



دانشگاه پیام نور



United Nations  
Educational, Scientific and  
Cultural Organization



• UNESCO Chair on Environmental Education  
• Payame Noor University,  
• Islamic Republic of Iran

# UNESCO Chair on Environmental Education Progress Report

April 2017 - October 2020

## UNESCO CHAIR/UNITWIN NETWORK PROGRESS REPORT FORM

Title of the Chair/ Network	UNESCO Chair on Environmental Education
Host Institution	Payam Noor University (PNU)
Date of Chair/Network Establishment (mm/ yyyy)	April 2017
Period of activity under report (mm/ yyyy- mm/ yyyy)	April 2017 - October 2020
Report established by (name , position)	Professor Seyed Mohammad Shobeiri- Chair holder

To be returned by electronic mail to both: [unitwin@unesco.org](mailto:unitwin@unesco.org) and [i.nichanian@unesco.org](mailto:i.nichanian@unesco.org)

Or by mail to UNESCO, Division for Teacher Development and Higher Education,

Section for Higher Education

7, place Fontenoy – 75352 Paris 07 SP, France

Fax: 33 (0)1 45 68 56 26/27/28

**1. Executive Summary:**

*Significant outcomes, results and impact of the Chair, including on national policies, about its objectives as stated in Article 2 of the Chair Agreement (between the Institution and UNESCO)*

(Not exceeding 300 words)

UNESCO Chair on Environmental Education seeks to pursue the following objectives through research, educational and cultural approach:

- ✓ Enhancement of national and international status of environmental education
- ✓ development and promotion of environmental culture and morality, moving toward achieving sustainable development goals
- ✓ Enhancement of the public participation in environmental protection
- ✓ Promotion of environmental literacy through awareness raising, change of attitude and environmental behaviors of citizens

The main implemented activities are as follows:

- ✓ Establishment of scientific, specialized and technical infrastructures for running national online Center of Excellence for educational environment.
- ✓ Collaboration with national and international institutions, specialized research and development organizations, NGO activists and environmental researchers.
- ✓ Collaboration with UNESCO National Commission and other UNESCO chairs and exchanging lecturers, tutors, students and researchers.
- ✓ Publication of quarterly journals, books, newsletters and providing electronic contents
- ✓ Presentation of educational and research projects based on demand and supply in various environmental topics.
- ✓ Conducting feasibility study for identifying the methods of attracting public participation in environmental protection.
- ✓ Organizing lectures, seminars and conferences on environmental education at national level.

**2. Activities:***Overview of activities undertaken by the Chair during the reporting period***a) Education/Training/Research***(key educational programs and training delivered and research undertaken by the Chair during the reporting period, target group and geographical coverage)*

<b>i) Education</b> (leading to the certificate)	<ul style="list-style-type: none"> <li>• Ph.D. programme in Environmental education, with participation of 10 students at Payam Noor University.</li> <li>• MA course in environmental education, with participation of 35 students at Payam Noor University.</li> </ul>
<b>ii) Training</b> (Short-term)	<p>❖ <b><i>Specialized Workshop on familiarization with collaborative methods and facilitating approaches for environmental protection - 26 - 27 October 2017</i></b></p> <p>Specialized Workshop on familiarization with collaborative and facilitating approaches for environmental protection was held with participation of 21 members of NGOs, MA and PhD students of Environmental Education course and other interested people in a collaborative method. The aim of the workshop was introducing the basic principles of the collaborative approach and its potential for environmental protection to graduates and university students. The participants learned, in brief, the history of collaborative approach, relationship with other approaches, fundamentals and essential principles, techniques and their categorization, the role of game in the approach, and were familiarized with the experiences of the facilitators active in Iran's environmental projects (areas of education, management, and protection).</p> <p><b>Behavioral Learning Objectives:</b></p> <p>The participants would be able to:</p> <ul style="list-style-type: none"> <li>• Explain the differences between quantitative, qualitative, and collaborative approaches and make appropriate use of each method.</li> <li>• Become familiar with the history of the collaborative approach as a new paradigm, its origin and necessity.</li> <li>• Become familiar with the principles of the participatory insight, behavior, and collaborative techniques as an approach (beyond the method).</li> <li>• Become familiar with the body of literature on the participatory approach and understand the fundamental terms such as facilitator, analyst, etc.</li> <li>• Explicate the stages involved in the participatory approach (e.g., fragmentation, confidence building, and empowerment).</li> <li>• Become familiar with the concept of participating plays (activities/games) and learning a few plays (activities/games) and their philosophies.</li> <li>• Become aware of the categorization of participatory techniques and experiencing 3-4 main methods in practice.</li> <li>• Become familiar with the concept of designing, collaborative projects management, and its seven stages.</li> <li>• Become familiar with a few projects implemented under the method in the field of environmental protection in Iran and their delicate activities in the field.</li> </ul>



### ❖ *Specialized Meeting on instructional design for Waste Management - 24 January 2018*

The training workshop for designing waste management held on 24 January 2018 within the 2<sup>nd</sup> National Conference of Environment Training by UNESCO Chair of Environmental Education. The specialized contents in the meeting were presented with the aim of enhancement of the knowledge and attitude of experts, trainers and audience interested in waste management department of the municipality and relevant organizations. This content was presented in two sections through interactive and interviewing approaches. In the first section, the issues concerning waste material problems and diseases caused by them as well as solutions to overcome barriers were discussed.

In the second section, following items were raised through interaction and participation of audiences in terms of educational design:

- Presentation of the background knowledge on the differences between different kinds of concepts of learning, teaching, instructing, training, internship;
- A review of UNDP priorities concerning the essential environmental problems of the 21<sup>st</sup>-century (training+ environment)
- The curriculum and syllabus for a behavioral change;
- The definitions and objectives of educational design;
- A Situation analysis of educational design at various levels, Including national, provinces, regions or classrooms;
- ISD pattern and its stages including need assessment, design, implementation and evaluation;
- Needs assessment and its related issues;
- Methods of needs assessment;
- Development of general and behavioral goals and their levels;
- The concluding remarks and Q&A were conducted at the end of meeting.



### ❖ *Educational workshop on ecotourism, 24 January 2018*

Ecotourism workshop was held with the aim of delivering seminars on and

examining the mutual effects of tourism and environment and also highlighting the principles of sustainable tourism. There have been widespread discussions based on international statistics and valid scientific resources concerning the ecotourism, sustainable tourism and international approach toward ecotourism industry and the necessity of considering Iran's environment as the main tourism infrastructure. Unsustainable destruction of Iran's natural resources (by providing real samples) that has imposed serious damages to environment and tourism attractions have been among subjects of discussions during the workshop. As the participants of these workshops were mainly active in this field and those in charge of holding Eco Tours, great experiences were exchanged and sustainable tourism barriers in Iran were discussed. Methods of effective training on sustainable tourism and its economic attractions, as a developing industry in the world, were also referred in the workshop. Iran as a vast country with a wide variety of climates and unique natural-cultural characteristics is at fifth rank among the countries in terms of the potentials for natural tourism; while its rank is now 119 out of 141.



❖ ***workshop on waste management- specialized for members of the committee of the chair, 26 July 2017***

Educational workshop on waste management was held on 26 July 2017 for the members of chair and on the sidelines of the event, participants visited the waste training center of Tehran municipality. This workshop was organized at the training center and permanent exhibition site of Tehran municipality waste management and with participation of the members of the Chair. Definition of waste, classification of waste into 5 different categories, definition of types of waste, speaking about the effects of economy and population, explanation on Basel law, analysis of waste based on various seasons, manner of collection, transportation, recycling and disposal of waste as well as international signs of recycling were the main topics presented in this training workshop.



❖ ***Specialized workshop on educational design regarding waste management approaches- 5 September 2017***

Educational design workshop regarding waste management approaches was held on 5 September 2017 at PNU - South Tehran branch with participation of 20 MA and

PhD students of Environmental Education course of this university and also members of the Chair. The main objectives of this workshop were as follows:

- Educational designing (definitions and processes)
- Needs assessment (necessity and patterns)
- Educational objectives (definitions, significance and its types)
- Learning areas
- Selection of content and media and learning resources
- principles of content compilation

**Main content:**

- Instructional design (definitions and processes)
- Need assessment (necessities and patterns)
- Educational Objectives (Definitions, Importance and Types)
- Areas of learning
- Principles of content selection, media and learning resources
- Principles of syllabus design



❖ ***Mind Mapping Workshop - 24 January 2018***

Mind Mapping educational workshop was held on 24 January 2018 on the sidelines of the 2<sup>nd</sup> national conference of environmental education. In this workshop, the educational experts of environment became familiar with definitions and objectives of Mind Mapping, its capabilities and its role. Then, the construction of mental map was trained manually and also through using computers and software. Moreover, in addition to presentation of some simple patterns, concerning their job responsibilities and their personal information, the participants began to design their mental maps. Subsequently, the designed mental map related to environment (using the Mindmeister software) was introduced. Then the application manner and the benefits of construction and sharing of this mental map and its various sections (as a nonlinear graphical representation) were explained. Moreover, the software related to construction of mental map and a widely used psychological map related to research tools were introduced and briefly described. The important point regarding this concept and training workshop is that using Mind Mapping can play an essential role in understanding concepts and topics and would improve the quality of teaching and more importantly has the capability of updating the content and materials.

❖ ***Specialized training Workshop on Waste Management - 5 November 2017***

The 8-hour specialized workshop of waste management was held on 5 November 2017 for experts of waste management Center and students of environment

education with the aim of Awareness raising on the following topics:

- History of waste management
- Waste management strategies
- National wastes regulations
- Identification of international laws on wastes
- Risks of non-hygiene disposal of solid wastes
- Waste management procedures
- Concept of strategy in waste management



❖ ***Training Workshop on Structural and non-structural Safety against Earthquake - 24 January 2018***

The workshop on Structural and non-structural Safety against Earthquake was held on 24 January 2018 on the sidelines of the 2<sup>nd</sup> National Conference of Environmental Education. It dealt with the investigation of the history of earthquake in Iran, status of training and preparation for earthquake.



❖ ***Training workshop on ISO 45001 Audit at Qazvin University, in cooperation with Hamfa Co. 16-25 November 2018***

The 7-day training workshop was held at Qazvin University in cooperation with Hamfa Company. The Training Course provided the technical and practical skills required for a qualified auditor. The items presented at the workshop are as follows:

- Objectives and benefits of occupational health and safety management system
- The role of an auditor
- Designing, implementing, reporting and following up of the Health and Safety Management System audit so that it conforms to ISO 45001 and ISO 19011 standard
- Providing audit findings
- Processes including the creation, implementation, operation, monitoring, measurement, analysis, evaluation, review and improvement of occupational health and safety management system
- The used vocabulary and definitions
- The requirements of the information of the occupational health and safety management system and the difference between the maintaining and keeping

information

- The intentions of and differences between the first-party, second-party and third-party audits

The course was highly interactive and included classified materials in the form of practical exercises.



❖ ***ISO 45001 Workshop at Qazvin University of Labor, in cooperation with Hamfa Compan-16 December 2018***

The *ISO 45001 Workshop, Health and Safety Management System* was conducted by the educational team of Hama Company, in cooperation with the UNESCO Chair on Environmental Education on 16 December 2018 at Kar University of Qazvin. The workshop was structured to provide participants with information on setting up an environment meeting the ISO 45001 standard, the changes made to OHSAS 18001 and the process of setting up Occupational Health and Safety Management Systems.

The workshop was designed to achieve the following specific objectives:

- The ability to design the documentations required by organizations, including forms, implementation methods etc.
- Providing an opportunity for participants to understand the requirements and structure of ISO 45001 standards
- Increasing the managerial skills of the participants for setting up ISO 45001 Occupational Health and Safety Management System, Edition 2016

**Contents of the workshop:**

- The basics and vocabulary of ISO 45001 standard
- The new structure of the management system standards
- The requirements of ISO 45001 Occupational Health and Safety Management Systems
- How to determine the policy and objectives of the Occupational Health and Safety Management Systems
- How to identify stakeholders' needs and expectations
- How to review the management of Occupational Health and Safety Management systems
- How to identify risks of activities
- Risk management and its use in identifying organizational risks in accordance with ISO 45001 requirements
- The draft changes of ISO 45001: 2016, in comparison to OHSAS 18001 standard

**Participants:**

- Representatives of Occupational Health and Safety Management System
- Occupational Health and Safety Experts

- Professionals in Occupational Health and Safety Management System
- HSE officials.



❖ ***Training Workshop on the Promotion of Human Ecology- 8 January 2019***

The Workshop was held on 8 January 2019 at the office of UNESCO Chair on Educational Environmental.

**Main topics of the workshop:**

- Architecture from the perspective of human ecology
- Urbanization from the perspective of human ecology
- Definition of the environment and its relation to the basic principles of human ecology, with emphasis on its history from 1962 to the present day
- The important points about water from the perspective of human ecology, with emphasis on gray water and its recycling
- The important points about air from the perspective of human ecology, with emphasis on fossil fuels
- The important points about waste from the perspective of human ecology and with reference to composting method
- The important points on energy (especially renewable energy) from the perspective of human ecology.

❖ ***Training workshop on Environmental Education at Kahrizak Charity Foundation***

Kahrizak Charity Foundation, with more than 1,700 help-seekers, employees, and visitors, faces various health-environmental challenges. Mehregan Parto Institute, in cooperation with UNESCO Chair on Environmental Education, organized the following five training workshops to call for the cooperation of various groups of the sanatorium in modifying the behavior and improving the environmental situation of the sanatorium.

**List of the workshops:**

No	subject	participants	date
1	Identifying environmental problems and and improving environmental attitudes	Nursing group	15 October 2018
2	Operational planning methods for prioritizing and solving environmental problems	Members of the committee for Health and Environment	3 January 2019
3	Introduction to the basic concepts of the environment and protecting the earth	Kindergarten children	15 October 2018 2 February 2019 24 February 2019
4	Introduction to the Basics of green life	Working mothers and children	7 February 2019
5	Introduction to the basics of environment and environmental attitudes	Selected help-seekers	24 February 2019



### ❖ *Training workshop on Safety Management System, Health and Environment – 13&14 March 2019*

The workshop was organized by Hamfa Company, in cooperation with the UNESCO Chair on Environmental Education and the Ministry of Industry, Mining and Trade of Qazvin province, at the Ministry of Industry, Mining and Trade of Qazvin province.

**Main titles of the course:**

- Concepts and general principles
- Risk identification and assessment
- Risk management

- Risk Assessment
- Introduction to executive instructions and procedures
- Introduction to systemic and general concepts and MS-HSE's audit and evaluation

#### ❖ *Workshop on Social Responsibility towards Construction Waste- 5 December 2018*

The workshop was organized with the scientific support of UNESCO Chair on Environmental Education on 5 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. The General Manager of Yazd Provincial Government presented the workshop. It provided an opportunity for the participants to exchange ideas and learn about the following subjects:

- Issues related to construction waste, their disposal methods and their impact on the environment
- The importance of the construction industry
- Building depreciation and destruction methods in Iran
- Guidelines for waste reduction management in Iran



#### ❖ *Workshop on How China and Iran can work together to make the sky blue again- 5 December 2018*

The workshop was organized with the scientific support of UNESCO Chair on Environmental Education on 5 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Participants discussed the cooperation between Iran and China and became acquainted with the effective use of waste incinerators and experiences of Chinese companies.



❖ ***Workshop on Techniques and Tools of Risk Identification Assessment- 5 December 2018***

The workshop was organized with the scientific support of UNESCO Chair on Environmental Education on 5 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Head of the HSEE Working Group of UNESCO Chair on Environmental Education presented this workshop. The objective of the workshop was to familiarize participants with the concepts of risk assessment, risk identification and risk assessment methods, hazard identification methodologies (Hazled, PHA, JHA, FTA, ETA, HAZOP, FMEA, PEM), assessment of risk reduction measures, scoring and prioritizing risks, and practical examples of risk identification and assessment processes.



❖ ***Workshop on Marine Waste and its Impacts on Coastal-Marine Ecosystems -5 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 5 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Advisor of the Marine Environment department presented the workshop. The aim of the workshop was to provide the participants with explanation on the following subjects:

- Advantages of oceans and seas and human behavior toward oceans and seas
- Definition of marine wastes and how they enter the sea
- The problem of marine waste in the world
- The status of waste management in the coastal areas of the northern and southern Iran in each city and village
- Programs implemented for waste management, especially marine and ship-generated wastes

Participants also discussed the future plans in areas, such as new technologies, rules and regulations, production, changes in habits and behavior.



❖ ***Workshop on Waste Management and Solving Environmental Problems in Industrial Animal Husbandry through Using Biogas and Industrial Refinery-5 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 5 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. The workshop was instructed by the Sales and Marketing Manager of Aria Waste Management and New Energy Development Company and Mr. Chang Xiaoxi (Sales Manager of the Overseas Department). The purpose of the workshop was to familiarize participants with the following subjects:

- Biogas global concepts
- Biogas as a renewable energy source
- Heating value of biogas, which is about two-and-a-half times more than the heat generated by the burning of livestock excreta
- Role of animal husbandry in the production of agricultural fertilizer



❖ ***Workshop on the recycling of multi-layer Tetra Pak bags- 6 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Director of Environmental Affairs of Tetra Pak Company was lecturer of the workshop. The speaker explained the economic cycle resulting from recycling and spoke about Multi-layer packaging, known as Tetra Pak in Iran. Multi-layers cartons are recycled to granular and PVC, which are most commonly used in industry. Tetra Pak cartons have been widely used as a convenient packaging for dairy, beverages and other products in Iran. Considering the fact that about 20,000 tons of multi-layer packages are produced and used in Iran and many of the imported products are packaged by multi-layer packaging, the recycling and waste management of Tetra Pak have become an inevitable necessity in the country. The

first recycling plant of this product has been already launched in Iran.



❖ ***Workshop on the Concepts and Applications of Carbon Management with Emphasis on Waste Management -6 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Head of Carbon Management working group of the UNESCO Chair on Environmental Education was lecturer of the workshop. In this workshop, participants were familiarized with the following subjects:

- Various aspects of carbon management
- The national and international requirements for carbon management
- Carbon management in different stages of waste management (reducing production, separation, collection, transfer and disposal)
- Using capacities, national and international mechanisms of carbon management
- Introducing great examples of carbon management in waste management process



❖ ***Workshop on the Regulations and Instructions of Medical Waste Management and Monitoring of the implementation of these regulations by the Ministry of Health and Medical Education-6 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. The specialist of environmental health and hospital waste management monitoring instructed the workshop. The main subjects of the workshop are as follows:

- Harmful, toxic and pathogenic effects of hospital wastes on environment

- Management of hospital wastes (ordinary and hazardous) and the related national laws
- Rules and methods of executive management of medical wastes /the rules for assigning management of medical waste to natural and legal persons
- The classification of hazardous medical wastes and how they are collected
- The health and safety instructions
- Various stages of waste management, guidelines and selection instructions
- Guidelines for selecting non-hazardous non-incineration waste devices
- Guidelines for performance assessment and monitoring of biological, chemical and mechanical non-hazardous non-incineration devices
- Statement on the non-hazardousness of sharps and infectious wastes,
- WHO documentation on medical wastes
- Main reasons of using non-incineration methods in Iran
- The current process of hazardous medical waste management in Iran
- Monitoring of the medical waste management plan by the Ministry of Health and Medical Education



❖ ***Workshop on Executive Strategies for Waste Management in Iran, in a four-year Plan and playing of the Mother of the Earth movie/ 6 December 2018.***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Managing Director of the Organic Fertilizer Production and Recycling Company was instructor of the workshop. In this workshop, participants learned about and exchange ideas on the following subjects:



- The amount of waste produced in the country, its types and effects on environment
- The problems for full implementation of waste management despite appropriate laws in this field
- The proposed solutions for processing and recycling of waste in the cities and villages of Iran
- Introduction of the processing and recycling plan of Kermanshah as a template
- Comparing the investment amount and current costs of processing plans through reducing physical-biological waste by incinerators

- Development of a 4-year plan for the full implementation of waste processing and recycling plans in cooperation with the private sector

❖ ***Workshop on the Comprehensive plan of Mobarez Company in the field of Garbage Truck-6 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Managing Director of Mobarez Research and Production Company and Managing Director of the Waste Management Department of Shiraz Municipality presented the workshop. The objective of the workshop was to familiarize participants with the comprehensive plan of Mobarez Company in the field of garbage truck and its benefits in waste management, including:

- Removal of high-altitude loading platforms which cause huge human and financial losses
- Ease of loading
- The depreciation, caused by the transportation of light vehicles to landfill or recycling plant, will be reduced
- Reduction of leachate along the route
- Reduction of waste fall because the truck is completely sealed
- Waste volume reduction: waste is reduced in size as a result of compacting process performed by garbage machine
- It is easy to dispose waste in the landfill or recycling plant.
- Standard dimensions, which conform to transportation law and facilitate transportation in urban and suburban roads

Duration of the workshop: 2 hours



❖ ***Workshop on Plasma Technology for Disposal of Special Industrial Wastes-6 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. A faculty member of Shahid Beheshti University instructed the workshop and participants were familiarized with plasma technology and its benefits for disposal of special industrial wastes. The main advantages of plasma technology for waste treatment are:



- Plasma technology is a green and clean method for disposing of hazardous

waste

- Processing of organic waste into combustible synthesis gas for electric power and thermal energy that
- Plasma technology is the most optimal way to eliminate waste and generate electricity
- It is a safe means to destroy all kinds of wastes
- By applying European standards, plasma technology could be used to destroy wastes containing water, refractory materials or hazardous wastes which generate gaseous pollutants when they are destroyed in usual combustion processes
- The materials produced during the waste disposing process are useful

❖ ***Workshop on Different Approach to Business Development and Entrepreneurship in the Reuse of Materials and Energy (Conversion and Recycling) -7 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 6 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran.

Managing director of Pishtazan Project Management Company instructed the workshop. In this workshop, participants learned about and exchange ideas on the following subjects:

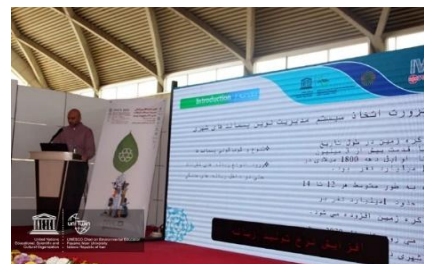
- Business Environment Analysis
- Understanding the deterrent and facilitating factors in entrepreneurship development, including infrastructural, cultural, social, political, and economic factors
- The business environment (it is an environment in which a business asks for something, offers something and affects market equilibrium)
- How environmentalists, green movements and multinational corporations affect the re-use of materials and energy.



❖ ***Workshop on New Energy and Incineration – 7 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 7 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Director of the Waste Department and Incineration Power Plant of Tehran instructed the workshop. The main discussion topics of the workshops are as follows:

- The need to adopt a new urban waste management system
- History of waste management system
- Conventional waste incineration technologies
- Requirements for constructing a waste incinerator
- The status of waste incineration projects in Iran



❖ ***Workshop on the Recycling of Electrical and Electronic Wastes, Risks, Environmental and Human Impacts -7 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 7 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran.

Managing Director of Pars Charkesh Asia Company instructed the workshop. The main discussions of the workshop focused on the following topics:

- Features of electronic and electrical wastes, including toxicity, pathogenicity, stability in the environment and body of living creatures, corrosiveness and the like
- The disposal of electronic and electrical wastes is a challenging process because of the difficulty of separating the constitutive elements of such wastes and inadequate research on their recycling process
- The management of electrical and electronic waste
- Reuse methods
- Environmental pollution caused by mismanagement



❖ ***Workshop on the Processes of Creating Facilities for the Plants producing Industrial and Hazardous Waste - Rules, Regulations and Guidelines for Industrial Waste Management and How it is monitored -7 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 7 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran.

The workshop was instructed by head of the HSEE sector of the Ministry of Industry, Mine and Trade. The main topics addressed by the workshop are:

- The amount of industrial (hazardous) waste generated by industries
- Basel Convention
- Capacity of the country to manage industrial, hazardous and medical waste in the provinces of Iran
- The processes of establishing facilities for the industries producing waste and waste recycling plants



- Performance and plans of the Ministry of Industry, Trade and Mine

#### ❖ **Workshop on Circular Economy and Waste Management-7 December 2018**

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 7 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Head of the Center for the Development of Biomass Energy Technologies (Niroo Research Institute) instructed the workshop. The topics addressed by the workshop are:

- Development and complexity of the economic system
- Waste management legal framework and law, saving and economic efficiency
- Concept of side costs
- Policy making in the public domain
- Volunteer organizations and private markets



#### ❖ **workshop on Fire Safety Courses -8 December 2018**

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Theoretical part of the course included information on the definition of safety and its regulations, identification of hazards (physical-mechanical-chemical-electrical-nuclear), fire detection, types of fire-fighting equipment and machinery and how to use them, different types of fire extinguishing process, firefighting organization, firefighter duties and fire behavior in different situations.



This workshop was instructed by head of the HSEE working group of UNESCO Chair on Environmental Education and the training materials were presented in six sections as follows:

- Introduction of the basic concepts of fire, including combustible materials and its types (solid, liquid and gas), the burning process, the role of oxygen and oxidants, combustion and triangle pyramid (the three elements a fire needs to ignite: heat, fuel and an oxidizing agent), and the fourfold pyramid of fire
- Fire behavior and conditions, including: heat, energy types, chemical chain reactions, combustion chemistry, combustion products and modes of heat transfer
- The ignition characteristics of liquid, gaseous and solid fuels, flammability and BLEVE phenomenon (a combination of fire and explosion)

- Firefighting safety tips, five classes of fire: A-B-C-D-K
- Fire steps (incipient, growth, fully developed and decay)
- Fire in apartment, the effects of room contents on fire development, fire structure (Backdraft, Flashover & Rollover), thermal equilibrium and thermal stratification

❖ ***Workshop on the Status of Air Pollution, including Pollutants Generated by Waste Incineration on the Outskirts of Tehran -8 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Head of the dust group of Department of Environment presented the workshop. The following topics were discussed at the workshop:

- Types of air pollution
- Distribution and transmission of air pollution
- Effects of air pollution
- Different types of contaminants generated by natural and artificial activities of human beings
- PSI unit
- Diseases caused by burning of waste
- The effects of air pollution on plants



❖ ***Workshop on incinerations, Dioxins and Furans -8 December 2018***

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. The Commercial Director of Rah Pooyan Saleh Company presented the workshop. In this workshop, participants learned about and exchange ideas on the following subjects:

- Types of waste
- Management of industrial and hazardous wastes
- History of waste incinerators
- Types of waste incinerators and waste incineration technologies
- Waste incineration technology in Iran
- Incidents caused by Dioxins and Furans, including
- Chemical composition of Dioxins and Furans
- The effects of Dioxins and Furans on human health,
- The formation of Dioxins and Furans, and the industries that produce these

compounds

- Sampling process of Dioxins and Furans in the compounds released from industrial chimneys

#### ❖ **Workshop on Agricultural Waste Management – 8 December 2018**

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. The workshop was instructed by the expert on wastewater, waste and pollutants, from the Environment and Food Health department of the Ministry of Agriculture Jihad. The objective of the workshop was to familiarize participants with the standards and methods of executive management of agricultural wastes. The following topics were discussed at the workshop:

- Agricultural wastes include excreta, animal carcasses, corrupt or non-consumable agricultural products, and ...
- The challenges caused by the large volume of agricultural waste and the crisis our country faces in this area
- The experiences of successful countries in this field



#### ❖ **Workshop on Source Separation of Wastes in the Northern Provinces of Iran-8 December 2018**

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Managing Director of Tabiat Sabz Bespar Company presented the workshop. Participants of the workshop were familiarized with the role of children and adolescents and their experiences and inventions, the practical experiences and impacts of source separation of waste in the northern provinces of the country.



❖ **Workshop on Clarification of the Process of Waste Collection and transportation - 8 December 2018**

The workshop was held with the scientific support of UNESCO Chair on Environmental Education on 8 December 2018, on the sidelines of the first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, held at Shahre-Aftab International Exhibition Center in Tehran. Head of the Waste Management working group of UNESCO Chair on Environmental Education presented the workshop. The objective of the workshop was to familiarize participants with waste management contracts, calculating contracts cost, regulations and instructions of Iran's Municipalities and Village Administrators organization.



❖ **90-minute workshops for life--22 July 2019, 29 July 2019, 5 August 2019, and 21 August 2019**

These workshops were designed to increase awareness of environmental subject and motivate people to pay more attention to environment and to practice examples of proper behaviors. Following the call for participation, a number of people registered and participated in these workshops. The duration of each workshop was 2 hours, which were held on Mondays from 10-12 AM. Workshop evaluation methods included questions and answers, surveys, post-test and participation in group activities.



	Worksh op title	Description	Topics discussed
First session	Let's reduce the cost of our lives	Reducing the cost of basic needs of life, water, electricity, gas, reducing the cost of health services for the family, purchase management, waste management, and energy management at home	Identifying costs of life, cost management in water, electricity and gas consumption by optimal consumption method, cost management of consuming materials by eliminating disposable tableware, waste management, optimization of detergents consumption
Second session	Let's live with the live	Let's love and to be loved, the importance of biodiversity, ethnic diversity and climate diversity	Identifying different species and the need to protect them and to preserve human life and health, how to pay attention to maintaining biodiversity in everyday life, the rights of animals and plants, the concept of Mother Earth, explaining the different valuation methods of biodiversity
Third session	Let's be happy and have fun	How to reduce cost in traveling and taking vacation (sustainable tourism)	The concept of tourism and its implication for health, environment-friendly tourism methods, proper behavior in nature, implementing the demo of "sustainable tourism, from north to south", proper interaction with the local community

Forth session	Let's make a committed generation	( How to create proper, healthy and life-friendly social model ) environment-friendly lifestyles and creation of social patterns	How to attract public participation to protect the environment, identifying role of the individual and society, and how to affect the society in order to create models of proper behavior in the environment
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❖ **Workshop on “new methods of environmental education for children ”for kindergarten teachers in Kahrizak Charity Sanatorium” --14 July 2019**

Initially a training package entitled "New methods of environmental education for children" was developed for kindergarten teachers by the UNESCO Chair on Environmental Education, in cooperation with Mehregan Research Institute. This 4-hour workshop was held for teachers and managers of kindergarten of Kahrizak Charity Sanatorium for the Elderly and Disabled. The goals of the workshop were:



- Familiarity with environmental education, its history and discipline in Iran and the world
- Familiarity with new methods of behavioral training
- Practicing games - teaching children
- Familiarity with methods of using natural elements and using these methods in environmental education plans

❖ **Learning City Workshop - Yazd Environmental Education – 14 August 2019**

This workshop was jointly organized by the Iranian National Commission for UNESCO and UNESCO Chair on Environmental Education. The instructors of the workshop included Dr. Fakhri (learning city) and Dr. Haghighi (environmental education). Workshop was attended by mayors of different district, deputies and university professors, managers and experts from Environmental Protection Organization, Radio and Television Organization, women sports officials, etc.

Dr. Fakhri, as the representative of the Iranian National Commission for UNESCO, introduced UNESCO, objectives and missions of the Iranian National Commission for UNESCO and its departments, and emphasized the role of educational measures in the field of environmental education. She also spoke about the network of creative cities, the characteristics of creative cities and creative cities of Iran. Then, by introducing the network of learning cities as another important activity of UNESCO, she discussed the history, backgrounds and characteristics of learning cities and introduced the learning cities of Iran. Finally, she explained the strategic plan of UNESCO for learning cities in six parts, including:

- Planning,
- Involving partners
- Organizing events
- Citizens' access to education
- Monitoring and evaluation
- Use of human and financial resources and equipment at cities

In the second part, Dr. Haghighi, on behalf of the UNESCO Chair on Environmental

Education at Payame Noor University, spoke about education, as an important component of learning. She also discussed the reasons for the relevance of the learning city to environment and emphasized the need for environmental education.

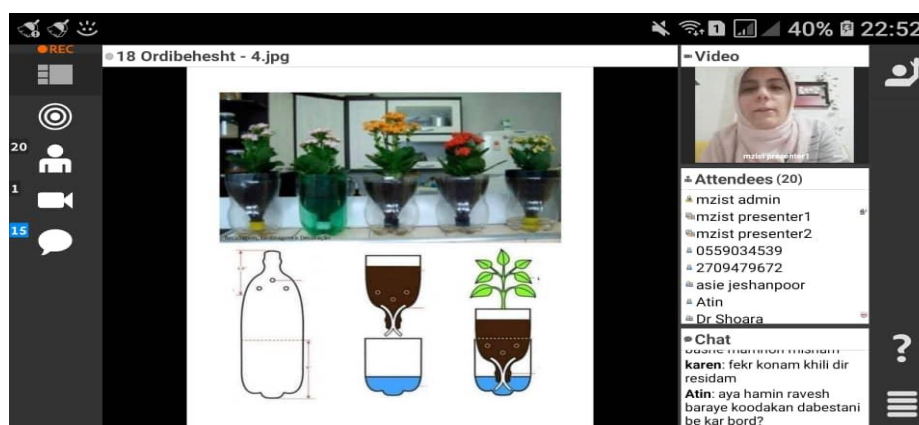
❖ ***Meeting to review the factors for failure in the sustainability of environmental education concepts in recent years – 30 April 2020***

This meeting was organized by the Waste Management Training Working Group with the aim of identifying the factors for failure in waste management training. This meeting, held through the LMS virtual system, was attended by student groups and environmental activists and Ms. Saeedeh Karimi, a member of the Waste Management Training working group was moderator of the meeting. In this meeting, subjects related to the correct steps of the environmental education process (awareness, attitude, behavior) were examined. At the end of the meeting, a question and answer session was held.



❖ ***Environmental education for children under seven with the approach of sustainable education in waste management– 7 May 2020***

This meeting was held by Ms. Zahra Razini, a facilitator in the field of children's education, with the aim of examining the proper methods of teaching the children under seven and the need to educate children about the environment. This meeting was held through the university's LMS virtual system. In this meeting, the participants got acquainted with the issues and solutions related to environmental education for children. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on the impact of the COVID-19 pandemic on the environment – 14 May 2020***

The purpose of this meeting was to recognize the impacts of COVID- 19 pandemic on the environment, as well as to identify the related challenges, threats and opportunities. The meeting was held for the target groups of the community and environmental activists through the university's LMS virtual system and Dr. Laden Razi Kurd-Mahale, member of the UNESCO Chair on Environmental Education, was

moderator of the meeting. Participants in this meeting got acquainted with COVID-19 disease and its effects on the environment, as well as the challenges, opportunities and environmental threats during the outbreak of the Coronavirus. At the end of the meeting, a question and answer session was held.

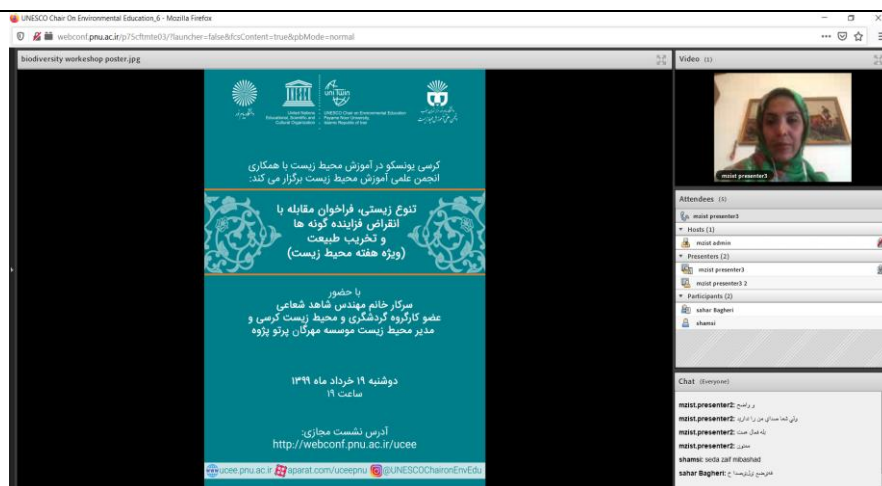
❖ ***Meeting on environmental education for children between 7 to 12 years of age, with the approach of sustainable education in waste management- 14 May 2020***

The purpose of this meeting was to familiarize the audience with the environmental education of adolescents, with the approach of sustainable education in waste management. Meeting was held through LMS virtual system and Dr. Zahra Sho'ara, educational consultant for child and adolescent and university lecturer, was moderator of the meeting. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on Biodiversity / Call for fighting the increasing extinction of species and degradation of nature (on the occasion of the World Environment Week), 8 June 2020***

On the occasion of the World Environment Week, this meeting was held with the aim of examining the status of biodiversity in Iran and the world. This meeting was held through LMS virtual system and Ms. Shahed Shoaee, Senior specialist of Environmental Education and member of the UNESCO Chair on Environmental Education, was moderator of the event. The topics of the meeting included concepts and principles of biodiversity, characteristics and values of biodiversity, human impact on biodiversity and practical solutions to reduce the risks. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on Corona and Environment, Threats and Opportunities (on the occasion of the World Environment Week) – 9 June 2020***

On the occasion of the World Environment Week and in continuation of the previous meeting of the Chair in the last months, this meeting was held with the aim of recognizing the effects of the outbreak of coronavirus on the environment and the threats and opportunities of this pandemic for the environment. This meeting was held for the general public and environmental activists. Sherwan Shoaee, head of the Working Group on Health and Environmental Education of the UNESCO Chair on Environmental Education was moderator of the event. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on social responsibility development and its impact on sustainable education in waste management (on the occasion of the World Environment Week) – 11 June 2020***

On the occasion of the World Environment Week, this meeting was held for the students and environmental activists, in cooperation with Waste Management working group and Social Responsibility working group. The aim of the meeting was to familiarize the audience with the concepts of social responsibility, as one of the main component in changing attitudes in sustainable education process. This meeting was held through LMS virtual system and Ms. Saeedeh Karimi, director of Social Responsibility Working Group was moderator of the meeting. In this meeting, participants were familiarized with social responsibility and various methods and

strategies to foster the social responsibility of individuals, how to use these strategies to change people's attitudes toward environmental issues and emergence of sustainable behavior in environmental education. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on the role of education and culture-building in energy consumption optimization and achieving sustainable development – 11 June 2020***

The purpose of this meeting, held in line with the goals of sustainable development, was to familiarize the electricity experts, students of environment and other stakeholders with energy consumption and different methods of optimizing energy consumption in buildings. Meeting was held through LMS virtual system and Dr. Azita Behbahaninia, PhD in Environmental Engineering and member of the Chair's Working Group of Energy Consumption was moderator of the event. Topics of the meeting included role of culture-building in energy saving, role of media in educating the public about optimal energy consumption, practical solutions to reduce energy consumption, role of renewable energy in preserving energy reserves, study of energy wastage in office and residential buildings and practical methods to reduce energy wastage. At the end of the meeting, a question and answer session was held.



❖ ***Meeting on “promoting responsible behavior in energy consumption of buildings and providing solutions” – 25 June 2020***

The meeting was held with the aim of raising awareness about the impact of culture-building on fuel consumption and proposing simple solutions to improve the

consumption pattern for adult audience. Meeting was held through LMS virtual system and Ms. Rudabeh Najmaei, senior specialist of energy architecture and member of the Chair's Energy Working Group, was moderator of the event. At the end of the session, a question and answer session was held.



### iii) Research

- The role of social networks in the development of environmental culture, (Executive Producer), University Payam Noor, 2018.
- Evaluating the factors and indicators of adult literacy to develop lifelong learning, (Executive Producer), University Payam Noor, 2017.
- Analyzing the content of the new textbook of "humans and the environment", compiled for the 11th grade of high school, 2018-2019.
- The Effectiveness of Teaching on How to Facing Environmental Crises (Case Study: Municipal Experts), (Executive Producer), University Payam Noor, 2020.
- Starting and developing the project of environmental education encyclopedia

## b) Conferences/Meetings

*(Key conferences and meetings organized by the Chair or to which its Chair holder contributed)*

### i) Key conferences hosted by the Chair

#### ❖ 2nd National Conference and 4th Specialized Exhibition of Environmental Education - 24 and 25 January 2018

The 2nd National Conference and 4th Specialized Exhibition of Environmental Education was held on 24 and 25 January 2018 by UNESCO Chair on Environmental Education of PNU with participation of a great number of authorities and experts in the field of environment and education. The logo of UNESCO Chair on environmental education was presented officially at the opening of conference in PNU. In the end of the ceremony, statues were awarded to nominees as a sign of appreciation.

This conference was held with the aim of creating a proper ground for exchanging scientific information and transferring the experiences and achievements of the researchers in this area. Presenting new solutions and strategies along with new scientific and training technologies in performing scientific and applied researches and studies as well as enhancement of interaction to achieve sustainable development was among other goals for organizing the subject event. This conference with 8 main themes covered a wide range of updated scientific topics in this field. Considering the scope and applicability of this field, this conference was an opportunity for presenting the achievements and scientific capabilities of researchers.

- The number of received papers: 173 papers

- The number of accepted papers for oral presentation: 15 papers
- The number of accepted papers for poster: 38 papers

On the first day of the event, 9 workshops and meetings, attended by elite participants, were organized to provide the ground for deep discussion about course changes. The initiative offered the possibility of exchanging the latest achievements. Moreover, the required planning for the scientific development of country will be performed based on the obtained results of the said workshops. On the sidelines of the meeting, an exhibition was held the related achievements and services of environmental education were presented.

All programs of the second day of the conference were presented in the form of virtual meetings including 5 sessions on various areas of this field. During the two days of conference, those interested and also active in the area of culture, economy, sociology, psychology, health, biology and other scientific fields related to environmental education made a widespread participation, physically or virtually.



❖ *Specialized training meeting for sharing experiences of collaborative management within the framework of Man and Biosphere program - 24 January 2018*

The specialized training meeting was held with the aim of exchanging experiences of collaborative management within the framework of Man and Biosphere Reserves on 24 January 2018 at the 2<sup>nd</sup>

National Conference of Environmental Education by UNESCO Chair on Environmental Education at Payam Noor University. This educational conference was organized in three sections with the presence of the representatives of governmental and non-governmental organizations, academics and environmentalists with the purpose of analyzing the feasibility of implementation of the conservation program for biosphere reserves in Iran.

- **Part One:** *A Review of the concepts and analysis of collaborative management and Biosphere Reserves:*
  - Presentation of the concept and objectives of Man and Biosphere program
  - Introduction of management and zoning approach of biosphere reserves
  - A review of motivational and collaborative potentials for environmental protection in the biosphere
  - Challenges of integrated management in Iran
  - The sustainable tourism industry in biosphere reserves
  - Summary and conclusion
- **Part Two:** *Presentation and evaluation of current experiences in collaborative management of Man and Biosphere program.*
  - Presentation of private hunting ground experiences in Yazd Province
  - A review of community-based management experiences concerning Naiband National Park, Assaluyeh territory
  - Adapting to and mitigating climate change effects in Dena Biosphere Reservoir
  - Activities and challenges of collaborative management of pastures of Sabzkou protected area
  - Details of collaborative protection of Asian black bears together with local livelihood improvement approach
- **Part Three:** *Summarization and extraction of lessons (presented by CBOs and NGOs)*  
The lessons-learned were summarized in six dimensions including capacity building and education, management and zoning, regulations and legal issues, branding, local communities, intersectional collaboration and recognition of weaknesses, strengths, opportunities, challenges and solutions for management of biosphere reserves in Iran at three levels of local, national, and international. The Discussed topics would be the beginning of a series of meetings on this subject.

#### ❖ *Specialized and interdisciplinary E-meeting on environment-psychology*

The Specialized and interdisciplinary meeting on environment-psychology entitled “tutors and effective communication methods” was held electronically on 25 January 2018. The meeting was conducted with the aim of promoting quality enhancement of the environmental education between teachers and trainers, including children, adults, citizens, and specialists.

In the beginning, an overview of the definitions of effective communication in the process of transmission of the concepts of effective and ineffective communication features, essential communication factors, as well as the components of communication were presented. The discussions continued with the explanation of educational experiences and various examples of how to interact with different audiences in order to change attitudes.

The meeting was an introduction to the communication between the two areas of psychology and the environment and provided an opportunity for the educators to learn about the educational psychology and the ways they can communicate with the learners effectively. In addition to occupational skills, participants acquired specific training prerequisites. The video and audio files of this meeting is available through the web page of the 2<sup>nd</sup> National Environmental Education Conference at <http://conference.pnu.ac.ir/cfee>.

❖ ***E-training Meeting on Urban Facilities and Services - 25 January 2018***

The E-training meeting on urban educational facilities and services for Environmental Education was held by UNESCO Chair and in collaboration with the Waste Management Organization of Robatkarim and Baharestan cities, on 25 January 2018 at Payam Noor University. This web-based workshop was designed and presented for the experts of urban services of Iran's municipalities with the aim of familiarizing them with legal duties and modern methods of providing services to citizens and related facilities. In fact, urban services had been one of the first and most important duties of the municipality and gradually, with the expansion of urban missions, the department of urban services has been developed within the structure of municipality.

❖ ***Electronic Meeting on Comparison of the Changes in ISO 14001 Standard, 2015 Ed. with 2004 Ed. - 25 February 2018***

The specifications of ISO 14000 family was investigated during this training meeting which was held electronically. The ISO 14000 series of standards are called environmental management system (EMS). These standards are the tools that created effective communication between business and environment.

What is clear in ISO 14000/2015 draft is that technical committee of ISO/TC207 has come to this understanding that organizations should move towards comprehensive quality management. Therefore, the latest version of this standard is consistent with other management systems in such a way that organizations have gained a strategic attitude toward environmental management systems and have decided to upgrade these system to comprehensive quality management systems. Thus, in this meeting, the differences between 2015 and 2004 editions regarding risk management, strategic environmental management, environmental protection, environmental performance, lifecycle, communications, and documentation were discussed.

❖ ***Specialized meeting on ecological and biological understanding of Khuran strais wetland (Man and the Biosphere Reserves) - 17 December 2018***

In new approaches to environmental protection; in particular management approach of biosphere reserves, much emphasis is placed on public participation in the management of protected areas; therefore, it is suggested that all the stakeholders, particularly local communities participate and offer their opinions in all stages of management planning of wetland so that they could control the output and produced maps, have a sense of belonging to the wetland and assess it in accordance with their needs and priorities. At first, it is essential to identify the areas where indicator species live, breeding sites and the areas threatened by human. To this end, a workshop was held at the Department of Environmental Protection of Hormozgan province, with the presence of scholars, NGOs, CBOs and experts who had implemented projects on the biological environment of the region. UNESCO chair on environmental education participated in holding the workshop.

• **objectives:**

- Collecting case studies undertaken on straits of Khuran wetland
- Familiarity with participatory zoning of biosphere reserves

• **Main topics:**

- Participatory zoning in biosphere reserves
- Biological studies on the vegetation and vertebrates of the region

• **Workshop subtopics:**

- Welcoming speech and the need to integrate information on Khuran strais wetland

- Zoning in the ecosystem management of Khuran straits wetland through the management approach of biosphere reserves
- Studying the impacts and the pollarding points of Hara forests
- Biological dispersal of indicator species of aquatic animals in Khuran straits wetland
- Studying the biodiversity of fish communities in Hara protected area (in Qeshm)
- Biological dispersal and presence of aquatic birds and the birds that live around water in Khuran straits wetland
- Sensitive areas of Hara forests in terms of the presence of marine mammals

❖ ***Participation of 6 colleagues of Chair in a 6-day meeting on Enhancing Cooperation between European Union and Iran***

The 6-day meeting on Enhancing Cooperation between European Union and Iran: air pollution, water and marine environment pollution, circular economy and waste was held from 21 to 26 November at Milad Tower in Tehran, and six colleagues of UNESCO Chair on Environmental Education attended the meeting.

The first two days of the meeting focused on air pollution, industrial pollution, sand and dust storm. On the third and fourth days of the workshop, the issues related to water and marine issues were discussed. Circular economy, waste and recycling were the main subjects of the last two days. The EU delegation of 26 senior experts who had worked with international organizations such as United Nations (UN) and World Health Organization (WHO) participated at the event. Six colleagues from UNESCO Chair on environmental education also participated at the series of the meetings.



❖ ***Meeting on idea generation, and structured consulting for creating and enhancing the National Electronic Center of Excellence for Educational Environment***

The first meeting on idea generation, and structured consulting for creating and enhancing the National Electronic Center of Excellence for Educational Environment was held on 14 August 2018 at Payame Noor University, South Tehran branch. A group of researchers, professors, graduates and experts in the field of environment and other related fields attended the meeting.

At the outset of the meeting, Dr. Seyed Mohammad Shobeiri, Chairholder of UNESCO Chair on Environmental Education at Payame Noor University, welcomed all the participants to the meeting and highlighted the importance of environmental education, hoping that the meeting will lead to significant achievements in the establishment of the National Center of Environmental Education. He

also referred to the goals, plans and actions undertaken at UNESCO Chair on Environmental Education. Then, the vision, missions and plans of the National Center of Excellence for Educational Environment were presented.

Head of the Science Department of the Iranian National Commission for UNESCO spoke about the history, goals and role of UNESCO and its twin universities in scientific capacity building and development of international inter-university cooperation as a bridge between decision-makers, scientific community and civil society. He explained that exchange of information in different specialized fields are the most important necessities for the formation of UNESCO Chairs. The main aim of the Workshop he said is to promote information sharing.

In the second part of the meeting, participants exchanged their ideas and suggestions on the following topics:

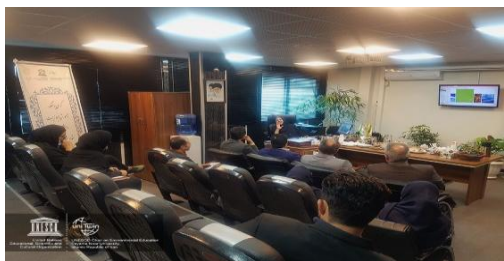
- The programs proposed for developing communication and interactions in National Center of Excellence for Educational Environment, in formal and informal education sectors
- Policy making methods
- planning and implementation of training programs
- Different approaches to providing educational contents
- educational evaluation methods
- Various educational tools and their application in Electronic Center of Excellence for Educational Environment

It is worth noting that all the audience presented their opinions in 3 minutes, and at the end of the session, the ideas and proposals of the participants were summed up.

Organizing seminar series on the specialized fields of environmental education was put on the next agenda of the meeting.

#### ❖ *Specialized Meeting on Social Pathology toward the Environment and its issues in Iran - 25 August 2018*

The specialized meeting was held on 25 August 2018 at Payame Noor University. The meeting was organized in line with the objectives of UNESCO Chair on Environmental Education. A group of officials from the Solid Waste Management Organization of Tehran Municipality attended the meeting. The purpose of the meeting was to promote the practical use of scientific researches on waste management and to stop overspending and losses of national funds. The participants presented the results of pathological research on waste management in 11 provinces of Iran and introduced the executive strategies implemented by the Solid Waste Management in some regions of Tehran. The meeting continued with question and answer session and attendees discussed the methods of public participation and experiences in the aforementioned fields.



### **The first startup entrepreneurship event on "Designing and Producing Learning Technologies with focus on Waste Management Training", 26 and 27 August 2019**

The first startup entrepreneurship event on "Designing and Producing Learning Technologies with focus on Waste Management Training" was held on 26 and 27 August 2019, by UNESCO Chair on Environmental Education and in cooperation with the Waste Management Organization of Tehran Municipality, science and technology parks and university incubators. The purpose of the event was to familiarize the participants with designing and producing standard educational media and organizing the preparation and purchase of incentive items by the Waste Management Organization of Tehran Municipality.

The educational themes were as follows:

- Reducing waste generation
- Source Separation of waste

The audience of this event included startups, knowledge-based companies, entrepreneurs and manufacturers.

This event was held in 2 stages (the first stage was held on 24 July in the form of Demo Day by the participants, the second stage was held on 26 and 27 August in the form of startup event for introducing the products).

The event began with the presence of 75 participants in the form of 18 teams at 9:30 AM in the meeting hall of the specialized training center and the permanent exhibition of the waste management.

The event began with a workshop on waste management and then some groups were formed. At first, groups privately explained their ideas to the referees and each team explained its ideas for 20 minutes, and the initial evaluation lasted about 6 hours. Meanwhile, the mentors, together with the participants in the main workshop, provided the necessary guidance and training.

Due to the product-oriented nature of this entrepreneurship event, once all the participants were informed, the groups started designing and 3 groups that had not proposed ideas related to environmental education were eliminated from the evaluation panel.

On the second day, the event began at 7:00 AM and groups presented their ideas and products, and the evaluation process was held in public assembly hall with the presence of all the present participants.

Once the presentations were given by the participating groups, referees consulted and finalized their views and then 5 designs and products were selected as the best designs.

The selected products were as follows:

- Designing educational worksheets
- Workbook about Waste Management Training
- Computer game about Waste reduction
- Zero waste promotional package
- QR Code book

Referees of the event were as follows:

- Dr. Seyyed Mohammad Shobeiri, head of UNESCO Chair on Environmental Education and a faculty member of Payame Noor University
- Dr. Hamed Moghtadari, faculty member and head of incubator center of Al-Zahra University
- Dr. Alireza Hamidiyeh, faculty member of Payame-Noor University and referee of technology department of incubator centers
- Dr. Saeed Moradi Kia, senior specialist of Waste Management Organization of Tehran Municipality

- Dr. Mojdeh Saberi Sahneh, director of the Waste Management Training Working Group of UNESCO Chair on Environmental Education
- Ms. Narges Rajaei, deputy head for Social and Cultural Affairs at Waste Management Organization
- Dr. Saeedeh Karimi, director of Citizenship Education at Waste Management Organization
- Mr. Amin Sharifi, senior specialist at Future Wave Ultra Tech. Company



**The 3<sup>rd</sup> National Conference on Environmental Education was held as webinar (for the first time) on Monday and Tuesday, 11 and 12 November 2019.**

This conference was held with the aim of creating a proper ground for exchanging scientific information and transferring the experiences of researchers. Developing and enhancing audience sensitivity and making creative about environmental change as well as promoting environmental awareness and public culture in the field of environmental protection are other aims of this conference.

The purpose of organizing the conference as a webinar:

- Removing geographical constraints on environmental education and learning
- Interaction with experts and researchers to exchange and share experiences and knowledge on collaborative education, environmental awareness and information in the field of environment, with emphasis on blended learning
- Time saving access to educational, scientific and research information
- The ability of Payame Noor University in providing e-learning to all audiences in the country
- Mission of University in the Sixth Development Plan of the country- Payame Noor University as an International E-Learning Center
- Achieving the University Green Management Indicators, one of the priorities of the university.
- Reducing costs and organizing conferences using environmental indicators and electronic capacities in the form of blended learning.

**❖ Conference Themes:**

- Theoretical, Cultural, Philosophical, Psychological, Sociological and Economical Foundation of Environmental Education.
- Environmental Education and Instructional Design
- Environmental Education and Learning Technologies
- Environmental Education and Islam
- Environmental Education and Management
- Environmental Education and Waste Management
- Environmental Education and Natural Disaster
- Environmental Education and Spatial Knowledge
- Communication, Capacity Building, Education, Participation and Awareness (CEPA) Regarding Wetlands
- Environmental Education and Participatory Training
- Environmental Education and Eco-Friendly Technologies
- Environmental Education and Renewable Energies
- Environmental Education and Climate Change
- Environmental Education and Food Security
- Environmental Education and Environmental Law
- Environmental Education and Green University
- Environmental Education and Passive Defense
- Environmental Education and Air Pollution

**❖ Opening Ceremony:**

The event began with the recitation of the Holy Quran and the national anthem of the Islamic Republic

of Iran in Payame Noor University. Then specified speeches were played for the audiences in offline mode.

### ❖ **Keynote Speakers:**

*Professor Seyed Mohammad Shobeiri Head of UNESCO Chair on Environmental Education and Secretary of the Conference:*

In the first speech, Professor Seyed Mohammad Shobeiri, Secretary of the Conference, explained that the aim of the conference “is to create and enhance community sensitivity about environmental issues”. He mentioned that the environment has three dimensions:

- Multiplicity of topics (waste management, crisis management, air pollution, energy and resource consumption pattern modification, climate change, social responsibility etc.)
- Number of audience (minors, adolescents, youth, adults, women, principals, teachers and students)
- Multiplicity of educational methods: formal-informal education

Then he briefed the session on the report of the environmental education conferences held previously in 2011 and 2017. He said: “The affairs related to the executive management and scientific management of the conference have been planned during the last 9 months. After obtaining the necessary permits from the Ministry of Science, Research and Technology, the conference was held as webinar to remove the geographical limitation, save time for participation in the conference and facilitate the realization of green management.” 75 papers were submitted to the conference, some were presented by the participants and some were presented as poster.

*Dr. Mohammad Ali Karimi Deputy of Research and Technology of Payame Noor University:*

Dr. Mohammad Ali Karimi put emphasis on the importance of environment and said: “considering that Payame Noor University focuses on blended and electronic learning, it has played a crucial role in developing green management and reducing the use of paper, especially through production of electronic books and electronic tests. This webinar promotes educational justice by making educational materials accessible to all participants from different parts of the country.” He added: “today, environment is one of the important concerns of the country. By development of new technologies and advancement of science, public attention has been drawn to the environment, and today many countries are working to protect the environment.” He said: “I hope that the conference would facilitate beginning of a comprehensive education for all the people with the motto of “starting from ourselves and paying attention to the rights of others”, so that various social reforms for protection of environment and natural resources can be implemented at community level.”

*Dr. Hojatollah Ayoubi Secretary General of the Iranian National Commission for UNESCO:*

While expressing his satisfaction about organizing the conference as webinar, he called the participants’ attention to environmental literacy- as one of the criteria for literacy in terms of the UNESCO. He pointed out: “considering the importance of environmental protection in Iran's ancient culture and teachings of religion, environmental protection is, in fact, part of the Persian culture and organizing such conferences can facilitate promotion of literacy as well as policy -making in the field of environmental protection.”

*Dr. Arash Yousefi Head of the Center for Environmental Education and Department of Training of park rangers of Department of Environment:*

He said: “education plays an important role in solving environmental problems. In Department of Environment, emphasis is placed on promotion of environmental protection culture, in line with sustainable development goals. This Department also offers strategies for the higher education system of the country by providing the academic course on “understanding of environment” and by compiling the book of humans and the environment for high school students. Furthermore, measures have been taken for education of pre –school children. Given the central role of family in the development of environmental literacy, more emphasis has been placed on education for children and families.”

*Dr. Akbar Ranjbarzadeh Secretary of the board of directors of the Islamic Consultative Assembly:*

He said: “organizing the event as webinar can be an effective step in promotion of educational justice, because this event has provided an opportunity for participants from different parts of the country to share their educational materials”. He also referred to Payame Noor University, as a model for other universities in the realization of Green University and said: “elevating the status of the environment is an important issue and in this regard, environmental education provided by of UNESCO Chair at University of Payame Noor, plays an important role in development of environmental education.”

*Dr. Mohammad Birjandi Director General of the Department of empowerment of NGOs and Development of Social Participation (part of the Ministry of Interior):*

He spoke about environmental education and importance of social participation, with emphasis on the capacity of NGOs in development of environmental education at different levels of society. He said “community involvement of a society bears witness to its development and is rooted in social interests of the society. Participation is an important aspect of NGOs’ activities in the field of environment. Non-governmental Organizations, as institutions of social partnership, play an effective role in determining national and international diplomacies for the promotion of environmental laws by cooperating in the implementation of the project and providing consultation in policy –making. Voluntary activities are the best achievements of NGOs.”

*Dr. Sheena Ansari Director General of the Environment and Sustainable Development Department of Tehran Municipality:*

She said: “In accordance with paragraph 14 of the policies issued by the Supreme Leader, emphasis must be placed on promotion of environmental awareness. Also article 50 of the Constitution links current and future generations to the environment and makes it a public duty to protect the environment. Therefore, environmental education for the public is very important. In the laws passed by the parliament as well as the laws of the country, much emphasis is placed on environmental education. However, we are facing serious challenges and environmental education can be effective once we take necessary steps to decrease environmental degradation. Strengthening the willpower of people through environmental education and governmental policy –making can help us overcome challenges. This webinar promotes educational justice by making educational materials accessible to all participants from different parts of the country.

Department of the Environment and Sustainable Development of Tehran Municipality has established a department for empowerment and has taken effective measures to encourage social participation and develop environment departments in Tehran.”

### ❖ Paper Presentations and Panel Discussions:

On the first day after the opening ceremony, in the second part of the conference, 21 papers were presented –in online mode– in three separate panels for the four referees of each panel and those who were interested in the topic. Researchers from across the country explained their findings and provided answers to the questions of the referees.

Panel Discussion 01		
Prof. S. Mohammad Shobeiri	Dr. Fahimeh Haghighi	Dr. Alireza Ghorbani
	Paper Topic	Author
1	Soil and Water management Master Degree Regional Curriculum	Dr. Ladan Razi Kordmahaleh
2	Footprint of education of family in shaping the attitudes and environmental behaviors of students	Dr. Fatemeh Parasteh Ghombavani, Ms. Zahra Meiabadi
3	The Role of Environmental Religious Teachings in Protection of animals rights, value and importance	Ms. Mahnaz Ranjbar
4	Conditional Abundance of Blessings from the Perspective of Quran, the Basis of Environmental Education	Mr. Abbas Alizadeh Shoostari
5	Designing a Desirable Pattern of Environmental Education Curriculum in Elementary School with Integrated Approach	Ms. Masoumeh Kargozar
6	Content Analysis of Textbooks in first stage of high school from the Perspective of Climate Change	Dr. Shahou Karami
7	Content analysis of the book "Human and environment	Dr. Fahimeh Haghighi, Dr. Fatemeh Parasteh Ghombavani, Mr. Seyed Milad Ramin Azad

Panel Discussion 02			
Dr. Babak Omidvar	Dr. Maryam Larijani	Dr. Hassan Darabi	Dr. Mojdeh Saberi Sahne
	Paper Topic	Author	
1	The Model Green Mining Effective Components Using the Sustainable Development DPSIR Model and Fuzzy DEMATEL Method	Mr. Hossein Fakhraei, Dr. Mohammad Yazdi, Dr. Seyed Mohammad Shobeiri, Dr. Ravanbakhsh Shirdam, Dr. Hasan Barzegar	
2	The relationship between family processes and tendency to green consumption behavior among personal of Rostamani hospital of Parsian	Dr. Ahmad Rastegar, Mr. Majid Bayareh	
3	Identification of effective components on the local communities participation in the development of wetland ecotourism for sustainable rural development (Case study: Kanibarazan Wetland of Mahabad)	Mr. Mahmoud Houshyar	
4	Factors associated with farmers tendency to use water (case study: Hasanlu dam lands-Naqadeh)	Mr. Mohammad Allahverdyan	
5	Determining and Prioritization of Environmental Literacy Benchmarks for Kindergarten to 4th grade (K-4) considering Specialists and Experts' Views	Mr. Seyed Milad Ramin Azad	
6	Analysis of Environmental Education in Elementary Course Content with a Future Research Approach	Ms. Farzaneh Askary	
7	climate change and environmental education	Mr. Ahmad Yari, Ms. Maryam Khalili Rad	

## Panel Discussion 03

Prof. Mehran Farajollahi	Prof. Bahman Zandi	Dr. Mahdieh Rezaei	Dr. Fatemeh Parasteh
Paper Topic			Author
1	The role of environmental television programs in Individual and social behavior of children		Ms. Zahra Shamsi Papkiadeh
2	Explaining environmental metrics in national media to raise awareness of citizens to reduce changes		Mr. Mostafa Naderi, Dr. Maryam Larijani
3	The role of virtual social network (Eitaa) in improving energy literacy of Tehran Province's Payame Noor university students		Ms. Elham Borzouei, Dr. Mahdieh Rezaei
4	The role of virtual social networks on environmental education		Mr. Majid Tavazoei
5	Comparing the effect of flipped classroom with traditional teaching method in Environmental Issues of Science Lessons		Dr. Marjan Masoumi Fard, Ms. Tahereh Pour Elmi
6	Investigating the effect of 5e teaching method on increasing the knowledge level of elementary school students in fifth grade about waste management learning		Ms. Samira Shirzadi, Dr. Marjan Masoumi Fard
7	Investigating the effectiveness of environmental education on the attitudes of senior, middle managers, and experts of one of the combined cycle power plant in the design and construction phase		Ms. Arefeh Farahani, Ms. Fatemeh Effati

## ❖ Specialized Online Meetings:

On the second day, thirteen scientific and specialized meetings were held in various fields of environmental education.

Meetings		
	Topic	Presenter
1	Educational planning and Environment	Dr. Fahimeh Haghighi
2	Tourism and Environmental Education	Ms. Shahed Shoaee
3	New Technologies and Environmental Education (MOOCs)	Dr. Mahdieh Rezaei
4	Mind Mapping and Environmental Education	Dr. Fatemeh Parasteh
5	Visual Arts and Environmental Education	Ms. Hayedeh Lorestani
6	Environmental Education and Learning Cities	Dr. Fahimeh Haghighi
7	Introduction of Carbon trading and management concepts	Dr. Somayeh Oryan
8	Environmental Education and Green Management University	Ms. Sahar Rashidi
9	A Modern Solid Waste Management Strategy-Zero Waste	Dr. Mojdeh Saberi Sahne
10	The Role of Women in Environmental Protection	Dr. Akram Soltanpour
11	Human's environmental law, regulations, criteria and standards	Dr. Ladan Razi kordmahaleh
12	A sample of participatory environmental education, based on experiences of ecosystem approach in Iranian wetlands management	Mr. Mahdi Mojtahedi
13	The summit of Environmental Education in Iranian-Islamic Model of Progress	Mr. Abbas Alizadeh Shooshtari
14	Circular Economy and Environmental Education	Ms. Nazi Ahangar Partovi

## Meeting 01

## Educational Planning and Environment

## Presenter: Dr. Fahimeh Haghighi

Educational Planning and Environment meeting including the description of the concept of “Design”, “Instruction” and “Environment” on 12 November was held. Then the main elements of “6 wh” including: what (the subject of education), why (the goal of education), when (the time of education-learning pattern), whom (the learner of education-pre knowledge), how (the method of education), which (the technology of education), have described. The pattern of “ISD” and the 5th. Process of it including: 1- problem analyzing (need assessment), 2- Designing, 3-Runnind, 4- Evaluation, 5- Review and correction have explained.

**Meeting 02****Tourism and Environmental Education****Presenter: Ms. Shahed Shoaee**

Tourism is a profitable global industry that interacts with the environment outside its purpose, type of tourism and its dimensions. However, in some types of tourism such as eco-tourism, this factor is more noticeable and if environmental considerations are not attended, it will cause irreparable damages. We must strive to inform all stakeholders of tourism, including tourists, tour leaders, local communities, policy makers and decision makers in the field of tourism through environmental education, about the positive and negative impacts of tourism. Environmental education organizations must try to improve behaviors of stakeholders according to their role in order to lead to stability and improvement of socio-economic conditions rather than environmental degradation. Iran, with its unique characteristics in terms of tourism attractions, should strive for a more sustainable tourism expansion.

**Meeting 03****New Technologies and Environmental Education (MOOCs)****Presenter: Dr. Mahdieh Rezaei**

The meeting of new technologies and Environmental education investigated the new technologies utilize in environmental education with emphasize on massive open online course (MOOC) and their utilize in environmental education.

**Meeting 04****Mind Mapping and Environmental Education****Presenter: Dr. Fatemeh Parasteh Ghombavani**

“Mind map” can be defined as tools that broadly facilitate research and related activities. “Mind map of Environmental Education” enable researchers to collect, organize, analyze, visualize and publicized all information and documents about Environmental Education. In this mind map we tried to collect some tools that enable researchers, students and interested to follow the correct path in environment and also familiar with some activities in this area, such as definitions, related Pollution and Scientific journals about Water, weather, soil, Biodiversity and energy.

**Meeting 05****Visual Arts and Environmental Education****Presenter: Ms. Hayedeh Lorestani**

Visual arts can be a tool for environmental education. Arts such as painting and photography have memorable messages for people. Holding workshops in public spaces is very effective. Holding exhibitions of paintings and sculptures on the subject of the environment is another way to raise awareness. Creating environmental bases in art colleges and art schools can be very effective. Hoping for the day we can have a world in perfect health

**Meeting 06****Environmental Education and Learning cities****Presenter: Dr. Fahimeh Haghighi**

Environmental Education and Learning cities meeting was held on November 12. The concepts of the learning city and its history were presented. UNESCO World Learning Network cities China (2013), Mexico (2015), Denmark (2017), and Colombia (2019) conferences were introduced. At the end, the characteristics of the learner city were explained by the environmental education approach and continued with a variety of formal, non-formal and free education and a variety of teaching methods in the learner city using all urban capacities.

**Meeting 07****Introduction of Carbon Trading and Management Concepts****Presenter: Dr. Somayeh Oryan**

Carbon management is a systematic approach to reducing carbon emissions, integrating the technical, regulatory, financial and communications aspects within comprehensive strategies and plans of action. In this online meeting has been discussed about:

1. The Effects of Climate change and global warming
2. National laws, regulations and policies regarding carbon management,
3. Importance and different major dimensions of carbon management such as:
  - Financial and nonfinancial mechanism of UNFCCC,
  - Emission trading,
  - Carbon auditing,
  - Carbon footprint,
  - Life cycle assessment,
  - Carbon engineering.

**Meeting 08****Environmental Education and Green Management University****Presenter: Ms. Sahar Rashidi**

The importance of higher education and education to the issue of green management and public education The preservation of the environment is a pressing need of the community in facing the challenges and critical environmental challenges, the need for the role and leadership of universities and schools in the field of responsibility Social needs require planning and frivolous action. The academics and teachers of any community are the most prestigious group for developing cultural and environmental activities. Universities and schools can be recognized as a successful example and an evolving model for spaces outside the university. The farhangian University, the pivot of the fundamental transformation in education, can play a more valuable and distinct role than other universities in creating a culture of environmental support. Different models are presented in the context of Green University But the key indicators in university green management are: Water consumption management, Energy consumption management, Waste management, Education and Culture

Each has sub-indicators. Implementing a green management system at the university is a nine-step process:

1. Public education
2. Structure and system
3. Performing your own audit
4. Analyzing the results of self-audit
5. Identify opportunities for improvement
6. Prioritization
7. Project determination
8. Performance
9. Supervision, control and monitoring

**Meeting 09****A Modern Solid Waste Management Strategy – Zero Waste****Presenter: Dr. Mojdeh Saberi Sahne**

The online meeting introduces different governments' strategies for waste generation and presents the issue of zero waste as the best idea for waste management.

Communities, governments, and innovators are launching successful programs to reduce and zero waste , today . We are now familiar with a number of "waste-free" pioneers who have achieved remarkable success in the following case.

1. Local governments' plans for a zero waste theory
2. Specimen community
3. Eco parks
4. Expanding the responsibility of environmental producers
5. Preferred purchase with environmental considerations
6. Design of packaging

## 7. Comprehensive approaches to zero waste jobs

**Meeting 10****The Role of Women in Environmental Protection****Presenter: Dr. Akram Soltanpour**

Across the regions and cultures of the world, women play critical roles in relation to their natural environment. Often deeply dependent on available natural resources for food, fuel and shelter, women can be particularly vulnerable to environmental changes or threats. Because women's workload is often centered on managing natural resources, biodiversity and ecosystems, their experiences and perspectives are essential to sustainable development policymaking and actions at every level, for a healthy planet for generations to come.

**Meeting 11****Human's Environmental Law, Regulations, Criteria and Standards****Presenter: Dr. Ladan Razi Kordmahaleh**

Noticing the increasing importance of environmental problems in our time, the close observation of the aspects of these problems and how-to-face them in domestic laws of counties and international rules has gained vital importance. Problems such as global warming, acid rains, oil pollution, extinction of some of living species, floods, the destruction of the ozone layer, etc. have gained such importance that are called the 'second generation of environmental problems' and the full recognition of domestic and international environments is impossible without considering them; moreover, the convergence of world countries to face them is necessary. The analysis of the mentioned issues in domestic laws of countries in order to provide appropriate harmony for growth of such laws in international law is essential. We will explain the status of constitution, ordinary laws, and also international cooperation of Iran related to this subject in 3 divisions.

1- Constitution: Islamic Republic of Iran enshrined environmental protection in the Constitution. "In the Islamic Republic of Iran protection of the environment, in which present and future generations should enjoy a transcendent social life, is regarded as a public duty," reads Article 50. "Therefore, economic and any other activity, which results in pollution or irremediable destruction of the environment, is prohibited."

2- Principal Laws: Principal Environmental Laws in human's environmental is about soil protection, clean water and air, environmental assessment and monitoring of environment.

3- International Law: Iran is a Party to: Vienna Convention, Montreal Protocol, RAMSAR Convention, Basel Convention, Stockholm Convention and Rotterdam convention.

**Meeting 12****A Sample of Participatory Environmental Education, Based on Experiences of Ecosystem Approach in Iranian Wetlands Management****Presenter: Mr. Mahdi Mojtahedi**

A sample of participatory environmental education, based on applying experiences of ecosystem approach in Iranian wetlands management

In this lecture by representing Arnstein participation ladder and participation models, the level of participation among local community and different stakeholders in management of the Iranian wetlands and protected areas has been discussed. Then by introducing different steps of preparation Khorkhoran wetland management plan, done based on the ecosystem approach, efforts and results of this process has been explained.

Using local knowledge, the bottom-up planning and efforts to gain collaboration between different stakeholders for sustainable conservation of this precious wetland and biosphere reserve was the main issue in this type of planning, called ecosystem approach.

**Meeting 13****The summit of Environmental Education in Iranian-Islamic Model of Progress****Presenter: Mr. Abbas Alizadeh Shoostari**

The summit of Environmental Education in Iranian-Islamic Model of Progress, with the presence of faculty members, researchers, students and enthusiasts, as one of the conference side programs, was held as a webinar.

The purposes of this meeting, were introducing the basics of development of environmental education models from the perspective of the Iranian-Islamic Model of Progress, and understanding the status and role of environmental education in the formation of the Iranian-Islamic Model of Progress.

#### Meeting 14

#### Circular Economy and Environmental Education

**Presenter: Ms. Nazi Ahangar Partovi**

A circular economy is one that seeks to establish a system of consumption where materials continuously flow, being used and then reused, with as little waste and negative environmental impact as possible. Biological materials are returned to the environment and technological materials are utilised in a 'make – use – repair/upgrade' cycle.

Circular economics is seen as a breakaway from our current linear economic system, whereby resources are used in a 'make-consume-dispose' model, with high waste and significant negative environmental impact. It seeks to make our societies less wasteful and more resourceful.

So, how would this theory be used in the curriculum? The teaching would begin by looking at our current linear system of consumption, and dealing with the first objective of circular economics, making us less wasteful.

This presentation is about circular economy, it's difference with linear economy, it's principles, circular business models and concepts in order to circular economy.

Second part is about the importance of education in this field not only for entrepreneurs but also for all people.

At the end the third part is about the international status of circular economy.

#### ❖ Closing Ceremony:

After the specialized sessions, in the closing ceremony, Dr. Nasrin Fakhri, Director of the Education Department of the Iranian National Commission for UNESCO, delivered her speech. She said: "UNESCO's various programs are categorized in five major programs, including education, natural sciences, social/human sciences, culture and communication/information and education is the most important program. Numerous seminars and conferences are annually held to promote quality and accessible education for all the people. This webinar is organized by UNESCO Chair on Environmental Education of Payame Noor University, which is one of the new and active Chair in Iran and presents part of the environmental education and research activities in the country. Achieving native and national models for protecting the environment and solving environmental challenges and introducing these models to the world are objectives of the Iranian National Commission for UNESCO and its Chairs in Iran."

At the end of the ceremony, Prof. Shobeiri, Scientific Secretary of the Conference and head of UNESCO Chair on Environmental Education, presented a report on the two-day conference and thanked all the supporters and colleagues for their cooperation in organizing the conference. It was mentioned that one of the plan of the Chair is organizing a webinar on environmental education at regional and international levels in the coming years.



## ❖ National Festival of Environmental Education and the fifth specialized exhibition of environmental education – 26 January 2020

In order to fulfill its responsibility, UNESCO Chair on Environmental Education in Payame Noor University organized the National Festival of Environmental Education on 26 January, which is world Environmental Education Day and is celebrated in many countries around the world. By organizing this festival, UNESCO Chair on Environmental education has contributed to the symbolic introduction of the World Environmental Education day.

National Festival of Environmental Education began with the message of the Minister of Science, Research and Technology. This festival was attended by Dr. Hojatollah Ayoubi, Secretary General of the Iranian National Commission for UNESCO, Dr. Mohammad Reza Zamani, President of Payame Noor University, Dr. Kiyoomars Kalantari, Deputy Director of the Environmental Protection Organization for Natural Environment, Dr. Shina Ansari, Director of Environment and Sustainable Development department of Tehran Municipality, Dr. Mohammad Ali Karimi, Deputy President for Research and Technology at Payame Noor University and Dr. Seyed Mohammad Shobeiri, head of UNESCO Chair on Environmental Education at Payame Noor University and secretary of the festival, experts and specialists of environmental education. This festival was organized by UNESCO Chair on Environmental Education on 26 January 2020 at the Central Organization of Payame Noor University.

In order to realize the green management of the universities and to continue the policies of the Chair and the university, this event was shown simultaneously in the form of video conferences for 31



provinces, and all the 24 specialized scientific meetings and 3-minute competitions for presenting the dissertations were held online.

Festival included the following items:

- Unveiling of the national symbol of environmental education
- Unveiling of the project of specialized encyclopedia of environmental education
- Organizing the fifth specialized exhibition of environmental education
- 3-minute presentation of master's theses and doctoral dissertations related to environmental education
- organizing 24 specialized meetings in the field of environmental education

### **Opening ceremony**

The festival began with the recitation of the Quran and the national anthem of the Islamic Republic of Iran at 9:00 AM. Participants from the provincial headquarters of Payame Noor University in 31 provinces participated in the festival via video conference.

The keynote speakers of the festival included Dr. Seyed Mohammad Shobeiri, Head of UNESCO Chair on Environmental Education, Dr. Mohammad Reza Zamani, President of Payame Noor University, Dr. Hojatollah Ayoubi, Secretary General of the Iranian National Commission for UNESCO, Dr. Shina Ansari, Director of Environment and Sustainable Development department of Tehran Municipality and Dr. Kiyoomars Kalantari, Deputy Director of the Environmental Protection Organization for Natural Environment.

### **Unveiling of the national symbol and specialized encyclopedia of environmental education**

The national symbol and the project of the specialized encyclopedia of environmental education were unveiled in a ceremony attended by the Secretary General of the Iranian National Commission for UNESCO, university officials, Environmental Protection Organization and Tehran Municipality.



The project on “encyclopedia of environmental education” began in the form of a memorandum of understanding between the UNESCO Chair on Environmental Education and Faculty of Encyclopedia Studies.

### 3-minute presentation of master's theses and doctoral dissertations related to environmental education

This event was held by permission of the University of Queensland in Australia and was attended by 13 participants who gave 3-minute presentation of their theses and dissertations in the form of one slide. The presentations were evaluated by the referees, who were university professors, and finally winners of the first, second and third place were awarded a plaque of appreciation and statue of the festival.

The winners were as follows:

1. Ms. Shahed Shoa'ei
2. Dr. Mostafa Adelizadeh and Mr. Rahim Suzani
3. Dr. Somayeh Oryan



### Scientific meetings

In order to provide an opportunity to exchange the latest achievements, 24 virtual scientific meetings were held in four parallel panels with the participation of professors and experts. The titles of the meetings and the participants, including the organizations, institutions and associations, and names of the moderators are given in below table.



	<b>Panel A</b>	<b>Panel B</b>	<b>Panel C</b>	<b>Panel D</b>
Title	Educating Environmental health, a global approach to protect human health and the environment	Techniques and motivational patterns in voluntary activities	Global brand of UNESCO learning city (process of joining this global network )	A new look at waste management knowledge
Organizer	Mehregan Partoo Research Institute	UNESCO Chair on Environmental Education	Iranian National Commission for UNESCO	UNESCO Chair on Environmental Education
Moderator	Dr. Shervan Shoa'ei	Ms. Shahed Shoa'ei	Dr. Nasrin Fakhri	Dr. Saeed Moradi Kia
Title	Environmental education for people with special needs, challenges and opportunities	Familiarity with the principles of detection, treatment, rehabilitation and release of birds of prey in the wild	Solutions to energy consumption optimization	Waste reduction training
Organizer	Mehregan Partoo Research Institute	Consulting Engineers of Zist-Boom company	UNESCO Chair on Environmental Education	UNESCO Chair on Environmental Education
Moderator	Ms. Shahed Shoa'ei	Dr. Abolfazl Kiamarzi	Mr. Rahim Suzani	Dr. Saeedeh Karimi
Title	Familiarity with the role of sport in environmental education	Understanding the principles of environmental protection for the directors of compiling textbooks of "Geology" and "Human and the Environment ", Ministry of Education	Risk Management , a means for the reduction of the damages and the increase of the reversibility in environmental events	Status of art in environmental education
Organizer	Red Crescent Society	Environmental Protection Organization	UNESCO Chair on Environmental Education	UNESCO Chair on Environmental Education
Moderator	Dr. Mohammad Hossein Bibi Kobadi, Dr. Mahdiyeh Seraji	Dr. Houman Bahmanpour	Mr. Ahmad Yari	Ms. Elahe Moghaddami
Title	Solutions to improve water and energy frugality	Explaining the process of jobs' need assessment for the heads of provincial education organizations	Training Crisis management and safety	How to implement green management at universities
Organizer	Ministry of Petroleum	Environmental protection organization	Red Crescent Society	UNESCO Chair on Environmental Education
Moderator	Mr. Omid Jalali	Mr. Mehrdad Samadi	Dr. Ahmad Soltani	Dr. Mahdieh Rezaei
Title	Using new approaches in environmental education (experiences of the national plan to protect water resources and environment)	Understanding the role of toxins of landfills in animals and birds' life and providing solutions to eliminate toxins in nature	Introduction of passive defense and its role in management	The cause and effects of climate change and adaptation to climate change
Organizer	Department of people partnership at Environmental Protection organization	Consulting Engineers of Zist-Boom company	UNESCO Chair on Environmental Education	UNESCO Chair on Environmental Education
Moderator	Dr. Mohammad Reza Farzaneh	Dr. Abolfazl Kiamarzi	Dr. Mostafa Adelizadeh	Dr. Shahou Karami

Title	Introduction to Sustainable fashion design and its role in protecting the environment	Waste management at domestic level	Planning Environmental Education	Story –telling about the environment
Organizer	Institute of Sustainable Fashion Design	UNESCO Chair on Environmental Education	UNESCO Chair on Environmental Education	Environmental Protection Organization
Moderator	Ms. Neda Sormeh	Dr. Houman Gholampour	Dr. Fahimeh Sadat Haghighi	Ms. Zahra Rezaei Tarhani

### Specialized webinar on Zagros forest fires, challenges and solutions – 1 July 2020

When Zagros forests were beset by successive fire, in order to identify proper strategies and solutions, UNESCO Chair on Environmental Education tried to fulfill its mission in this field by organizing this webinar and by examining this phenomenon from four different aspects, including forestry, weather and climatology, role of local communities and firefighting management.

The experts of the webinar included:

- Dr. Jahdi, faculty member of the Department of Forest Science and Engineering in Mohaghegh Ardabili University,
- Dr. Mohammad Ghasem Torkashvand, faculty member of the Department of Meteorology in Payame Noor University,
- Mr. Mehdi Mojtahedi, head of the working group of Participatory Protection of UNESCO Chair on environmental education
- Dr. Mostafa Adelizadeh, Director of HSEE Working Group of UNESCO Chair on environmental education

The specialized webinar and a question and answer session were held through LMS virtual system and many students, researchers, natural resource experts and ...attended the webinar.



### ii) Exhibition

#### ❖ 4th specialized exhibition of environmental education- 24 and 25 January 2018

During the 2nd national conference of Environmental Education, 4th specialized exhibition of environmental education was organized by Environmental Education Chair during the two days in 15

stalls regarding the latest achievements of some governmental and non-governmental institutions.



#### ❖ *The first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment/ 5-8 December 2018*

The first International Exhibition on Waste Management, Recycling, and the Related Machinery and Equipment, was held from 5 to 8 December 2018 at Shahre-Aftab International Exhibition Center in Tehran. This exhibition was organized with the support of the Ministry of Industry, Mine and Trade, Ministry of Agricultural Jihad, UNESCO Chair on Environmental Education, Iran's Trade Promotion Organization, Department for the Development of Science, Technology and Knowledge-based Economy (Vice-presidency for Science and Technology), Tehran Chamber of Commerce, Industries, Mines and Agriculture, and Iran Federation of Oil Industry. The workshops held during the four days of the exhibition provided an excellent educational opportunity for the participants. These workshops were organized under the auspices of UNESCO Chair on Environmental Education.



#### ❖ *5th specialized exhibition of environmental education*

In the 5th specialized exhibition of environmental education, the latest achievements of some governmental and non-governmental institutions and associations were showed in 31 booths. The list of the institutions, companies and associations participating in the exhibition is given in below table.

**The list of the booths in the 5<sup>th</sup> specialized exhibition of environmental education**

Booth number	Booth title
1-3	Environmental Protection Organization
4	Abangah Engineering Group
5	Borna Association
6	Waste social project
7	Bacheyahe Ab (Children of water) Group
8	Sabzkaran NGO from Gilan Province
9	Graduates of environment
10	Water resources protection plan
11	Firooze Garden of Medicinal botany
12	Zist-Payesh Company
13	Boom-Payesh Company
14-15	Kudakeimen (Safe child) NGO: the Savior of Tomorrow
16-17	Energy optimization
18	Institute of Sustainable Fashion Designers
19	Pioneers of Avijeh Aryan
20	Vaziri Caved Museum
21-22	Protection of Iran's wetlands
23	Red Crescent Society
24	Working Group on Energy and Environment of the department of Women's Affairs and Family, Ministry of Petroleum
25-26	Soodeh Educational Complex
27	Fire Department
28	Mehregan Partoo Research Institute
29	Kahrizak Charity Sanatorium
30	Department for Environment and Sustainable Development, Tehran Municipality
31	UNESCO Chair on Environmental Education, Payame-Noor University

❖ *Virtual Meeting on the Earth day – 20 April 2020*

[51]

On the occasion of the World Earth Day, an online virtual meeting was held by the Municipality of district 4. Meeting was attended by 30 experts and managers of the environment department of municipality. Representative of UNESCO Chair on Environmental Education was one of the speakers of the meeting. In this meeting, head of the “Waste Management Training” working group of the UNESCO Chair on Environmental Education spoke about the importance of environmental protection, climate change and the necessary solutions to reduce greenhouse gases and role of symbolic occasions such as Earth Day.

### iii) Other conferences/organizational activities undertaken by the chair holder

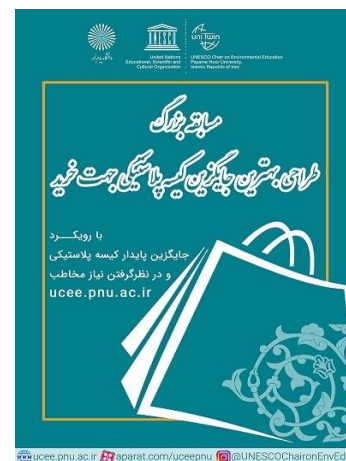
- Presentations and lectures at the International Conference on Society and Environment and International Summer School (Golestan Province) to introduce the UNESCO Chair on Environmental Education (6-8 September 2018)
- Organizing the festival of plastic-free day in Robat Karim (a city in Tehran province), in cooperation with the Waste Management Organization of the city, 12 July 2018
- The Exhibition of Handicrafts made from disposable materials, 2018
- Cooperation with the municipality of Bagestan and Robatkarim in organizing painting competition on themes of environment and students
- Cooperation in organizing kite festival called, "Blue sky"
- Cooperation with Bagestan and Robatkarim municipalities in organizing the festival of Earth Day
- Cooperation with Mashhad municipality for implementation of programs related to international event of Earth Hour
- Cooperation with Mashhad municipality in holding 8 programs in terms of environmental events

### ❖ 1<sup>st</sup> competition for designing the best alternative to plastic bags (on the occasion of the International Plastic Bag Free Day) - summer 2020

On the occasion of the International Plastic Bag Free Day, 1<sup>st</sup> Competition for Designing the Best Alternative to Plastic Bags was held with the aim of providing sustainable alternatives that meet the needs of the audience to discourage consumers from using plastic bags.

Registration for the competition was done via the website: <https://evnd.co/7vpDi> and all age groups could participate in the competition. Initially, participants sent their preliminary design to the Chair via email, and some designs were selected. Then, participants were asked to produce and send two samples of their designs to the Chair's office address and final designs were selected.

Evaluation criteria included creativity, applicability of design, quality of presentation, sustainability indicators, attention to the needs of the audience and easy use of the product. The third week of July was the deadline for submitting preliminary designs and the initial winners were introduced in the last week of July. The initial winners had to present their final products until 5 September. Finally, the winners were introduced and awarded gift and Chair's certificate of appreciation.



### ❖ Visiting Kahrizak Charity Sanatorium for the Elderly and Disabled – 29 September 2019

More than 1400 elderly individuals and disabled people are cared for in Kahrizak Charity Sanatorium. On 29 September 2019, a team consisting of the head and members of the Chair, head of the education department of the Iranian National Commission for UNESCO and representative of Women Affairs department of Tehran Municipality visited the sanatorium, rehabilitation workshops, products produced by the invalids and workshops' equipment for production, especially recycled products. The team got acquainted with one of the operational plans implemented in the field of environmental entrepreneurship and discussed the possibilities of joint cooperation.



#### iv) A selection of conference presentations by the Chair holder and other colleagues

- An Analysis of Green Management Education in Universities, National Conference on Green Education, Environmental Protection and Social Capital Promotion, Hanieh Namaki, Seyed Mohammad Shobeiri, Mahdiah Rezaee, Esfahan, 2019.
- Analyzing the position of environmental education in the development of green management, National Conference on Green Education, Environmental Protection and Social Capital Promotion, Hanieh Namaki, Seyed Mohammad Shobeiri, Mahdiah Rezaee, Esfahan, 2019.
- An Analysis of the role of virtual social networks in new energy consumption, 9th National Conference on Environment, Energy and Sustainable Natural Resources, Elham Borzuei, Mahdiah Rezaee, Seyed Mohammad Shobeiri, Tehran, 2019.
- Effect of Information and Communication Technology (ICT) on Raising Environmental Awareness in Students (A Semi-Experimental Study), 5<sup>th</sup> International Conference of UNESCO Sciences Chairs entitled Technology for Development in Lausanne, Mahdiah Rezaee- Seyed Mohammad Shobeiri, 2018.
- Invitation for giving a talk on the International Day of Education 2018- Jinan, China
- Creating Appropriate Pattern for Development of Environmental and Sustainable Development Indicators in Payame Noor University in Iran, 9th International Conference on Environmental Science and Technology, June 25-29, Hilton Hotel, Houston, USA.
- Feasibility study of upgrading and redesigning the industrial and sanitary wastewater treatment plant of the first refinery of the South Pars Gas Complex, Third International Conference on Science and Engineering 31 August, 2017, Bangkok, Kasem Bundit University.
- The effect of environmental education on improving the mental health of children, 9th World Environmental Education Congress September 9-15, 2017, Vancouver – Canada.

#### c) Interuniversity Exchanges/Partnerships

*(principal exchanges/partnerships between the Chair and other institutions including UNESCO Chairs/UNITWIN Networks)*

#### d) Publications/Multimedia Materials

*(major publications and teaching/learning materials)*

*Please tick relevant fields of output and indicate the volume of output:*

- ☒ Books
- ☒ Books (edited)
- ☐ Books (chapters)
- ☐ Monographs
- ☒ Research Reports
- ☒ Journal Articles (refereed)
- ☒ Conference Proceedings
- ☒ Occasional Papers
- ☒ Teaching/Learning Materials
- ☒ Multimedia Materials (CD-ROM)
- ☒ Multimedia Materials (Video)
- ☒ Multimedia Materials (Other)

*Give details of major publications and materials including full citations.*

## **i) Theses**

### **Subjects of Ph.D. theses:**

- Providing a Decision-making Model for Selection of Environmental Education Method using Fuzzy Logic in Technical Schools, PhD thesis (Fatemeh Ghasami)
- Designing and Validating a Model for Environmental Education Planning Concerning Utilization of Financial and Non-Financial Mechanism of International Convention on Climate Change (Somayeh Oryan)
- Designing a Nature School with Environmental Education Approach - Case Study: Pardisan Park, Tehran (Zohreh Rouhipoor)
- Design and validation of the pattern of educational measures for crisis management in the seismotectonic zones with an emphasis on the earthquake in Kermanshah (Farhood Hamidi)
- Designing the Model of Environmental Character Education of High School Students in Social Network (Masoud Abdollah-Rash)
- Design and validation of the integrated environment curriculum in the preschool period in Rasht -a combination of language teaching, social skills and citizenship education- (Maryam Mohammadi Ostadkelayeh)
- Presentation and validation of the Entrepreneurship Education Model for the Environment for NGOs (Mohammad Birjandi)
- Design and Codification of Policy Model in Educational of Food Safety (Ladan Razi Kordmahaleh)
- Developing a Native Model for Sustainable Schools in Four Climates of Iran Based on National and International Documents (Hoda Taie)
- Appropriate Environmental Education Policy Making Model for Drought Risk Management (Jeiran Amiraslani)

### **Subjects of M.A. theses:**

- The Role of Futures Studies in Development of Ecotourism Education in Iran (Fariba Ibrahimi Fini)
- Examination of Challenges of Development of Green Schools in Iran and Providing Guidelines for Improving the Current Condition (Azam Ayoubi)
- The Effectiveness of Environmental Education Focusing on Healthy Water and Crisis in Raising Awareness of Health Care Providers of Health Centers in Golpayegan city based on standards WHO (Esmat Naemi)
- The Effect of Environmental Literacy on Happiness of Female Students (Maryam Roubakhsh)
- The Effect of Environmental Education on the Level of Knowledge and Change in the Behavior of the First Year Students of Shahid Rajaee Tarbiat Modarres University on Reduction of Greenhouse Gas Production (Soheila Baniahmadi)

- Surveying the predisposal factors in pro-environmental behaviours among local tourists
- Identifying and prioritizing the educational needs of Payame Noor university employees to achieve green management (Hanieh Namaki)
- Development and standardization of evaluation indicators of environmental education (Zohre Alijani)
- Survey on the role of environmental education on HSEE management of Tehran Metro Line 6 (Homa Khodai Marandi)
- Comparison of the effect of traditional and flipped classroom instruction on energy literacy in elementary sixth grade students (Parisa Ghanipour)
- Identifying and prioritizing the educational needs of the employees of Khodabandeh health centers in order to achieve green management (Javad Hashemi)
- The Level of Ecology Awareness of Students of the Sixth Grade of Elementary School in Tabriz and the Role of Gender and Parents Education Level (Razieh Ranjbari)
- The Role of Integrated Management Systems (IMS) in Improving Environmental Literacy Employees Engineering Sapco (Amin Nemati)
- Evaluation of the Effectiveness of Green Management Training Courses on the Staffs of the University of Zanzan (Nasrin Meskar)
- The impact of problem solving experimental science education on ecological literacy of 9th - grade students (Mohammad Reza Kiani)

## ii) Publications:

- **Books:**

**Author:**

Teaching Environmental Ethics, Publication Payam Noor University, 2019. (In Persian)

Developing an environmental culture at home, Publication of Irana Media, 2018. (In Persian)

Recognition of Green Schools: Ideas, Policies and Planning, Wetland Publication, 2018. (In Persian)

Public environmental education, Payame Noor University Press, 2020. (In Persian)

Planning for an education system according to environmental needs, Payame Noor University Press, 2019. (In Persian)

Preparation and production of advanced materials and equipment for environmental education, Payam Noor University Press, 2019. (In Persian)

**Translator:**

Teaching Environmental Ethics, Jahad Daneshgahi University publications, 2017. (In Persian)

Guidelines for Excellence K–12 Environmental Education for educators, administrators, policy makers, and the public, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

Guidelines for Excellence Environmental Education Materials, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

Guidelines for Excellence Professional Development of Environmental Educators, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

Persian)

Guidelines for Excellence Non formal EE Programs for students, parents, educators, homeschoolers, administrators, policy makers, and the public, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

Guidelines for Excellence Early Childhood Environmental Education Programs for educators, parents, homeschoolers, administrators, policy makers, and the public, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

Guiding Principles for Learning in the Twenty-first Century, Publications of the Chair of Environmental Education in UNESCO, 2020. (In Persian)

#### **Editor:**

Introduction to Environmental concepts, Publication Payam Noor University, 2018. (In Persian)

#### • **Articles:**

Shobeiri, S.M, Rezaei, M, Ranjbari, R. (2020). *Evaluation of ecological awareness of sixth grade students of Tabriz elementary schools and the effective factors*, Sociology of Education Journal, 1(13), 169-156. (In Persian)

Rashidi. S, Yarahmadi. R, Shobeiri. S.M, Mansourian. M, (2020). *Designing and Validation of Training Model of Health, Safety, Environment and Energy in Mineral Industries*, Journal of Mineral Resources Engineering (JMRE), 5(2), 85-104. (In Persian)

Taie. H, Shobeiri. S.M, Hatami. J, Larijani. M, (2020). *Designing Sustainable Schools Model to Develop Sustainable Cities Analysis of Network Process (ANP)*, Journal of Environmental Education and Sustainable Development, 8(2), 121-136. (In Persian)

Zamani. N, Hatami. J, Shobeiri. S. M. Kaboodvandpour. SH, (2020). *The impacts of environmental education on reducing human-wildlife conflict*, Journal of Animal Environment, 12(1), 31-40. (In Persian)

Abdollarash. M, Seif. M.S, Shobeiri. S.M, Khaliliy. M, (2020). *A Model for Environmental Character Education Components*, Environmental Researches, 10(20), 149-160. (In Persian)

Alizadeh Shooshtari. A, Shobeiri. S.M, Jamshidi Rad. M.S, Mohammadi. N, (2020), *Model of Environmental Etiquette and Explaining the Environmental Education Objectives Based on Islamic Perspective of "Mother Earth"*, Quarterly Journal of Applied Issues in Islamic Education, 4(4), 149-106. (In Persian)

Sheykholeslami. M, Rezvani. M, Shobeiri, S. M, (2019). *Presentation of Regression Model to Prediction of Pesticide in Iran*, Journal of environmental science and technology, 21(9), 201- 208. (In Persian)

Birjandi. M, Larijani, M, Shobeiri, S. M, (2019). *Presenting a Theoretical Model of Organizational Components Affecting Entrepreneurship Development for NGOs Active in the Area of Environment*, Journal of Social Science, 16(1), 161-186. (In Persian)

Oryan. S, Shobeiri, S. M, Farajollahi. M (2019). *Identification and Prioritizing the barriers to effective utilization of Mechanisms of United Nations Framework Convention on Climate Change (UNFCCC) by Emphasizing on organizational training based on the Three-Dimensional Model*, Iranian Society for Training and Development, 6(21), 37-65.

(In Persian)

- Amiraslani J, Omidvar B, Shobiri SM. (2019). *Prioritization of Crisis Management Practical Measures in the Field of Drought Using Views of Executive Managers*. Sci J Rescue Relief, 11(1): 29-35.
- Adelizade. M, Shobeiri. S.M, (2019), *Fire hazard identification in tall buildings: A factor analysis approach*, Journal of Resilient City, 2(6), 1-19. (In Persian)
- Adelizade. M, Shobeiri. S.M, (2019), *Prioritizing fire risks in tall buildings using the FISM and FANP hybrid model*, Journal of Resilient City, 1(4), 1-26. (In Persian)
- GHassami. F, Shobeiri. S.M, Larijani. M, Farahmand rad. SH, (2019). *Choosing the most appropriate method of teaching sustainable development using hybrid algorithm of DEMATEL-ANP and TOPSIS in fuzzy approach (A case study of technical and vocational schools)*, Journal of environmental science and technology, 21(4), 107-123. (In Persian)
- Shobeiri, S. M, Oryan, S. (2019). *International Declarations and Recommendations on Climate Change (Global Warming)*, Iranian Encyclopedia Curriculum, 1-10. (In Persian)
- Shobeiri, S. M, Rezaee, M. (2019). *Contemporary environmental challenges and the role of curriculum planning*, Iranian Encyclopedia Curriculum, 1-8. (In Persian)
- Shamsi. S. Z, Shobeiri, S. M, (2019). *Evaluation of socio-economic factors affecting the environmental awareness of women (Case study: Tehran)*, Quarterly Journal of Woman & Society, 10(38), 319-334. (In Persian)
- Shobeiri, S. M, Rezaee, M. (2019). *Statements and recommendations related to Biodiversity*, Iranian Encyclopedia Curriculum, 1-10. (In Persian)
- Shobeiri, S. M, Rezaee, M. (2019). *Statements and recommendations related to environmental education*, Iranian Encyclopedia Curriculum, 1-13. (In Persian)
- Shobeiri, S. M, Rezaee, M. (2019). *Statements and recommendations related to Catastrophes and natural disasters*, Iranian Encyclopedia Curriculum, 1-9. (In Persian)
- Rashidi. S, Yarahmadi. R, Shobeiri, S. M, Mansourian. M, (2019). *Ranking Key Performance Indicators of Health, Safety, Environment, and Energy Education Using Multi-Criteria Decision-making Techniques*, Journal of Occupational Hygiene Engineering, 6(1), 26-34. (In Persian)
- Rouhipoor, Z. shobeiri, S. M, Larijani, M. Mikaili, A. R. (2019). *The effects of creating nature schools on urban Livability using Delphi technique Case Study of Pardisan Park*, Tehran, Biannual Journal of Urban Ecology Researches, 10(19), 27-46. (In Persian)
- Shamsi. S. Z, Shobeiri, S. M, (2019). *Mobile learning in environmental impact assessment training using theory of reasoned action*, Research in Curriculum Planning, 16(33), 133-144. (In Persian)
- Razikordmahaleh, L., Hatami, J., Shobeiri, S.M., Noroozi, O. (2019). *Strategic analysis of food safety policy-making*, Journal strategic studies of public policy, 8(29), 159-179. (In Persian)
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- Razikordmahaleh, L., Hatami, J., Shobeiri, S.M., Noroozi, O. (2019). *Model of Education Policy for Food Safety: A Grounded Theory Study*, Iranian Journal of Health Education and Health Promotion, 6 (4), 383-392, (In Persian)

- Razikordmahaleh. L, Hatami. J, shobeiri, S. M, Nourozi. A, (2018). *Policy Research on Food Safety: A Qualitative Research*, Majlis & Rahbord, 25(95). (In Persian)
- Fathi Vajargah, K. Shobeiri. S.M, Parhizkar, L. (2018). *Teachers' Perceptions of the Environmental Curriculum in Tehran's Secondary Schools: A Phenomenological Approach*, Quarterly Journal of Research in School and Virtual Learning, 6(1), 87-104. (In Persian)
- Mohammadi Ostadkelayeh, M. Zandi, B. Hatam, J. Shobeiri, S.M. (2018). *Design and Validation a Pattern of Integrated Curriculum in Environmental Education for Pre-Primary School Children*, Journal of Environmental Education and Sustainable Development, 7(1), 115-126. (In Persian)
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- Rezai. M, Shobeiri, S. M, Sarmadi. M. R, Larijani. M, (2018). *Investigating the Effect of Environmental Programs of TV on the Promotion of Environmental Awareness and Attitude of Students*, Journal of environmental science and technology, 20(2), 203-215. (In Persian)
- Birjandi. M, Larijani, M, Shobeiri, S. M, (2018). *Identification of Organizational Factors Influencing Entrepreneurship Training for the NGOs Active in the Field of Addiction and the Environment*, Journal of Research on Addiction, 12(45), 281-295. (In Persian)
- Shobeiri, S. M, (2018). *The Role of Social Networks on Promoting the Environmental Culture of Teachers: A WhatsApp Case Study*, Quarterly Journal of Research in School and Virtual Learning, 5(4), 93-100. (In Persian)
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- Abdollarash. M, Seif. M.S, Shobeiri. S.M, Khaliliy. M, (2017). *Qualitative Study of the Character Education as a New Approach to Environmental Ethics*, Bioethics Journal, 7(26), 51-60. (In Persian)
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- Birjandi. M, Shobeiri, S. M, Larijani, M (2017). *The main policy formulating and implementing environmental education strategies in the sixth development plan*, Strategy, 26(84), 133-147. (In Persian)
- Rezai. M, Shobeiri, S. M, (2017). *The Effect of Social Networks Usage on the Promotion of Pro-environmental behavior in Tourism (Case Study: Telegram Social Network)*, Journal of Tourism Planning and Development, 6(21), 28-53. (In Persian)
- Rezai. M, Shobeiri, S. M, Sarmadi. M. R, Larijani. M, (2017). *Investigation of Environmental Literacy of Central Province PNU students with an Emphasis on Gender and Its Comparison of Islamic and Ecofeminism Perspective*, Journal of humans and the Environment, 15(2), 106-120. (In Persian)
- Ghaemi. A, Larijani. M, Shobeiri, S. M, Sarmadi. M. R, (2017). *A Conceptual Model for the Sustainable Governance of Integrated Management of National Water Resources with a Focus on Training and Capacity Building*, Journal of Water & Wastewater, 28(4), 112-117, (In Persian)
- Shobeiri. S.M, (2017). *Thinking Styles and Environmental Behavior and Attitudes among High School Students*, Quarterly Journal of Education, 33(2). 41-66. (In Persian)
- Ghassami. F, Shobeiri. S.M, Larijani. M, Farahmand rad. SH, (2017). *Fuzzy Multiple Attribute Decision Making Model for Choosing Environmental Education Method in Vocational and Technical Schools*, Journal of Environmental Education and Sustainable Development, 5(3), 59-78. (In Persian)
- Ghaemi. P, Shobeiri, S. M, Larijani. M, Rokrok. B, (2017). *Developing the Conceptual Model for Environmental Education Expansion by Evaluation of Strategic Parameters*, Environmental Researches. 7(14). 3-16. (In Persian)
- Meiboudi. H, Lahijanian. A, Shobeiri. S.M, Jozi. S.A, Azizinezhad. R, 2017. *Development and validation of sustainability criteria of administrative green schools in Iran*, Journal of Environmental Management, 197, 605-609.
- Karami. S, Shobeiri. S. M, Jafari. H. R, Nabi Bidhendi. G. R, 2017. *Assessment of knowledge, Attitudes, and Practices (KAP) towards climate Change Education (CCE) among lower secondary teachers in Tehran, Iran*, International Journal of Climate Change Strategies and Management, 9(3), 1-15.

#### • Multimedia Videos

- Producing the animation of Zoonami (waste tsunami) and distribution of animation in the first national festival of environmental education
- Making a clip introducing the Chair and its plans

- **Obtaining a license for e-publishing activities of the Chair**

After obtaining the necessary licenses, the electronic publications department of the UNESCO Chair on Environmental Education has begun since 2019, and now the processes related to the publication of 6 books have been completed and several books are in evaluation and editing stage.

#### e) Cooperation with UNESCO Headquarters, Field Offices

- Organizing 18 consultation meetings with the presence of heads of the Science and Education Department of the Iranian National Commission for UNESCO
- Presence of the Secretary-General of the Iranian National Commission for UNESCO as the main lecturer at the 2<sup>nd</sup> National Conference on Environmental Education (held by the Chair)
- Presence of the head of Science Department of the Iranian National Commission for UNESCO and lecture at the specialized meeting on Training the Exchange of Collaborative Management Experiences in Biospheres, in the 2<sup>nd</sup> national conference of environment (held by this Chair)
- Presence of the head of Education Department of the Iranian National Commission for UNESCO at the specialized Panel of Education and Sustainable Development in the 2<sup>nd</sup> National Conference of Environmental Education (held by this chair)
- Presence of the head of Science Department of the Iranian National Commission for UNESCO and lecture at the specialized meeting on idea generation, and structured consulting for creating and enhancing the National Electronic Center of Excellence for Educational Environment
- Presence of the Secretary-General of the Iranian National Commission for UNESCO as the main lecturer at the 3<sup>rd</sup> National Conference on Environmental Education (held by the Chair)
- Presence of the head of Education Department of the Iranian National Commission for UNESCO at the specialized Panel of Education and Sustainable Development in the 3<sup>rd</sup> National Conference of Environmental Education (held by this chair)
- Presence of a representative from the Iranian National Commission for UNESCO in the meetings of the Executive Committee of the National Festival of Environmental Education Day (held by this chair)
- Presence of the Secretary General of the Iranian National Commission for UNESCO (as the main speaker) and head of the education department of the Iranian National Commission for UNESCO in the National Festival of the World Environmental Education Day (held by this chair)

#### f) Other

*(any other activities to report)*

#### **Awards :**

- The best researcher of Payame Noor University, 2017.

#### **Signing agreements with educational, research and executive institutions and organization**

- A joint agreement between UNESCO Chair on “Teachers as lifelong learners” and “UNESCO Chair on Environmental Education” in Iran.
- Tri-party collaborative agreement between PNU, Faculty of Environment of University of Tehran and Malek Ashtar industrial university on Environmental Security, Climate Change, Sustainable Development, Management and Engineering of Events, Health, Safety and Environment (HSE)
- Mutual agreement between "UNESCO chair on environmental Education of PNU " and Mashhad municipality on Reduction of Environmental Pollutants.
- Mutual agreement between " UNESCO chair on environmental Education of PNU " and Abadgaran Sustainable Life Association of Asre Andishe
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Waste Management Organization of Baharestan and Robat Karim municipality” on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Makrazi Provincial Government” on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Mehregan Parto Project Institution” on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Curriculum and textbooks development office” on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Arak Municipality" on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and “Energy Institute of Higher Education" on Environmental Education
- Mutual agreement between " UNESCO chair on environmental Education of PNU" and "Payvaran Institute for Development of Science and Technology" for educational, research and executive cooperation in the field of environment

#### **3. Future Plans and Development Prospects:**

*Outline of an action plan for the next biennium and short/medium and long-term development prospects. Please do not hesitate to refer to difficulties that the Chair has experienced (Not exceeding 300 words)*

- Building the infrastructure and technology required for the development of National Center of Excellence for Educational Environment
- Establishment of the National and Regional Center of Excellence for enhancing education and research in the field of environment
- Establishment of specialized environmental education working groups, in cooperation with governmental and non-governmental organizations (NGOs), local communities or CBOs, associations, companies, educational and research centers of the country
- Educational need assessment in the form of various environmental elements for target groups
- Providing scientific contents (text, animation, film, report, book, article, infographic, bulletin, etc)
- Providing various online and traditional teaching methods for different target groups

- Designing and implementing assessment methods for evaluating the provided training
- Creating the encyclopedia of environmental education
- Preparing a database of educational and research information in the field of environmental education
- Organizing workshops and training courses in face-to-face and electronic forms
- Organizing scientific and research visits (museums, national botanical garden, theme parks, landfills, etc.)
- Organizing exhibitions, festivals and environmental startups
- Organizing competitions in the field of environmental education
- Publishing the Journal of Environmental Education in two languages: Farsi and English
- Analyzing the textbooks in terms of their environmental education contents
- Compilation and translation of learning resources, including textbooks, educational resources and supplementary reading materials (electronic and print forms)
- Content design and citizenship education courses for different types of target audience
- Organizing conferences in cooperation with NGOs and CBOs and encouraging public participation in environmental protection practices
- Providing Adaptive Co-Management plan for Biosphere Reserves
- Training the trainers of the recycling offices of 22 municipal districts of Tehran
- Implementing the plan of Blended Learning Network, developing awareness raising plans, educational plans, and raising awareness of the wetlands of Iran
- Implementing the plan of Blended Learning Network, developing awareness raising plans, educational plans, and raising awareness of energy optimization in buildings
- Organizing the online international conference on environmental education
- Organizing the annual National Festival of the World Environmental Education Day
- Pursuing the dedication of a day to environmental education in the national calendar
- Organizing an annual competition on 3-minute presentation of dissertations in the field of environmental education
- Organizing the annual specialized exhibition of environmental education (in person or virtually)
- Launching the working group of Persian literature and environmental education
- Designing a public participation model for environmental protection of Iranian society

## Appendix

### 1) Human Resources:

Our Colleagues of the chair include Faculty Members, Academics, PhD and MA postgraduate and graduate students, employees from private organizations and member of NGOs. they do their main research and administrative activities in connection with the Chair regarding environmental education in subgroups as below:

- Startup team and creative ideas
- Economics and Environment
- Health, Safety, Environment and Energy (HSEE)
- Environmental toys and games
- Content Analysis
- Climate Change and Carbon Management
- Collaborative conservation of the environment

- Women and the Environment
- Water Management
- Green Management
- Energy Management
- Social Responsibility
- Sustainable Agriculture
- Tourism, Environment and Ecotourism
- Crisis Management
- International Communications

**2) Financial Resources:**

<i>Please tick sources of financial contribution and specify the amount in U.S. dollars.</i>	<b>Amount (USD)</b>	
	<input checked="" type="checkbox"/> Host Institution	\$72,700
	<input type="checkbox"/> Partner Institution	-
	<input checked="" type="checkbox"/> Government Body	\$1,000,000
	<input type="checkbox"/> Other Public Institution/Body (incl. Research Councils)	-
	<input type="checkbox"/> UNESCO	-
	<input type="checkbox"/> Other UN Agency	-
	<input type="checkbox"/> IGO	-
	<input checked="" type="checkbox"/> NGO	\$2,380
	<input type="checkbox"/> Industry	-
	<input type="checkbox"/> Other Private	-

*Give details of financial contributions, material resources and space.*

- **Funding provided by University:**
  - Two offices with 20 m<sup>2</sup> and 12 m<sup>2</sup> area and also one office and a conference hall with 45 m<sup>2</sup> area have been allocated to UNESCO Chair on Environmental Education with total approximate value of 1,200,000,000 IRR equivalent to 28,600 USD.
  - All facilities, equipment and vehicles have been provided by PNU with total value of 1,852,000,000 IRR equivalents to 44,100 USD.
- **Funding by public sector:**
  - A budget of 42,000,000,000 IRR equivalent to 1,000,000 USD, has been allocated to the establishment of National and International Network of Environmental Education by Program and Budget organization
- **Funding by non-governmental organizations:**
  - Receiving financial assistance of 100,000, 000 IRR equivalent to 2,380 USD for organizing the 2<sup>nd</sup> national conference of Environment Education



ucee.pnu.ac.ir  
ucee@pnu.ac.ir