

## TRAINING OF ETHNODESIGN SPECIALISTS IN A POSTINDUSTRIAL SOCIETY

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**Abstract:** The aim of this article is to reveal the peculiarities of training specialists in ethnodesign on the application of institutions of higher education of the United States of America, Canada and Japan. It was found that the peculiarities of the training of experts in ethnodesign should be disclosed by identifying the impact of the level of training of students of the future experts in ethnodesign on the employment level of the experts in ethnodesign – former graduates of Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art + Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University.

**Keywords:** Design Education, Higher Education Institutions, Postindustrial Countries, Regression Analysis

### 1 Introduction

Under the influence of the development of science and technology, every nation wants to preserve its cultural heritage. That is why the task of modern institutions of higher education is all-round and effective training of specialists in ethnodesign. Getting a design education for the direction of "Ethnodesign", the future specialists learn the art of creation and dissemination of ethnic style products. In order to preserve cultural values and traditions, institutions of higher education must conduct proper training of students in the field of "Ethnodesign" so that the students as the future specialists in ethnodesign formed design-creative, art and knowledge, information and professional competence.

Training of highly qualified specialists in ethnodesign at institutions of higher education should also be focused on the examination and study of each of the artistic and stylistic trends of ethnodesign, including industrial design, graphic design, environment design, clothing design, etc. Focusing attention on such aspects, relevance of topics of this research is caused by the peculiarities of training of specialists in ethnodesign.

### 2 Literature review

Macías et al. (2020) argue that ethnodesign is a model for the creation of ethnography in the context of including it in the design process. Brueggemann et al. (2017) argue that it is important for the training of ethnodesign practitioners to undergo reflective practices in the context of design education. Chalmers (2019) asserts that ethnodesign is one of the areas of art education. Müller (2020), examining the peculiarities of ethnography of design from the point of view of epistemology and methodology, states that ethnodesign is a process of combining reflections on creative art. Kornytka (2020), examining the peculiarities of ethnomystical education, notes that students, as the future specialists in ethnomystical design and art education, form an art and professional competences in the process of education. The combination of modern and innovative teaching methods and traditional art education has a special influence on the formation of such competences. Kukhta et al. (2015) argue that ethnodesign is the basis for the formation of a tolerant attitude to other traditions and cultures. Barab et al. (2004) argue that ethnodesign education should include collaborative project work. Mohedas et al. (2014) argue that ethnodesign is one of the key components of design and is focused on the individual, her desires and needs. Diachenko et al. (2021), examining the peculiarities of professional training of students, as the future specialists in ethnodesign, state that, acquiring higher education, students acquire new knowledge in the fields of philosophy, history of ethnos, applied art and

ethnoculture. Buchkivska et al. (2020) have argued that ethnodesign plays an important role in the formation and development of ethnoculture.

Miyata et al. (2017) argue that design students should take an educational course based on innovative design, which is aimed at the development of creativity in such students as future design practitioners. Sudarmin et al. (2019) argue that the training of design practitioners should be based on the implementation of a model of design education in the teaching process. This model should be integrated into the relationship between the approach of using technology and the approach of using mathematics in teaching ethnology as design education. Kapaniaris et al. (2019) argue that the acquisition of new knowledge by ethnodesign practitioners can also be achieved by taking online training programs in folklore and ethnography.

Chyrchuk (2017) examines the methodological and organizational aspects of the training of teachers of graphic design and argues that the students, as the future specialists in graphic design, should form a cognitive interest to learning with the use of innovative methods of teaching on this basis. Cranz et al. (2014) state that in order to prepare students as future specialists in ethnodesign, especially in the field of architecture, semantic ethnography should be included in the educational process.

Thanks to the study of this discipline, the students, as future specialists in ethnodesign, will be able to distinguish the peculiarities of human behavior and their cultural values. Malpe (2020) argues that during the training of experts in ethnodesign special attention should be paid to the specifics of the design of ethnographic methods. Thanks to this, the specialists in ethnodesign will be able to better understand the ideas and desires of their future clients (for example, the design of ethnographic methods plays a special role in the sphere of environment design and graphic design). Rapp (2020) points out that while pursuing design education, students, as future specialists in ethnodesign, should be able to combine elements of ethnodesign with the development of new design projects. Noel (2020), reviewing the peculiarities of universal design education, states that the training of design craft is often the most popular in countries with a strong industrial-oriented economy. Bud et al. (2017) argue that the industrial design curriculum should be continuously introduced with new technologies. At the same time, Cezzar (2020) states that the educational process of the disciplines "Graphic and Communicative Design as Varieties of Ethnodesign" should also include the use of modern and innovative teaching methods in order to raise the level of knowledge of students as future specialists in graphic and communicative design.

Thus, based on the review of problematic aspects of ethnodesign we can say that the problem of training of specialists in ethnodesign from the practical approach is not fully solved. The aim of this article is to reveal the peculiarities of training of experts in ethnodesign based on higher education institutions of the United States of America, Canada, and Japan.

In the course of achieving the research aim, it is necessary to solve the following tasks

- to present the institutions of higher education of the United States of America, Canada, Japan, which carry out the training of students – prospective specialists in ethnodesign;
- to disclose the areas of training for students, who are graduates of the Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art and Design, Ryerson University, Simon Fraser University, Seian University of Art and Design, and Musashino University of Art;

- to detect the impact of the training level of students, who are aspiring ethnodesign practitioners at Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art and Design, Ryerson University, and Simon Fraser University, Seian University of Art and Design and Musashino Art University to the employment rate of ethnodesign practitioners – former graduates of Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art and Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University.

### 3 Materials and methods

In the article a number of research methods were used, in particular: 1) methods of theoretical analysis, synthesis, abstraction, observation and description – to reveal theoretical aspects of formation and development of ethnodesign as an educational field; 2) methods of system analysis and comparisons – to present the peculiarities of the training of students – graduates in ethnodesign, in institutions of higher education of the United States of America, Canada and Japan; 3) methods of measuring, regression analysis and consolidation – to determine the impact of the level of training of students – graduates of ethnodesign, in institutions of higher education of the United States, Canada and Japan on the employment rate of graduates of higher education institutions in the United States, Canada, and Japan. The study, which is based on the features of the training of specialists in ethnodesign, was conducted on the application of higher education institutions of the United States of America, Canada and Japan because the United States, Canada and Japan are one of the leading postindustrial countries in the world.

The informational basis of the study consists of:

- QS World University Rankings by Subject: Art & Design (Quacquarelli Symonds, 2021);
- part of the students who are receiving design education at the Parsons School of Design at The New School (Parsons School of Design at The New School, 2021), Rhode Island School of Design (RISD) (Rhode Island School of Design (RISD), 2021), School of the Art Institute of Chicago (School of the Art Institute of Chicago, 2021), Art Center

College of Design (Art Center College of Design, 2021), Emily Carr University of Art + Design (Emily Carr University of Art + Design, 2021), Ryerson University (Ryerson University, 2021), Simon Fraser University (Simon Fraser University, 2021), Seian University of Art and Design (Seian University of Art and Design, 2021) and Musashino Art University (Musashino Art University, 2021).

- part of the employment of students who have received design education – former graduates of Parsons School of Design at The New School (Parsons School of Design at The New School, 2021), Rhode Island School of Design (RISD) (Rhode Island School of Design (RISD), 2021), School of the Art Institute of Chicago (School of the Art Institute of Chicago, 2021), Art Center College of Design (Art Center College of Design, 2021), Emily Carr University of Art + Design (Emily Carr University of Art + Design, 2021), Ryerson University (Ryerson University, 2021), Simon Fraser University (Simon Fraser University, 2021), Seian University of Art and Design (Seian University of Art and Design, 2021) and Musashino Art University (Musashino Art University, 2021).

### 4 Results

To identify the institutions of higher education in the United States and Canada for which this study was conducted, we use data from QS World University Rankings by Subject: Art & Design (Quacquarelli Symonds, 2021). Thus, focusing on the QS World University Rankings by Subject: Art & Design for 2021 established that our research is based on such institutions of higher education of the United States as Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art + Design, Ryerson University, Simon Fraser University and Canadian institutions of higher education such as Emily Carr University of Art + Design, Ryerson University and Simon Fraser University. The influence of the level of training of students – future experts in ethnodesign on the level of experts' employment in ethnodesign in Japan will be determined on the application of Seian University of Art and Design and Musashino Art University. In the course of the research, we will identify the areas of training of students – future specialists in ethnodesign at the institutions of higher education of the United States of America, Canada, and Japan (Table 1).

Table 1: Areas of student's training – the future specialists in ethnodesign at Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art + Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University

High education institution	Areas of training for students
United States of America	
Parsons School of Design at The New School	This high education institution trains students in Architectural Design, Communication Design, Fashion Design, Interior Design, Design History and Practice, Industrial Design
Rhode Island School of Design (RISD)	This high education institution provides training in "Apparel Design", "Industrial Design", and "Graphic Design".
School of the Art Institute of Chicago	This high education institution provides training of students in "Fashion Designing".
Art Center College of Design	This high school trains students in "Graphic Design".
Canada	
Emily Carr University of Art + Design	This high education institution is training students in Integrated Design, Industrial Design
Ryerson University	This high education institution is training students in "Interior Design".
Simon Fraser University	This high school is training students in interior design.
Japan	
Seian University of Art and Design	This high school is training students in Graphic Design, Costume Design
Musashino Art University	This high education institution trains students in "Industrial, Interior and Craft Design".

In view of the lack of information about the number of students who are studying design education (to express the level of training of students – future experts in ethnodesign) and the number of students, who have received design education – former graduates (which is an indication of the employment rate

of design professionals – former graduates) of the Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art +

Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University. These institutions of higher education were officially requested

to provide this information, as it is not confidential. Having obtained the information we need, we will present it in Table 2.

Table 2: Input data for the impact of the training level of students who are graduates of the Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art + Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University on the level of employment of the graduates of Parsons School of Design at The New School, Rhode Island School of Design (RISD), School of the Art Institute of Chicago, Art Center College of Design, Emily Carr University of Art + Design, Ryerson University, Simon Fraser University, Seian University of Art and Design and Musashino Art University

High education institution	Years / Indicators									
	2015		2016		2017		2019		2020	
	P <sub>1</sub>	P <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>
Parsons School of Design at The New School	28,5	24,1	27,6	23,9	29,4	25,1	30,2	26,5	31,1	26,4
Rhode Island School of Design (RISD)	15,4	14,5	15,2	14,9	15,1	14,9	14,9	14,4	15,3	14,8
School of the Art Institute of Chicago	8,4	8,1	8,5	7,9	8,1	7,8	8,4	7,6	8,9	7,7
Art Center College of Design	7,1	6,8	7,5	6,9	8,1	7,5	7,9	7,6	7,9	7,4
Emily Carr University of Art + Design	13,2	12,8	13,8	12,7	13,5	12,5	13,6	12,8	14,0	13,1
Ryerson University	9,5	9,1	8,9	8,4	9,1	8,5	9,2	8,4	9,1	8,7
Simon Fraser University	13,1	12,5	13,5	12,7	13,4	13,0	13,8	13,5	14,1	13,7
Seian University of Art and Design	16,2	15,4	16,4	15,4	16,8	15,7	16,7	16,4	16,9	16,5
Musashino Art University	19,2	18,7	19,4	18,8	19,7	19,1	19,6	19,1	19,8	19,2

Definition:

P<sub>1</sub> – the share of students who acquire design education out of the total number of students of this educational institution, %.

P<sub>2</sub> – the number of students who received design education – former graduates of higher education institutions, %.

The results of the regression analysis allow us to note that the variation in the proportion of students who have received design education – the former students who have received design education. The results of the regression analysis (appendix 1 – 11) allow us to state that the variation in the number of design students – former graduates of the surveyed higher education institutions is due to the variation in the number of students at the Parsons School of Design at The New School – by 89.83%, the Rhode Island School of Design (RISD) – by 4.91%, the School of the Art Institute of Chicago – by 4.30% and the Art Center College of Design – by 85.64%. This data points to the fact that only two institutions of higher education we surveyed in the United States, i.e. at Parsons School of Design at The New School and Art Center College of Design the level of training of students – future specialists in ethnodesign significantly influences the level of specialists employment in ethnodesign – former graduates of these institutions.

As for the results of the regression analysis of Canada's institutions of higher education, the variation in the number of design students – former graduates of the institutions of higher education surveyed is due to the variation in the number of students at Emily Carr University of Art + Design by 25.18%, Ryerson University by 68.54%, and Simon Fraser University by 88.38%. The findings indicate that only Simon Fraser University has a significant impact on the employment rate of the students who will become ethnodesign professionals, the former graduates of this institution.

Emphasizing the results of the regression analysis of higher education institutions in Japan, it should be noted that the variation in the share of students who received design education – former graduates of the studied higher education institutions is due to variation in the share of students receiving design education from the total number of students at Seian University of Art and Design – by 61.51%, and at Musashino Art University – by 95.41%. Summing up the regression analysis in Japan it should be noted that only at Musashino Art University the level of training of students – future specialists in ethnic design significantly affects the level of employment of specialists in ethnic design – former graduates of this institution.

## 5 Discussion

Revealing the peculiarities of training specialists in ethnic design, we note that this issue is quite relevant in the research of many scholars. Namely Macías et al. (2020), Chalmers (2019), Müller (2020), Kornyska (2020), Kukhta et al. (2015), Barab et al. (2004), Mohedas et al. (2014) in the context of research note that ethnodesign as an educational direction is and at the same time affects: model of ethnography reproduction, development of reflective practice, key art, creative art, development of artistic and professional competencies, formation of tolerance in others other cultures and traditions, development of joint project work, orientation on the person.

Applicants in design education in the field of ethnodesign develop and update knowledge of philosophy, history of ethnos, ethnoculture, applied arts, ethnoculture, ethnography, folklore (Diachenko et al. (2021), Buchkivska et al. (2020), Kapaniaris et al. (2019)). We strongly agree with the results obtained by other scholars, but note that the disclosure of the peculiarities of training ethnodesign should be based on identifying the impact between the level of training students – future ethnodesign professionals and the level of employment of ethnodesign professionals – former students.

Because of our hypothesis about the influence of the level of training of students – future specialists in ethnic design on the level of employment of specialists in ethnic design – former students, we conducted a regression analysis on the example of higher education institutions in three postindustrial countries – USA, Canada and Japan. The results of the regression analysis showed that in two of the four higher education institutions in the United States, i.e. the Parsons School of Design at The New School and the Art Center College of Design, one of the three Canadian higher education institutions, i.e. Simon Fraser University and in one of the two higher education institutions in Japan, i.e. in Musashino Art University, the level of training of students – future ethno-design specialists significantly affects the level of employment of ethno-design specialists – former graduates of these educational institutions, as the variation of students of the studied higher education institutions is due to the variation of the share of students who receive design education

from the total number of students in these institutions by 89.83%, 85.64%, 88.38% and 95.41%, respectively.

## 6 Conclusion

It was found that the peculiarities of training of experts in ethnodesign should be carried out on the application of such three post-industrial countries as the United States of America, Canada and Japan in the context of determining the impact of the level of training of the students of the future graduates of higher education institutions of these countries on the level of employment of the graduates. It has been established that higher education institutions in the United States, Canada and Japan generally carry out the training of specialists in ethnic design effectively. This conclusion was made based on the regression analysis, which revealed the impact of the level of training of students – future specialists in ethnodesign, receiving design education at Parsons School of Design at The New School, Art Center College of Design, Simon Fraser University and Musashino Art University at the level of employment of specialists in ethnic design – former students of these institutions of higher education.

The practical significance of the results obtained by us in the study is that this approach to identifying the impact of student training on employment after design education is of universal importance, as it will be implemented in the context of disclosing training features of other specialties. The prospects for further exploration are to reveal the features of the training of specialists in ethnic design in the countries of the European Union.

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## Primary Paper Section: A

## Secondary Paper Section: AM