

Evaluation of Professional Handicrafts Competencies in the Current Situation of Iranian Undergraduate Education¹

Hossein Norouzi Gharagheshlagh^a, Iman Zakariaee Kermani^b, Amadreza Nasr Esfahani^c

^a PhD in Art Research, Art University of Isfahan, Isfahan, Iran.

h.norouzi@au.ac.ir

^b Assistant professor, Art University of Isfahan, Isfahan, Iran. Corresponding author

i.zakariaee@au.ac.ir

^c Professor, Department of Educational Sciences, University of Esfahan, Isfahan, Iran.

Arnasr@edu.ui.ac.ir

Abstract

The present study is conducted to evaluate the professional competencies of handicrafts obtained from a qualitative study in the current situation of this field. In other words, this study is about evaluating the use of each of these competencies in the undergraduate education of this field and from the perspective of senior students. The research question is that to what extent the competencies of handicraft professionals have been considered in the undergraduate curriculum. The exploratory mixed research method has been used to achieve this purpose. Among 15 professional competencies, professional abilities and aesthetics were considered in the curriculum of this field according to results. . Therefore, to achieve the goals of efficient higher education, Iranian handicrafts are required to reconsider the issue of professional competencies in this field.

Keywords: Handicrafts, undergraduate course, professional competence, evaluation.

Introduction

The concept of competence has been more supported where knowledge and skills are equated with other characteristics (attitude, habit, behavior, personality, and ability), based on the consensus of experiences and opinions (Hedayati, 2016, 28). Competency is the context of the action that enables a person to use its components (knowledge, skills, and attitudes) for effective application in the action, which is relevant to his or her profession. (Kane 1992, quoting, Jame Bozorg, 2012, 18). Having a specialized field in explaining, defining, and applying competency is the boundary between understanding competence and professional competence. To distinguish competencies from other disciplines, the conditions are created when competencies are applied in a specialty and professional context. In other words, in each profession, quality and competence have their definition that distinguishes that profession from another and form its nature (Mahdavi Hazaveh et al., 2016: 24; Kenzhebekov, 2004: 178).

¹ This article is extracted from “ Hossein Norouzi Gharagheshlagh”’s Ph.D. dissertation thesis entitled “Identifying and Evaluating the Professional Competencies of Bachelor of Handicrafts Graduates in the Iranian Higher Education System” which is in progress under supervision of Dr. “Iman Zakariaee Kermani” and advisement of Dr. “Amadreza Nasr Esfahani” at Art University of Isfahan in 2021.

In Iranian society, handicrafts are considered culturally and then economically important. With the changes resulting from the growth of technology, these attitudes towards handicrafts require that the tasks and capacities of this field be examined against new developments and needs. Handicrafts have become a creative economy and a new pattern for manufacturers and other professionals in the age of constant change. This art industry is developing in response to the world around it. It responds to economic, cultural, technological, and social change while maintaining its main values and purpose. (Burns et al, 2012: 2). Creating appropriate conditions and structure to acquire knowledge, skills, and attitudes is one of the final and emphasized goals of higher education that are provided in the form of competencies for learners of different disciplines (Mohammadi et al., 2012: 84). To cover many professional competencies in art education, facing art with a wide range of fields, including society, culture, politics, beauty, application, etc., requires some conditions. It is necessary to conduct extensive research on them and by the changing conditions in each society (Haanstra, 2013). More professional development is achieved through formal education opportunities according to Yair (2011). To make progress in the field of handicrafts, the application of technical and theoretical skills and knowledge originate from higher education (Burns, Gibbon, Rosemberg & Yair, and 2012: 2). To develop properly, it is necessary to examine and evaluate a set of professional competencies required by graduates of this field and it should be presented as a solution in the development of handicrafts. The qualifications of handicraft professionals were obtained through interviews with experts in this field in Iranian higher education according to a study conducted by the authors of the present article. The present article is about evaluating the acquired professional competencies in the current conditions of higher education in this field. This study is to examine the extent that these competencies are used in current education from the perspective of senior students in this field in various Iranian universities. The research question is also asked to what extent the competencies of handicraft professionals have been considered in the undergraduate curriculum?

Method:

The present study is a combination of descriptive mixed methods. In this model, the more and main weight is allocated to quantitative data, but to explain the different dimensions of the phenomenon, qualitative data is used. To further reveal and explain the phenomenon and remove some ambiguities, qualitative data is used. In the first part of the research, professional competencies in the current situation of handicraft undergraduate education have been evaluated by using the survey method and a researcher-made questionnaire based on the five-point Likert scale. Data analysis was performed using descriptive and inferential statistics and a one-sample t-test. Kolmogorov-Smirnov test was used to determine whether the indicators were normal or abnormal. The professional competencies evaluated in this study are the result of a qualitative study using thematic analysis, as mentioned. The evaluated model is the result of the expert's views (24 faculty members of handicrafts in Iranian universities) who have been tactfully selected. Then, some indicators have been applied to the approved curriculum in this field using the content analysis method in the second step of the research. In other words, the number of indicators was evaluated and adapted in the curriculum approved in 1987 in this field, which was considered according to the current situation of the undergraduate course in handicrafts. The senior students of handicrafts in Tehran, Al-Zahra, Sooreh Tehran, Isfahan Art, Mazandaran, Semnan, Kashan, Bojnourd, and Birjand universities were the statistical population of the study who were randomly selected.

The process of achieving professional skills in handicrafts:

The professional competencies obtained in the 15 main indicators are the result of their interviews and thematic analysis. In the analysis process, the text-cutting method was used. Sentences that semantically expressed a theme were extracted from different parts of the interviews after careful and coherent study of the text of the interviews. At this stage, 639 codes were obtained. They reached 130 codes after refinement. Primary themes are categorized according to semantic similarities, common concepts in activities, events, or phenomena. They shape a set of codes in the form of "sub-themes or

competency components”. In each section, these categories led to the discovery of the most important concepts and ideas, which are the "main themes or dimensions of competence." The most final and abstract part of the interview analysis are the main themes. The choice of words for the formation of main themes is based on the conceptual analysis of each of the categories of sub-themes. The main themes are a very short conceptual summary of the sentences considered in each of the sub-themes. The operations of combining, deleting, and modifying the primary themes are performed in conceptual networking and the formation of sub-themes. The number of sub-topics reached 91 codes after completing this step and finally, 15 professional competencies (main topics) were obtained. Max Kyoda software is used to analyze interviews. Figure 1 shows the professional competencies of handicrafts in 15 main indicators in three areas of knowledge, skills, and attitude.

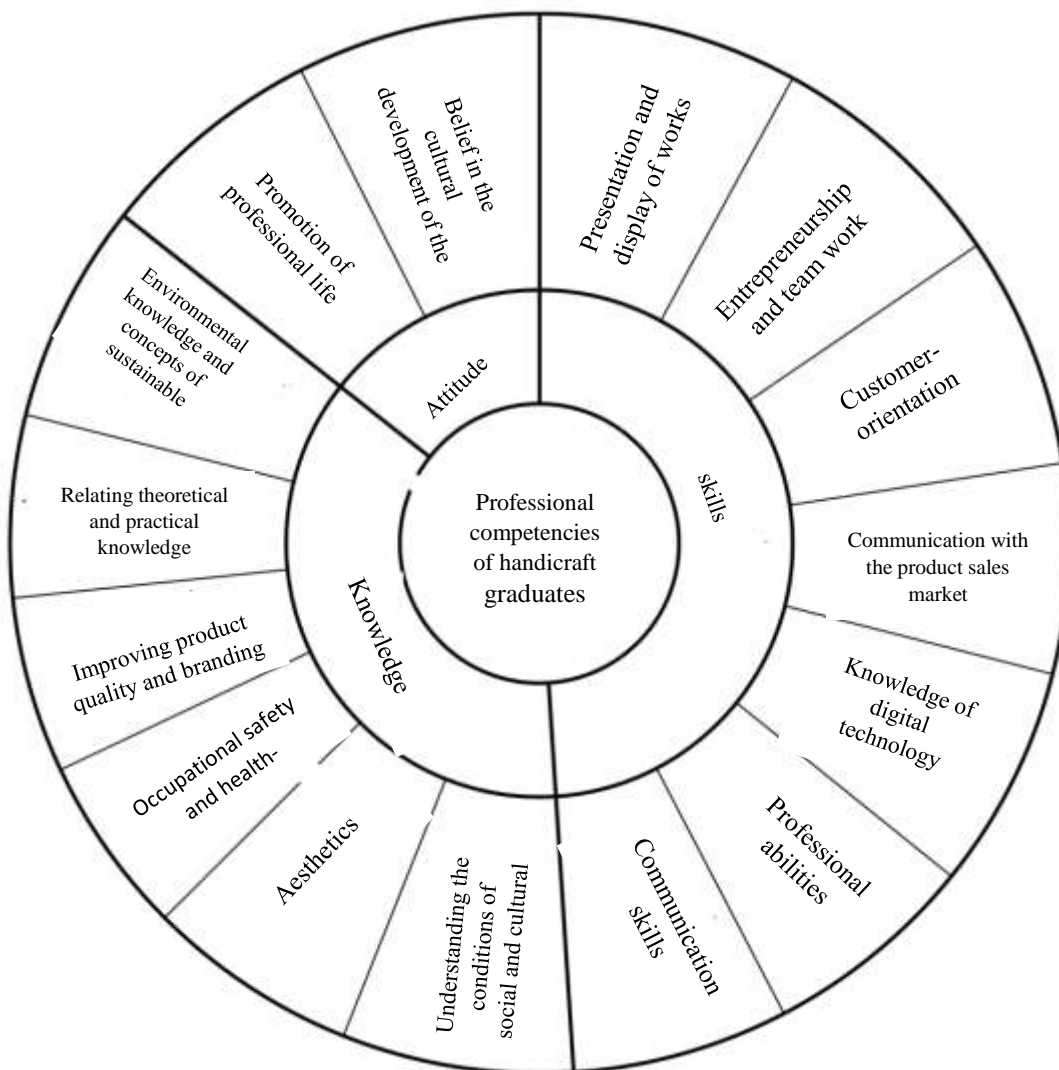


Figure1: Professional competencies required by handicraft graduates. (Source: Authors)

Research Findings:

Demographic findings, descriptive and inferential statistics:

According to Table 1, 140 students were studied that men with 41.4% and women with 58.6% formed the sample size. Women have the largest sample size.

Table 1: Distribution of percentage and frequency of participants in the questionnaire by gender

Gender	Abundance	Percent
Man	48	34.3
Female	92	65.7
Total	140	100.0

Table 2: Distribution of percentage and frequency of participants in the questionnaire according to the university

University of study	Abundance	Percent
Tehran Art	14	10.00
Al-zahra	16	11.42
Soreh of Tehran	16	11.42
Isfahan Art	14	10.00
Mazandaran	17	12.14
Semnan	16	11.42
Kashan	15	10.71
Bojnord	17	12.14
Birjand	15	10.71
Total	140	100

Table 3: Descriptive statistics of the main variables (professional competencies)

Main variables	Number	Average	Standard deviation	The least	The most
Aesthetics	140	3.82	0.452	3.00	4.86
Professional abilities	140	3.21	0.472	2.25	3.50
Communicating theoretical and practical knowledge	140	1.69	0.644	1.00	4.50
Communication skills	140	2.50	0.498	2.17	3.30
Communication with the market and product sales	140	2.43	0.557	1.57	3.29
How to communicate with the customer and customer response literature	140	2.10	0.368	2.57	3.29
Improving product quality and branding	140	2.07	0.327	1.30	3.35
Entrepreneurship and teamwork	140	1.63	0.425	1.00	3.25

Evaluation of Professional Handicrafts Competencies in the Current Situation of Iranian Undergraduate Education

Presentation and display of works	140	1.27	0.389	1.00	3.60
Environmental knowledge and concepts of sustainable development	140	2.12	0.644	1.00	3.10
Belief in the cultural development of the country and society by the art of their industry	140	1.82	0.641	1.00	3.60
Awareness of digital technology	140	2.24	0.640	1.00	3.67
Improving professional life	140	2.69	0.475	1.91	3.13
Understanding the conditions of the social and cultural day	140	2.42	0.394	1.52	3.20
Occupational safety and health	140	2.24	0.767	1.00	3.50

According to the information in the table, among the main indicators, the index of aesthetics and professional abilities have the highest average with an average of 3.98 and 3.05, respectively.

Table 4: Kolmogorov-Smirnov test results (inferential statistics)

Variable name	Number	Test statistics	Significance level
Promoting professional life	140	1.65	0.008
Understanding the conditions of the social and cultural day	140	1.19	0.117
Environmental knowledge and concepts of sustainable development	140	1.30	0.066
Communication skills	140	1.76	0.004
Communication with the market and product sales	140	1.05	0.217
customer orientation	140	1.56	0.015
Improving product quality and branding	140	0.989	0.282
Entrepreneurship and teamwork	140	1.56	0.015
Presentation and display of works	140	2.87	0.001
Communicating theoretical and practical knowledge	140	2.05	0.001
Belief in the cultural development of the country	140	1.40	0.038
Awareness of digital technology	140	0.966	0.309

Aesthetics	140	1.34	0.053
Professional abilities	140	2.36	0.001
Occupational safety and health	140	1.67	0.007

In the Kolmogorov-Smirnov test, the hypotheses are defined as follows:

$[H0: \text{Observations follow the normal distribution}]$

$[H1: \text{Observations do not follow the normal distribution}]$

Therefore, the hypothesis of normality of observations (hypothesis zero) is not rejected, considering that the significance level of the test in all variables is more than 0.05. As a result, to examine the indicators, the parametric test is used.

Table 5: Results of one-sample t-test to evaluate the status of professional competencies in handicrafts

Variable name	Average difference	Community average = 3		95 %Confidence interval	
		Test statistics t	Significance level	Lower bound	upper bound
Promoting professional life	0.985	25.77	0.059	0.910	1.06
Understanding the conditions of the social and cultural day	0.550	13.78	0.061	0.471	0.628
Environmental knowledge and concepts of sustainable development	0.840	22.18	0.085	0.765	0.915
Communication skills	0.509	12.09	0.073	0.426	0.592
Communication with the market and product sales	0.220	4.68	0.080	.0127	0.313
customer orientation	0.538	17.30	0.089	0.477	0.600
Improving product quality and branding	0.083	2.90	0.074	0.025	0.135
Entrepreneurship and teamwork	0.366	7.87	0.061	0.032	1.29
Presentation and display of works	0.928	2.46	0.068	0.793	1.66
Communicating theoretical and practical knowledge	0.308	4.03	0.051	0.416	1.20

Evaluation of Professional Handicrafts Competencies in the Current Situation of Iranian Undergraduate Education

Belief in the cultural development of the country	0.172	2.64	0.062	0.280	1.06
Awareness of digital technology	0.759	2.03	0.071	0.086	0.652
Aesthetics	0.078	2.95	0.001	0.018	0.300
Professional abilities	0.218	6.54	0.001	0.152	0.284
Occupational safety and health	0.240	3.70	0.075	0.111	0.638

The average indicators were compared with the average of the community, which is equal to 3 in examining the status of professional competencies. The results show that: Aesthetic competencies and professional abilities are significant at the level of 0.001. Both indicators have been considered in the current situation of handicraft education according to comparing the average difference with the average difference of zero society. The other 13 cases have not been considered in the current situation.

Professional competencies in the handicraft curriculum:

The compilation and approval of the undergraduate curriculum in the field of handicrafts in 1987 are the most important developments that have taken place in higher education. . This decree has been compiled in the art group to revive, strengthen and guide Islamic art, culture, and ethics in the field of Iranian handicrafts. It also wants to maintain the continuity of traditional Iranian arts (Kafili, 2015, 178). The important point in this regard is the current activity of this curriculum in Iranian universities. Therefore, it is very important to conduct a well-researched study related to the approach of this field and the required competencies and to review its curriculum. “Emphasis on the historical knowledge of Iranian Islamic art and culture and technical skills in most handicrafts” is what can be identified from the objectives of this field and the overall curriculum about competencies. It has a comprehensive view of educating experts in this field. In other words, it is very important to pay attention to the “cultural approach and preservation of traditions”. Furthermore, the view of Iranian handicraft's higher education continues to emphasize the development of technical and artistic skills, which covers most of the arts in the field of handicrafts. The lack of competencies and abilities is quite clear which is appropriate to the current situation and concerning the development of handicrafts from a social, economic, and entrepreneurial perspective.

Table 6: Professional competencies of the Iranian handicrafts undergraduate course in three components of knowledge, skills, and attitude. References: Authors, based on the analysis of general characteristics, curriculum, and titles of undergraduate courses in handicrafts, 1987.

Knowledge component	Skills component	Attitudinal component
---------------------	------------------	-----------------------

<p>Culture, civilization, and works of art of Islamic lands / History of art in different cultures / Recognition of traditional Iranian arts / Recognition of different motifs in handicrafts / Knowledge of design and its relation to the human body and soul / Recognition of objects in Islamic civilization / Recognition of traditional materials in handicrafts / Evolution of handicrafts in other countries / Recognition of contemporary art disciplines / Wisdom and beauty in Islamic art.</p>	<p>Relative technical skills in most industrial arts / Skills of understanding visual elements / Skills of drawing / Photography Skills / Skills in drawing ideas from nature / Skills in drawing traditional designs / Skills in researching arts, artists and methods of making arts in the past / Skills in presenting research / Skills in recognizing and applying materials and tools / Skills in repairing and maintaining works of art /</p>	<p>Preservation and expansion of cultural knowledge and traditional arts of Iran. Respecting tradition and preserving traditional production methods. Understand the general spirit of traditional arts. Understanding the place of handicrafts in today's life and promoting it.</p>
--	--	---

Discussion and conclusion:

The results showed that except aesthetics and professional abilities, all the extracted competencies were not considered in the current situation of handicraft education. The need to pay more attention to the handicraft curriculum and the implementation of the indicators obtained in higher education in this field is focused on in this result. Many of the components of aesthetic competencies and professional competencies are taught in different courses in this field according to the analysis of the undergraduate handicraft curriculum (Table 6). Therefore, it is predictable to reach such a conclusion regarding the assessment of the current situation. The components obtained in aesthetic competence include aspects of recognizing the concepts and topics of beauty in traditional art, general knowledge of traditional arts, importance to tradition, and a curiosity about how art is made in the past. It seems that all the presented issues can be seen in the courses and objectives of this field. Knowledge components such as culture, civilization, and works of art of Islamic lands, knowledge of traditional Iranian arts, wisdom, and beauty in Islamic art refer to topics and goals that are included in the aesthetic index according to the analysis obtained from the Iranian handicrafts curriculum (Table 6). In addition, components in the skills section such as relative technical skills in most industrial arts, research skills in arts, artists, and methods of making arts in the past also refer to components extracted from the aesthetic index. All the cases that have been discussed in the section on attitude components express the concepts that have been obtained in the aesthetic index. The result of the survey and what was obtained from the analysis of the curriculum of this field generally shows the accuracy of the fact that the aesthetic index has been considered in the curriculum of this field. Table 7 shows the components of aesthetics in the current curriculum of this field and the components identified in the aesthetics index.

Table 7: Relationship between aesthetic components in the handicraft curriculum and the index identified in the research

Aesthetics related components in the handicraft curriculum according to Table 6	Identified components of the aesthetic index
<p>Recognition of traditional Iranian arts Recognition of the design of objects in Islamic civilization</p>	<p>Recognize aesthetic topics Awareness of the criteria of beauty in traditional art</p>

Wisdom and beauty in Islamic art. Relative technical skills in most industrial arts Research skills in the arts, artists, and methods of making art in the past Preservation and expansion of cultural knowledge and traditional arts of Iran. Respecting tradition and preserving traditional production methods. Understand the general spirit of traditional arts. Understand the place of handicrafts in today's life and promote it	General knowledge of traditional arts and their structural study Respecting tradition and synchronizing it with the tastes of the day Recognizing the tastes of society and creativity in the path of community culture Having a spirit of problem-solving and curiosity in the construction methods and concepts of past art
--	--

The second indicator that has been considered in the current situation was Professional abilities. A set of knowledge, skills, and attitudes that form the basis of professionalism in any specialty is called Professional ability. Each indicator that is obtained in defining professional competencies creates a platform for providing professional competence. In other words, in all the components that are explained for a profession and a specialized field, professional ability should be explored and monitored. Specialization and professionalism would not make sense in many activities, skills, and knowledge. Therefore, many of the components obtained in this index are considered as the main and necessary activities. Without having these abilities, anyone who is active in a professional field has not entered the specialized topics of that field and profession. It should be noted that professional ability is in the category of skills. Skills also require aspects of knowledge and it is not possible to differentiate it in all fields and situations according to the theoretical issues and what has been achieved in practice. Several components extracted in the professional competencies section refer to aspects of knowledge that create a link between practical skills and the essential and specialized knowledge of a discipline. In the present study, what has been achieved in the index of professional abilities, refers to the concepts and activities, which are important in the current curriculum of this field. Many of the items extracted in the professional abilities are emphasized in the current training of the field (according to Table 6). Some of its components are not included in the current curriculum. But the result shows that the professional abilities in teaching this field have been noticed. Depending on what can be deduced from experience, this issue and its result may be related to the various conditions, approaches, and methods used in the teaching of different universities.

Table 8: Relationship between the components of professional skills in the handicrafts curriculum and the index extracted in the research

Components related to professional competencies in the handicraft curriculum according to Table 6	Identified components of the Professional Abilities Index
Recognition of traditional Iranian arts Recognize different patterns in handicrafts Design knowledge and its relationship with the human soul and body Recognition of the design of objects in Islamic civilization Recognition of traditional materials in handicrafts Development of handicrafts in other countries Recognition of contemporary art disciplines Relative technical skills in most industrial arts	Recognize handicrafts from different regions Recognize production samples similar to their works Recognition and application of traditional tools and materials in the field of expertise Recognition and application of new tools and materials in the field of expertise Ability to identify, prepare and prepare quality raw materials Ability to combine and interdisciplinary interaction in handicrafts Applying design in the sense of essential knowledge and developer

Ability to understand visual elements Drawing drawing skills Photography skills Skills in conceptualizing nature Skills in drawing traditional motifs Skills in recognizing and applying materials and tools Skills in repairing and maintaining works of art	Ability to recognize original designs and motifs of Iranian handicrafts Ability to restore works in your area of expertise Mastery of creativity and innovation Ability to build some required tools Quality control knowledge in the field of expertise
---	--

To achieve the goals of efficient higher education, Iranian handicrafts need to reconsider the issue of professional competencies, due to the lack of attention to the 13 indicators obtained from the analysis of interviews with experts in this field. It is suggested that the practical aspects of these indicators be examined from the perspective of curriculum components (purpose, content, teaching methods, evaluation). In general, after the research on competencies, it is necessary to pay attention to its complementary dimensions in various researches. It is also necessary to examine specialized areas for each of the competencies in detail.

References

1. Burns, J., Gibbon, C., Rosemberg, C., & Yair, K. (2012). *Craft in an Age of Change*. London: UK Crafts Council.
2. Gonczi, Andrew. (1996). *Reconceptualising Competency-based Education and Training: whit particular reference to education for occupations in Australia*. Thesis of doctor of philosophy degree, university of technology, Sidney.
3. Haanstra, F. (2013). *Research into competency models in arts education*. European Network for Visual Literacy. Retrieved from <https://envil.eu/folkert-haanstra-research-into-competency-models-in-arts-education/>
4. Hedayati, Akbar. (2016). *Designing and validating a competency-based curriculum template for a master's degree program in curriculum planning*. Ph.D. Thesis. Curriculum planning group. Faculty of Psychology and Educational Sciences. Allameh Tabatabaei University.
5. Jame Bozorg, Marzieh. (2012). *Identifying and prioritizing the professional competencies required by technical and professional students from the perspective of students, management staff, and students of technical and vocational colleges in Hamadan using the Burich model and quadrant analysis*. master thesis. Curriculum planning group. Faculty of Educational Sciences and Psychology. Mashhad Ferdowsi University.
6. Kafili, Negar. (2015). *Fundamentals of traditional and university education in pottery and ceramics in Iran and Japan*. Ph.D. Thesis. Art Research Group. Faculty of Applied Arts. Tehran University of Arts.
7. Kenzhebekov, B. T. (2004). *Methodological approaches to the study of the expert professional competence development*, *Vocational Education*, 5, 177-182.
8. Mahdavi Hazaveh, Mansoura; Maleki, Hassan; Mehr Mohammadi, Mahmoud; Abbaspour, Abbas. (2016). *A Comparative Study of the Competency-Based Curriculum System in the Elementary Teacher Training Program in Malaysia, India, and Iran*. *Iranian Curriculum Studies Quarterly*. 11 (41). 23-64.
9. Ministry of Science, Research and Technology. (19). *General specifications of the program and titles of undergraduate courses in handicrafts*. Approved for the one hundred and third session of the Supreme Planning Council.
10. Mohammadi, Mehdi; Naseri Jahromi, Reza and Moeini Shahraki, Hajar. (2012) *Evaluating the external effectiveness of the project management course curriculum of Shiraz Electronic Industries Company based on the competency eye model*. *Iranian Engineering Education Quarterly*. 14 (53). 83-117.
11. Yair, K. (2011) *Craft and the Digital World*. Op. cit.