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AN EVALUATION OF ALPHA GENERATION PREFERENCES STUDYING IN FARM SCHOOL OR AGRICULTURAL WORKSHOP IN IZMIR: DATA ANALYSIS WITH CHILDREN

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Abstract

Since Alpha generation was born in a digital age, simulations, super-reality dimensions, humanoid robots, wearable technological devices, holograms, drone applications and 3D printers are some of the ordinary events in their worlds. The extraordinary thing is that they can touch the soil and acquire the knowledge that can blend the ecological cycle with technology. Questions were asked to the 5th grade students who preferred agriculture workshops or farm schools, who learned by having fun, by questioning, researching and wondering, so that they could develop their creative aspects and live more integrated and respectful with nature. These questions are about agriculture and education. The data obtained using the SPSS program will be interpreted by the children who attend the agricultural workshops and farm schools actively operating in İzmir. Based on these findings, it can be concluded that educational practices that combine mathematics, science and technology in İzmir have a positive effect on the lessons they take at their schools, as Alpha Generation learns about agriculture and nature. In addition, the Agricultural Workshop will be able to support the creative powers of children. Another finding is that it can be shown that different segmentations may emerge in the Agro tourism market with Agricultural trainings.

Keywords: Agro Tourism, Circular Agriculture (Another Agriculture is Possible), Farm Schools, Agro Education, İzmir, Alpha Generation.

İzmir'de Tarım Okulu veya Tarım Atölyesinde Eğitim Alan Alfa Kuşağının Tercihlerinin Değerlendirilmesi: Çocuklarla Veri Analizi

Özet

Alfa Kuşağı dijital bir çağda doğduğundan beri simülasyonlar, süper gerçeklik boyutları, insansı robotlar, giyilebilir teknolojik cihazlar, hologramlar, drone uygulamaları ve 3D yazıcılar onların dünyalarındaki sıradan olaylardan bazılarıdır. Olağanüstü olan ise toprağa dokunabilmeleri ve ekolojik döngüyü teknoloji ile harmanlayabilecek bilgiyi edinebilmeleridir. Eğlenerek, sorgulayarak, araştırarak ve merak ederek öğrenen tarım atölyelerini veya çiftlik okullarını tercih eden 5. sınıf öğrencilerine yaratıcı yönlerini geliştirebilmeleri, doğayla daha bütünleşik ve saygılı yaşayabilmeleri için sorular sorulmuştur. Bu sorular tarım ve eğitim ile ilgilidir. SPSS programı kullanılarak elde edilen veriler İzmir'de aktif olarak faaliyet gösteren tarım atölyelerine ve çiftlik okullarına devam eden çocuklar tarafından yorumlanacaktır. Bu bulgulara dayanarak, İzmir'de matematik, fen ve teknolojiyi birleştiren eğitim uygulamaları ile Alfa Kuşağının tarım ve doğayı öğrenmesiyle okullarında gördükleri derslere olumlu etkisi olduğuna ulaşılabilecektir. Bununla birlikte Tarım Atölyesinin çocukların yaratıcı güçlerini de destekleyebilecektir. Bir başka bulgu ise Tarım eğitimleri ile Agro turizm pazarında farklı segmentasyonların ortaya çıkabileceği gösterilebilir.

Anahtar Kelimeler: Agro Turizm, Başka Bir Tarım Mümkün, Tarım Okulları, Tarım Atölyesi, İzmir, Alfa Kuşağı.

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INTRODUCTION

Today, the fight against poverty and drought is the most important issue in the strategic plans of all nations. Climate change is cited as the main reason for this situation. In addition to natural changes in the climate, human activities also affect the global climate system. The clearest indication that human activities have an impact on the climate system is the increasing trend in global temperatures in the second half of the 20th century. Paleoclimatic evidence indicates that the warming trend that took place in the 20th century occurred at a rate and magnitude that had never occurred during the last 10 thousand years (Erlat, 2010: 63). According to the 5th Assessment Report of the IPCC (Intergovernmental Panel on Climate Change), "The increase in global mean surface temperatures over the 1951 - 2010 period was definitely (95% - 100% probability) due to human activities." The fact that the report increases the level of certainty unequivocally reveals that the climate change we are experiencing is human-induced (IPCC 5. Report). The IPCC (Intergovernmental Panel on Climate Change) published the first part of its 6th assessment report (WGI – Physical Science Foundation) in August 2021. The WGI found that greenhouse gases from human activities increased global warming by approximately 1.1 °C between 2010-19 compared to 1850-1900, and that global temperature is expected to increase by 1.5 °C over the next 20 years, or even exceed this figure. The report left no room for doubt regarding this situation, which was declared a "red code" for humanity by the UN Secretary General António Guterres. According to the 2019 report of IPBES (Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services), the scale of destruction caused by humanity on the planet is increasing exponentially. Since 1970, the world's population has doubled and the production and consumption has increased in parallel with it, the total area of urban settlements has doubled since 1992, the destruction of more than 100 million hectares of forests for livestock only between 1980 and 2000, and more. More than a million animal and plant species are in danger of extinction, which, according to many experts, is the harbinger of the 6th mass extinction in the history of the world. The term 'Anthropocene', first pronounced by Crutzen and Stoermer in 2000, refers to the permanent trace left by the activities of the human species on the earth's crust - nitrogen used in agriculture, carbon emissions, microplastics mixed with the oceans, etc. - as a new geological age. used to describe. The claim that we are living in the Human Age prompts those who work in different fields to question the past accumulation of their disciplines and the way they are practiced today (Gönlügür and Kurtgözü, 2020: 17-18). S-ince agriculture is an activity largely dependent on climate and weather events (Bazzaz and Sombroek, 1996: 70), the impact of climate change on agriculture is greater than in other sectors. In addition, since agriculture is an activity that uses natural resources, it is effective on soil and water resources, and changes in natural resources affect agricultural production. Due to all these features and its different structure from other sectors, agriculture is more affected by the effects of climate change and its impact width is greater. It is thought that the Neolithic Age is the beginning of these agricultural activities, which includes all the work done on the soil with the aim of growing necessary and useful plants and

obtaining products. There are many breaking points until today. The first of these is the Green Revolution. The historic beginning of the Green Revolution is often attributed to Norman Borlaug, an American scientist with an interest in agriculture. He began research in Mexico in the 1940s and developed new disease-resistant high-yielding wheat varieties. As a result of the Green Revolution, food production increased, population growth accelerated, and the use of chemical drugs was on the agenda. The book named “Silent Spring”, written by Rachel Carson in 1962, is another turning point due to its opposition to chemicals used in the agricultural sector (Çetiner, 2012: 21). The concept of sustainability, defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" in the 1991 report of the United Nations World Commission on Environment and Development, "Our Common Future" began to shape agriculture significantly. The reflection of this report on Turkey is; The Seed Law in Turkey in 2000, the change in the Metropolitan Law, the changes in the Forest Law and the privatization of Agricultural Credit cooperatives are the most important turning points in the field of agriculture. Contrary to popular belief, liberalism is not a "let them do it, let them pass" system. On the contrary, it is a regulatory regime created by laws, regulations and institutional interventions. The important thing is whose priorities and interests all these arrangements are made (Yenal, 2022). In an environment where these situations are experienced in Turkey, Another Agriculture is Possible, which Tunç Soyer matured in Seferihisar in 2009, is transforming İzmir and the whole of Turkey today. In line with Mayor Tunç Soyer's İzmir Agriculture strategy, which is based on combating drought and poverty, it sets an example for all agriculture stakeholders with the vision of Another Agriculture is Possible (Circular Agriculture). In the light of this vision, it continues its exemplary work on supporting agricultural production, which it sees as the cornerstone of its goal of "local (rural) development". İzmir Metropolitan Municipality Agricultural Services Department continues to support agricultural and animal production in urban rural areas, continuing to support peasants and farmers through cooperatives with a contracted production model with purchase guarantee at a time when industrial and corporate agriculture is supported worldwide and small-scale producers are destroyed. While the contracted purchase model provides purchase and payment guarantees to the villagers, it also improves the infrastructure and production techniques of the cooperatives and increases their production and employment capacities. İzmir Agricultural Development and Other Agricultural-Purpose Cooperatives Union (Köy-Koop İzmir) is progressing in coordination with Neptün Soyer, the Chairman of the Board, with the most concrete example of solidarity and unity. To evaluate the products of cooperatives and to protect their common interests in marketing and to carry out economic activities in this regard, to coordinate and supervise their activities, to regulate their relations with foreign countries, to develop cooperatives and to provide training. Thousands of local producers who are members of the cooperative, whose marketing opportunities have increased, are standing strong despite the crisis thanks to the strong solidarity model provided by the Izmir Metropolitan Municipality and the brand value created.

It has been seen that İzmir can very well feed the population in the cities with ancestral seeds and small producers. Terra Madre Anadolu İzmir fair, on the other hand, has shown that it can establish a better, fairer and cleaner food production chain.

While protecting these principles, the younger generations should not be forgotten either. With the 'Children's Agriculture Workshop' in Can Yücel Tohum Center Bornova, it is thought that the motto of "Seed is root, tradition and future" has been internalized and will offer a different segmentation opportunity for agro tourism with the alpha generation.

1. LITERATURE REVIEW

Sustainable improvement can be achieved through the support of small-scale farmers and indigenous communities for actions to strengthen their socio-economic status, community organisation, self-management and access to markets and value chains for a sustainable agriculture (Kara and Yereli, 2022: 367). The most important way to ensure community organization in accordance with the ecological cycle is to provide education for the younger generations. The youngest generation, the Alpha Generation, are those who are called digital natives, who know the mother tongue of the digital world very well and use this language among themselves because they have advanced knowledge and skills about information technologies. (Prensky, 2001: 1) It is obvious that the Alpha generation will be the human resource of the future, but there is not enough information about this generation. Alpha generation includes individuals born after 2010 (McCrindle and Wolfinger, 2010: 10). As of 2022, this generation, the oldest of which is 12 years old, will start to take their place in business life after 10 years at the latest. This situation increases the importance of having knowledge about the Alpha generation day by day. In their studies, Schawbel (2014) and Ramadlani and Wibisono (2017) made some predictions about Alphas that we may encounter in working life, based on the characteristics of the Alpha generation. These estimates are; they will be self-sufficient, better educated and prepared for great challenges. Alpha generation will have to overcome many of the world's greatest challenges, including global warming and famine. They will not have social security or social safety nets such as pensions and health. Since the alpha population will be concentrated in underdeveloped or developing countries and sparse in countries with high welfare level, income inequality, in other words, the gap between rich and poor will become more evident. In order to prevent this, the education of the Alpha generation becomes even more important. Researchers think that traditional education methods are not equipped to meet the intellectual, social and emotional needs of this new student group due to the characteristics of the Alpha generation (Bennett, Maton and Kervin: 2008: 778). It is thought that especially teachers who lack technological knowledge will have serious problems with the Alpha generation (Tapscott, 2009: 131). Since the alpha generation are accustomed to high-speed learning, making random web connections, and processing visual and dynamic information, more online game-based learning will be suitable for them (Brown, 2000: 12). Therefore, the increase of Agricultural Schools or Agricultural Workshops,

which provide education and training in an ecological knowledge in nature, is increasing with game-based and STEM applications in İzmir.

When we look at the history of education in Turkey, according to Gerard Tongaz (1937), Atatürk's Philosophy was able to achieve the works that could be realized in ten centuries, and can be proudly presented to all humanity as an exemplary philosophy. In a Kemalist understanding of education, basic concepts such as school, method, student, teacher, program have attained their real function. The main features of the education method envisaged in Kemalist education are practicality, functionality, success in life, compliance with environmental conditions, being based on business principles. According to him, “The method to be applied in education and training is to turn knowledge into a useful and used device that provides success in life rather than an unnecessary ornament, a tool of pressure, or a pleasure of civilization. Mustafa Necati (1894-1929), the most talked about minister of Atatürk's period, put most of the suggestions of John Dewey, who wrote a report on the Turkish Education System, into practice (Tonguç, 2007: 34). Darwin, C. Hegel, J. Piaget, JJ. Dewey, who was influenced by Roesseau, Pestallozzi, Froebelk, Montessori, almost synthesized the views of these scientists and philosophers. He tried to clarify by analyzing the concepts of "Experience, Freedom, Discipline, Democracy, Interest, Job". The most important contribution of these most famous educational philosophers of the 20th century is that they put the concept of "business school" into practice as an alternative to the schools where the traditional understanding of education, called "book school", "memorization school" is dominant. Work is a social activity that develops the child's connection with the world, forms his personality, and develops his mental activities. The business school movement was the most widespread of educational reforms in the 20th century. Pestalozzi, who tried to put Rousseau's ideas into practice, gave importance to job training in terms of being a synthesis-action of the three elements he saw in human beings (thinking, hearing and doing). In this respect, he said that thinking is the power of the brain, hearing is the power of the heart, and doing is the power of the hand (Bal, 1991: 25).

This trend suggested combining handicrafts with mental work in order to ensure the effectiveness and productivity of students, and the programs to be functional by establishing a connection with life. The concept of Tonguç business school, the painting and handicraft education he received, the theories and practices he studied abroad will be synthesized with the experience of Village Institutes for the solution of the country's problems by putting the reforms of the new Republic of Turkey into practice and gain originality (Kocabaş, 2008: 211). This system is systematically put into practice from theory with the legal regulation enacted on April 17, 1940, with the principle of learning and teaching on the job, for the job, by job. This system has made schools the center of education, production, social life, art and culture with its various outputs (Kurtuluş, 2001: 24). With the closure of the Village Institutes in 1954, the biggest deficiency in our education system today will be that our schools and our teacher training system will be removed from the qualifications of "book school" and "memorization school" and bring them to business schools and practice-oriented programs (Kocabaş, 2008: 211).

Agricultural Schools and Agricultural Workshops, which differentiate the quality of memorization schools, are also in the field of interest of researchers (Smeds, Jeronen and Kurppa, 2015: 11). In their article investigating the effect of agricultural education on children, learning activities in an authentic learning environment enable students to be involved in the process of creating and experiencing knowledge in their real environment, thus enabling a more comprehensive understanding and understanding of the phenomenon to be learned. This result clearly shows the importance of personal experience (Ballantyne and Packer, 2009: 68) in the learning process and in shaping students' mental schemas and unique learning environments. These findings are also supported by the ideas of Dewey (1938/1997), who argues that students' learning should be related to their environment and be purposeful and meaningful in the present. Another outcome of this research is that if children grow up believing that agriculture is a less important profession, this will not encourage them to receive education in agriculture and there will be a loss of skilled workers in rural areas. Finally, one of the most important results of this research is that if children's understanding of agriculture, their views and values are based on information blended with fiction, they will not be able to make the right choices about food. They will not be able to properly understand how their decisions now or in the future affect their health, society, environment, culture or agriculture in a broader perspective. Apart from these studies emphasizing the importance of Agricultural Schools or Agricultural Workshops, it is thought that the places where these practices will take place in Turkey will lead to a new segmentation in terms of Agro Tourism.

2. METHODOLGY

2.1. Purpose and Importance of the Reseach

When the studies on recognizing the alpha generation are examined, it has been concluded that the individuals belonging to the Alpha generation are individuals who do not know boundaries, do not hesitate to express their thoughts, and do not recognize traditional power, authority and hierarchy structures compared to previous generations (McCrindle and Fell, 2020). Another suggestion on education is to apply the learning method by gamification with the support of technology, especially in school education of the Alpha generation (Tootell et al., 2014: 89). With this research, it shows that the education in the Agriculture Workshop is the learning method where the Alpha generation can blend technology, gamification, and ecological concepts. The participation of the Alpha generation, born into a digital world, to the Agricultural Workshops is also very important in terms of showing that their creative powers and learning performances in other courses are positively affected by the contribution of nature. In the light of these data, it is thought that agriculture schools and workshops can reshape the alpha generation. It is predicted that at the end of this transformation, they will become an ecocentric thought-centered individual. They will be those who prioritize the protection of the environment in the recovery or recycling of wastes, efficient use of water and energy, and prefer public transportation instead of using their private vehicles, taking into account the protection of the environment, except in

cases of necessity. They will be people with ecocentric thinking, who see the world as a stand-alone value, believe that nature should be protected without prioritizing their own interests, and act accordingly. Apart from this being the macro purpose of this study, a new segmentation will emerge in the Agro tourism market with the increase in the number of Agricultural Workshops and Agricultural Schools of the Alpha generation.

2.2. Sample

In this research, especially Can Yücel Seed Center Bornova 'Agricultural Workshop' was chosen. The center, which works for the protection, reproduction and dissemination of seeds, is an indispensable place for many nature protectors on a voluntary basis. The Agricultural Workshop, which started its activities at the request of conscious parents, provided training for more than a thousand people between the ages of 4-17 by giving two hours a week, four lessons per month in a short period of one year. In the research, a survey was conducted with the students who passed the 5th grade, who were entitled to receive the Agricultural Workshop certificate in the 4th grade. The reason for reaching the students residing in Buca, Karabağlar, Konak, Karşıyaka, Çiğli and Narlıdere districts is because they have the least contact with the soil in the city. The reason for the determination of the schools selected from the districts was revealed according to the course hours they took. Students, who attended the agriculture workshop in the 4th grade for four weeks in total by using ahaslides.com online via zoom in Izmir districts, were reminded of their information and asked survey questions after each information slide. With the interactive ahaslides.com, the content was created with the help of valuable trainers and supported with emojis to attract children's attention and interests. With an active participation of the Alpha generation, they completed the training, which is expected to take 30 minutes, with 55 minutes.

2.3. Reserach Method

SPSS program was used to analyze the survey data. First of all, one of the tools used to measure the consistency of Likert-type scales in the study is the Cronbachs's Alpha coefficient. As a result of the reliability analysis, it can be said that the survey results are quite reliable. 250 students participating in the research; One-Way Analysis of Variance (TYVA), one of the parametric tests, was used to test whether there is a statistically significant difference between the mean scores according to the class hour. When the questions asked are combined under two main headings: the effect of the course content and the effect of the school environment; It can be said that the effect of class hours on children's education and creativity differs statistically after the ANOVA test. In order to decide which post-hoc multiple comparison technique to use after ANOVA, the hypothesis of whether the variances of the group distributions were homogeneous was tested with Levene's test and it was determined that the variances were homogeneous ($p=0.072$). On top of that, Scheffe multiple comparison technique, which is widely used, was preferred in case the variances were homogeneous. The reason why the Scheffe test is preferred is that the test is sensitive to alpha type error.

H0: The effect of the agricultural workshop on the education and creativity of children is not statistically significant.

H1: The effect of the agricultural workshop on the education and creativity of children is statistically significant.

In terms of each question asked in the survey, the district and the hours of training received, it was examined whether the effect of the Agricultural Workshop on education and creativity was statistically significant.

3. RESULTS

According to the research, district and the number of hours taken by the students participating in the research are given in Table 1.

Table 1. General Information

Demographic Features		**Number of Observation**	**Ratio(%)**
Institution	29 Ekim Primary School	18	7,2
	Sasalı Primary School	107	42,8
	Çakabey Primary School	50	20,0
	İlhan Onat Primary School	25	10,0
	Kıbrıs Şehitleri	23	9,2
	Türk Kadınlar Konseyi	27	10,8
District	Buca	27	10,8
	Çiğli	107	42,8
	Karabağlar	18	7,2
	Karşıyaka	50	20,0
	Konak	23	9,2
	Narlıdere	25	10,0
Lesson Hours	8 hour	50	20
	10 hour	18	7,2
	12 hour	25	10,0
	14 hour	157	62,8
Total		250	100

According to Table 1, the students participating in the research;

• 7.2% of 29 Ekim Primary School, 42.8% of Sasalı Primary School, 20% of Çakabey Primary School, 10% of İlhan Onat Primary School, 9.2% of Kıbrıs Şehitleri, 10.8%' i is in the Türk Kadınlar Konseyi.

• 10.8% are from Buca, 42.8% from Çiğli, 7.2% from Karabağlar, 20% from Karşıyaka, 9.2% from Konak and 10% from Narlıdere.

• 20% took 8 hours, 7.2% took 10 hours, 10% took 12 hours and 62.8% took 14 hours.

To summarize, from Table 1, it can be said that the students participating in the research generally took 14 hours of lessons from Çiğli district, Sasalı Primary School.

Table 2: Distribution of Students' Answers to the Questions

		Definetely Yes	Yes	Neither Yes Nor No	No	Definetely No
1	What I learned in class is intriguing.	195	42	13	0	0
2	I do research on the topics I learned in the course.	145	33	55	17	0
3	Actively participating in round group conversations with my teachers.	244	6	0	0	0
4	I know how to get the seed.	249	0	1	0	0
5	I know the importance of preserving, finding, propagating and distributing seeds.	250	0	0	0	0
6	I know the use of all the tools used in the lessons and related to the soil.	179	71	0	0	0
7	I continue to learn about insects, animals and all other living things in the ecological cycle.	210	40	0	0	0
8	I know the importance of water and soil.	170	70	10	0	0
9	I know how to compost and prevent food waste.	250	0	0	0	0
10	I know how and when fruits and vegetables were planted.	120	120	10	0	0
11	I know the importance of taste, texture and smell in agricultural products and I can cook traditional dishes.	205	25	20	0	0
12	I know the importance of the forest	190	60	0	0	0
13	I can use the knowledge I learned in Nature in real life.	221	29	0	0	0
14	After the lessons taught by my teachers, my knowledge about science, mathematics and technology increased.	243	0	7	0	0
15	My science and math grades improved.	250	0	0	0	0
16	I am more successful when I work as a team and as a team.	140	72	140	0	0
17	Being in nature increases my activeness and my desire to learn.	191	59	0	0	0
18	I am more creative because I am inspired by nature.	227	15	8	0	0
19	I feel more fit, healthy and prepared for changing conditions in the garden or in the field.	240	10	0	0	0

Table 2 shows the distribution of the answers given by the 250 children participating in the research.

One of the tools used to measure the consistency of the Likert type scales used in this study is the Cronbachs's Alpha coefficient. Accordingly, the alpha (α) coefficient should be greater than 0.7 (Pallant, 2005:47).

Table 3: Reliability Analysis Results

Reliabilty Analysis	
Cronbach's Alpha	Number of Questions
0,839	19

According to Table 3, it can be said that the results of the survey are quite reliable as a result of the reliability analyzes of the answers given to the surveys by the students participating in the research.

Table 4: Statistics of Students' Answers to Questions

		Min–Max			
	N	Midpoint	Mean	Standart Deviation	Mean Standart Deviation
Effects of Course Content	250	1-5 (3)	4,904	0,29518	4,9040 0,29518
Effects of School Environment	250	1-5 (3)	4,84	0,36734	4,8400 0,36734

According to Table 4, considering the average scores, 250 students participating in the research;

• It can be said that the average score (4,9040) on the questions they gave about the effect of the course content is well above the average.

• It can be said that the average score (4,8400) on the questions they gave about the effect of the school environment is well above the average.

Based on Table 4; In line with the results obtained from the questionnaires applied to the students participating in the research, it can be said that the Children's Workshop, which was held for the students, gave very effective results on their development. At the same time, it can be said that the effect of the course contents and the effect of the school environment are effective in its development due to the training provided.

Table 5: Frequency of Answers by Students to the Questions

	Lesson Hours	**Definetely Yes**	**Yes**	**Neither Yes Nor No**	**No**	**Definetely No**
Effect of Lesson Content	8 hour	28	22	0	0	0
	10 hour	0	18	0	0	0
	12 hour	25	0	0	0	0
	14 hour	157	0	0	0	0
Effect of School Environment	8 hour	44	6	0	0	0
	10 hour	0	18	0	0	0
	12 hour	25	0	0	0	0
	14 hour	157	0	0	0	0

According to Table 5, the students participating in the research;

• Their answers to questions measuring the impact of course content according to course hours; Of the students who took 8 hours of lessons, 28 were 'definitely yes', 22 of them were 'yes', 18 of the students who took 10 hours of lessons were 'yes', 25 of the students who took 12 hours of lessons were 'definitely yes', 157 of them answered 'definitely yes'.

• Their answers to questions measuring the impact of the school environment according to the class hour; 44 of the students who took 8 hours of lectures were 'definitely yes', 6 of them were 'yes', 18 of the students who took 10 hours of course were 'yes', 25 of the students who took 12 hours of course were 'definitely yes', 157 of them answered 'definitely yes'.

The students participating in the research; One-Way Analysis of Variance (TYVA), one of the parametric tests, was used to test whether there was a statistically significant difference between the mean scores according to the class hour. Table 6 shows the significance values of the effect of the agricultural workshop on the creativity of the children according to the lesson hours.

Table 6: The Effect of Agricultural Workshops on Children's Creativity by Class Hours

		Total Sum of Squares	Sd	Mean of Squares	F Statistics, p
Lesson Hours	Between Groups	21,280	3	7,093	141,636
	Within Groups	12,320	246	0,050	0,000
	Total	33,600	249		

H0: The effect of the agricultural workshop on the education and creativity of children is not significant according to the lesson hours.

H1: The effect of the agricultural workshop on the education and creativity of children is significant according to the lesson hours.

According to Table 6, in the analysis in which the effect of class hours on children's education and creativity was tested, since the significance value (p=0.000) was less than 0.05, it can be said that the effect of class hours on children's education and creativity differs statistically. In this case, the H0 hypothesis is rejected. In this case, it can be said that the education given to the children is positively affected by the answers they give to the questions and supports their personal development.

In order to decide which post-hoc multiple comparison technique to use after ANOVA, the hypothesis of whether the variances of the group distributions were homogeneous was tested with Levene's test and it was determined that the variances were homogeneous (p=0.083). On top of that, Scheffe multiple comparison technique, which is widely used, was preferred in case the variances were homogeneous. The reason why the Scheffe test is preferred is that the test is sensitive to alpha type error. The Scheffe test allows us to determine which group differs significantly from each other. The results of the Scheffe multiple comparison analysis performed are presented below.

According to Table 7;

As a result of the post-hoc Scheffe test after one-way analysis of variance (ANOVA), which was conducted to determine between which subgroups the scores calculated from the answers given by the students to the survey questions differ according to the course hours.

• children with 8 hours of lessons; From the children who took 10 hours, 12 hours, 14 hours of lessons;

• children with 10 hours of lessons; From the children who took 8 hours, 12 hours, 14 hours of lessons;

• children with 12 hours of lessons; Of the children who took 8 hours and 10 hours of lessons;

• children with 14 hours of lessons; It was determined that there was a statistically significant difference between the children who took 8 hours and 10 hours of lessons.

Using Levene's test, it was tested whether the group variances were equal and it was determined that the variances were equal.

Tablo 7: Scheffe Test Results

(I) Lesson Hours	(J) Lesson Hours	(I-J) Mean Difference	Std. Error	Sig.
8 hours	10 hours	,56000*	,06151	,001
	12 hours	-,44000*	,05482	,000
	14 hours	-,44000*	,03634	,002
10 hours	8 hours	-,56000*	,06151	,001
	12 hours	-1,00000*	,06918	,000
	14 hours	-1,00000*	,05569	,000
12 hours	8 hours	,44000*	,05482	,000
	10 hours	1,00000*	,06918	,000
	14 hours	,00000	,04819	1,000
14 hours	8 hours	,44000*	,03634	,002
	10 hours	1,00000*	,05569	,000
	12 hours	,00000	,04819	1,000

H0: According to the institutions, the effect of the agricultural workshop on the education and creativity of children is not significant.

H1: According to the institutions, the effect of the agricultural workshop on the education and creativity of children is significant.

According to Table 8, since the significance value (p=0.000) is less than 0.05 in the analysis in which the effect on children's education and creativity is tested according to institutions, it can be said that the effect of institutions on children's education and creativity differs statistically. In this case, the H0 hypothesis is rejected.

Table 8: The Effect of Agricultural Workshops on Children's Creativity by Institutions

		Square Total	Sd	Square Average	F Statistics, p
Institutaion	Between Groups	32,643	5	6,529	1665,41
	Within Groups	0,957	244	0,004	0,000
	Total	33,600	249		

In order to decide which post-hoc multiple comparison technique to use after ANOVA, the hypothesis of whether the variances of the group distributions were homogeneous was tested with Levene's test and it was determined that the variances were homogeneous (p=0.072). On top of that, Scheffe multiple comparison technique, which is widely used, was preferred in case the variances were homogeneous. The reason why the Scheffe test is preferred is that the test is sensitive to alpha type error. The results of the Scheffe multiple comparison analysis performed are presented below.

Table 9: Scheffe Test Results

(I) Institution	(J) Instituition	Mean Difference (I-J)	Std. Error	Sig.
29 Ekim Primary School	Sasalı Primary School	-1,00000*	,01595	,000
	Çakabey Primary School	-1,00000*	,01721	,000
	İlhan Onat Primary School	-1,00000*	,01935	,000
	Kıbrıs Şehitleri	-,04348	,01970	,434
	Türk Kadınlar Konseyi	-1,00000*	,01905	,000
Sasalı Primary School	29 Ekim Primary School	1,00000*	,01595	,000
	Çakabey Primary School	,00000	,01073	1,000
	İlhan Onat Primary School	,00000	,01391	1,000
	Kıbrıs Şehitleri	,95652*	,01439	,000
	Türk Kadınlar Konseyi	,00000	,01348	1,000
	29 Ekim Primary School	1,00000*	,01721	,000

Çakabey Primary School	Sasalı Primary School	,00000	,01073	1,000
	İlhan Onat Primary School	,00000	,01534	1,000
	Kıbrıs Şehitleri	,95652*	,01577	,000
	Türk Kadınlar Konseyi	,00000	,01495	1,000
	29 Ekim Primary School	1,00000*	,01935	,000
İlhan Onat Primary School	Sasalı Primary School	,00000	,01391	1,000
	Çakabey Primary School	,00000	,01534	1,000
	Kıbrıs Şehitleri	,95652*	,01809	,000
	Türk Kadınlar Konseyi	,00000	,01738	1,000
	29 Ekim Primary School	,04348	,01970	,434
Kıbrıs Şehitleri	Sasalı Primary School	-,95652*	,01439	,000
	Çakabey Primary School	-,95652*	,01577	,000
	İlhan Onat Primary School	-,95652*	,01809	,000
	Türk Kadınlar Konseyi	-,95652*	,01777	,000
	29 Ekim Primary School	1,00000*	,01905	,000
Türk Kadınlar Konseyi	Sasalı Primary School	,00000	,01348	1,000
	Çakabey Primary School	,00000	,01495	1,000
	İlhan Onat Primary School	,00000	,01738	1,000
	Kıbrıs Şehitleri	,95652*	,01777	,000

According to Table 9;

As a result of post-hoc Scheffe test after one-way analysis of variance (ANOVA), which was conducted to determine between which subgroups the scores calculated from the answers given by the students to the survey questions differ according to the institutions.

• Children taking classes at 29 Ekim Primary School; Sasalı Primary School, Çakabey Primary School; İlhan Onat Primary School, Türk Kadınlar Konseyi;

• Sasalı Primary School; From the Kıbrıs Şehitleri of the 29 Ekim Primary School, ;

• Çakabey Primary School, 29 Ekim Primary School, Kıbrıs Şehitleri

• İlhan Onat Primary School, 29 Ekim Primary School, Kıbrıs Şehitleri;

• Kıbrıs Şehitleri, Sasalı Primary School, Çakabey Primary School, İlhan Onat Primary School, Türk Kadınlar Konseyi,

• It has been determined that there is a statistically significant difference from the children educated in the Türk Kadınlar Konseyi, 29 Ekim Primary School and Kıbrıs Şehitleri;

Table 10: Descriptive Statistics of the Effects of Agricultural Workshops on Children's Creativity According to Questions

Groups	Questions	Total	Average	Variance
1	What I learned in class is intriguing.	1182	4,73	0,30
2	I do research on the topics I learned in the course.	1056	4,22	1,03
3	Actively participating in round group conversations with my teachers.	1244	4,98	0,02
4	I know how to get the seed.	1248	4,99	0,02
5	I know the importance of preserving, finding, propagating and distributing seeds.	1250	5,00	-
6	I know the use of all the tools used in the lessons and related to the soil.	1179	4,72	0,20
7	I continue to learn about insects, animals and all other living things in the ecological cycle.	1210	4,84	0,13
8	I know the importance of water and soil.	1160	4,64	0,31
9	I know how to compost and prevent food waste.	1250	5,00	-
10	I know how and when fruits and vegetables were planted.	1110	4,44	0,33

11	I know the importance of taste, texture and smell in agricultural products and I can cook traditional dishes.	1185	4,74	0,35
12	I know the importance of the forest	1190	4,76	0,18
13	I can use the knowledge I learned in Nature in real life.	1221	4,88	0,10
14	After the lessons taught by my teachers, my knowledge about science, mathematics and technology increased.	1236	4,94	0,11
15	My science and math grades improved.	1250	5,00	-
16	I am more successful when I work as a team and as a team.	1102	4,41	0,55
17	Being in nature increases my activeness and my desire to learn.	1191	4,76	0,18
18	I am more creative because I am inspired by nature.	1219	4,88	0,17
19	I feel more fit, healthy and prepared for changing conditions in the garden or in the field.	1240	4,96	0,04

H0: The effect of the agricultural workshop on the education and creativity of children is not statistically significant.

H1: The effect of the agricultural workshop on the education and creativity of children is statistically significant.

Table 11: The Effect of Agricultural Workshops on Children's Creativity

		Square Total	Std. Error	Square Average	F Statistics, p
Instutions	Between Groups	225,75	18	12,54	59,03 0,000
	Within Groups	1005,20	4731	0,21	
	Toplam	1230,95	4749		

According to Table 11, since the significance value (p=0.000) was less than 0.05 in the analysis in which the effect of agricultural workshops on children's education and creativity was tested, it can be said that the effect of the education and creativity of agricultural workshops differed statistically. In this case, the H0 hypothesis is rejected.

CONCLUSION AND RECOMMENDATIONS

Today, we are feeling the effects of the climate crisis more than ever. With the pandemic process, we once again remembered the importance of food and the world we live in. The importance of agriculture has emerged in order to be more sensitive to the environment and protect our food. The awareness of the Alpha generation, which will carry us to the future, is more essential than ever. Our biggest goal should be to raise responsible individuals who are integrated with nature and have high environmental awareness. An individual who has received a good environmental education will be an environmental literate and will be able to live in peace with the environment he lives in in the future. In order to provide such an education, it is necessary to develop appropriate training programs and to conduct practical training in suitable environments (Kıyıcı, Yiğit, and Darçın, 2014, 18). Nature education programs have a certain systematic. Such programs aim to introduce nature to students in nature. Nature stands out here as the purpose, tool and evaluation material of education (Keleş, Uzun and Varnacı Uzun, 2010, 386).

The experiences of the students regarding the time they spend in nature are important in terms of finding the nature equivalents of the information they learned at school. In this process, students have the opportunity to develop many high-level thinking skills such as problem solving (Lai, 1999: 241).

According to ecological philosophy, man finds himself in nature, identifies with nature, learns to take into account the wishes and interests of nature while considering his own wishes and interests in his relations with nature. The meaning of the natural environment can be learned while interacting with it. In the light of this view, environmental education is important because it increases the interest in nature when it takes place in the natural environment and allows to look at life by empathizing with nature. (Atasoy, 2006: 45)

Ozaner (2007: 69) states that in order to increase environmental awareness, first of all, it is necessary to know what the environment is, and this will be possible by learning the language of nature.

With this research, Can Yücel Seed Center Bornova was chosen, which ensures the discovery, preservation and reproduction of seeds, which are our ancient heritages, while learning the language of nature. The reason for this is that apart from being able to provide ecological literacy in the best way, it shows all stages of food from soil to plate with the trainings created in the Agriculture Workshop. In the last lesson, children are provided to cook for themselves from the fruits or vegetables they produce depending on the season, and they create a self-sufficient generation that can produce and cook with traditional methods. Educational contents are localized after blending international education programs. Alpha generation started to prefer to touch the soil even though they knew and preferred to harvest in the computer games they played. They understood the importance of water until they reached the harvest stage. They realized that insects could be beneficial as well as harmful insects. They learned what the bee and silkworm can do. They realized that household waste is not just garbage, they can compost with them and add fertilizer to the soil. They learned all of these by playing, working, living and experiencing.

The reason why the schools included in the research were chosen especially from places in the city of İzmir and which do not have much contact with nature was to be able to see that even the students who study here can differ with a small touch. It was revealed that the effect of the students on the questions in which the effect of the course content was measured was 4.9 and the effect of the school or the nature environment in which they were educated was well above the average with 4.84. In line with these data, it can be said that the children's agricultural workshop is effective in their development.

Another important finding of the study is that in the Scheffe test applied after one-way analysis of variance, it was seen that the school in Karabağlar showed significant differences from all other district schools. The fact that the district school, which we call as a disadvantage, is in this way reveals that the course hours in such schools should be increased. When the effect of course hours is examined, no significant difference was found between those who took 12 or 14 hours of courses.

After all data analysis, the effect of Agricultural Workshop on children's education and creativity is statistically significant.

It is thought that students who learn about soil, nature and the climate crisis will make a difference by blending the technology world they were born into due to this high level of consciousness and Alpha generation.

It is foreseen that the number of Agricultural Workshops and Schools will increase, this will be a sub-title of Agro Tourism and the attitudes of the alpha generation will cause a new segmentation in terms of sales and marketing.

Considering the cyclical process of Another Agricultural Possible, local breeds offer seed, feed, equipment, training and product consulting, planning, branding and sales support. A shepherd's map has been drawn for purchase and sales support. It enables contracted production and provides support for export. The focus products are meat, milk, dried fruit, olive and fertilizer facilities for packaging, branding and sales of products. Product development and imaging is also done. At the end of these efforts, according to the agriculture and product planning most suitable for Izmir, cereals and legumes, olives and olive oil, grapes and dehydrated fruits, coastal fisheries and pasture animal husbandry. Another topic in which this whole cycle is gathered is Agro Tourism. The fact that the research was conducted in İzmir is especially due to this vision.

The limitation of this research is that it was not done with the Alpha generation, who live in other more rural areas and are more familiar with agriculture. Another limitation is that it should be extended to other age groups as well.

According to the 2017 data of the Address Based Population Registration System (ADNKS) of the Turkish Statistical Institute (TUIK), it is predicted that the Alpha generation will reach 26 million in 2040 and constitute 26% of the country's population (Apaydın and Kaya, 2020: 126). In their studies, Schawbel (2014) and Ramadlani and Wibisono (2017) made some predictions about Alphas based on the characteristics of the Alpha generation. These estimates are; Alpha generation will have a more entrepreneurial spirit compared to other generations. In fact, each generation after this generation will be more entrepreneurial than the previous one. Because they will have the opportunity to access information and the source of power at a very early age. In fact, it will be possible for us to see Alphas who have turned 10 years old and own their own businesses. They won't be able to get any work done without social networks. If a business wants to reach Alphas from a marketing or recruiting perspective, that business will need to have a mobile-friendly website. Moreover, they will expect social communication to be customized according to their needs. The Alpha generation, spoiled by their X and Y parents, will also be very impressed by their ideas. For this reason, businesses will need to consider their parents in their advertising and sales activities targeting the Alpha generation. They will be self-sufficient, better educated and prepared for great challenges. The Alpha generation will have to overcome many of the world's greatest challenges, including global warming and famine. As its researchers predict, it is thought that the greatest help that can be made to the Alpha generation will be with the "Agricultural Workshop or Agricultural Schools" in this tough battle that it will have to give against global warming.

STATEMENT OF RESEARCH AND PUBLICATION ETHICS

The method used in the study does not require ethics committee approval.

DECLARATION OF SUPPORT

This study was not supported by any person or organization.

CONFLICT OF INTEREST STATEMENT

There is no conflict of interest between the authors.

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