 to 30 years and are female.
- Students in Press Communications have the greatest interest in visual literacy.
- Over 80 students believe that they have not studied a discipline related to the visual arts. In fact, in primary and secondary education there are classes in Fine Arts, during which they study the history of art, painting styles, etc., i.e. they develop their visual competence.
- According to students the information literacy is the basic and most needed skill in the digital age, the second needed skill is the digital literacy, the third place is for the basic literacy and just in fourth place they put the visual literacy.
- According to the students, visual literacy is applicable in reading and writing, in working with information and communication technologies, in activities related to drawing and arts.
- According to students, visual literacy is developing learners' abilities to analyse and use visual materials, such as photographic images, graphic design, or multimedia materials.
- Regarding what digital visual literacy is, the answers are different.

- Students believe that they need visual literacy and disciplines such as art history, semiotics, media and culturology, communication studies, visual ethnography and anthropology and critical theory are related to visual literacy and necessary for education.
- Students are not convinced that they are visually literate and that they apply visual thinking.
- Opinions differ on what is critical and creative thinking, but the answers demonstrate that most students recognize the characteristics of these types of thinking.
- When confronted with IQ test questions, students demonstrate their intelligence and visual literacy.

4 CONCLUSIONS

Interaction between education, innovation, economics, and regional development is the approach that will be used to teach students with creative thinking, which is an essential skill in the 21st century. And creative thinking is a key element in understanding visual materials. Visual literacy gives educators a chance to increase the quality of their teaching and to connect with learners in more interesting way. Creating new habits and additional stimulation for expression and creativity is a step in the development of all types of competencies. The ULSIT's project "Creation and development of educational and scientific facilities for documentary and applied photography as part of the training of students in the professional field "3.5 Public communications and information sciences" covers the educational process in the field of visual literacy. The University of Library Studies and Information Technologies prepares specialists in book publishing, print media, cultural heritage, cultural tourism, library and information managers, archivists, and museum specialists. The range of creative industries in Bulgaria covers the following industries: publishing, software, music, visual arts, performing arts, media, film, photography, advertising, architecture, design, cultural heritage. Therefore, it is important to discover students' understanding of visual literacy as future professionals in the above-mentioned creative industries.

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