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The Mediating Role of Attitude towards Digital Technology in the Relationship between Digital Citizenship and Motivation in Social Studies Course

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Abstract

The aim of this study is to clarify the mediating role of attitudes towards digital technology in the relationship between digital citizenship in social studies class and motivation, and to provide an important perspective for educators. The research was conducted using a correlational survey model to reveal the relationships between digital citizenship in social studies class, motivation, and attitudes towards digital technology. The study group consisted of 409 sixth and seventh-grade students attending a public school affiliated with the Ministry of National Education in Oltu district, Erzurum, during the 2022-2023 academic year. The sample size was determined using disproportionate stratified sampling technique, with a sufficiency level of 95% confidence, calculated as a minimum of 374. Accordingly, the target was to reach 420 students. However, due to some missing data during the data collection process, data from 409 students were used. After eliminating 21 data with outlier characteristics, 388 valid data were used for the analysis. Of the participating students, 212 (51.8%) were male, and 197 (48.2%) were female. The Digital Citizenship Scale, Social Studies Class Motivation Scale, and Attitudes Towards Digital Technology Scale were used for data collection in the study. Descriptive statistics, including means and coefficients, were used for data analysis. The data collected in the study were analyzed using SPSS 20 and Lisrel 8.8 software packages. The relationships between digital citizenship, motivation in social studies class, and attitudes towards digital technology were tested using Structural Equation Modeling. The study found that attitudes towards digital technology play a significant partial mediating role in the relationship between digital citizenship and motivation in social studies class.

Keywords: digital citizenship, social studies class motivation, attitudes towards digital technology.

1. Introduction

We are living in an era where digital technologies are integrated into every aspect of our lives with the advancement of the digital age. This has deeply impacted the field of education and has brought about many areas that require the acquisition of new skills (Al Salman, Alkathiri & Khaled Bawaneh, 2021; Reddy, Sharma & Chaudhary, 2020). One of these areas is digital citizenship. Digital citizenship refers to the skills and awareness that enable individuals to act ethically, safely, and responsibly in the digital world. Social studies, on the other hand, provides an important foundation for digital citizenship education as it aims to teach students societal values, ethical principles, and democratic participation. Motivation towards the social studies

class is also an important factor that affects students' interest in the content, participation, and willingness to achieve learning goals (Searson, Hancock, Soheil & Shepherd, 2015). Having high motivation towards social studies lessons enables students to achieve the goals of the lesson more effectively and, therefore, contributes to the development of their digital citizenship skills.

The relationship between motivation towards social studies lessons and digital citizenship is a very important and complex issue. Motivated students focus more on the content of the lesson, actively participate in the class, and process their learning more in-depth. This can positively affect the process of developing students' digital citizenship skills. For example, understanding and adopting ethical and responsible behaviors required for digital citizenship can be achieved with a relevant and conscious attitude towards digital technologies (Jiang, Rosenzweig & Gaspard, 2018; Ribble, 2011). In today's digital age, the rapid development and widespread use of digital technologies have had profound effects on almost every segment of society. One of these effects is felt in the field of education. Social studies lessons, on the other hand, provide an important ground for digital citizenship education as a lesson aimed at teaching students democratic values, human rights and social responsibilities (Karaduman & Öztürk, 2014).

Motivation during the educational process is a critical factor that influences students' willingness and effort to achieve success. Motivation is an internal drive that enables students to actively engage in the learning process and supports them in reaching their goals (Algahtani, Zrieq, Aldhmadi, Atta, Obeidat & Kadri, 2021). Social studies aim to equip students with the skills to understand, interpret, and evaluate the functioning of society, as well as historical and cultural values. This subject holds great importance in fostering students' awareness of societal issues, embracing democratic values, and becoming active citizens (Doğan, 2021; Kulakaç, 2020; Solmaz & Çekim, 2017). At this point, motivation towards social studies is a critical factor that influences students' level of interest and commitment to the course content. The motivation towards social studies affects students' interest in the course content, their desire to achieve learning goals, and their efforts in studying the subject. Motivated students tend to possess higher levels of learning and comprehension skills, which in turn increases their potential for success in social studies (Compeau & Higgins, 2020; Hartnett, 2016; Pintrich, 2013; Viau, 2015). Motivation towards social studies can be influenced by various factors. Personal interests and values associated with the course content, relevance to real-world events, and the use of student-centered and interactive teaching methods can positively impact motivation. Conversely, if the course is perceived as abstract or boring, students' negative attitudes towards the course content can diminish motivation (Adeyemi & Ijiwole, 2017; Gbadamosi & Ajayi, 2018).

Attitude towards digital technology is a concept that encompasses individuals' positive or negative feelings, thoughts, and behaviors towards digital technologies (Cabı, 2015). This attitude can reflect their opinions and expectations regarding the use of digital technologies. The mediating role of attitude towards digital technology in the relationship between motivation towards social studies and digital citizenship can be a critical factor in enhancing students' digital skills and digital citizenship awareness (Cabı, 2016; Graham, 2009; Sezgin, Erdoğan & Erdoğan, 2017). The formation of attitude towards digital technology is shaped by the interaction of various factors. Individuals' experiences, educational levels, demographic characteristics, and social environments are significant components that influence their attitude towards digital technology. For instance, a person's past experiences and abilities can impact their attitude towards digital technology positively or negatively. Additionally, it has been observed that as the level of education and knowledge increases, individuals' attitudes towards digital technologies become more conscious and informed (Gokhale, Brauchle & Machina, 2013; Wiley, Bliss & McEwen, 2014).

The importance of attitude towards digital technology is crucial in today's digital world for effective functioning. With the rapid development of digital technologies, individuals need to adapt to these technologies and use them effectively. A positive attitude towards digital technology

enables individuals to adapt to technology faster and improve their digital skills (Davies & West, 2014; Vizenor, 2014).

Furthermore, a positive attitude towards digital technology can help individuals navigate the digital world in an ethical and secure manner. Motivation towards social studies influences students' interest in course content, active participation, and willingness to achieve learning goals, while digital citizenship refers to individuals' ability and awareness to use digital technologies ethically, securely, and responsibly (Farmer, 2011; Şendağ & Uysal, 2010). Therefore, the mediating role of attitude towards digital technology in the relationship between these two factors is essential. This article's main focus is on how students' attitudes towards digital technologies affect their motivation towards social studies and how this interaction plays a mediating role in acquiring digital citizenship skills (Adeyemi & Ijiwole, 2017; Kim, Xie & Cheng, 2017).

The aim of this study is to clarify the mediating role of attitude towards digital technology in the relationship between digital citizenship in social studies and motivation, providing educators with an important perspective. The findings obtained from this study can offer valuable guidance for education policies and practices, indicating how digital citizenship education should be focused. Additionally, it can contribute to identifying strategies that can shape students' attitudes towards digital technologies and enhance their motivation.

Three hypotheses developed in line with the research aim were tested:

- (1) Digital citizenship in social studies positively predicts motivation towards the course.
- (2) Digital citizenship in social studies positively predicts attitude towards digital technology.
- (3) Attitude towards digital technology partially mediates the relationship between digital citizenship in social studies and motivation towards the course.

2. Method

2.1 *Research design*

The study was conducted using a correlational survey design to examine the relationships between digital citizenship in social studies, motivation towards the course, and attitude towards digital technology. In a correlational survey design, the aim is to determine the degree of simultaneous change between two or more variables (Karasar, 2014). To test the relationships within the scope of the study, a hypothetical model, as shown in Figure 1, was determined. In this model, the mediating effect of attitude towards digital technology was evaluated in the relationship between digital citizenship in social studies and motivation towards the course.

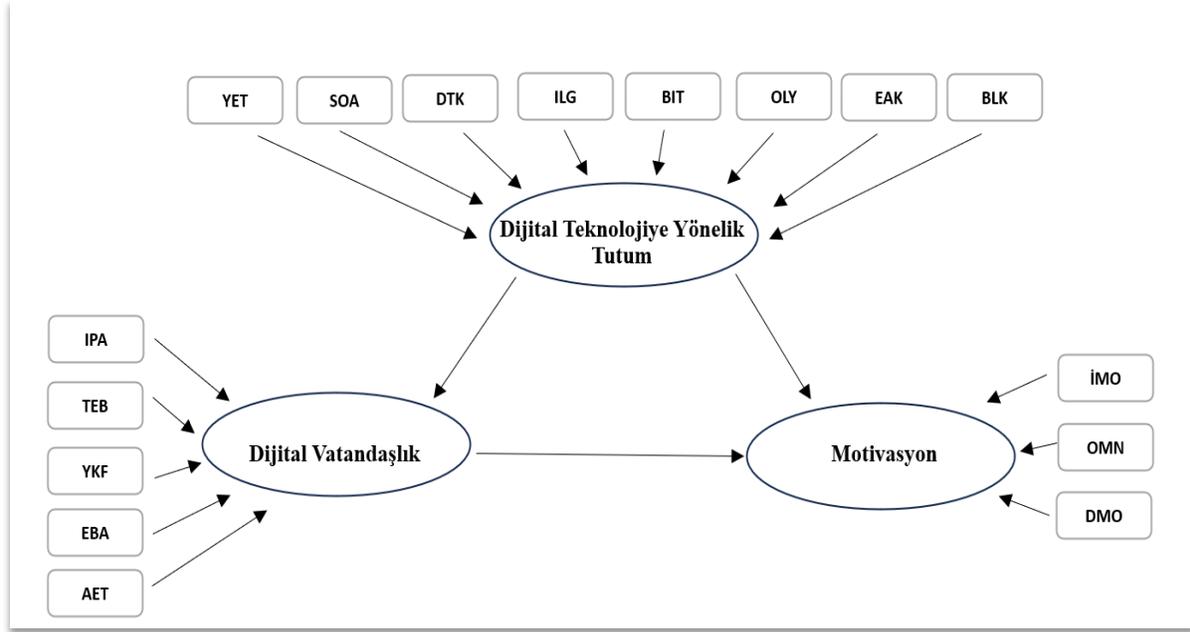


Figure 1. Hypothetical model

IPA: Internet Political Activism subscale of Digital Citizenship Scale; TEB: Technical Knowledge subscale of Digital Citizenship Scale; YKF: Local/Global Awareness subscale of Digital Citizenship Scale; EBA: Critical Perspective subscale of Digital Citizenship Scale; AET: Network Efficiency subscale of Digital Citizenship Scale; YET: Competence subscale of Attitude towards Digital Technology Scale; SOA: Social Networks subscale of Attitude towards Digital Technology Scale; DTK: Technology Use in the Classroom subscale of Attitude towards Digital Technology Scale; ILG: Interest subscale of Attitude towards Digital Technology Scale; BIT: Technology for Me subscale of Attitude towards Digital Technology Scale; OLY: Negative Aspects subscale of Attitude towards Digital Technology Scale; EAK: Entertainment Use subscale of Attitude towards Digital Technology Scale; BLK: Conscious Use subscale of Attitude towards Digital Technology Scale; iMO: Intrinsic Motivation subscale of Motivation towards Social Studies Scale; OMN: Importance subscale of Motivation towards Social Studies Scale; DMO: Extrinsic Motivation subscale of Motivation towards Social Studies Scale.

2.2 Study group

The study group consisted of 409 sixth and seventh-grade students attending a state school affiliated with the Ministry of National Education in the Oltu district of Erzurum province during the 2022-2023 academic year. The sample was determined using the disproportionate cluster sampling technique, and the sample size required for a 95% confidence level was calculated to be a minimum of 374. Therefore, data were collected from 409 students. Although the plan was to reach 420 students, there were some deficiencies in the data collection process. After removing 21 data points showing outlier characteristics, 388 valid data were used for the analyses. Out of the participating students, 212 (51.8%) were male, and 197 (48.2%) were female.

2.3 Data collection instruments

The data for the study was collected using three scales: Motivation towards Social Studies Scale, Digital Citizenship Scale, and Attitude towards Digital Technology Scale.

2.3.1 Motivation towards social studies scale

The scale consists of 23 items and includes three subscales: “intrinsic motivation,” “extrinsic motivation,” and “importance.” The Cronbach’s alpha reliability coefficient for the overall scale was found to be .792. Reliability calculations were also performed for the subscales, with .802 for intrinsic motivation, .745 for extrinsic motivation, and .826 for importance. These values represent the reliability coefficients used to measure the consistency of the scale items within the subscales. The scale was reported to account for 41% of the total variance, indicating that the scale items effectively represent the measured concept (Gömleksiz & Kan, 2012).

2.3.2 Digital citizenship scale

After obtaining permission for adaptation, the scale was translated into Turkish by three experts proficient in both languages. Subsequently, two experts performed reverse translations. After corrections made by an expert with language and domain expertise, the scale was sent to Turkish experts for further corrections regarding spelling, expression, and wording. Ethical committee approval was obtained for the implementation of the scale. To determine the language equivalence validity of the scale, the Turkish and English versions of the scale were applied to 3rd-year students studying English teaching at a state university at three-week intervals. Significant correlations between .61 and .78 ($p < .01$) were found for dimensions and the overall scale in both measurements. Next, data were collected from 272 students studying at seven different universities to test the validity and reliability of the scale in different samples. Confirmatory factor analysis conducted to test construct validity resulted in the removal of 8 items from the scale. The analysis indicated that the item-total correlation values were above .30, and the fit indices of the scale ranged from moderate to excellent fit. The internal consistency test for evaluating the reliability of the scale yielded a Cronbach’s alpha value of .87. The Cronbach’s alpha values for the factors were found to be .86, .93, .83, .80, and .73, respectively. Based on the analyses, it was concluded that the 18-item Digital Citizenship Scale, organized under five factors, is a valid and reliable measurement tool (Erdem & Koçyiğit, 2019).

2.3.3 Attitude towards Digital Technology Scale

In this study, a scale was applied to 689 high school students, and the validity and reliability of the scale were tested. To determine the validity and reliability, scope validity, construct validity, t-test, corrected item-total correlations, Cronbach’s alpha internal consistency coefficient, and two half-test correlations were examined. Additionally, the factor structure of the scale was tested through confirmatory factor analysis, and acceptable fit was achieved. According to the analysis results, the scale consists of 39 items with an eight-factor structure. The factors were named as “competence,” “social networks,” “technology use in the classroom,” “interest in technology,” “technology for me,” “negative aspects,” “entertainment use,” and “conscious use.” These factors correspond to the names used in the subscales of similar scales. For example, the “competence” subscale was also included in the previously developed “Digital Literacy Scale.” Moreover, the designations like “social networks” and “entertainment use” are commonly encountered factors in adolescents’ computer activities. The corrected item-total score correlations of the factors range from 0.31 to 0.73, and Cronbach’s alpha coefficients range from 0.86 to 0.61. T-test results indicate significant differences between the upper 27% and lower 27% groups in terms of item means. These findings support that the scale performs well in terms of validity and reliability (Cabı, 2016).

2.4 Data analysis

In this study, descriptive statistics such as means and coefficients were utilized. For the evaluation of structural model tests, goodness-of-fit values were considered. The cutoff points for goodness-of-fit values are as follows: <0.08 for SRMR, <0.10 for RMSEA, ≥ 0.90 for CFI, IFI, NNFI, and GFI (Kline, 1998; Schumacher & Lomax, 2004). Additionally, the cutoff point for the X^2/df ratio was set at 5. The data obtained in the research were tested using SPSS 20 and Lisrel 8.8 software packages. The chosen statistical significance level for all analyses was 0.05.

3. Findings

3.1 Hypothetical model test

In the scope of this research, a structural model has been determined (Figure 1). In this model, the latent variable “Digital Citizenship” is represented by the scores obtained from the Digital Citizenship Scale items. The latent variable “Motivation” is similarly represented by the total scores of the sub-dimensions of the Social Studies Lesson Motivation Scale. Likewise, the latent variable “Attitude towards Digital Technology” is based on the total scores of the sub-dimensions of the Attitude towards Digital Technology Scale. Table 1 provides descriptive statistics for the observed variables included in the model.

Table 1. Descriptive statistics for variables in structural models

Sub-dimensions	X̄	Ss	Skewness	Kurtosis
IPA	3.26	0.67	-0.53	0.89
TEB	3.41	0.68	-0.68	-0.08
YKF	3.41	0.69	-0.66	0.30
EBA	2.99	0.79	-0.36	-0.41
AET	2.76	0.80	0.16	-0.42
YET	3.46	0.83	-0.19	-0.51
SOA	3.46	0.89	-0.79	-0.13
DTK	23.15	4.87	-1.39	1.90
ILG	22.01	5.49	-0.75	0.21
BIT	20.64	5.70	-0.63	-0.09
OLY	23.32	4.20	-1.20	3.22
EAK	20.61	6.32	-0.69	-0.35
BLK	22.64	4.89	-1.42	1.61
IMO	7.37	4.91	1.49	3.60
OMN	76.32	16.50	-0.69	0.79
DMO	62.13	13.61	0.00	-0.08

The kurtosis and skewness values for the distribution of the data were examined. In general, in social sciences, it is expected that skewness values fall within the range of ± 1.5 , and kurtosis values fall within the range of ± 7 (Field, 2013; Tabachnick & Fidell, 2013). Upon examining the skewness and kurtosis values obtained in this study, it is observed that the skewness values range from -1.42 to 1.49, and the kurtosis values range from -0.51 to 3.60. These values fall within acceptable limits for datasets demonstrating normal distribution.

Table 2. Relationships between variables

Sub dimension	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IPA	-														
TEB	.320**	-													
YKF	.353**	.465**	-												
EBA	.389**	.416**	.581**	-											
AET	.374**	.316**	.430**	.556**	-										
YET	.370**	.372**	.389**	.511**	.543**	-									
SOA	.239**	.166**	.243**	.192**	.122**	.146**	-								
DTK	.343**	.238**	.276**	.245**	.176**	.223**	.245**	-							
ILG	.439**	.296**	.321**	.349**	.311**	.310**	.222**	.752**	-						
BIT	.324**	.235**	.249**	.316**	.281**	.312**	.082	.711**	.705**	-					
OLY	.352**	.117**	.179**	.136**	.152**	.089	.112**	.599**	.572**	.481**	-				
EAK	.269**	.181**	.233**	.217**	.251**	.195**	.079	.469**	.652**	.470**	.517**	-			
BLK	.165**	0.06	0.09	-0.09	0.08	-0.08	-0.05	.151**	.227**	.130**	.461**	.370**	-		
IMO	-.347**	-.224**	-.184**	-0.79**	-.125**	-0.09	-0.08	-.392**	-.362**	-.309**	-.176**	-.347**	-.133**	-	
OMN	.480**	.240**	.370**	.347**	.367**	.396**	.283**	.335**	.236**	.395**	.461**	.435**	.300**	.292**	-
DMO	.402**	.350**	.399**	.396**	.283**	.333**	.236**	.395**	.462**	.434**	.306**	.351**	0.09	-.280**	.664**

Multiple collinearity is a situation that can arise in a regression model due to high correlation between variables. It occurs when there is a strong relationship among independent variables. In such cases, when there is a very high correlation observed between independent variables, it can mislead the results of the regression model and produce unreliable predictions. Based on the information in the table, it has been indicated that in this study, when controlling for multiple collinearity among the examined variables, none of the variable pairs have a correlation coefficient higher than 0.90. This indicates that the regression model will produce statistically more reliable results. The correlation values between the dependent and independent variables range from 0.52 to 0.63, indicating a moderate level of relationship between the variables.

Table 3. Correlations among latent variables

Latent Variables	1	2	3
Digital Citizenship	-		
Attitude Towards Digital Technology	.52*	-	
Motivation Towards Social Studies Course	.60*	.63*	-

*p<.01.

When examining the correlation values obtained in this study, it was stated that all correlation coefficients are statistically significant. This indicates that there is a relationship between the variables under investigation, and this relationship is not due to random chance. The highest correlation coefficient among the latent variables was observed between motivation towards the social studies course and attitude towards digital technology (r=.63, p<.01). This result indicates that as the attitude towards digital technology increases, motivation towards the social studies course also increases. The lowest correlation coefficient was observed between digital citizenship and attitude towards digital technology (r=.52, p<.01). This result shows that there is a weaker relationship between the level of digital citizenship and attitude towards digital technology. Since both correlation coefficients are statistically significant, it can be concluded that there is a positive relationship between these variables and an increase in one variable is associated with an increase in the other. However, since the correlation coefficient between motivation

towards the social studies course and attitude towards digital technology is higher, it can be said that the relationship between these two variables is stronger.

In this study, a two-stage approach was adopted, and it was mentioned that the measurement model was tested before testing the structural model (Figure 1). According to the results of the measurement model analysis, the goodness-of-fit indices are as follows: χ^2/df (598.98/128) = 4.67, $p=.001$, IFI=.94, NNFI=.93, CFI=.94, GFI=.86, SRMR: .076, RMSEA=.095 (RMSEA confidence interval = .088–.11). These goodness-of-fit indices are considered acceptable. The goodness-of-fit indices indicate that the measurement model is consistent with the data and that the model fits well. The standardized path coefficients obtained in the measurement model are presented in Figure 2. These results indicate that the measurement model fits the data and is ready to be tested for the structural model.

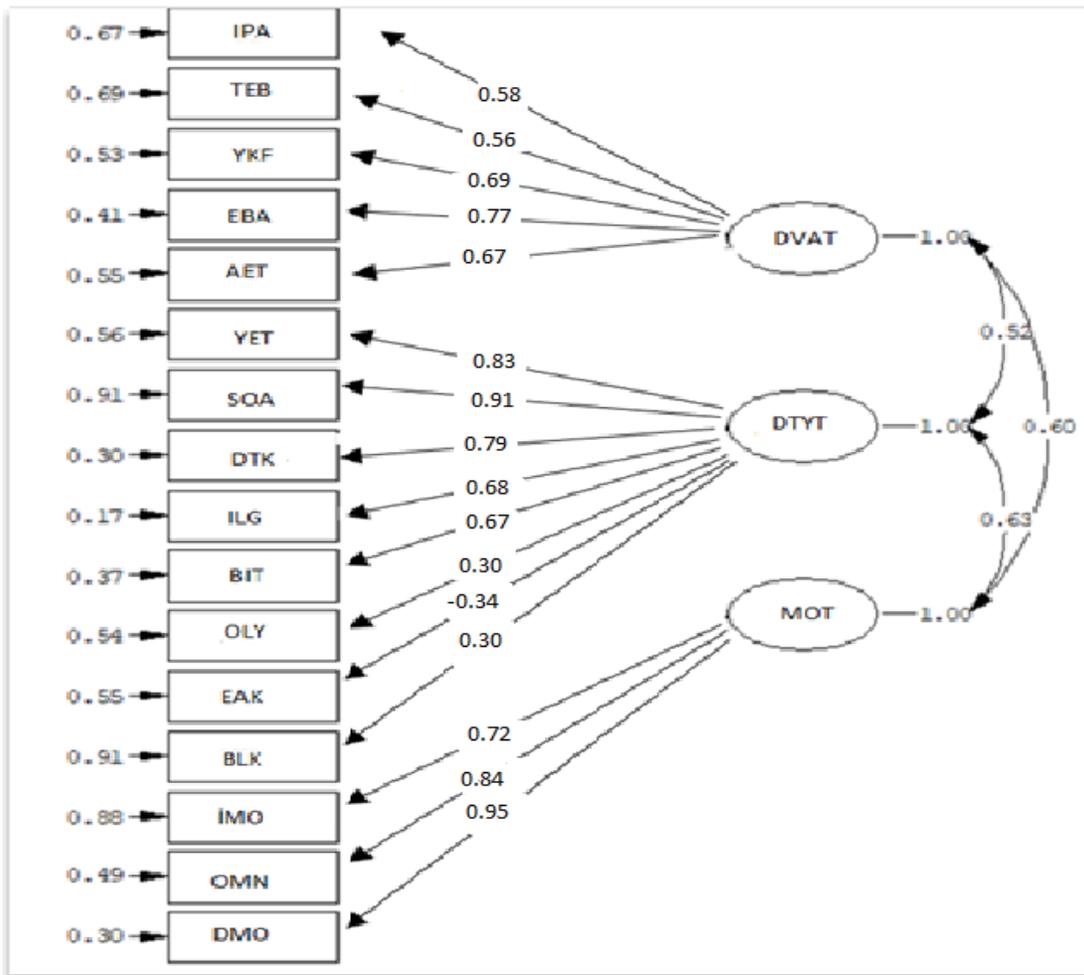


Figure 2. The standardized path coefficients for the measurement model

The structural model presented in Figure 1 was tested in the scope of the research, and the analysis results indicated the following goodness-of-fit values: χ^2/df (598.98/128) = 4.67, $p=.001$, IFI=.94, NNFI=.93, CFI=.94, GFI=.86, SRMR: .076, RMSEA=.095 (confidence interval for RMSEA = .088–.11). These goodness-of-fit values demonstrate that the tested structural model fits the data at an acceptable level. The standardized path coefficients obtained from the structural model analysis are presented in Figure 3. These coefficients represent the relationships between variables. According to the analysis results, digital citizenship has a significant predictive effect on social studies motivation ($\beta=.38$, $p<.01$) and digital technology attitude ($\beta=.52$, $p<.01$).

Additionally, digital technology attitude has a significant predictive effect on social studies motivation ($\beta=.43, p<.01$). These findings indicate that the structural model is consistent with the data and significantly explains the relationships between variables. We can conclude that there is a complex relationship among digital citizenship, social studies motivation, and digital technology attitude, and these variables predict each other.

To test the mediating effects in the research, the strategy of nested models was employed. This strategy is based on adding or removing paths related to the mediating effect from the structural model and determining the improvement or deterioration of the model using the chi-square difference test.

Firstly, it was determined that there is a path from digital citizenship to social studies motivation in the model ($\beta=.38, p<.01$). However, when the effects of other variables are not present, this path becomes ($\beta=.60, p<.05$). Next, the model was retested by removing the path from digital citizenship to social studies motivation, and the goodness-of-fit values for the revised model were as follows: $\chi^2/df (643.60/129) = 4.98, p=.001, IFI=.93, NNFI=.94, CFI=.93, GFI=.85, SRMR: .11, RMSEA=.11$ (confidence interval for RMSEA=.094-.12).

According to the chi-square difference test results, removing the path from digital citizenship to social studies motivation caused a significant deterioration in the model ($\Delta\chi^2 (1, N = 388) = 43.98, p<.05$). Therefore, it was decided to retain this path in the model. In the final model, it can be observed that digital technology attitude partially mediates the relationship between digital citizenship and social studies motivation.

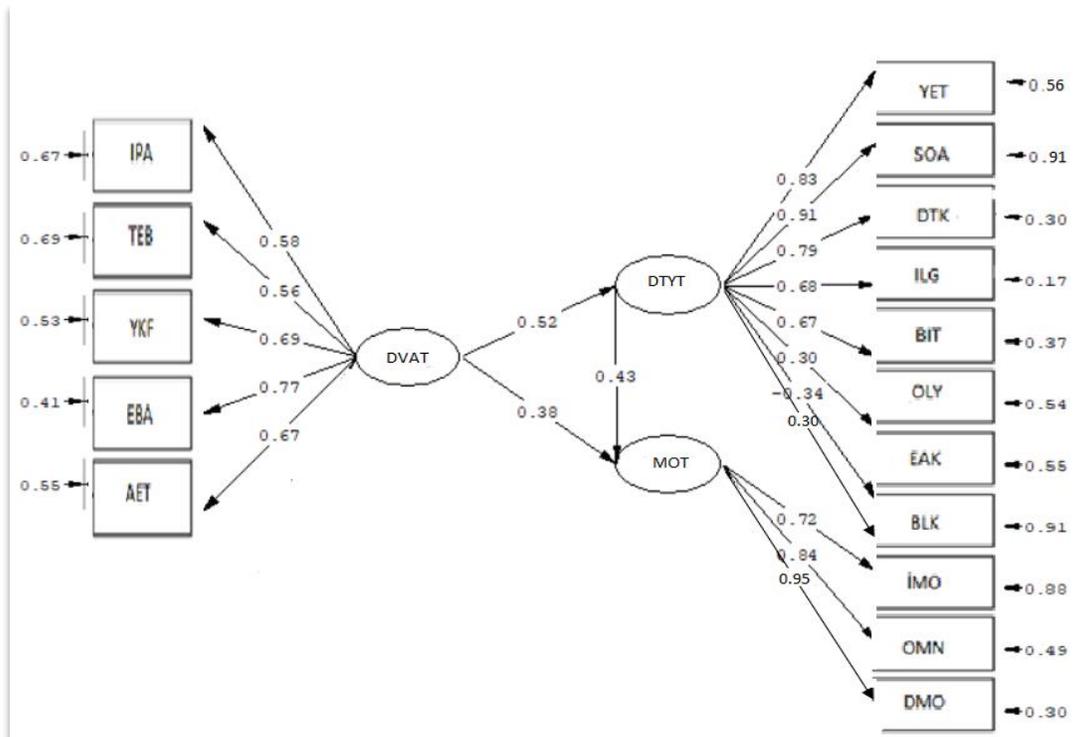


Figure 3. Standardized Path Coefficients Calculated in the Structural Model

Bootstrapping method was used to test the significance of indirect effects. This method calculates the statistical significance interval by taking a certain number of samples from the data. The findings obtained from the Bootstrapping analysis demonstrate that the indirect effects in the model are statistically significant (Table 4). Overall, when considering the explained variances, digital citizenship explains approximately 10% of the variation in digital technology attitude, while

both digital citizenship and digital technology attitude together explain about 50% of the variation in social studies motivation.

Table 4. Bootstrap test results

Independent Variable	Mediator	Dependent Variable	Path Coefficient (β)	%95 CI
Digital Citizenship	Attitude Towards Digital Technology	Motivation Towards Social Studies Course	.38* (.60*)	[.131, .287]

4. Discussion and conclusion

In this study, it has been observed that digital citizenship positively predicts motivation towards social studies. This means that as students' level of digital citizenship increases, their motivation towards social studies also increases. Students with higher levels of digital citizenship are more motivated in lessons related to this subject. In this context, it can be stated that there is a positive relationship between digital citizenship and motivation towards social studies (Choi, 2016). Studies focusing on digital citizenship (Tapingkae, Panjaburee, Hwang & Srisawasdi, 2020) emphasize the importance of motivation towards the subject matter.

The results obtained from the model indicate that the attitude towards digital technology acts as a mediator variable in the relationship between digital citizenship and motivation towards social studies. In other words, the attitude towards digital technology plays a bridge role in the relationship between digital citizenship and motivation towards social studies, effectively linking these two variables. Consistent with previous research findings, the attitude towards digital technology has a positive impact on motivation towards social studies (Isgren Karlsson, Alatalo, Nyberg & Backman, 2022). Similarly, motivation towards social studies also positively influences the attitude towards digital technology (Novikova, Bychkova & Zamaldinova, 2021). Mikelic Preradovic, Lešin & Šagud (2016) found that students' interest in digital technology enhances their motivation for learning in class. Moreover, the attitude towards digital technology positively affects academic achievement through increased motivation (Gudek, 2019). Zhong and Zheng (2023) reached the conclusion that the level of digital citizenship positively predicts motivation towards social studies.

In this study, the total scores obtained from the motivation towards social studies scale were used to measure students' motivation towards social studies. Therefore, when interpreting the findings of the study, it was taken into consideration that students' motivation towards social studies may be influenced by other variables apart from the ones examined. Banda and Nzabahimana (2023) conducted a study in which various factors influenced students' motivation towards social studies. Another research conducted by Parola (2020) segmented students' motivation profiles based on self-regulated learning strategies.

With the advancement of technology, the incorporation of digital technology in education has become crucial in fostering digital citizenship and developing related skills. Students with higher levels of digital citizenship exhibit different attitudes towards digital technology. In this context, promoting digital citizenship in education and integrating these skills into the learning process are important for enhancing effectiveness and efficiency in education and learning strategies (Choi & Cristol, 2021).

In the Turkish education system, various research findings suggest that students are encouraged to memorize information. National exams, school assessments, and some textbook questions are often at lower cognitive levels (knowledge, comprehension, and application levels), which may lead students towards superficial and rote learning strategies. Students are reported to rely on rote learning and superficial learning strategies while preparing for exams (Bilgili & Keklik,

2022). This situation may lead to student disengagement and lack of motivation in the classroom. To address this issue, incorporating digital technology in education can help students approach lessons with more motivation. In this regard, students can develop a positive attitude towards digital technology, which can positively impact their motivation in class (Pongsakdi, Kortelainen & Veermans, 2021).

The study reveals that improving students' levels of digital citizenship and their attitude towards digital technology can contribute to their motivation in social studies classes. The importance of digital citizenship is emphasized. Students with higher levels of digital citizenship are more motivated in class, adopt self-directed learning, show greater willingness to participate, and engage in cognitive evaluations during the learning process (Sitinjak, Simamora & Gultom, 2023). Students with higher levels of digital citizenship provide knowledge and awareness on how to be more effective in their learning, encouraging self-regulation. As a result, students develop the ability to use more effective learning strategies and manage their learning process more efficiently (Bilgili & Keklik, 2022).

Integrating school and classroom environments into digitalization is a pathway to enhancing students' levels of digital citizenship and their attitude towards digital technology. Such digital-oriented education can contribute to the improvement of students' knowledge and awareness of digital technology. Additionally, this approach can enhance students' attitude and motivation in class (DeFreitas & Bravo, 2012; Trolan & Jach, 2020). Nowadays, various options are available to promote students' development of digital citizenship and enhance their attitude towards digital technology in schools and classrooms (DiRamio & Payne, 2007). In digital classroom environments, students' attitudes towards digital technology differ, leading to an increase in their motivation for learning (Daungcharone, Panjaburee & Thongkoo, 2020). Studies have shown that digital technologies, active and collaborative learning environments, higher cognitive strategies, and digital journals contribute to students' motivation in digital learning environments (Jiang & Wong, 2019). Furthermore, teaching students about the awareness of being digital citizens can also contribute to their motivation in class (Srisawasdi & Panjaburee, 2019).

The study emphasizes the limitations of the conditions and data used and proposes potential improvements for future research. The fact that the study was conducted with students from a state school in the Eastern Anatolia region may affect the generalizability of the findings. Therefore, it is recommended that in subsequent research, the model be retested with study groups that include students from different schools in various regions. This would allow for more suitable results for generalization and enable comparisons between different groups.

According to the summary of this study, the importance of attitudes towards digital technology in students' motivation in social studies classes is highlighted. The study indicates that digital citizenship and attitudes towards digital technology also influence students' motivation in social studies classes. In future research, different variables can be examined in the context of their impact on motivation in relation to digital citizenship and attitudes towards digital technology.

Furthermore, the mediating effects of attitudes towards digital technology on motivation in social studies classes can also be considered. Such studies could provide valuable information for activities aimed at enhancing students' motivation in educational settings, ultimately leading to improved academic achievements. In conclusion, the study underscores that digital citizenship and attitudes towards digital technology can influence students' motivation in social studies classes, and research in these areas can provide valuable findings for the field of education. Such research can contribute to the development of educational environments that assist students in more effective learning and development.

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The Effect of Argumentation-Based Teaching on Scientific Process Skills of 7th Grade Students

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Abstract

The aim of this study is to investigate the effect of argumentation-based teaching carried out with secondary school 7th grade students on students' scientific process skills. The sample of the study consists of 7th grade students in two different branches studying at a public school in the Central Anatolia Region of Turkey in the 2018-2019 academic year. The study was carried out with the participation of 36 students, 18 in the experimental group and 18 in the control group, and lasted approximately 12 weeks. Mixed method was used as the research model in the study. In the quantitative part of the research, the semi-experimental pretest-posttest paired control group design was used, and in the qualitative part, the semi-structured interview form developed by the researcher was used. The "Scientific Process Skills Scale" was applied to the experimental and control groups as a pre-test and post-test. At the end of the process, the scores of the students from the related test were analyzed. As a result of the research, no significant difference was found between the scientific process skill levels of the experimental and control groups.

Keywords: argumentation, scientific process skills, 7th grade.

1. Introduction

In today's conditions, raising individuals who can compete actively in social and economic lanes is directly related to the competitive capacity of countries. This situation increases the need of countries for individuals with high problem-solving skills, responsible, decision-making skills, innovative and critical thinking. For this reason, raising literate individuals in many fields has become the main goal of the education system due to the need for strategies, methods and techniques that will provide the said educational output (Ministry of National Education [MoNE], 2018). In order to achieve this goal, the education programs have been updated and the scientific literacy vision emphasized by the education programs has reached a very important point (Özdem-Yılmaz, 2017). Scientifically literate individuals are defined as who in addition to having basic knowledge can question, solve problems, have scientific process skills, and think creatively and analytically (MoNE, 2015). What is expected from scientifically literate individuals is to use their skills in different environments and conditions and to develop arguments by making scientific explanations based on the data they have obtained (Peker, 2017). Argument is defined as a thesis or claim put forward with a justification (Kuhn, 1993). Argumentation, on the other hand, is a scientific discussion technique that requires skills such as justification, creating arguments and counter-arguments, and making inferences based on evidence (Özdem-Yılmaz,

2017). Scientific debate, ie. argumentation, which has been very popular lately, is a part of science in any form. Therefore, it is very important to integrate it into education (Erduran & Jiménez-Aleixandre, 2007).

Argumentation-based education has become increasingly popular both in our country and in the world. Because argumentation not only provides students with content knowledge, but also enables them to become entrepreneurial, creative, social and questioning individuals who can express their ideas clearly. Argumentation enables individuals to be involved in the teaching process by questioning their own ideas and the ideas of others by using logical approaches (Uçar, 2018). In addition, argumentation is a method frequently used to refute or support claims in discussions that take place in daily life. Because argumentation leads to thinking, provides important contributions to issues such as generating ideas, defending one's ideas, and establishing healthy communication (Akbaş, 2017).

Argumentation is one of the most researched topics in science education in recent years. When the relevant literature is examined, many studies examining the effects of argumentation-based learning activities on individuals' academic achievement, attitudes towards science disciplines, and conceptual understanding have been found (Akdöner, 2019; Akyüz, 2018; Balcı, 2015; Cevger, 2018; Demirel, 2014; Gençoğlan, 2017; Tekeli, 2009). However, there are very few studies investigating the effects of argumentation-based practices on students' scientific process skills (Aslan, 2018; Demirel, 2014; Gençoğlan, 2017). Therefore, it is believed that this study will contribute to the field.

The aim of the research is to investigate the effect of argumentation-based teaching, carried out within the "Force and Energy" unit of the Science course, on the scientific process skills of 7th grade students. For this purpose, answers to the following questions were sought:

- (1) Is there a statistically significant difference between the Scientific Process Skills pre-test scores of the experimental group in which argumentation-based activities were applied and the Science Process Skills pre-test scores of the control group in which the current program was applied?
- (2) Is there a statistically significant difference between the Scientific Process Skills post-test scores of the experimental group in which argumentation-based activities were applied and the Scientific Process Skills post-test scores of the control group in which the current program was applied?
- (3) Is there a statistically significant difference between the mean scores of the Scientific Process Skills Test before and after the application of the experimental group in which the argumentation-based activities were applied?
- (4) What are the students' views on Argumentation-Based Teaching Activities?

2. Methods

Mixed method was used as a research model in the study titled The Effect of Argumentation-Based Teaching on 7th Grade Students' Scientific Process Skills. Mixed-method studies are studies in which quantitative and qualitative methods are used together in line with the principles of pragmatist philosophy in order to deal with the problem in a multidimensional and comprehensive way (Yıldırım & Şimşek, 2016). In the quantitative dimension of the study, a quasi-experimental pretest-posttest paired control group design was used. In this design, where unbiased assignment is not used, ready groups are paired over certain variables. Matching does not guarantee that the groups participating in the study are equivalent, but it is an important

alternative method in cases where random assignment cannot be made (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2013). Since the groups were selected from the existing classes in the study, it was decided that the quasi-experimental pretest-posttest paired control group design was the most appropriate design.

Another name for the quasi-experimental pretest-posttest paired control group design that can be encountered in the literature is the unequalized control group quasi-trial model. Quasi-trial models are used when real-trial models are not available. The unequalized control group model is similar to the pretest-posttest control group model, but the difference is that unbiased assignment is not made in the formation of the groups. In the assignment of groups as experimental and control groups, an unbiased assignment is made. We can summarize the model as follows (G: Group, M: Measurement, X: Process) (Karasar, 2016):

G _{experimental}	O _{1.1}	X	O _{1.2}
G _{control}	O _{2.1}		O _{2.2}

Figure 1. Model, symbolic view with unsynchronized control group (Karasar, 2016)

In the qualitative part of the study, the interview technique was applied by using a semi-structured interview form developed by the researcher. The opinions of the students in the experimental group about the teaching activities used in the process were determined. The obtained data were analyzed by content analysis method. Content analysis is the analysis that aims to reach concepts and relationships that can explain the collected data. For this purpose, in content analysis, similar data are brought together within the framework of certain themes and concepts, organized and interpreted in a way that the reader can understand (Yıldırım & Şimşek, 2016).

At the beginning of the research process, the Scientific Process Skills Scale (SPS) was applied to the experimental and control groups as a pre-test. In the process, first of all, general information and exercises about argumentation were given to the experimental group. The experimental group was taught within the scope of the “Force and Movement” unit with argumentation-based teaching activities for about 12 weeks. At the end of the process, SPS, which was applied as a pre-test, was applied as a post-test. In the control group, the “Force and Motion” unit was taught by applying the current program and adhering to the textbook, and at the end of the process, SPS was applied as a post-test.

2.1 Study group

The study was conducted with 36 7th grade students studying at a public school in the Central Anatolia Region of Turkey in the 2018-2019 academic year. Students study in 7/A and 7/C branches. In the study, the 7/A branch consisting of 18 people was assigned as the experimental group, and the 7/C branch consisting of 18 people was assigned as the control group. The researcher conducted the Science courses of both branches. Of the 18 students in the experimental group, 12 were girls and 6 were boys. Of the 18 students in the control group, 10 were girls and 8 were boys.

The school where the experimental and control group students’ study is a school which is active in sports and cultural terms and trains students for high-quality high schools. The classes in which the student’s study have the same physical equipment. There are no smart boards in either classroom. When visual elements are used, a projection is brought to the classroom or a lesson is taught in the laboratory. Parents of students are parents who attach importance to the education of their children and are in contact with the school. It can be said that the economic conditions of the students are moderate. There is no big difference between students in terms of economy. Considering the education levels of the parents, it can be said that they have been educated at least at primary school and at most at high school level.

2.2 Data collection tool

Scientific process skills scale

In the study, the Scientific Process Skills Scale developed by Aydoğdu, Yıldız, Buldur, and Tatar (2012) was used to measure students' scientific process skills. The scale consists of 27 items, all of which are multiple choice. The reliability coefficient KR-20 of the scale was determined as 0.84. The difficulty value of the scale is 0.54. The distinctiveness index of 27% was calculated between the scores of the upper and lower groups and it was determined that all items in the scale were statistically distinctive ($p < 0.05$). The scale is suitable for measuring the scientific process skills of 6th, 7th and 8th grade students (Aydoğdu, Yıldız, Buldur & Tatar, 2012)

Interview form

In the study, an interview form consisting of semi-structured interview questions prepared by the researcher was used to get the opinions of the experimental group students about the implementation process. In order to ensure the sufficiency of the questions, the opinions of three science teachers were taken, the questions were arranged in line with the opinions, and the form was finalized by taking the opinion of the advisor.

2.3 Data collection and analysis

In the study, the Scientific Process Skills Scale was used to collect quantitative data. The scale was applied to the experimental and control groups as a pre-test before the application and as a post-test after the application, and the quantitative data obtained were analyzed with statistical methods. In order to collect qualitative data, interview questions developed by the researcher were used. The analysis of qualitative data was made by content analysis method.

Quantitative data obtained during the study process were transferred to the computer environment and appropriate statistical methods were used to determine the relationships between the variables. While the experimental and control groups were compared according to their scale scores, the t-test for independent samples was performed on the data exhibiting normal distribution. When a statistically significant difference was detected between the pretest scores of the experimental and control groups, ANCOVA was used to eliminate the effect of the pretest in order to compare the posttest scores. In order to compare the posttest-pretest difference scores within the group, the Dependent Samples t-test was used if the data were normally distributed.

The Shapiro-Wilks test was used to examine the conformity of the data to the normal distribution, since the experimental and control groups each consisted of 18 people. Shapiro-Wilks test results of the groups are presented in Tables 1 and 2.

Table 1. Shapiro-Wilks test findings regarding the normal distribution of the groups

Scale	Test	Group	N	p
Scientific Process Skills (SPS)	Pre-Test	Experimental Group	18	0.062
		Control Group	18	0.222
	Post-Test	Experimental Group	18	0.309
		Control Group	18	0.056

Table 2. Shapiro-Wilks findings regarding the posttest-pretest difference scores of the students

Test	Group	N	P
Scientific Process Skills (SPS)	Experimental Group	18	0.315

When Table 1 is examined, it is seen that the SPS test pre-test and post-test scores are in accordance with the normal distribution ($p > 0.05$).

When Table 2 is examined, it is seen that the difference scores of the experimental group students are in accordance with the normal distribution ($p > 0.05$).

The analysis of qualitative data was carried out with the content analysis method. The data obtained from the interview with the experimental group students at the end of the process were first transferred to the computer environment. The answers of the students were examined one by one and codes were given by dividing them into meaningful sections. All codes were brought together and examined, common points between the codes were determined and themes were created. Thus, the answers were categorized in a more general framework by establishing meaningful relationships. After the themes were determined, the frequency and percentage values of the themes were calculated, so it was ensured that numerical data were used when talking about student opinions.

2.4 Preparation of worksheets

The worksheets were prepared by the researcher adhering to the achievements in the 7th Grade Science Curriculum (MoNE, 2018). During the preparation process, studies and books related to the subject of argumentation were examined, and the prepared worksheets were used after the examination of two experts. The activities were planned in a way that allows students to discuss. Activities such as expression table, use of evidence, concept cartoon, competing theories, which are among the argumentation techniques, were used.

2.5 Teaching process

The teaching process was carried out with the control group throughout the unit “Force and Energy” with the current program and the activities suggested in the textbook. In the experimental group, the following activities and practices were carried out.

Before starting to implement the argumentation-based teaching activities, small preparatory activities were carried out for the experimental group. Thus, the students had a general knowledge about creating arguments. In the implementation process of the activities, science classrooms and science laboratory were used. During the activities, the students worked in groups or individually, depending on the status of the content. However, even if they work in groups, it was ensured that each student had worksheets. The students were allowed to discuss and present their ideas in the process or to refute the ideas they disagreed with, and the researcher only took the role of a guide. A 1-week example of the teaching process has been given below.

At week 10 “The Power of Air” activity, which is related to the achievement of “F.7.3.3.3. A means of reducing the effect of air or water resistance is designed” has been carried out. Students were given a story and a claim made in the story. Students were asked to explain whether they agreed with this claim by providing reasons, supporters and rebuttals. After the class discussion, the students were asked to design an experiment in groups about their claims and to transfer their observations to the worksheets. The results were discussed. 4 class hours were allocated for this activity.

3. Findings

In this part of the research, in which the effect of argumentation-based teaching on the scientific process skills of 7th grade students is examined, the findings and comments obtained as a result of the analyzes of the sub-problems are included.

In the first sub-problem of the study, “Is there a statistically significant difference between the PPS pre-test scores of the experimental group in which the argument-based activities were applied and the PSB pre-test scores of the control group in which the current program was applied?” Analyzes made to solve the problem are discussed. In Table 3, the t-test results for the comparison of the PPS pre-tests of the experimental and control groups are given.

Table 3. Comparison of the SPS pre-test scores of the experimental and control groups

Groups	N	\bar{X}	S	sd	t	p
Experimental Group	18	15.944	3.90282	34	4.135	0.000
Control Group	18	10.444	4.07607			

BSB pre-test mean scores of the experimental and control groups were compared with the t-test for unrelated samples. When Table 3 is examined, it is observed that the PPS pre-test mean scores of the experimental group (=15.944) in which the argumentation-based teaching activities were applied were significantly different from the control group (=10.444) in which the current program was applied [$t_{34}=4.135$, $p<0.05$].

In the second sub-problem of the study, is there a statistically significant difference between the PPS Test post-test scores of the experimental group in which the argumentation-based activities were applied and the PPS Test post-test scores of the control group in which the current program was applied? Analyzes made to solve the problem are discussed. When Table 2 is examined, it is observed that the difference between the PSD pre-test scores of the groups is significant. For this reason, the effect of BSB pre-test scores should be eliminated in order to make PPS post-test comparisons of the groups. For this purpose, ANCOVA (Covariance Analysis) method was preferred to investigate the relationship between the post-test scores of the groups. Analysis results are as in Table 4.

Table 4. Comparison of SPS post-test scores of experimental and control groups

Source of Variance	Sum of Squares	sd	Mean of squares	F	Significance Level (p)
Regression	339.678	1	339.678	25.112	0.000
Group	5.082	1	5.082	0.376	0.544
Error	446.377	33	13.527		
Total (Corrected)	1036.750	35			

When Table 4 is examined, no significant difference was found between the mean PSD post-test scores adjusted according to the SPS pre-test scores of the experimental and control groups [$F(1-33)=4.211$, $p>0.05$]. In the case that the SPS pre-test scores are kept under control, the PPS post-test mean score of the experimental group (=15.877) does not statistically differ significantly from the PSS post-test mean score of the control group (=14.956). In other words, applications based on scientific argumentation did not have any effect on students' scientific process skills.

In the third sub-problem of the study, is there a statistically significant difference between the mean scores of the SPS test before and after the application of the experimental group in which the argumentation-based activities were applied? Analyzes made to solve the problem are discussed. Provided that the data are obtained from the same source and distributed normally,

the statistical method that can be used to examine whether there is a statistically significant difference between the means of two consecutive measurements is the Paired Samples t-test (Can, 2017). Dependent samples t test results are as follows in Table 5.

Table 5. Dependent samples t-test for comparison of SPS pre-test-post-test scores within the group

Measurement	N	\bar{X}	S	sd	t	p
Pre-Test	18	15.9444	3.90	17	3.146	0.006
Post-Test	18	18.0556	5.11			

When Table 5 is examined, a statistically significant difference was found between the mean score of the PPS test performed before the activity (pretest=15.9444) and the mean score of the PPS test performed after the activity (posttest=18.0556) in the experimental group in which the argumentation-based activities were performed [$t(17)=3.146$, $p<0.05$]. In other words, argumentation-based activities caused a significant increase in the scientific process skills of the experimental group students.

In the fourth sub-problem of the research, an answer to the question “What are the opinions of the experimental group students about argumentation-based teaching activities?” was sought. The students’ opinions were transferred to the computer environment and their answers were expressed with codes. Themes were created by combining similar codes. The themes are presented in Table 6 along with their frequency and percentage values. Apart from the numerical data, students' opinions were also included, but the names of the students were not specified. They were expressed as Ö1, Ö2, Ö3 Ö18.

Table 6. Students’ views on argumentation-based teaching activities

Scale Item	Theme	Frequency (f)	Percent (%)
What would you like to say about the activities held within the scope of the “Force and Energy” unit?	Fun/Beautiful	16	47.1
	Instructive/Formative	8	23.5
	Hard	5	14.7
	Boring	3	8.8
	Different	2	5.9
Did you enjoy the activities held within the scope of the “Force and Energy” unit? Which parts did you like the most? If you didn't like it, can you explain why you don't like it?	I liked experimenting	17	50.0
	I didn't like filling out worksheets	10	29.4
	I didn't like in-group conflicts	3	8.8
	There is nothing I don't like	2	5.9
	I liked doing group work	1	2.9
	I didn't like that it was tiring	1	2.9
What did you learn in the course of activity?	I learned to make arguments	14	56.0
	I learned designing experiments	8	32.0
	I reinforced what I learned	3	12.0
Did you have any difficulties during the applications? What are these parts?	Filling out worksheets	7	35.0
	Make an argument	7	35.0
	Experiment Process	4	20.0
	Working with a group	1	5.0
	I had no difficulty	1	5.0

Would you like to have similar activities in other units and other lessons?	Only suitable to Science classes	6	28.6
	Applicable to all subjects	4	19.0
	May be in social studies class	3	14.3
	May be in other units in science class	2	9.5
	May be in Turkish classes	2	9.5
	Not wanted	2	9.5
	May be in Maths	1	4.8
	May be in English	1	4.8
What are your suggestions/opinions regarding the implementation of the activities?	Worksheets should not be used	8	36.4
	More experiments should be done	5	22.7
	Good this way	4	18.2
	Studies should be individual	2	9.1
	Students should specify the groups	1	4.5
	Activities are time consuming	1	4.5
	Activities are hard	1	4.5

Experimental group students were asked about their thoughts on argumentation-based teaching activities. Nearly half of the students' opinions are that the activities are fun/beautiful. The frequency distribution and percentage values of the opinions are shown in Table 6. Among examples of student opinions are "...we did experiments and put them on paper, so we developed our power of interpretation and thus we learned something" (S11), "...the process went well, we learned new things, we used information and words that we did not use before, such as data assertions" (T12), "...it was very nice, I had fun, it was different" (T14), "...it was very nice, very entertaining" (T2).

Students were asked whether they liked or disliked things during the implementation of the activities. The data of student answers are presented in Table 6. Half of the opinions are that students like to experiment in the process. In addition, approximately 30% of student opinions state that students do not like to fill out worksheets. Sample student opinions are as follows: "...I liked doing experiments but I did not like writing" (S5), "...I liked it, it was good. I liked experimenting. I didn't like working in a group because some of my friends just found their ideas right" (T1), "...it was nice. I enjoyed experimenting and doing group work. I did not like to fill in the worksheets" (S7).

Students were asked what they learned during the activities. Students generally stated that they learned how to construct arguments and design experiments (Table 6). Some examples of the students' views are as follows: "...I learned the data, the claim, the justification, the supporter, I learned how to design an experiment" (S3), "... We experimented in many different ways, and we made claims with the data we obtained from our experiments" (T8), "...I understood the dependent and independent variable well. I learned to make arguments" (T6).

The students were asked whether there were any difficulties they encountered during the applications, and if so, what these difficulties were. Most of the students stated that they had difficulty in recording their ideas on the worksheets after the discussion process (Table 6). In addition, they stated that they had difficulties in the argumentation process and in the experiment design process. The following examples can be given to students' views: "...I had difficulty in filling out the worksheets, that is, I had difficulty in writing" (S3), "...I had difficulty in finding dependent and independent variables, others were easy" (S4), "...I had difficulty in making arguments at first" (S9), "... it was a little difficult to write" (T16).

The students were asked whether they wanted similar activities to be implemented in other units or other courses in the science lesson. Most of the students stated that argumentation-based activities are only suitable for science lessons. Some of them stated that they would like to have similar activities in all courses. Again, in different courses, there were students who expressed their desire to implement argumentation-based activities for different reasons. Frequency and percentage values of student opinions are given in Table 6. Sample student opinions are as follows: "...it can be in all courses if it is experimented. No writing" (S5), "...it could have been in the solar system unit in the science class. I would like it to be used in social studies as well because it is more suitable for discussion" (S7), "...I would like it to be in social studies because social studies is difficult because maybe it can be better with such activities" (S10), "...it may be in science, but I am not sure in other classes, it will be a little different in those classes than in science. I wish it was only in science" (T12).

Students were asked about their thoughts and suggestions about the implementation of argumentation-based teaching activities. Most of the students stated that the worksheets should not be used during the activities. Some of the students also stated that more experiments should be done (Table 6). Sample student opinions are as follows: "...it would be better if we did more experiments. They were good but difficult activities, they took a little longer" (T4), "...it would be better if we determined the groups with the people we chose" (T6), "...it was good. It would be better without the worksheets" (T8), "...it would be better if the writing part was less. Working individually could be better because there are conflicts within the group, sometimes they do not listen to each other and act independently. Sometimes the job is left to one person and others are not interested" (T12), "...it would be better if we did more experiments" (T15), "...the implementation of the activities was good. Working in a group was not good, it would be better if it was individual" (T16).

4. Discussion and conclusions

In this section the results related to the problem "Within the scope of the Force and Energy unit of the 7th grade Science course, is there a significant difference between the scientific process skills of the experimental group taught with argumentation-based activities and the control group taught with the current program?" are mentioned.

A significant difference was found between the pretest scores of the Scientific Process Skills Test (SPS), which was carried out before the application in order to measure the scientific process skills of the experimental and control groups. In order to investigate whether there is a significant difference between the PPS post-test scores of the experimental and control groups after the application, the effect of the PPS pre-test scores was removed by statistical methods and analyzed. It was observed that the PPS post-test scores of the experimental and control groups were not statistically significant when the effect of the PPS pre-test was eliminated. Accordingly, argumentation-based teaching activities do not have any effect on students' scientific process skills. The study conducted by Aslan (2018) with 29 secondary school 7th grade students, in which the pretest-posttest control group design was used, also indicates similar results. Argumentation activities were carried out within the scope of the Electric Energy unit of the Science course, and at the end of the process, no statistically significant difference was found between the experimental group and the control group in terms of scientific process skills. In addition, similar results were obtained in the study conducted by Gençoğlan (2017). Gençoğlan (2017), in his semi-experimental study conducted with 69 middle school 8th grade students, taught with the experimental group using argumentation-based teaching methods, while the control group was taught by following the current program and adhering to the textbook. At the end of the seven-week applications, the post-test scores of the experimental and control groups were compared and it was seen that there was no significant difference between the groups in terms of scientific process skills. In addition, the

results of the research contradict the results of the study conducted by Öç (2019). Öç, in his study designed as a quasi-experimental design with 82 pre-service science teachers, observed that scientific process skills increased in the experimental group in which argumentation-based laboratory activities were performed. In addition, the results of the research contradict with the results of the studies conducted by Demirel (2014), Cin (2013), Şekerci (2013), and Çınar (2013).

In addition to the comparison of the experimental and control groups in terms of scientific process skills, the experimental group to which the application was made was also compared within itself in terms of scientific process skills. The pretest scores of the experimental group from the PPS test were compared with the posttest scores, and it was determined that there was a significant difference in favor of the posttest scores. In other words, argumentation-based teaching activities led to an increase in the scientific process skills of the experimental group. However, this increase did not cause a statistically significant difference when compared to the control group. As a result of his study, Aslan (2010) concluded that there was a significant difference between the scientific process skills learning test pre-test and post-test scores of the experimental group students to whom the scientific discussion-oriented teaching approach was applied. Likewise, Erol (2010), in his research, observed that when he examined the pre-test and post-test scores of the experimental group students, their scientific process skills increased compared to the pre-application. Richmond and Striley (1996) found that discussions in their study caused positive changes in students' research skills necessary to conduct scientific research.

According to the results of the content analysis performed on the qualitative data, the students found the argumentation-based teaching activities entertaining, instructive and improving. In Kaya's (2005) interviews with students about the effectiveness of the argumentation model, the students stated that the activities carried out within the scope of the argumentation discussion model are more meaningful and permanent. Aktamış and Atmaca (2016), on the other hand, stated in their study that almost all of the pre-service teachers were satisfied with the argumentation-based activities, that this method positively affected the attitude towards the lesson and increased permanence. The thing that the students liked the most in the process was that they experimented and designed the experiment process by themselves. As a result of their study Tümay and Köseoğlu (2010); stated that argumentation-oriented teaching enables students to participate actively in the lesson, creates meaningful learning, and improves their thinking and questioning skills. While offering suggestions about the implementation process of the activities, the majority of them stated that more experiments should be done in the process. During the implementation of the activities, the students stated that they did not like to fill the worksheets the most. They stated that they did not have any difficulties in expressing their ideas orally, but they had difficulties when they had to express them in writing. While some of the students stated that they liked group work, some of them stated that they did not like in-group conflicts and miscommunication. The students expressed their opinion that they want similar activities to be implemented in all courses, especially in the science course. When the literature is examined, in the studies conducted with students at different education levels, as a result of using the argumentation-based learning approach in the lessons or including it in the course with various activities; It was determined that the participation in the course increased, permanent learning took place, the subjects covered in the course were learned in more detail, and it gave students the skills of inquiry, problem solving, and thinking (Kabataş Memiş, 2014; Günel, Kınır & Geban, 2012; Üstünkaya & Savran-Gencer, 2012).

Considering the results of this study, which examines the effects of argumentation-based teaching activities on students' scientific process skills, the following suggestions can be made:

(1) The study was carried out with 36 students for 12 weeks within the scope of the Force and Energy unit of the 7th grade science course. Similar studies can be carried out at different

grade levels, in other courses other than Science, or in different units in the Science course. In addition, the study can be repeated by studying for a longer time with a larger sample.

(2) In the study, the effect of argumentation-based teaching activities on students' scientific process skills was investigated. The study can be repeated with different independent variables other than scientific process skills.

(3) In the study, the effectiveness of the teaching based on the current curriculum and the textbook and the argumentation-based teaching were compared. In future studies, argumentation-based teaching and different teaching methods and techniques can be compared.

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Examining the Learning Outcomes Included in Science and Art Centers' Summer School Support and Development Course of Thinking Education Workshop Program According to Bloom's Taxonomy

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Abstract

The purpose of the research is to examine the learning outcomes included in Science and Art Centers' summer school support and development course of thinking education workshop program according to Bloom's taxonomy. The research was designed as a qualitative study, utilizing the document analysis technique and benefiting from descriptive analysis. The reliability coefficient for the research was 0.87. The results suggested that 91 of the primary, secondary, and high school learning outcomes in the workshop program were related to the cognitive domain of Bloom's taxonomy, and five of them were related to the affective domain. An examination of cognitive learning outcomes indicated that learning outcomes at the primary, secondary, and high school levels were at the lower levels of the taxonomy, namely remembering, understanding, and applying. However, there was little emphasis on learning outcomes for higher-order thinking skills, which include analyzing, evaluating, and creating. The same situation was observed in examinations carried out at the primary, secondary, and high school levels. Regarding the affective domain, one of the five learning outcomes was at the receiving level, while the other four were at the responding level.

Keywords: thinking education, curriculum, Bloom's taxonomy.

1. Introduction

Knowledge alone is insufficient in the twenty-first century education. This century requires the integration of knowledge with thinking for its effective utilization. Thinking is a lifelong ongoing process. In this lifelong process, students need to be equipped with fundamental knowledge and skills, along with abilities like critical thinking, analytical thinking, creative thinking, problem-solving, and collaborative teamwork. Thinking is the term used for the goal-oriented organized mental process carried out to understand the current situation (Cüceloğlu, 1999). Thinking is one of the significant skills which fosters individuals' language, cognitive, and social development, shaping their learning and guiding their future. Furthermore, thinking is the most crucial component of the process of acquiring knowledge, understanding, and learning, and lies at the heart of mental processes (Güneş, 2012). Thinking forms the foundation for questioning, evaluating, and generating new information, requiring mental images (Arnheim, 2007).

Individuals concretize real-life events and objects through mental images (Yıldız, 2020). Therefore, it is evident that thinking guides not only individuals’ development in various areas but also their learning and future. In addition, people need healthy thinking in every aspect of life.

Thinking education, on the other hand, enables the processing of knowledge, the culture of life, the development of culture, democratization, self-learning, understanding oneself, others, and the universe, and facilitates reasoning (Doğanay, 2012). Furthermore, thinking education increases people’s quality of life. It not only enhances success in real-life situations but also improves academic achievement, contributes to skill development, and fosters positive attitudes (Güven & Kürüm, 2006; Tokmak, Yılmaz & Şeker, 2019). Various thinking styles are important in education and the business sector, and individuals with good thinking skills have more job opportunities (Ay, 2005). The fundamental processes of thinking styles are problem-solving, decision-making, and critical thinking (Presseisen, 1991, as cited in Doğanay, 2012). In the thinking process, various operations such as analysis, synthesis, comparison, generalization, and abstraction are commonly performed (Nickerson, 1988). One of the significant goals of education is to enhance students’ skills in creativity, problem-solving, critical thinking, and higher-order thinking. In this process, thinking operations, processes, and skills are given special emphasis, and efforts are made to develop thinking operations, processes, and skills through specially designed programs and classifications (Güneş, 2012).

One of the important classifications that play a significant role in developing thinking operations, processes, and skills is Bloom’s taxonomy. The taxonomy developed by Bloom is related to different thinking skills. Teachers believe that the higher-order thinking skills found in the analysis, evaluation, and creation levels of the taxonomy are necessary for all classes. Students who can utilize skills such as identifying, classifying, analyzing, synthesizing, and evaluating are considered successful (Demirkaya, 2015). In Bloom’s taxonomy, the levels of analyzing, evaluating, and creating are considered higher-order thinking levels (Ay, 2005; Karakaş-Yıldırım, 2020; Anderson & Krathwohl, 2010; Uğurlu, 2023; Ulum, 2017). However, levels of remembering, understanding, and applying are also necessary for higher-order thinking. This is because lower-order thinking skills transform into increasingly higher-order skills (Biçer, 2019). In Bloom’s taxonomy, each level is related to one another and not entirely independent. Cognitive domain skills are arranged from simple to complex. According to Ünalı (2023), thinking skills are also interconnected, just like in Bloom’s taxonomy. In this context, it could be stated that there should be learning outcomes related to each level of Bloom’s taxonomy in the thinking workshop program. However, it could be argued that there should be more learning outcomes focused on developing higher-order thinking skills in particular.

In recent years, thinking skills education has become a significant problem in countries, and there have been significant challenges in providing thinking skills education, and the practices in this field have been inadequate (Baysal, Çarıkçı & Yaşar, 2016; Biçer, 2019; Güneş, 2012). Thinking is innate and can be developed through appropriate education (Costa, 2016). An educational program that places particular emphasis on thinking can be highly effective in developing thinking skills (İpşiroğlu, 2015). In this educational program, it is crucial to determine the learning outcomes appropriately. The Science and Art Centers (SAC) Summer School Support and Development Course of Thinking Education Workshop Program is an important practice in terms of thinking skills education. Therefore, it is considered important to examine the learning outcomes in this workshop program according to Bloom’s taxonomy.

There are two important international practices related to students’ higher-order thinking skills. One of these practices is the Program for International Student Assessment (PISA). PISA measures students’ knowledge and skills in mathematics, science, and reading, assessing their ability to apply these skills to overcome real-life challenges. Another practice is the Trends in International Mathematics and Science Study (TIMSS). TIMSS aims to assess students’ knowledge and skills in mathematics and science and contribute to their development in these

areas (IEA, 2023). These two practices are based on higher-order thinking skills (IEA, 2023; OECD, 2023; Yılmaz, 2019). One of the similar practices is the Academic Skills Monitoring and Evaluation (ABİDE) project implemented in Turkey. The ABİDE project aims to determine the extent to which students possess higher-order thinking skills through various types of questions. Accordingly, the ABİDE project aims to assess the higher-order mental skills of 8th grade students in Turkish language, mathematics, science, and social studies (MEB, 2023). Examining the learning outcomes included in the Science and Art Centers' summer school support and development course program and facilitating the acquisition of critical thinking skills will also increase success in national and international exams.

Workshops for SAC summer school programs were first introduced in the summer of 2022. The workshop programs are implemented separately for primary school, secondary school, and high school levels, and all students from grades 2-12 can participate in the workshops. One of these programs is the Thinking Education Workshop. The objectives of the Thinking Education Workshop are to enable students to utilize 21st century skills and higher-order thinking skills, establish their own thinking systems, establish a connection between language and thinking, analyze events and phenomena, express themselves effectively, respect different perspectives, think in a multifaceted manner, and support collaborative problem-solving (MEB, 2022). The general objective of the workshop is to encourage students to think about thinking, establish their own thinking systems, recognize that thinking is a skill that can be developed, consider national and universal values while thinking, respect different perspectives, become aware of what they know and do not know, realize the importance of meeting the thinking demands of the 21st century, and enable them to express themselves effectively through effective communication (Ersoy, Kefeli, Parmaksız, Karaman & Duran, 2022). Therefore, the thinking education workshop has an important function. It is also considered essential to examine the learning outcomes included in this workshop. In the context of thinking education, Sönmez (2016) conducted research on the impact of the 6th-grade elective Critical Thinking Education course on primary school students' critical and creative thinking skills. There were also many research studies in the literature examining the learning outcomes included in the curriculum in line with Bloom's Taxonomy (Büyükalın Filiz & Yıldırım, 2019; Çerçi, 2018; Karagöl, 2020; Lee, Kim & Yoon, 2015). In addition, numerous studies have examined the questions asked in lessons and exams (Eke, 2015; Çintaş-Yıldız, 2015; Demir, 2015; Gökulu, 2015; Gülerüz, 2016; Kana & Güney, 2020; Kanık-Uysal, 2022; Şanlı & Pınar, 2017; Yıldız, 2015; Zhang, Wong, Giacaman & Luxton-Reilly, 2021), and activities according to Bloom's Taxonomy (Bayrak-Özmutlu & Kanık-Uysal, 2021; Crompton, Burke & Lin, 2018; Durukan & Demir, 2017; Eroğlu, 2013; Gültekin, 2019; Karakaş-Yıldırım, 2020; Pujawan, Rediani, Antara, Putri & Bayu, 2022; Ulum, 2017). However, no research could be found regarding the examination of the learning outcomes given in the Thinking Education Workshop within the scope of SAC summer school programs.

As the Thinking Education Workshop delivered within the scope of SAC summer school programs is the first in its kind and no study has examined the workshop learning outcomes in the literature, investigating the distribution of primary school, secondary school, and high school learning outcomes included in the summer school thinking education workshop program according to Bloom's taxonomy levels is considered a worthwhile subject for research.

This research examines the learning outcomes in the "Thinking Education Workshop" program, which is part of the SAC Summer School Support and Development Course Program prepared by the Ministry of National Education (MoNE). In this context, the research aims to examine the learning outcomes of the summer school Thinking Education Workshop program according to Bloom's taxonomy. Therefore, answers were sought to the following questions:

1. What is the distribution of *primary school* learning outcomes in the Summer School Thinking Education Workshop Program according to Bloom's taxonomy process levels?

2. What is the distribution of *secondary school* learning outcomes in the Summer School Thinking Education Workshop Program according to Bloom’s taxonomy process levels?
3. What is the distribution of *high school* learning outcomes in the Summer School Thinking Education Workshop Program according to Bloom’s taxonomy process levels?
4. What is the distribution of *all* learning outcomes in the Summer School Thinking Education Workshop Program according to Bloom’s taxonomy process levels?

2. Method

This study employed a qualitative research design using document analyses. Document analysis is the examination of written documents concerning a specific phenomenon or event intended to be explored (Yıldırım & Şimşek, 2016). In qualitative studies, documents are an important source of data and can include both private and official documents (Creswell, 2017). The document analysis method, which focuses on how the researched subject is reflected in documents, is commonly used in educational research. Document materials can include public records, textbooks, letters, films, cassettes, diaries, themes, reports, or other documents (Ary, Jacobs & Sorensen, 2010). In this study, the data source document considered is the 2022 Thinking Education Workshop Summer School Program prepared by the MoNE for SACs under the Summer School Support and Development Course Program.

2.1 Data analysis

In this study, descriptive analysis was used to examine the learning outcomes of focus. In this analysis method, the data obtained from the document are examined and interpreted according to pre-determined categories, themes, or dimensions. This examination process is carried out in four steps. In step 1, a framework is established to determine under which themes or concepts the data will be organized. In step 2, within the specified thematic framework, the document is read, and the data are organized and processed. In step 3, the findings organized according to this framework are supported with quotations. In the final step, the findings are explained, related to each other, and interpreted to make them more meaningful (Yıldırım & Şimşek, 2016).

In this respect, first, a framework was established for analyzing the data based on the cognitive process dimensions of Bloom’s taxonomy. Then, the following steps were followed. In the first stage of document analysis, the learning outcomes included in the SAC Summer School Thinking Education Workshop Program, one of the 2022 SAC Summer School Workshop Programs published by the General Directorate of Special Education and Guidance Services, were examined according to primary, secondary, and high school levels, and their frequencies were extracted. As a result of this examination, a total of 96 learning outcomes were examined in this research, with 34 learning outcomes at the primary school level, 30 at the secondary school level, and 32 at the high school level. Then, action statements corresponding to the cognitive process levels of the revised Bloom’s taxonomy were determined, and the learning outcomes were examined according to the revised Bloom’s taxonomy. Ninety-six learning outcomes were separately coded by the researcher and an expert with a Ph.D. degree in educational sciences. The reliability between the two coders was determined using Miles and Huberman’s (2015) reliability formula (Reliability = Consensus/Consensus + Disagreement). According to this formula, the reliability concerning the learning outcomes in the cognitive process dimension was 0.87. When

examining the learning outcomes, the cognitive process represented by the action word at the end of each learning outcome statement was determined. For example, in the learning outcome, “2.19. Realizes that there are various problems in daily life”, the action word is “realizes.” This statement emphasizes a cognitive process at the level of remembering. The learning outcome “1.12. Conducts practices related to reasoning” is examined as the application level in terms of the cognitive process dimension.

3. Findings

This study examined the distribution of *primary*, *secondary*, and *high school* learning outcomes included in the SAC Summer School Thinking Education Workshop Program according to the cognitive dimensions of Bloom's taxonomy.

3.1 Findings regarding the cognitive process dimensions of primary school learning outcomes included in the thinking education workshop program

In the analysis conducted regarding the first research question, it was determined that the 33 primary school learning outcomes included in the SAC Summer School Thinking Education Workshop Program were related to the cognitive domain, and one was related to the affective domain at the receiving level. Findings regarding the cognitive dimensions of learning outcomes are presented in Figure 1.

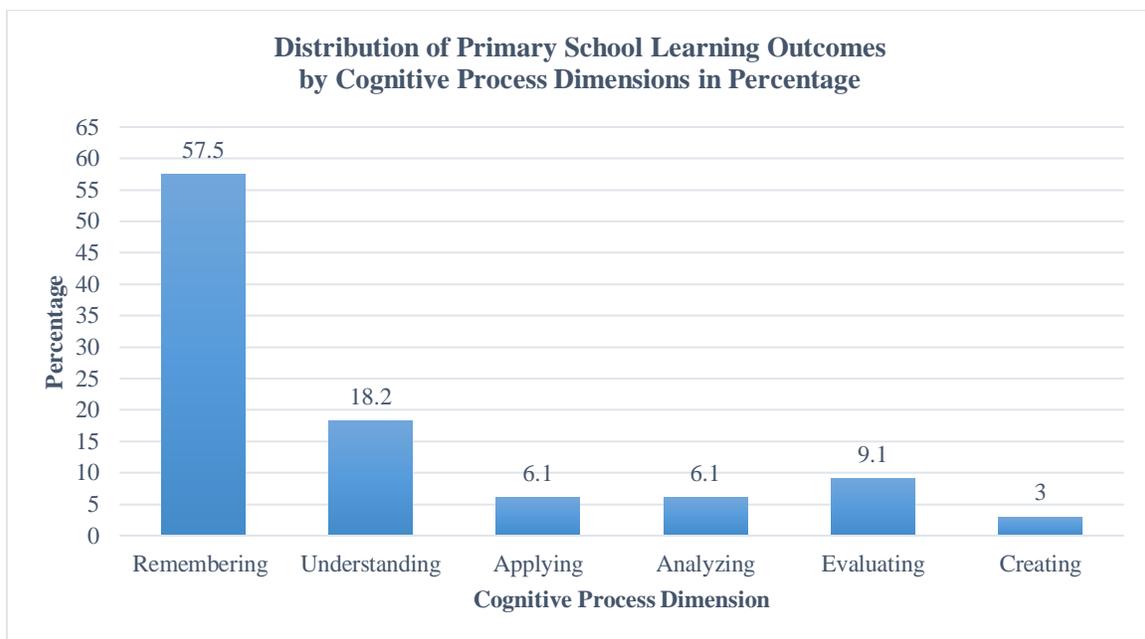


Figure 1. Findings regarding the cognitive process dimensions of primary school learning outcomes

As examined in Figure 1, out of the 33 primary school learning outcomes related to the cognitive domain, 19 (57.5%) were at the remembering level, 6 (18.2%) at the understanding level, 2 (6.1%) at the applying level, 2 (6.1%) at the analyzing level, 3 (9.1%) at the evaluating level, and 1 (3%) at the creating level. The fact that 81.8% of the primary school learning outcomes were at the remembering, understanding, and applying levels indicates that the thinking education program provides students with lower-order skills according to Bloom's taxonomy. The program

had little emphasis on higher-order thinking skills of analyzing, evaluating, and creating levels (18.2%).

3.2 Findings regarding the cognitive process dimensions of secondary school learning outcomes included in the thinking education workshop program

In the analysis conducted regarding the second research question, it was determined that 29 of the secondary school learning outcomes included in the SAC Summer School Thinking Education Workshop Program were related to the cognitive domain, and one was related to the affective domain at the receiving level. Findings regarding the cognitive dimensions of learning outcomes are presented in Figure 2.

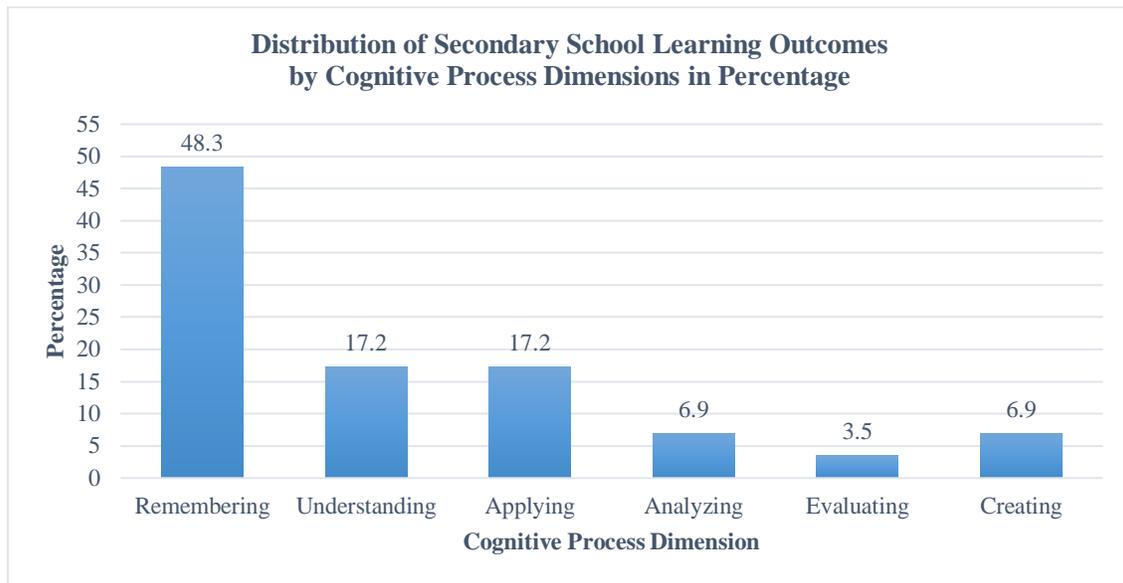


Figure 2. Findings regarding the cognitive process dimensions of secondary school learning outcomes

As seen in Figure 2, out of the 29 secondary school learning outcomes related to the cognitive domain, 14 (48.3%) were at the remembering level, 5 (17.2%) at the understanding level, 5 (17.2%) at the applying level, 2 (6.9%) at the analyzing level, 1 (3.5%) at the evaluating level, and 2 (6.9%) at the creating level. The fact that 87.2% of the secondary school learning outcomes were at the remembering, understanding, and applying levels indicates that the thinking education program provides students with lower-order skills according to Bloom’s taxonomy. The program had little emphasis on higher-order thinking skills of analyzing, evaluating, and creating levels (17.3%).

3.3 Findings regarding the cognitive process dimensions of high school learning outcomes included in the thinking education workshop program

In the analysis conducted regarding the third research question, it was determined that 29 of the high school learning outcomes included in the SAC Summer School Thinking Education Workshop Program were related to the cognitive domain, and three were related to the affective domain. Findings regarding the cognitive dimensions of learning outcomes are presented in Figure 3.

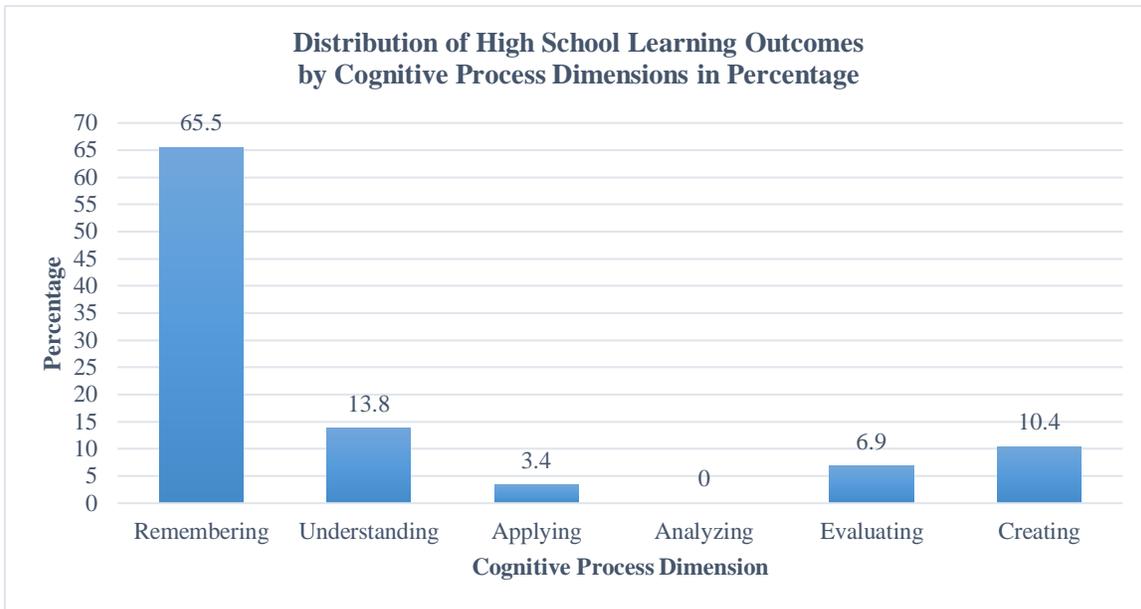


Figure 3. Findings regarding the cognitive process dimensions of high school learning outcomes

As illustrated in Figure 3, out of the 29 high school learning outcomes related to the cognitive domain, 29 (65.5%) were at the remembering level, 4 (13.2%) at the understanding level, 1 (3.4%) at the applying level, 2 (6.9%) at the evaluating level, and 3 (10.4%) at the creating level. The fact that 82.7% of the high school learning outcomes were at the remembering, understanding, and applying levels indicates that the thinking education program provides students with lower-order skills according to Bloom’s taxonomy. The program included no learning outcome concerning the higher-order thinking skill of the analysis level, while it had included very few learning outcomes at the analyzing, evaluating, and creating levels (17.3%).

3.4 Findings regarding the cognitive process dimensions of all learning outcomes included in the thinking education workshop program

In the analysis conducted regarding the fourth research question, it was determined that out of the 96 learning outcomes included in the SAC Summer School Thinking Education Workshop Program, 91 were related to the cognitive domain and five were related to the affective domain. Findings regarding the levels that these learning outcomes were related to are presented in Table 1.

Table 1. Findings regarding the cognitive process dimensions of the workshop program learning outcomes

Learning Domain	Levels	Number of Learning Outcomes	%
Cognitive domain	Remembering	52	54.16
	Understanding	15	15.62
	Applying	8	8.33
	Analyzing	4	4.16
	Evaluating	6	6.25
	Synthesizing	6	6.25
Affective domain	Receiving	1	1.04
	Responding	4	4.16
Total		96	100

According to Table 1, 52 (54.16%) learning outcomes in the cognitive domain were at the remembering level, 15 (15.62%) at the understanding level, 8 (8.33%) at the applying level, 4 (4.16%) at the analyzing level, 6 (6.25%) at the evaluating level, and 6 (6.25%) at the synthesizing level. In total, there were 75 (78.11%) learning outcomes at remembering, understanding, and applying levels. There were 16 (16.66%) learning outcomes related to the higher-order skills of analyzing, evaluating, and creating. Of five learning outcomes in the affective domain, one was at the receiving level and the other four were at the responding level, making up 5.2% of all learning outcomes.

4. Discussion, conclusion, and recommendations

The study concluded that 91 primary, secondary, and high school learning outcomes in the SAC Summer School Thinking Education Workshop Program were related to the cognitive domain of Bloom’s taxonomy and five were related to the affective domain. Of the five affective learning outcomes, one was at the receiving level and four were at the responding level. According to Dewey (1993), affective characteristics such as personal interest, sincerity, open-mindedness, and taking on responsibility are influential in the thinking process. According to Piaget (2004), affective characteristics such as love, interest, values, and impressions of harmony are important in the thinking process. According to Costa (2016), empathy and emotions are also influential factors in our thinking. The act of thinking cannot be independent of emotions, and thus equal attention should be given both to the affective and cognitive domains (Ornestein & Hunkins, 2016). However, only five learning outcomes were related to the affective domain, indicating that affective learning outcomes are insufficient in the workshop program. Therefore, the number of affective learning outcomes should be increased in new programs designed for thinking education.

The research found that most of the primary, secondary, and high school learning outcomes were at the lower levels of Bloom’s taxonomy, namely remembering, understanding, and applying. There was very little emphasis on learning outcomes related to higher-order thinking skills like analyzing, evaluating, and creating. However, in the State of Georgia’s list of thinking skills, there are four learning outcomes at the level of remembering, five at the level of understanding, six at the level of applying, eight at the level of analyzing, six at the level of evaluating, and five at the level of creating. This list is presented as an example of a comprehensive thinking education program by Oliva and Gordon (2018). According to Bloom (1956), complex behaviors encompass simpler behaviors. As the levels progress in the taxonomy, there will be more complex behaviors and thinking processes. Therefore, higher-order thinking skills encompass the learning outcomes at the levels of analyzing, evaluating, and creating in Bloom’s taxonomy (Akkuş-Çakır & Senemoğlu, 2016; Akyol & Kılıç, 2021; Ay, 2005; Anderson & Krathwohl 2010; Berger, 2018; Karakaş-Yıldırım, 2020; Stayanchi, 2017; Uğurlu, 2023; Ulum, 2017). This situation indicates the learning outcomes in the thinking education workshop are insufficient for developing higher-order thinking skills. Therefore, the new programs to be prepared for thinking education should include more learning outcomes related to higher-order thinking skills such as analyzing, evaluating, and creating.

Since the SAC Summer School Support and Development Course of Thinking Education Workshop Program was first published in 2022, no research was found in the literature regarding the learning outcomes of the workshop program. However, similar studies examining the learning outcomes of different subjects’ curricula according to Bloom’s taxonomy are available in the literature. These studies examining the curricula of Turkish, social studies, science, history, geography, physics, chemistry, and biology subjects indicate that the learning outcomes consist of the levels of remembering, understanding, and applying according to Bloom’s taxonomy (Aktan, 2020; Avşar & Mete, 2018; Büken & Artvinli, 2021; Büyükalan Filiz & Baysal, 2019; Büyükalan Filiz & Yıldırım, 2019; Çelik, Kul & Çalık-Uzun, 2018; Çerçi, 2018; Doğan & Burak, 2018; Durukan

& Demir, 2017; Eroğlu, 2013; Güldüren & Cangüven, 2020; Gültekin & Burak, 2019; Karagöl, 2020; İlhan & Gülersoy, 2019; Karakaş-Yıldırım, 2020; Önlen, Tatan & İbret, 2020; Özdemir, Altıok & Baki, 2015; Sözcü & Aydınöz, 2019; Ünveren-Kapanadzade, 2019; Zorluoğlu, Şahintürk, & Bağrıyanık, 2017). These findings are similar to the results of this research. Contrary to these research findings, Gezer, Şahin, Sünkür and Meral (2014) concluded that the learning outcomes of the Turkish Republic History of Revolution and Kemalism Course curriculum mostly consisted of higher cognitive levels. The researchers suggest that thinking education programs should be prepared by incorporating higher-level learning outcomes, and the impact of these programs should be investigated.

The study showed that approximately 82% of the primary school learning outcomes consisted of lower-order learning outcomes, while 18% were higher-order learning outcomes. On the other hand, around 83% of secondary and high school learning outcomes consisted of lower-order learning outcomes, while 17% were higher-order learning outcomes. These results show that the learning outcomes at the primary, secondary, and high school levels are similar in terms of lower and higher-order learning outcomes. Indeed, as one progresses from lower to higher grades, the level of learning outcomes should increase (Anderson & Krathwohl, 2010). This indicates that student characteristics and the principle of progressivity were not adequately taken into account in formulating the learning outcomes included in the workshop program. However, in programs designed for thinking education, student characteristics should be taken into consideration, and the learning outcomes should be included progressively.

The present-day world necessitates individuals to possess some thinking skills. Individuals with higher-order thinking skills are advantageous over those who can only directly acquire the transmitted information. Especially in developed societies, the primary purpose of education is to raise individuals who are sensitive to problems, capable of problem-solving, and possess higher-order thinking skills (Bapoğlu, 2010). Therefore, educational programs, especially the thinking education workshop program, should aim to raise individuals who can access information, think critically, and produce. However, it could be stated that the current state of the Thinking Education Workshop program is not sufficiently serving the purpose of raising the expected individuals.

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A Workshop for Education for Shared Life: Bedouins and Jews Female Teaching Students at Kay College for Education in the Southern Region of Israel

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Abstract

The importance of multiculturalism in education in general and in academic institutions for teacher training in particular, it receives a lot of attention in the academic-educational research field. Most of the studies held in Israel about teacher training accompanied by a multicultural approach as part of an educational concept discussed the distinction between the attitudes of students from different cultural groups or their achievements; Others proposed models for multicultural education or contented themselves with raising awareness of the need to design models. This study seeks to propose an interventional concept oriented to situation assessment and well planned within the framework of diverse lessons as part of a pragmatic tool – applicable that seeks to educate for intercultural care and cultural competence. To examine these training processes, the qualitative paradigm was chosen by the activation of an action research that continued within the framework of a course called: “Education for ambassadors for a shared life” that was prepared in advance after a careful assessment of the situation and divided into structured steps. 10 female teaching students participated in the study: 6 Jewish and 4 Bedouin Muslim women, residents of the southern region of the State of Israel. The students wrote reflections and were asked to formulate a joint educational project. The results of the study emphasize the importance of learning the mutual culture as a tool that produces closeness and reducing stereotypes; Understanding the need to take mutual cultural responsibility as future teachers and citizens; Collaborative learning spaces of this type create a safe educational space for self-expression and presentation of personal and cultural identity. Cultural sublimation and a sense of belonging were also expressed. All the participants recognize the importance of the topic and the need to learn.

Keywords: education for shared life, multiculturalism, interculturalism, intercultural caring, identity, mutual cultural learning, shared learning spaces.

1. Literature review

1.1 *Culture and definitions for culture*

Culture as a term refers to a set of definitions moving on two central axes: chronological and circular social. In terms of the chronological axis, the term culture is the formation of the individual’s identity while creating a continuous personal dialogue with his past and its origins, both at the personal level and at the community – social level. In this context, the formation of the concept of culture is aimed at the common future of the subjective items that are members of that group .In

this context, the formation of the concept of culture is aimed at the common future of the subjective items that are members of that group. In the circular social axis – cultural engagement is done through shared cultural elements: starting at the private level and moving through the community and social spaces. This concept is an abstract concept, and its role is to serve as a tool for achieving personal and social balance in relation to gaps that originate from social and human variation and cultural diversity in a given society (Abu-Asba, 2015: 119). In addition, the concept of culture, through an anthropological point of view, refers to the set of components that make up the way of life of a particular society such as beliefs, tradition, beliefs and habits. Some remain constant and others are dynamic and evolve over time. From these foundations are derived the norms of the various behaviors that are transmitted in intergenerational transmission from parents to their children (Mead, 1970: 31).

Culture is additionally defined as a field of activity in which the individual faces the society and vice versa and forms the building processes that enable the various human activities and the conditions for their existence or non-performance. Hence, culture is additionally defined as the set of value charges of the individual and the potential of this to bring them to fruition. Hence, culture is additionally defined as the set of value charges of the individual and the potential of this to bring them to fruition. In addition to values, culture contains beliefs and their expression in language related to historical and spatial-geographical circumstances. On the one hand, this dynamic cultural being creates homogeneity, and on the other hand, it creates different directions and developing trends that enable diversity, thus moving its details between uniformity and diversity (Boesh, 1991). The characteristics of culture and its universal dimensions play a decisive role in the stages of human development. Beyond the general human development characterized by chronological-stage uniformity, it was understood that the cultural factor plays a role in the individual's ability to realize the potential inherent in him or, in the opposite course, prevent his ability to self-realize (Nerlov & Spinner, 1981; Bruner, 1966).

Culture and the cultural structures of which it is composed represent distinct and interpretable cultural formations. The role of these formations is to formulate patterns of behavior accepted by the general and transmitted by systems of symbols that express personal achievements – separate, collective achievements, when both types together, are defined as belonging to the general society. Culture should exist around an ideological, traditional-historical core that is formed into a common set of values. These cultural systems express the results of the actions of the general society and constitute a condition for joint future activity (Crang, 1998). One of the established approaches that deals with the ability of a culture to exist deals with the need for cohesive group frameworks as a condition for its preservation. This concept places at its center the understanding that the cultural application as a case study is done by emphasizing the differences between the groups that make up the overall society while emphasizing the uniqueness of the central group and emphasizing its achievements, thus creating an attraction to the center – to her (Margalit & Halbertal, 1998).

1.2 *Multiculturalism*

Multiculturalism and a multicultural society is characterized as a dynamic, developing society with a sensitive self-critical ability, which has the ability to enrich its constituent partners and creates a fusion of values and morals between all the societies that compose it (Norberg, 2000). Additional definition of the concept of multiculturalism emphasizes the need for systems of recognition and perception expressed in a belief system that sees and acknowledges the importance of ethnic and cultural diversity and sees it as an opportunity for social development. The expression of this is the ability to invite diverse social experiences, choosing an appropriate lifestyle that matches the belief system and behavior patterns of the individual and the ability of subjects from different groups and nationalities to gain an equal opportunity for a proper education (Gay, 1995).

The term multiculturalism refers to the ability of a general society to make perceptual and mental change towards the way they see another society or another class from observing through a point of view that perceives them in the framework of general interactions, in a macro view that may also lead to exploitation to the ability to see the details within that group and the possession of resources of each and every one of them and thus converge to a concept dealing with cultural capital (Savage et al., 2004). A multicultural society that seeks to exist as such and from a concept of cultural continuity seeks to define anchored actions that require it to act appropriately in this area. For example, such a company places two central issues at the center of its existence: the creation of an open and cohesive cultural space and the recognition of multiple points of view and the right to represent them. Such a multicultural framework, beyond the anchoring of the definitions, will also work to preserve them both on the private – civil level and on the political level and the obligation of both forces to preserve them. The collective recognition will be shaped through public action, by the enactment of laws aimed at seeing its good of the general and thereby guarantee the continuity of society and its ability to establish a common existence (Elior, 2000).

A multicultural society that concentrates on multicultural practice and not only the one that recognizes it, places at the center of its systems the recognition of heterogeneity and recognizes the whole of the cultures and societies of which it is composed. A society of this type seeks for individuals and groups to preserve their uniqueness characterized by their diversity and according to this concept it must adapt the fundamental structure of its institutions to this and give expression to this diversity (Yona, 1998). Thin multiculturalism: includes liberal cultures only. Sales in the equal status of the company groups – the culture that make up the complete multinational company. This multiculturalism is characterized by political reciprocal relations motivated by the interests of each group. In this case there is no need to deal with cultural relativism or the lack of a common discourse or, on the other hand, a lack of agreement regarding the basic principles on which that society is founded. Tensions that arise in some cases in societies that operate in this way, do not stem from fundamental cultural gaps that exist between groups but from the inability of the two groups to distinguish the similar points that exist between them and hence, the formation of different cultural interests (Tamir, 1998).

Intercultural conflicts can be resolved through two paradigms according to Walzer (1992): liberalism 1 favors taking a neutral position on the part of the state and thus representing a policy that preserves the rights of the individual; Liberalism 2: at its core is the ability to support the existence of a defined general culture, but this is also committed to maintaining all the rights of individuals from all groups. Two bases for the existence of multiculturalism based on respect between cultures as a foundation and multiculturalism of liberalism, which is based on rights. One, recognition of cultural diversity and respect for this diversity, which exists only through the creation of mutual relations in which the other culture respects all its partners; The second, respect for the individual's personal tendencies and preferences (Tamir, 1998). Another definition of multiculturalism lies in the roots of liberalism that deals with the rights of ethnic minorities and centers on the recognition of the importance of the culture that motivates the autonomy of its individuals. This culture will recognize ethnic and hence cultural pluralism that exists in every society and operates in it, and at the same time will formulate an external point of view towards cultures different from it – which are not Western as part of safeguarding the rights of the individual (Kymlicka, 1989).

1.3. Education for culture and education for multiculturalism

Intercultural interactions that become part of the routine of many companies in the world places the field of knowledge dealing with culture and multiculturalism at the center of the educational discourse in general and the academic educational discourse in particular. This education strives to inculcate concepts of tolerance, harmony and coexistence (Abu Assaba, 2015).

Despite these multicultural opportunities and especially among Western countries, where policy leaders are not in a hurry to adopt multicultural educational approaches even in cases where these declare actions that are taken to accept the other and his culture. In order to be able to analyze multiculturalism in society, four parameters must be examined: social conditions, ideology, official policy and assimilation processes (Eldering, 1996). There is an opposite relationship in the context of multicultural education in the various educational systems around the world: more and more teachers and students encounter a multicultural reality and cultural diversity and few training processes take place in the academic frameworks for teacher training (Yazbek Abu Ahmed & Yahav, 2015).

The integration of cultural studies as an independent discipline was established in Western universities after the events of World War II. Its establishment is related to historical, social, and technological processes that began at the beginning of the twentieth century. The integration of these processes highlighted the importance of learning culture in the education systems in order to understand the life formations of human beings in the various political spaces and especially in those that became independent after the war (Evan Assaba, 2015). One of the approaches that deals with change processes for multicultural education seeks to create a social status process defined according to categories, which classify people into groups according to the number of resources they have accumulated and the types of resources they have obtained (mostly of similar types) and their ability to invest them for the advancement of their own lives and the advancement of their children's lives (Savage, Warde & Devine, 2004: 7). This approach is based on a mental transfer from the generalization of mutual relations to an individual view that sees the subjects that are part of the same group and the personal resources found in them and to promote them (Savage et al., 2004).

Another approach related to multiculturalism education seeks to foster a critical perception of the individual – the subject towards his culture. The learning of culture is done in two ways: one, through informal intergenerational transfer, in an active framework in the individual's family unit and usually by his parents and relatives. The second way, formal, takes part in education systems. These two ways lead to the assimilation of two central concepts: mass culture and high culture – the culture of the elites (Lem, 1999, 2000). Multicultural education is often placed within a social context and requires actions. The set of actions required for its activation are related to the creation of change processes in the educational system and it is binding on all concerned. This process requires the immediate rejection by response of any manifestation of racism or discrimination. At the same time, this process requires the formation of a pluralistic view of the whole community: students, teachers, and parents. This approach is combined with critical thinking that can help lead to change. This way that sanctifies multicultural knowledge and establishing actions for multiculturalism promotes principles of social justice (Nieto, 1992).

In addition, multicultural education advocates that this education is at its core an ideology that must be advanced into a movement that strives for educational and social change. This approach gives students who come from a different cultural moment and ethnic background the same opportunities to acquire an education. This approach seeks to help learners form a personal cultural identity that will enable them to establish solid attitudes and acquire knowledge and tools required for human-civic functioning in a multicultural-pluralistic and democratic society (Banks, 1995). One of multicultural education goal that presented by Banks (2001) is the creation of a society with common goals that knows how to achieve them by working together. This goal will be achieved by providing assistance to students to maintain normal relationships with people from different cultures and other societies and to conduct negotiations with them.

Education for multiculturalism and the investigation of the area of knowledge multiculturalism should be used as a central pillar in the focus of educational activities at every age and at every level. At its center is the willingness to learn the cultural characteristics of each group and emphasizing the differences between the minority group and the majority group. This educational approach seeks to motivate an integration that begins with rebuilding the socialization

of the educator class and continues with the creation of a sensitive multicultural consciousness in two directions: minority and majority, while preserving the identity of each group (Coulby, 2006; Ulkpokodu, 2002). Another aspect in the context of multicultural education emphasizes the importance of integrating the cultural and social diversity of the teaching staff at all age levels. This tool is another element in this multicultural approach that moves towards strengthening the definition of personal identity and strengthening the sense of solidarity that encourages critical thinking and equips its partners with tools that can lead to social change (Guyton & Wesche, 2005).

Multiculturalism is an educational goal. Those who see it as a goal seek to rule out “cultural chauvinism”. The growth of this approach promotes a two-way critical observation of the individual towards his own culture and towards the culture of another (Repel, 2000). At the base of the approach to academic education in general and multicultural education in particular is the concept of academic freedom. At the root of this, the motive that asks faculty members to do research in diverse areas of society and to work on different social issues (Zimmerman, 2005). The approach to multicultural education holds that the future teachers must be trained in unique abilities that will give them tools for their application, for example: attention, sensitivity and understanding of diversity and the source that beyond theoretical learning processes, teaching students must be allowed to experience culturally diverse environments (Bhargava, 2004; Horton & Scott, 2004). The ability to implement multicultural education is reflected in helping the student to develop cross-cultural inclusion abilities by guided and supervised dealing with prejudices, with learning the other culture by learning its symbols, customs, traditions, and accepted norms of behavior. This process will form a bicultural individual who knows and understands the culture of his significant other (Banks, 2001).

The education for multiculturalism seeks to train educators in this field of knowledge and equip them with applied tools that will be integrated into the educational process. This preliminary education and these practical tools will enable teachers to maintain an appropriate cultural and pedagogical discourse that characterizes a multicultural and ethnically diverse educational space. With its help, these will be able to mediate a variety of issues dealing with the formation of racist attitudes, softening them, and creating a perceptual transition towards the formation of a perception that represents intercultural sensitivity that allows the inclusion of cultural diversity and openness to different cultures (Bennett, 1995; Armento et al., 2000). Other approaches that deal with multicultural education holds that the teachers are the ones who should be at the forefront of action and who should strive to build a society that is tolerant towards different cultural diversities and cultural diversity. At the core of this approach is embedded the understanding that this responsibility belongs to the teacher educators and that these tools will be used as part of a permanent and dynamic educational toolbox that can be integrated as part of teacher training programs both theoretically and practically (Yogev, 2001).

Teacher training institutions have additional roles beyond providing future teachers with pedagogical and educational tools, but also a highly important public, social role that seeks to create renewed and permanent accommodation processes of the multifaceted reality, understanding the renewed and new series, learning it, education for new attitudes and thereby trying to prevent social injustices (Kenan, 2014). For example, the foundations of the multicultural education approach prevalent in the United States lie in the ethnic cultural diversity that characterizes the education system there and the need for teachers to deal with many conflicts that arise within this framework. On the other hand, in Europe, the approach of peace education that seeks to shape a multicultural society that strives to integrate all its details representing societies with different and sometimes even opposing interests is widespread. This approach teaches mutual respect, which is a broad basis for establishing a harmonious society (Yazbek Abu Ahmed & Yahav, 2015).

1.4. *Care-ethics*

Care-ethics is an approach that sees people as dependent creatures longing for relationships and not as self-sufficient independent individuals. According to this approach a moral person is a person who consciously creates, maintains, and preserves a caring encounter with other human beings. In such encounters one attentively listens to others, understands their thoughts, feelings, and experiences from their point of view, discovers what are their needs, and responds to these needs as successfully as possible. The central focus of care-ethics is not on the person's ability to express commitment to universal morality. Rather, the central focus is the moral prominence of being caring, that is, listening and responding to the needs of the people for whom we take responsibility (Gilligan, 2008; Held, 2006; Noddings, 2002). This approach which is based on virtue-ethics (Clament, 1996) distinguishes between minimal concern that refers to taking care of the other's needs, and authentic concern that seeks to help the other get to know oneself (Heidegger, 1996). Hence care-ethics is relevant both on a social and personal levels (Gilligan, 2008).

The care approach is based on two main areas of thought: psychology and philosophy (Gilligan, 2008). In the psychological field, it is related to the formation of the moral concept among humans and deals with the relationships between position, personal relationships, and response (Gilligan, 1993). The caring attitude is expressed in listening and in the intention that aims to drive change according to the needs of the other (Carmon, 2016). A true ethic attitude cannot exist unless it is accompanied by actions leading to social change (Gilligan, 2016).

The philosophical approach can be found in Martin Buber's works on interpersonal philosophy (Buber, 1980). Kierkegaard (1985) assumes a connection between the level of morality of a person and the ability to care for others. The care approach is also based on feminist approaches that emphasizes the importance of listening and responding to others (Gilligan, 1993; Noddings, 2013, 2008; Weil, 1977). These characteristics of attention and response play a central role in the development of the caring approach for teaching (Gilligan, 2008). The approach of care is based on the establishment of concrete relationships, a tangible encounter between two parties – one cares for the other that is cared for (Carmon, 2016; Noddings, 2008). The party who is cared for also has a contribution to the relationship, responding in a way that signs that the care has been received (Noddings, 2008).

1.5. *Educational approach to caring*

The field of education is defined as a care profession (Kuhse, 1997; Guyton & Wesche, 2005). However, there is a difficulty to discriminate between the terms used for the educational definition: "caregiving" and "caring". Not everyone who is defined as a caregiver acts out of care (Noddings, 2007).

Education for care places at the core of it doing the building of the caring relationship between the teacher and his student. Placing the caring as underlying the educational act implies several implications regarding teaching goals, methods and assessment, teacher training and the curriculum and it requires its practitioners to be flexible (Carmon, 2016; Slote, 2002). Education for caring seeks to consolidate the ability to identify the overt and hidden needs of the students. The main motivation theory that exists in the field of caring education is the theory that places the learner's inner needs and desires at the center (Noddings, 2002; 2007).

1.6. *Education for shared society*

Education for a shared society is a holistic way of life that requires regular maintenance. Further to the claim of Rosen and Perkins (2013) which is well expressed in the title of their article, "Shallow roots require constant watering: The challenge of sustained impact in educational

programs.” Education for a shared society among a population that does not necessarily identify with these values, requires continuous investment, and a pedagogical commitment from kindergarten to teacher training institutions. The meaning of the multicultural ideology is the preservation of the differences between the social groups out of concern for a unique cultural existence and respect for rights (Powell-Benjamin & Rheingold, 2016). Education for shared society is seen as an egalitarian education that provides for all student tools for efficient and valuable functioning in society, regardless of their ethnic origin, the racial, cultural, or social (Convertino et al., 2017). That is, education for a shared society promotes learning, respecting cultures diversity and creating an inclusive space for all cultures (Ho - Kyung, Seong Woo & Ju Sung, 2015).

Education for a shared society has been called – and still called in different countries of the world – education for peace, education for coexistence and education for democracy. Each of these definitions emphasizes a certain aspect, but all of them.

Engaged in finding educational ways to deal with the prevailing hostility and frustration in interactions between different cultural groups; to reduce manifestations of racism, to reduce stereotypical thinking, to deepen the acquaintance with the other and establish recognition of him. Among these concepts, the concept of education for a common society is inclusive and egalitarian most. The goal in education for a common society is the creation of common citizenship (Powell-Benjamin & Rheingold, 2020).

Unlike education for coexistence, the encouraging one Individuals and groups live side by side, education for shared society seeks to establish relationships reciprocity based on the one-on-one approach, which expresses partnership. This approach is not satisfied with the legal – procedural equality and the formal representation but asks to give space also to the subjective feeling of belonging to the public space. The underlying infrastructure of this education is not the procedural-instrumental democratic one, but the essential liberal democracy, based on education for the values of human and civil rights, respect for others and recognition of their individual and collective uniqueness (Fraser, 2014). To establish such a society, a democratic culture is required permeating all levels of the population. However, the multicultural liberal discourse, which was established in the academy and slowly seeped into the public spaces, still encountering opposition from groups various social groups, including academics (Mizrahi, 2017). Hence this study seeks to examine the following research question: Can a continuous educational meeting that creates personal connections and common goals establish a positive position towards multiculturalism and multicultural education and can it consolidate a personal and professional commitment to the subject?

2. Methodology

Examining the responses of the female students and the mutual relations that developed between them were examined through the qualitative paradigm.

This paradigm gives thoughts, considerations, feelings, experiences, and interpersonal relationships with the workshop partnership to be part of the conversation. The discussion of the diverse dilemmas dealing with shared life and education for shared life is done through their language, their views, approaches, and expectations of the students.

Action research was chosen as the research tool because it makes it possible to concentrate each time on a central theme and to examine at that moment the reactions, the connections, the intensity of the emotions and the conversation between the participants in the workshop. The broad theoretical meaning of action research is that action is behavior guided by cognitive judgment and is a fundamental unit of social inquiry (Arieli, 1989). Another definition for action research as a type in qualitative research includes a process of change by intervention (Shlesky & Alpert, 2007).

The material practices – the knowledge collection tools that used in this study are reflections written by the students and a dairy record that was written by the researcher.

2.1 Participants

The workshop included ten female students: Six (6) Jewish and four (4) Bedouin. In the age range 19-23. They are all residents of the South originally. The workshop was held for fourteen weeks, once a week for an hour and a half at a time.

Initially, the students were exposed to different approaches that deal with the subject and learned the basis of the conceptual discourse that characterizes the field (Banks, 1995; Bennet, 1995; Elijor, 2000; Lam, 1999). The learning infrastructure of intercultural dialogue focused on the understanding that one should talk about issues and not about a person or a group. Subsequently, dilemmas characterizing the conflict points of the two society were flooded. In this setting, students learned through immediate feedback how to conduct a multicultural discourse. In the second stage, the group chose a common goal: multicultural learning tutorial and began working on it together through ongoing dialogue and mutual help. The letter J (Jewish) will be placed next to the Hebrew names. The letter M (Muslim) will be placed next to the Muslim – Bedouin names.

2.2 Data analysis

The analysis of the data was done using qualitative content analysis in the strategy of “Grounded field theory approach” (Strauss & Glazer, 1967). This method uses a process of sorting phenomena, distinguishing and separating a sequence of the data, until finding the meaning of the data through the disclosure of the characteristics found in the data and their classification into groups with a common denominator (categorization). The categorization includes two elements: the process of dividing the data into segments separate and put them into categories that join the sections to each other); (Charmaz, 1995; Corbin & Strauss, 1990). The sorting of the phenomena is done by coding, based on the assumption. Because in human behavior there are patterns and repetitions that can be discovered through research. Open research questions and a careful, structured, and systematic search for contexts and structures. In the first stage, open coding was conducted – dividing the data according to Themes, that is, initial conceptualization. In the second stage, Axial coding is performed organizing the coded concepts while creating meaning categories and subcategories. In the third stage, selective coding was applied: another examination of the received categories and filtering those that are not necessary and directed to the subject under investigation.

2.3 The intervention process

In the first sessions, the students were exposed to a general theoretical background dealing with the issues of multiculturalism, interculturalism and education for shared life. This theoretical background gave the students the tools to formulate the basic rules for the intercultural dialogue that will take place during the lessons.

2.4 The rules of discourse

The words they and we cannot be used.

No individual or group can be blamed for the actions of an individual.

You can ask anything (almost) – but you must think about how you ask.

If I feel fear from my significant other, does that mean, he or they are guilty of something?

I do not take a judgmental position towards a custom or a way of life that is unfamiliar to me.

I should define my role as belonging to the majority group or the minority group

I must learn to observe my society critically and not be afraid of it.

2.5 Demographic and cultural background

In the second stage, the students received a demographic background in the State of Israel and the division of most settlements according to religious affiliation. In addition, they received background on the meeting points between different groups in the State of Israel considering the challenges of space and place separation. Also, data was presented on the separate education systems in the State of Israel and the importance of the academic institutions in these contexts. Furthermore, the students learned about the various socialization processes that young Jews and Bedouins in Israel go through: social structure, gender, decision-making in choosing a profession.

Bedouin youth: Average age of starting studies: immediately after finishing high school 18-19. The Bedouin girls live in the context of a religious and conservative society. They conduct themselves according to the rules of a patriarchal society that supervises different layers of their lives: for example: getting from place to place, time of return home or limiting the time of leaving the house in the evening, form of clothing and choosing a field of study (Bar-Sinai, 2020).

Jewish youth: Mandatory military conscription law. Average age of starting studies after military service: 22-28. Many of the young Israelis go on a long trip abroad after their release from the army (Iram & Schachter, 2002).

2.6 Historical background

In the third stage, the students studied the history of the State of Israel and the region through two narrative perspectives: Jewish and Arab. In addition, an emphasis is placed on the term: "Palestinian culture"; A term that was unknown to all students.

2.7 Personal questions

In the fourth stage the students were asked to ask any questions that they interest with. The questions represent two main fields: Personal universal questions that deal with daily life of the students from both cultural groups. The second field represent a general question that ask to get an over vie knowledge on the other culture, for example: history, ethnic region, national and self-identity.

2.8 Acting and setting common goals

In the fifth stage, the students were asked to think together of a similar point of identity and a common goal that they would formulate together as a group. For example: Similar aspirations; The Hebrew and Arabic languages share many common words; Comparisons between the biblical stories and the Koranic stories and found a broad common ground, The students explored the musical foundations of Israeli music and Arab music and found many mutual influences; The Jewish students whose families originate from Arab countries, researched customs practice in the family or used to be practiced and found many common denominators with Arab customs; The students who study art, looked for mutual influences in works of art by Jewish and Arab artists. The common goals

that were chosen: Building a tutorial learning for multiculturalism and education for multiculturalism based on the study departments operating in the college.

3. Results

3.1 Learning the culture of those who are different from me: Creating kinship relationships built by mutual cultural learning

The intervention process that the female students experienced is represented by all the researched through five stages: (1) settling in a comprehensive concept that emphasizes the importance of knowing the other's culture; (2) The desire to get to know the significant other who is a partner in the process within the framework of the workshop; (3) Acknowledging the importance of learning the other's culture by looking for cultural characteristics like the two groups the students come from: Bedouin Muslims and Jews; (4) A desire to create closer personal communication, while being able to share various personal experiences, including sharing personal intercultural experiences; (5) Finally, the interviewees refer to their personal aspects in relation to the process they went through in the workshop and a statement on future actions (a general statement) that they will strive to do in the context of education for shared life.

“This allowed us to integrate into two different cultures, despite the partial similarity between them, in terms of language, religion and certain customs” (Lama: M); “It increased my motivation and my desire to strengthen my Hebrew language” (Elam: M); “I had many concerns and fear that the students would not accept me because I am Arab. However, their reaction to me joining their class was very different from what I expected. They were very kind and hospitable, and they welcomed me with joy” (Ragda: M); “The participants in the course were very interested in getting to know each other and learning about each other, I had an amazing experience with one of them, she was interested in finding the commonality between the Quran and the Bible. She devoted her time and effort to do this, and I appreciate it” (Yasmin: M); “And it's amazing to find people who are willing to support living together and dedicate their effort to teach others about their culture and language and find ways to communicate despite all the difficulties and differences between the two communities” (Asil: M); “During the workshop, the students developed a sense of belonging” (Ziv: J); “I feel like I went through a process from the moment I signed up for the course until today, as I was exposed to the world of multiculturalism and our ability as a society to live a shared life side by side no matter what our faith” (Kalanit: J); “I know the listening was mutual” (Ron: J); “I was very happy to take part in this important course. Its content and the practices learned will serve me in the future as an Israeli citizen as well as a future teacher” (Hadar – J); “Working in the course allowed me to get to know the Arab culture a little more closely and also the Jewish culture a little more deeply” (Mali – Jewish student); “I learned a lot of new things, about which I had no prior knowledge, knowledge about the Bedouin sector, customs, a little language...” ... “I learned how similar we are, both in our customs and in our religion. I learned about how important it is to find out information about religions different from yours in order to understand where they come from and what they believe and to respect them and their beliefs.” ... “I believe that the course gave me a lot of tools and insights about living together, I would love for as many students as possible to go through the cross and most importantly that the Tutorial we built will help living together not only in our college but in general in all of Israel” (Li'el: J).

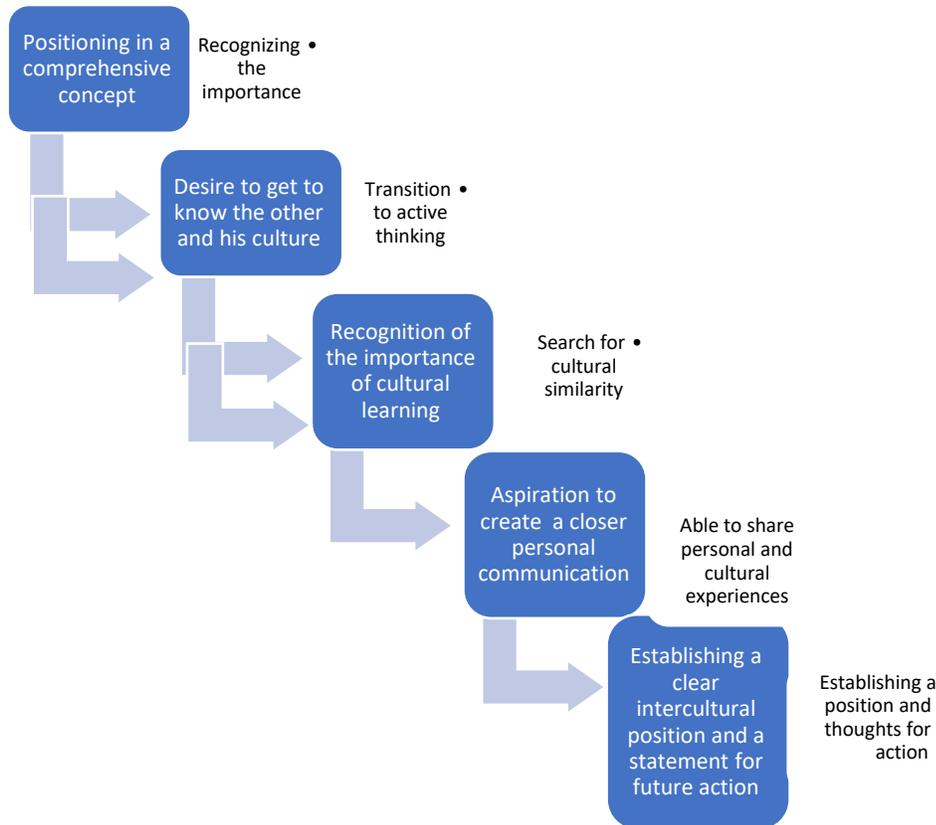


Figure 1. A graded cognitive model for cultural closeness based on process learning

3.2 Taking responsibility: On a personal level and professional level

Participating in the workshop led some of the participants (5: 3 female Jewish students and 2 female Bedouin students) to formulate a view that seeks to take responsibility. Taking responsibility is represented by three points of view: taking responsibility towards the significant other or the general other, taking professional responsibility as teachers for the future and taking social educational responsibility at the civil level which presents an overall point of view towards wider social circles.

3.3 Creating a responsible point of view towards the other

The statement seeking to take responsibility for the other or others is represented by three perspectives that express the positioning of the researched in three expanding social circles and stemming from their national affiliation: the private, the workshop partners and the general social. This category is represented by five female students and is presented here due to its importance: three Jewish female students and two Bedouin female students.

The consolidation of the different perspectives between the female students: Jewish and Bedouin in relation to this theme, has the effect of testifying to the position of these in the overall fabric of social relations of the female students in Israeli society. This social positioning is represented by differences between the majority and the minority and expresses the participants' perception of themselves and their relation to others and hence their ability to establish an intercultural and social paradigm based on the mobilization of cultural cognitive resources. In addition, it can be assumed that the placement in the broader social point of view – by all the Jewish students (one student expressed two positions) perhaps represents a distant – less personal point of view that is more convenient for them, in the process of processing the sequence of the workshop and it is possible that this is an expression of an alienated position in relation to the direct partnership for the course

3.4 Taking responsibility: Between imposing responsibility and taking responsibility through the perspective of a minority group

Compared to the establishment of the overall view of the Jewish female students, the Bedouin female students present a different point of view, which expresses more personal and seemingly deeper relationships with the significant other. This point of view reflects the ability to define the individual's role in relation to others through two processes: one, the imposition of intercultural responsibility in relation to self-change processes and the ability to “absorb” cultural components (in our case: personal and professional components); The second, taking responsibility, which is expressed in two ways: recognizing the other and his ability to make changes; The second way, the ability to recognize it and voice it.

“I was very happy to participate with my kind colleague ‘Ziv’ in the last job, as it added new experience and support to me, in my educational career, in this college” (Lama: M); “I had an amazing experience with one of them, she was interested in finding the commonality between the Koran and the Bible. She put her time and effort into doing this, and I appreciate it. She wanted to know more about my religion and culture and was very respectful and open-minded. And I think this is the essence of living together” (Ragda: M).

As mentioned, at the end of the workshop, the Jewish female students established three broader points of view than the Bedouin female students: one, taking responsibility for the participation in the workshop – from the Bedouin society: “...I would be happy to hear more from the girls from the Bedouin sector who would express their opinion without fear” (Liel: J); “I think the Bedouin girls should talk more so that we can understand more” (Mali: J).

3.5 The second point of view: The formation of a concept that expresses taking professional responsibility as teachers for the future and its application to intercultural practice

The manifestation of this perceptual formation is divided into four stages: acquisition of intercultural knowledge, transfer of intercultural knowledge, access to the importance of knowledge both on a personal and professional level, and thoughts on the application of knowledge on a practical intercultural level. Acquisition of knowledge: “I would have been happy if this course had

been an annual course because I learned a lot in a short period of time and if the course had been an annual course I would have learned even more, educated” (Liel: J); “I was very happy to take part in this important course, which will accompany me in the future as an Israeli citizen as well Also as a teacher for the future” (Kalanit: J).

The transfer of knowledge: “... and pass my knowledge on. It seems to the students that it is possible and desirable to live together. As future teachers...” (Liel: J); “As a future teacher, I think I will take from the course the opportunity to give my students.... In my opinion, an ambassadors’ course for shared life should be an annual course that lasts over two semesters, like a community or at least a semester and a half” (Mali: J).

Making the importance of knowledge accessible: “It is important that they get to know and know each other’s beliefs and customs, that they build partnership and the desire to live together... As a future teacher, it will be important for me to convey to my students the importance of living together, I will teach the Jewish students about the Bedouin side, traditional customs, etc. And I will teach the Bedouin side about the customs and traditions of the Jewish people, I will show them how similar we are and how important it is to want and love to live together” (Liel: J); “I am hopeful that I will be able to use not only the study material but also tolerance and patience and the ability to explain the material in different ways...” (Ziv: J); “Their reaction to me joining their class was very different from what I expected. They were very kind and hospitable, and they welcomed me with joy. The lecturer also spent ten minutes of the class to explain everything to me about the course and its requirements, which reflected the true meaning of the course... I was very respectful and joined in with an open mind. I think this is the essence of a shared life” (Kalanit: J).

Thoughts on the application of the knowledge: “That they want to show their students the importance of living together and pass it on!” (Liel: J); “I will take from the course the opportunity to give my students a safe and inclusive place to express themselves and sit in class and feel comfortable and have a joint and orderly conversation and discussion” (Mali: J); “...and to find ways to communicate despite all the difficulties and differences between the two communities, and to do so in a respectful and civilized manner...” (Ron: J).

The third point of view represents taking social educational responsibility in relation to broad civil levels: “It is important that they get to know and know each other’s beliefs and customs, that they build the partnership and the desire to live together” (Ron: J); “We will show the students that it is possible and desirable to live together... that they will want to show their students the importance of living together and pass it on!... I will show them how similar we are and how important it is to want and love to live together” (Liel: J); “I was very happy to take part in this important course, which will accompany me in the future as an Israeli citizen as well as a future teacher” (Kalanit: J); “Not only in the study material but also in tolerance and patience and the ability to explain in different ways” (Ziv: J); “The most important thing is that the students we have built will help to live together not only within the walls of the college but in general in all of Israel” (Mali: J).

3.6 A safe space for intercultural self-expression

3.6.1 Moving from the establishment of habits of cultural interactions to change processes of intercultural experiences

The starting point in relation to this theme represents a fundamental difference in the concept of a sense of security in a controlled and educational multicultural space between the representations of the societies: the Muslim Bedouin and the Jewish, centered on two focal points: conflict and relations between a majority society and a minority society. The perception of the concept by the representatives of the society can be describe as an axial process, but one whose direction of origin is different: a horizontal axis process characterizes the Bedouin female students,

while a vertical axis process from top to bottom characterizes the Jewish female students. As mentioned, the Bedouin Arab female students are represented by a process of horizontal change, which manifests itself in three evolving (perhaps circumstantial) sub-phases: beginning with feelings of apprehension, continuing with a reflection of a sense of belonging, and finally taking part in the active discussion, which at the end expresses a process of reversal: it is evident that they came to the workshop with an expectation of a relationship Distancing to the point of discrimination and even harm by racist statements on the part of Jewish female students. This point of departure seems to represent their experiences from previous interactions. Compared to this “cultural expectation” those report that throughout the workshop they experienced the opposite experience of acceptance, inclusion and taking an active part as an equal member: Representations of the beginning of the process:

“In the beginning... I had a lot of concerns and fear...” (Jasmin, Rada, Lama: Ms); “The relationship between us was very good, and I did not feel any discrimination, or racism” (Rada: M); “They were very kind and welcoming, and they received me happily...” (Lama: M); “Despite all the difficulties and differences between the two communities...” (Rada: M); Representations of a sense of belonging and taking an active part: “So I attended my classes with energetic love, full of life...” (Rada: M); “I felt safe to express myself, and participate in discussions from the first time.” (Lama: M); The reversal and recognition phase: “At the end of this meeting we had during the semester, which was fun and wonderful; especially that it allowed us to integrate into two different cultures...” (Jasmin: B); “...which reflected the true meaning of the course...” (Rada: M); “...and to do so in a dignified and civilized manner” (Lama: M).

As mentioned, compared to the gradual process that represents the manifestation of the intervention experienced in the workshop by the Arab Bedouin students, the Jewish students represent a different point of view – a vertical axis directed from top to bottom. The discourse presented by them (as mentioned, in contrast to that presented by the Arab female students) is a discourse, the overwhelming majority of which is not personal, but general, which looks at the process through a broad – general point of view, which goes through three stages, which are as mentioned from top to bottom: the first, the examination of the discourse in front of the security situation that accompanied the course of the workshop.

The second, the definition of the discourse as a respectful discourse that takes place in the mediation of two different cultures by a linguistic gap in two different languages. The third stage, a process projection that refers to the success of the workshop on the other group and the workshop leader. Examining the discourse in relation to the political situation: “During the course, security things happened in the country, and I was happy that in the course we talked about the things and feelings that occurred mainly in the context of common life” (Kalanit: J); “The security situation in the country at the time of the course was not good and there were attacks, and we could talk about things properly” (Ziv: J). Respectful discourse mediated by two cultures in different languages: “An open and respectful discourse, and a safe place for joint work in two cultures and sometimes also different languages” (Hadar: J); “I felt that at the beginning I would not participate so much or say what I think because of the fear that I would say things that the Arab girls would not understand, maybe because of the language gap, but I did feel towards the end that I was expressing myself more...” (Mali: J); “And I know that the listening was mutual and the conversation was always open and respectful” (Kalanit: J). External consequences: “He [the lecturer] gave her the space to express herself was clear and felt throughout the course, this was manifested in his ability, tolerance and patience to answer questions that the students asked” (Ziv: J); “That I was attentive to the contents of the lesson, and I know that the listening was mutual, and the conversation was always open and respectful” (Kalanit: J); “I would have been happy to hear more from the girls from the Bedouin sector who would express their opinion without fear” (Liel: J).

3.7 A reserved sense of belonging from a distant intercultural position considering mutual cultural learning: The social-intercultural “Sublimation”; Attitudes that represent positioning in a distant intercultural point

The term “social appearance” refers to skipping one or more social-cultural cognitive stages and moving to a “higher” stage, without processing staged processes to create the ability to settle in a safe personal space. This process can be paralleled to the creation of cognitive consonance when experiencing cognitive dissonance as part of the aspiration to return to harmony – and to the creation of cognitive balance by completing data that is difficult to process or accept (Festinger, 1957, 1959). This position represented by female students from both cultural groups: Bedouin-Muslim and Jewish expresses a distant point of view both towards the process they went through and towards the group of the significant other. It is evident that this positioning, which was also expressed in other categories and more strongly by the Jewish students, has a pedagogical – educational reference to the process they went through as students for teaching and understanding the importance of the subject on the one hand and remaining in an immature – initial stage in the process that calls for “advancement on the scale of intercultural competence” on the other. The female students from both groups make use of two basic syntactic patterns: moving from a single linguistic complex to a plural linguistic complex and vice versa.

It is evident that the use of general statements, the expression of which is the operation of a multi-linguistic integrator, does not represent process partnership, but expresses their positioning in a position that distances them both from the process itself and from the group of the significant other; Thus, along with the representation of the sense of intercultural belonging – partially, the female students maintain a cultural, remote social location which seems to establish a sense of security for them.

“Feeling belonging” (Ziv: J); “We can act from our place” (anemone); “I felt like I was a part of this thing” (Mali: J); “Companies from the Bedouin sector, companies that tell everything” (Liel: J); “To accompany me in the future as an Israeli citizen and also as a future teacher” (Ron: J); “I was exposed to the world of multiculturalism and our ability as a society to live a shared life side by side no matter what our faith is...” (Hadar: J); “during the course security things happened in the country and I was happy that in the course we talked about the things and feelings that occurred mainly in the context of the shared life” (Kalanit: J); “Especially because it allowed us to integrate into two different cultures” (Lama: M); “I had an amazing experience with one of them” (Rada: M).

However, and in contrast to the general position, it appears from the analysis of the statements of the Bedouin female students (and perhaps one Jewish female student as well) that they formulated a more approachable position, but even in this case, it is in a position that maintains a distance and places the speakers in a safe cultural place according to their point of view. The expression of this verbal representation is by using a contrasting syntactic pattern that opens with expressions of proximity: first person singular or third person plural and ends with expressions of distance: “We have... different cultures” (Lama: M); “I had... one of them” (Rada: M); “I acquired more information in the course [from] companies from the Bedouin sector, companies that tell everything to each other, companies without difference” (Liel: M).

3.8 Intercultural statements: Between the absence of practical thinking and practical thinking according to social affiliation

In some of the statements of the Jewish female students (4) there is the use of syntactic structures that make a transition from a single linguistic combination to a multi-lingual combination or vice versa: a transition from presenting a general position to a more personal position. In all references to proximity, this amounts to a general statement that maintains distance by remaining

in a general personal social position and without any display of thought about practice or aspiration to it.

“We can act from our place..... and how the course has an impact on a personal level...” (Kalanit: J); “I felt like I was part of this thing” (Mali: J); “That I was attentive to the contents of the lesson and I know that the listening was mutual...” (Ron: J); “I acquired more information in the course [from] companies from the Bedouin sector, companies that tell each other everything, companies without difference” (Liel: J).

From the words of the Bedouin female students (2) a similar pattern is obtained, which represents a departure from a general pattern, but unlike the Christian pattern expressed by the Jewish female students, these converge on defined levels accompanied by examples and thoughts about a practice – future instrumental – often personal that will be used to create good relationships with the significant other.

“At the end of this meeting we had during the semester, which was fun and wonderful; especially that it allowed us to integrate into two different cultures, despite the partial similarity between them, in terms of language, religion and certain customs... It increased my motivation and my desire to strengthen my Hebrew language” (Lama: M); “I had an amazing experience with one of them, she was interested in finding the commonality between the Koran and the Bible. She put her time and effort into doing this, and I appreciate it. She wanted to know more about my religion and culture and was very respectful and open-minded. And I think this is the essence of living together” (Ragda: M).

4. Discussion

4.1 *Learning the culture of those who are different from me: Creating kinship relationships built by mutual cultural learning*

The intervention process experienced by the female students represented by five stages that deal with emphasizing the importance of knowing the other’s culture; The desire to know the other meaning; recognition of the importance of learning the culture of the significant other; creating personal communication, while sharing different personal experiences; A statement on future actions (general statement) that they will strive to do within the framework of education for common life. All five of these steps are supported by the scientific literature.

This finding supports the multicultural approach which sees a respectful and inclusive approach to promote learning processes about other cultures, thus creating an inclusive space (Ho - Kyung et al., 2015). Also, this finding supports the multiculturalism – interculturalism approach that sees diversity as a resource that must be nurtured (Colombo, 2015). Additionally, this finding strengthens the understanding of the need for guided kinship relationships and testifies to the ability of social construction that creates mutual relationships that stand in contrast to the knowledge that a multicultural reality that exists without an orderly political concept will determine social divisions and the relationships in it will be characterized by injustice and equality, cultural alienation, lack of dialogue, avoidance and mutual negation (Powell-Benyamin & Rheingold, 2020).

Further mor this finding is supported by the assimilation approach that seeks to establish intercultural ties by emphasizing common denominators based on the reduction of the various cultural elements and the erasure of group cultural uniqueness (Basuchoudhary & Cotting 2014). More than that, the results of the workshop, also represented by the shared spatial learning approach, led to mutual learning processes, each person learning another’s culture. In this way, a significant reduction of culturally stigmatizing perceptions was achieved (Flavian, 2020). This finding stands in contrast to the approach that is part of the assimilation approach in which an organization or country aims to establish a neutral policy. This approach can fundamentally harm

the individual's rights to justice and equality. This makes it difficult for the individual to form a collective identity (Margalit & Harbetal, 1994; Taylor, 2006).

The multicultural approach seeks to preserve the ethnic diversity that exists between the groups and encourages mutual learning between cultures (Powell-Benyamin & Rheingold, 2016). This creates an infrastructure of mutual respect and respect for rights. This approach seeks to produce an ecological cultural system – an eco-system in which diverse social balances are maintained (Gat et al., 2023). This position is supported by the accepted concept in research that claims that exposure to the other's culture affects the development of self-identity, social and cultural and the whole sense of personal coherence (Kakonda-Moalem et al., 2020).

This attitude, that emerges from the female students reinforces the need for the existence of intervention procedures while creating a guided closeness and supports what is known in the research according to which students from both groups do not aspire to create educational or friendship relationships with students from the other ethnic group. In addition, these do not want to adopt the elements of their culture from the culture of the significant other. This cultural distance originates from the Israeli-Palestinian conflict which adds to the reluctance of both groups to be exposed and to know deep bits of the other's culture such as religion. Customs, music, and history (Kakonda-Moalem et al., 2020).

4.2 Taking responsibility: On a personal level and professional level

As mentioned, the Jewish female students present a position that is contrary to the species of the Bedouin female students. The latter present a point of view that expresses the desire for the formation or desire for the formation of more significant relationships with the significant other. This point of view reflects, as noted, two processes: one, the imposition of intercultural responsibility and the ability to “absorb” cultural elements; The second, taking responsibility, by recognizing the other and being able to recognize him.

The findings of the study strengthen what is known in the study and revealed that among the participants a learning approach was adopted that seeks first to find out who their learning partners are and then to establish other – more sensitive – learning procedures (Hirsch, 1996). This finding indicates that the creation of mutual and long-term relationships consolidates a perception of responsibility and stands in contrast to the established understanding that the absence of a multicultural policy leads to alienation and a position that denies the other (Powell-Benyamin & Rheingold, 2020). The multicultural approach supports this finding in that at the foundation of its concept is the understanding that everyone always has the right to receive an equal and effective education that reflects him as a person, according to his characteristics and needs and regardless of his ethnic origin (Banks, 1995).

This finding supports the multicultural approach that works to promote a way of cultural interrelationships motivated by grounded moral gratitude accompanied by empathy. This concept places emphasis on multiple narratives and voicing the different perspectives of members of disadvantaged cultural groups (Evans, 2011). Academic institutions – representing spaces of pluralistic multiculturalism, are an opportunity to challenge institutions that perpetuate separateness and represent particularistic multiculturalism (Gat et al., 2023). This approach undermines the existence of a cultural center and thus allows a variety of ethnic groups to be seen in the different spaces, to make their voices heard and to create a process of social reconstruction (Rorty, 1989). In addition to the pedagogic approach to shared life, a workshop for shared lives also constitutes the concept of the shared learning space. This combination, while emphasizing the importance of the other, its advantage is that it leads to learning accompanied by more significant processes in relation to differential learning that takes into account the characteristics of the other and to a more correct and sensitive planning of the educational space (Beder & Crane, 2011).

The format of the workshop that implements the collaborative learning spaces approach is based on the understanding that the student is a social-cognitive and emotional subject and hence the importance of the partnership in the learning process and the contribution to it from all or most of the students. This meaningful and intensive learning allows adaptation to the learner's needs and to the set of his characteristics. In fact, it teaches to take professional and personal responsibility (Rosenfeld, 2004). The spatial cooperative learning approach implemented as part of the workshop led to the creation of significant relationships between its partners. This sense of belonging led to the formation of a perception of personal and professional responsibility among the representatives of the cultural groups (Flavian, 2020).

The participation in the workshop led the participants to create a position that seeks to take responsibility for the significant other both on a personal and professional level. This finding is consistent with the concept that in a multicultural democratic country the approach of learning in a common space should be adopted and, in any case, only external integration should be avoided as is often the case (Avinon, 2013). One of the findings of the workshop that was reflected in the words of the partnership dealt with the need to take professional and personal responsibility for the other. This finding is supported by the scientific literature, and it emerged that learning the one and his culture consolidates an educational sensitivity and understanding that the cultural other must be taught – the significant one through the formation of learning strategies that are unique to him and according to the background of his cultural origin (Flavian, 2020; Dewey, 1938).

4.3 A safe space for intercultural self-expression

One of the goals of education for shared life is the creation of a safe common space that represents the plurality of social voices and thus establishes common citizenship driven by defining common goals and a desire to achieve them (Fraser, 2014). The finds that rise from the workshop supports the multiculturalism approach (Colombo, 2015) which seeks to promote cultural learning and in this way lead to cultural respect, thereby establishing safe spaces for cultural expression (Ho - Kyung et al., 2015). There are three levels of multiculturalism in relation to educational spaces: the first, a particularistic multicultural educational space, the second, a universal educational space and the third, a pluralistic multicultural educational space. In the third space, educational processes take place and mutual recognition, and intergroup recognition are created there (Tamir, 1995).

The choice to acquire higher studies is purely practical and does not indicate a desire for cultural acquaintance and the creation of processes of intercultural kinship. This shared spatial presence does nothing to promote significant processes of kinship and recognition and to recognize diverse cultural aspects that carry meaning such as religion, tradition, and customs (Kakonda-Moalem et al., 2020). The pluralistic multicultural approach sees mixed academic institutions as an opportunity for multicultural intervention (Yona, 2007). This concept offers a reconsideration of the social structure and the location of the center in it and turns any place without geographical reference into a center. In this way, all partners in society are granted the ability to express and build a new shared social space (Gat et al., 2023; Rorty, 1989).

This central statement stands in contrast to the perception of the liberal approach which seeks to relegate the individual's preference and perception of his cultural identity to the private space and thus keeps the public space neutral. On the other hand, the workshop, even though it was held within the framework of the college that represents the preservation of the public smear free of disciplinary multicultural representations, gave its partners a safe space for multicultural expression. In addition, it emerged that the workshop did not form a broad collective identity, but instead found common denominators (Taylor, 2006). In addition, these findings are supported by the multicultural approach that emphasizes the advantages of cultural diversity and its utilization as a social resource, thus creating a safe cultural space for all ethnic groups and promoting justice and equality (Colombo, 2015).

The findings of the workshop support the known in research in which it is claimed that in the framework of traditional frontal learning, those who do not belong to the majority culture are discriminated against (McIntyre, 1997). The course of the workshop and its initiative is in line with the concept that claims to raise awareness of the changes that must be made in teaching and learning in multicultural spaces. The operation of the workshop and its results strengthen the understanding in the face of profit today in a world where courses are taught as part of the training of teachers dealing with multiculturalism, which remain at the theoretical level only. The workshop led to a prolonged and in-depth personal and group multicultural discourse and raised the motivation for multicultural cooperative learning (Schlein & Garii, 2011; Sleeter & Smith, 2013).

Pluralistic education-based spaces such as academic institutions enable intentional and unmediated encounters between cultures. These meetings promote mutual cultural recognition and acquaintance between individuals (Tamir, 1995). This sense of security for self-expression and exposure of aspects of identity, especially among the Bedouin students, was made possible thanks to the implementation of the concept of education for shared life, which leverages educational spaces and promotes mutual relationships striving for sharing. This approach establishes a subjective sense of belonging in the operated space and strengthens the value-cultural perception of all the members of the group (Powell-Benyamin & Rheingold, 2020).

4.4 A reserved sense of belonging from a distant intercultural position considering mutual cultural learning

The foundation of this figure is supported by the concept that multiculturalism constitutes an undermining element to the existing social order and an explanatory factor for distant social settlement (Triandafyllidou, 2003). This position is partially supported by the multicultural concept. This works with the help of the development of a high moral document supported by an approach of intercultural care (Gat et al., 2023) which is achieved by emphasizing the existence of multiple narratives and by providing the opportunity to include the voices of members of different cultures (Evans, 2011). Also, this finding reinforces some of the perceptions of the pluralist approach which recognizes the rights of groups that are not the majority group but does not seek to adapt to the mainstream and certainly not to assimilate into it. By its very recognition of the dominant culture and its cultivation, it perpetuates the inferiority of groups that are not part of it (Gorski, 2008).

Shared spaces in general and shared educational spaces in particular have been known to play an important and central role in the creation of multicultural social change processes and especially to the public space in its guises as academic institutions. These spaces can establish dynamic multiculturalism (Gat et al., 2023; Yona, 2007). This aspect is supported by the multicultural approach presented by Colombo (2015) who sees cultural diversity as a social resource of great importance. At its core is a value approach guided by cultural sensitivity and recognition of the multiplicity of groups. This way has the potential to lead to civil equality and distributive justice. It turned out that among the female students there was a partial improvement process which placed them in a slightly distant position. This achievement, even if it is a partial expression of the goals of the workshop, is supported by the educational – pedagogic concept that seeks to prepare for a shared life. Feelings of sharing and expressing a position for sharing and a sense of belonging to the subjective educational space of the workshop were formed (Powell-Benyamin & Rheingold, 2020; Fraser, 2014).

This finding serves to strengthen the concept of pedagogy for shared life, which emphasizes that it is not enough for the joint presence of students from different cultures in an academic space, but that action must be taken to create change processes. This finding stands in contrast (albeit partially) due to taking a positive but reserved position in relation to the other and in relation to the knowledge that students from different cultures do not form a bicultural identity. This difference is rooted in the distant and even alienated cultural starting point from which the

students come: the Jews and the Arabs in Israeli society (Kakonda-Moalem et al., 2020). Additionally, the results of the workshop, even if they represent a partial change, reinforce what is said in the research that daily “natural” contact between groups cannot lead to interpersonal relations, but only to a prolonged and well-prepared set of activities (Paul Binyamin & Haj-Yehia, 2019). This type of contact may create personal connections, sympathy and even empathy (Bohmert & Demaris, 2015). Another result of this study indicated a desire for change and improvement and from the understanding of the importance of creating joint processes in order to establish significant products that support the scientific literature in the field indicating the understanding that learning in common spaces alone is sufficient, that regular programs in this field should be formulated directed by a clear educational policy that sets goals and thus a guided and responsible multicultural discourse will be established. Another understanding that supports this research is that learning and teaching in shared spaces must be prepared as part of an overall concept (Sleeter, 2001).

4.5 Intercultural statements: Between the absence of practical thinking and practical thinking according to social affiliation

The results of the joint life workshop and its expression, which was also built on the foundations of the spatial joint learning approach, is supported by the well-known in the scientific literature. This is in line with the understanding that this type of learning, which creates practical learning processes through interactions with variety, beyond learning content, consolidates the participants’ attitudes about teaching and future pedagogical practice (Flavian, 2020). The finding of this workshop supports the multicultural approach that sees an active and continuous meeting between cultural groups as a way to create social leadership (Powell-Benyamin & Rheingold, 2020).

One of the results, which deals with the formation of practical and pedagogical thinking according to social affiliation and that which is not practical, is supported by the well-known research indicating that between cultural groups there are visible and hidden layers and only after understanding the visible layer can the hidden one be dealt with (Hirsch, 1996; McIntyre, 1997) and in this case to move to applied thinking while understanding the other and his needs (Gat et al, 2023). Another aspect of this research emphasizes the fact that despite the intense presence in the workshop, there are processes that do not undergo a fundamental change. From the literature it appears (although in contrast to the reality described here) that the joint presence of students from different cultures in one academic space does not constitute a particular bicultural identity. It is evident that this presence does not sufficiently expose the other to the culture of the different (Kakonda-Moalem et al., 2020). Thus, an alienated multicultural position is established (Gat et al., 2023). It appears that despite the active stay accompanied by a powerful intervention is not a sufficient parameter to formulate a strong bicultural identity concept.

This result, even if partially supported due to the partial multicultural statements in relation to practical educational aspects, is supported by the understanding that the multicultural-social aspect affects the development of thinking. The theory of cognitive change describes how the mediation of the surrounding society affects a person's ways of thinking and leads to his development (Feuerstein et al., 2015). The purpose of the pedagogy of the common educational space, which the workshop is also based on, is to impart to the teachers of the future Tools for understanding the diversity among learners and teachers. The teaching goals according to approaches these derive from the educational concept according to which diversity characterizes each group of learners and it is manifested in various fields and affects the teaching and learning processes in a variety of ways (Flavian, 2020).

5. Summary

Multicultural academic spaces are an advantage for creating familiarity processes and relational kinship ties, within the framework of which the students will strive to learn about the culture of the significant other. Teaching another culture is a basis to get to know those who come from a different culture. The learning process creates closeness processes that originate from the reduction of barriers and reduction of stereotypical thinking. In spaces where a well-planned intervention action is not carried out, carried out from prior learning, and understanding that the cultural background requires a flexible pedagogical approach, will lead to opposite results and settling in opposing and even alienated positions. As soon as the process is controlled and learned before, positive multicultural attitudes may be formed that reflect a desire to absorb some of the elements of identity that until now were foreign to me from both sides and even adopt a bicultural view. This sequence can lead to the understanding that you must take responsibility for the other from you in micro and macro processes and provide a safe academic-educational - multicultural space for the expression of positions, especially those belonging to the minority group. In addition, a meaningful and powerful intervention process can consolidate social sublimation and a sense of belonging, even if partially. It is evident that this process also contributed to a pedagogical consolidation that sees great importance in multiculturalism and the need to learn about the phenomenon and pass it on to the students.

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Metaphors of 6th Grade Students Regarding the Culture Concept Included in the Social Studies Curriculum

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Abstract

This research aims to reveal the metaphors used by 6th grade secondary school students regarding the concept of culture in social studies. In this qualitative research study, the researchers interviewed 80 students – 40 girls and 40 boys – regarding their metaphors concerning the concept of culture. We conducted content analysis to analyze the data collected. We categorized the metaphors under five titles. These categories are cultural element, heritage, leader, continuity, and unifying. The study observed that the students mostly associated the concept of culture with the concept of history and tradition and defined the concept of culture mostly through cultural elements. In addition, in the study, the researchers observed that the participants did not develop a negative metaphor about the culture and perceived the beneficial aspects of the culture. We can say that the social studies course and the curriculum successfully foster a favorable perception of culture.

Keywords: social studies, social studies teaching, culture, student, metaphor.

1. Introduction

Culture, stemming from the Latin root “edere-cultura,” encompasses all the values and behaviours collectively shaping the way of life within a society (Mejuyev, 1987, find the source; Çelik & Güleç, 2023). Societies maintain their cultural elements by transferring them from generation to generation (Polat, 2019). Every society has its own culture that it tries to experience, and individuals derive meaning from this culture (Kafadar & Şen, 2021). Through culture, individuals, societies, and the states integrate and protect their material and spiritual values, and the values of culture, such as solidarity, justice, and benevolence, become the behavioural pattern of the society (Akpınar & Genç, 2016). While cultural transmission primarily occurred in the past through verbal and visual methods, today, media culture significantly influences this process. Generations come under the influence of global culture with the great influence of the media (Gençalp, 2019: 54). It is important for individuals exposed to the intense influence of the media to recognize and know their own cultures and cultural components. They must be conscious of their values and adopt a critical and inquisitive stance towards cultural messages rather than passively absorbing them (Çelik & Güleç, 2023). Cultural literacy is the key factor enabling individuals to acquire this skill.

Cultural literacy encompasses the ability to perceive the underlying realities of social behaviours, comprehend cultural shifts across past, present, and future contexts, and understand

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the elements that may threaten culture (Kafadar & Şan, 2021). Cultural literacy allows the individual to notice similar and different aspects of cultures (Köksal, 2010). If culture is likened to an iceberg, the visible part of the mountain consists of traditions, customs, clothing, dishes, and folk dances; the invisible part consists of roles, superstitions, values, and perceptions (Western Sydney University, 2023). In this context, cultural literacy education is important in understanding the existence of society and the individual (Keith, 2020). The continuity of society and states can be ensured through education, vital in imparting cultural literacy to individuals.

States use education to educate their societies and introduce their cultures, values, ideals, and elements they want to keep alive. After receiving their first education from their families, children acquire different cultural elements from kindergarten and first grade (Şahin, 2019). Social studies are a course that intensively introduces culture and its components in secondary school (Gürel & Çetin, 2018).

Social studies are an educational curriculum that integrates social and human sciences, encompassing disciplines like history, geography, and citizenship. Its purpose is to adapt to the evolving and progressing conditions of the nation and the global context (Öztürk, 2009: 4). First, in the USA, Social studies, originally developed to address the social challenges and issues arising from the post-World War I migration wave, has evolved into a curriculum adopted by numerous countries over time. As a reflection of social studies in Turkey, “History, Geography and Civics” courses were combined in 1962 and named “Society and Country Studies.” Subsequently, these courses were integrated into primary school curricula in 1968, and they were universally adopted under the label of “social studies” across all secondary schools in 1975 (Akyüz, 2009). In 1985-1986, the social studies course was abolished and “national history, national geography and citizenship knowledge” courses were introduced. It was combined again in 1998 under the social studies course (Boz, 2022). The 2005 and 2017 Social Studies Curriculum was last updated in 2018 and continues to be implemented (Şimşek, 2020). There are 18 specific objectives in the renewed program. When we analyse the Social Studies Course Curriculum considering the objectives established per the Fundamental Goals and Core Principles of Turkish National Education outlined in the National Education Basic Law No. 1739, it becomes evident that its primary aim is promoting cultural understanding. For example, the statement “*the objective is to comprehend the fundamental components and processes constituting Turkish culture and history, and to acknowledge the need to preserve and advance the cultural heritage that facilitates the formation of national consciousness*” demonstrates the presence of objectives about culture (Ministry of National Education, 2018). In this context, when the seven learning areas in social studies are examined, it is seen that there is a learning area called *Culture and Heritage* that directly deals with culture and cultural changes and concepts. However, the concept of culture is not only in the field of Culture and Heritage learning but also *in the fields of Individual and Society and Global Ties*. Social studies examine cultural issues from different perspectives at every grade level (Çelik & Güleç, 2023). In this sense, culture has an important place in social studies courses. However, the perceptions of the students about the concepts of culture and how they understand the culture are important. When we examine the literature, we can see many studies on culture in social studies. Up to August 2023, 25 research studies within this domain specifically focus on culture and the educational realm of “culture and Heritage” in social studies for master’s and doctoral studies.

When we mention some of these studies, they focus on cultural corruption, factors affecting culture, and approaches to cultural issues (Kılıç, 2023; Büyükçetin, 2023; Öztürk 2023; Maden, 2022; Çalimli, 2021; Tekkök, 2019; Bozkurt, 2019, Ünlü, 2012; Sertkaya, 2010; Ateş, 2007; Yıldız, 2002). There are also many national articles on culture. When we examine literature, there are studies examining the role of the social studies program in cultural transfer (Çengelci, 2012; Gürel & Çetin, 2018; Çulha, 2009, Pehlivan & Kolaç, 2016); studies examining the opinions of teacher candidates and teachers about culture (Deveci, 2009; Akpınar & Cantürk, 2021; Aslan,

2017, İbrahimoglu, 2018); studies examining student opinions about culture (Kılcan & Akbaba, 2013; Ünlü, 2012; Arıkan, 2012); studies examining social studies textbooks in terms of culture (Çelik & Güleç, 2023; Batmaz and Yurtbakan, 2023); studies examining the metaphors of teacher candidates about the concept of culture (Alkar, 2023; Erdilmen Ocak, Çiydem & Mindivanlı Akdoğan, 2017; Thessaloniki Ay & Kurtdede Fidan, 2013). There are also international studies in the academic literature that explore the evolution of the concept of culture within the context of social studies education for students (Thongdee, Promkum, Sawatta, Namseethan & Ruangsana, 2021; Pacana, Charnen, Maryland & Reynaldo, 2019; Schlein, Taft & Ramsay, 2016; Hall, 2012). However, in recent studies, we can see that the subject of culture has shifted to cultural literacy in foreign literature (Helms, Trejo & Fultz, 2012; Septinai & Maftuh, 2020; Eguz, 2021; Dere & Ateş, 2022. Setemen, Widianana & Antara, 2023). Upon reviewing the existing literature, it becomes evident that there is a shortage of studies investigating secondary school students' metaphors concerning the concept of culture within the social studies curriculum. Hence, this research focused on investigating the metaphors employed by 6th grade students about the concept of culture.

This research aims to determine the concept of culture of 6th grade students in social studies. Although the social studies course includes culture and concepts related to culture intensively, how the students perceive the culture concept and how they connect with other concepts is important. In this study, we aimed to determine the metaphors of the students by using the "Culture is like, because" sentence. In the first sentence, we determined what the students likened the concept of culture to, and in the subsequent sentence, we explored how they likened it. This research has two problems, and the problems are shown below:

- (1) What are the cultural metaphors of 6th grade students?
- (2) Which category are the 6th grade students metaphors related to?

2. Method

2.1 Research design

This study is designed with a qualitative research method. The qualitative research method offers the opportunity to examine a case in depth and in a multi-faceted way (Yıldırım & Şimşek, 2018). In this study, we explored the metaphors of 6th grade students about the concept of culture because, in qualitative research, it is not only the behaviours and physical events that occur but also how people perceive events and how this affects their behaviour (Maxwell, 2018: 30).

2.2 Sample and data collection

First, the researchers prepared a metaphor form for the study. They used the form by Aydın (2010) and Nikitina and Fruako (2008) for the metaphor. The study group of the research consists of 80 students, 40 females and 40 males, studying in the 6th grade in Bursa in the 2022-2023 academic year. In the form, the researchers asked the students to complete the statements "Culture is like....., because" . The forms collected from the female participants were coded as F1, F2, and F3..., respectively, and the forms collected from the male participants were coded as M1, M2, and M3..., respectively.

2.3 Analyzing of data

Content analysis is the state of downloading and interpreting qualitative data that determines the consistency and meanings of a massive qualitative material (Patton, 2014). The data collected from the students were analysed by content analysis. The researchers carried out the content analysis by following the stages of coding the data, finding the themes, organizing the codes and themes, and defining and interpreting the findings (Dilek, Baysan & Öztürk, 2018). The data were coded in the Excel program and categorized. All the students were able to create valid metaphors. The validity status of the data is shown below.

Table 1. Validity of the data collected

Form	Grade	Gender	Number	Total
Valid	6	Female	40	40
Valid	6	Male	40	40
Invalid	-	-	-	-
-	-	-	80	80

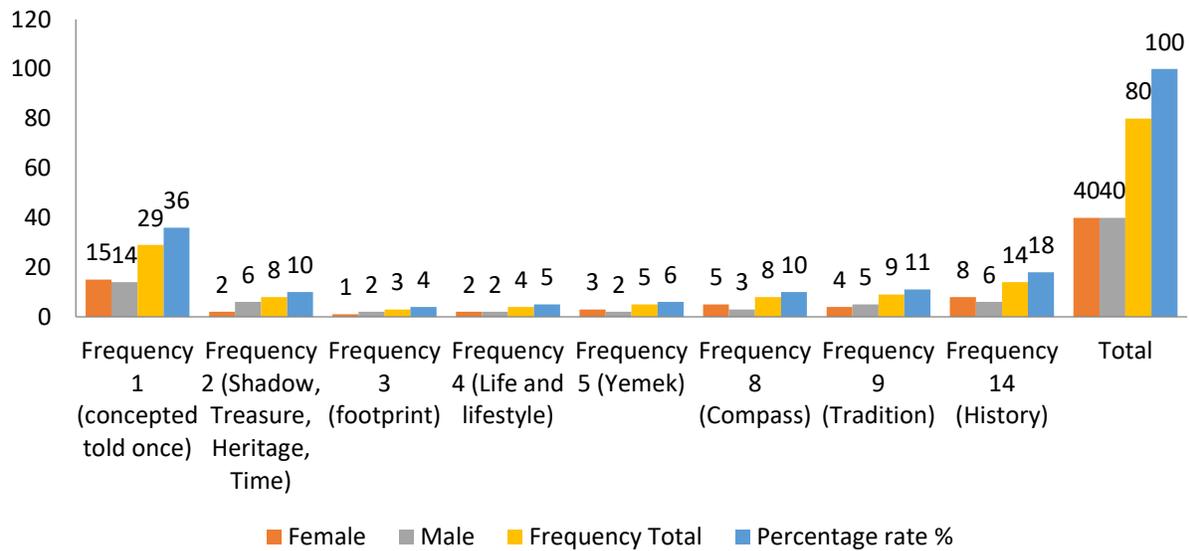
To enhance the validity and reliability of the study, the researchers provided a comprehensive and detailed explanation of the research process. Additionally, two researchers independently created the metaphors and categories and then compared them. They associated the metaphors with categories such as cultural component, heritage, leader, unifying, and continuity. The coders used the categories of similar studies on culture while creating the categories and increased reliability (Erdilmen Ocak, Çiydem & Mindivanlı Akdoğan, 2017; Akyol & Kızıltan, 2019). Consequently, to enhance reliability, the researchers assessed the number of consensus and disagreements between them and determined their consistency using the formula proposed by Miles and Huberman (2016). It was seen that 6 out of 80 data were associated with different categories and changed. Consistency among coders was calculated as 92%.

3. Results

3.1 Results regarding the metaphors of the students on the concept of culture

The researchers examined the metaphors of 80 students, 40 female and 40 males, regarding the concept of culture. The graph below shows the metaphors and frequency values of the students.

Graph 1. 6th grade students' metaphors about culture and frequency values of metaphors

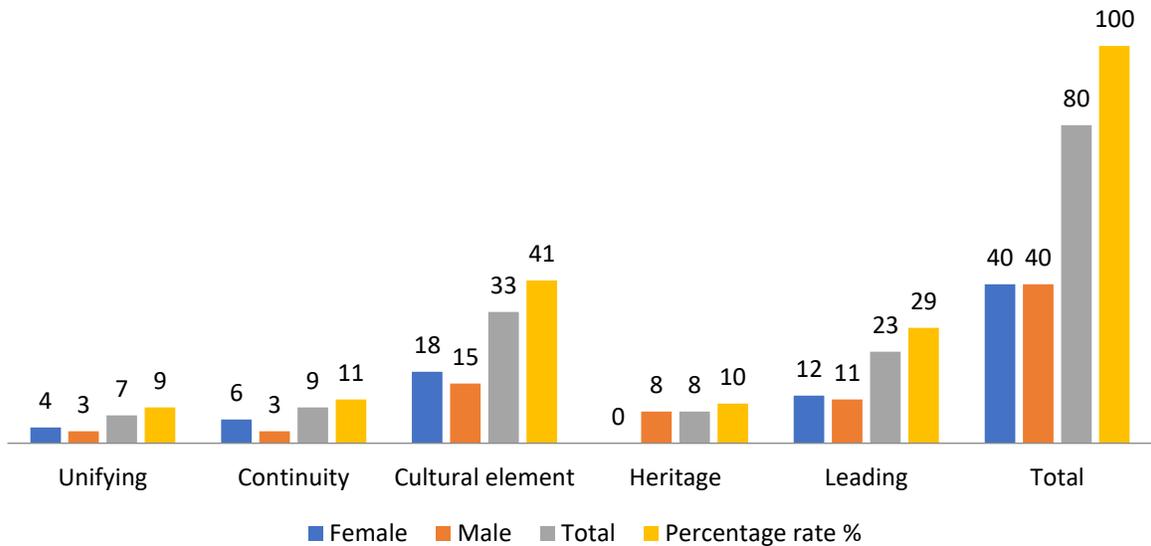


Upon examination of the graph 1 above, it is seen that there are concepts with the highest rate and 1 frequency (29). These concepts are *tree, fate, handcuffs, eternity, belonging, humanity, architecture, art, motherland, pearl, architecture, art history, our ancestors, light, nation, solidarity, law, book, nation, our unity, gift, forest*. The students associated culture with these concepts used once in various ways. *People may think that the participants developed meaning through different concepts of culture.* The concept that students most frequently associate with is “history,” occurring 14 times. This observation could be attributed to the extensive utilization of history within the 6th-grade social studies curriculum. The other most common concepts are tradition with nine frequencies and compass with 8 frequencies. The reason why tradition has 9 frequencies may be because it is a concept that participants often witness in social life. The participants’ analogy to the compass may be because they think the culture is the leader. Concepts with 2 frequencies are shadow, treasure, heritage, and time. The perception of culture as a shadow, treasure, or heritage from the past by students may be influenced by the idea that culture is a transmitted phenomenon. On the other hand, time can show that they think that culture is a phenomenon that has endured from past to present and has evolved over time but has always existed. When all ratios are examined in terms of gender variables, it can be said that there is no significant difference, and the values are close to each other.

3.2 Results regarding the categories to which the cultural metaphors of 6th grade students belong

The categories to which the participants’ metaphors about culture belong are “... Was created after the Because....” section. The researchers created five categories by unveiling the aspects of the concepts that the participants likened. In the graph below, categories are given with gender distribution.

Graph 2. Frequencies of the categories created according to the cultural metaphors of the participants



Upon examining Graph 2, it becomes evident that the category with the highest frequency is the cultural element, with a value of 41%. The concepts in the cultural element are *architecture, game, food, clothing, tradition, history, art history, and difference*. To give an example from the form of the participants in this regard, the female participant F 20 said: “*Culture is like history because our history teaches us about our past*”. In contrast, the male participant M 26 said: “*Culture is like tradition because we live and keep our traditions alive*”. The second category is the leader category, with a value of 29%. In the leader category, there are the concepts of *forest, compass, footprint, lifestyle, fate, humanity, motherland, shadow, law*. On this issue, F21 stated: “*Culture is like a compass because it shows us how to do something and where to go.*” In contrast, M19 stated: “*Culture is like a shadow because we are protected under it and know our limits.*” The least emphasized category of culture was unifying, with a value of 9%. In this regard, *togetherness, our unity, belonging, handcuffs, tree, our home, happiness* are stated. In this regard, participant F 32 said: “*Culture is like our unity because our common values and beliefs unite us thanks to culture.*” In contrast, male participant M 40 said, “*Culture is like happiness because it shows us what we will be happy for*”. Significant differences in the distribution of female and male participants by categories are in the heritage category with a value of 10%. This category encompasses the concepts of *pearl, heritage, nation, treasure, gift, book*. Eight male participants stated all concepts here. There are no statements from female participants included in this context. To give an example from the male participants, M 70 wrote: “*Culture is like heritage because it is left to us by our ancestors to sustain it.*” There is no significant difference in gender in other categories, which could be attributed to the students sharing the same classroom and curriculum for social studies. Their teachers may emphasize similar aspects while teaching cultural subjects.

4. Discussion

This study has unveiled the metaphors created by 6th grade students regarding the concept of culture, which is prominently featured in the social studies curriculum. The categories of the concepts were created in the part of the study that continues with “because...”. The study’s

findings indicated that students associated the concept of culture with various elements such as history, tradition, food, and clothing, which vary among cultures but serve as tangible representations of culture. Participants associated culture extensively with the elements of culture, as in social studies. Culture is paired with the concepts of the compass, shadow, fate, and footprint for the leader category. Their analogy with concepts such as belonging, handcuffs, and our home demonstrates their comprehension of the unifying nature of culture. Their likening of culture to concepts such as heritage, gift, and treasure shows that students recognize the characteristics of culture as a transferred heritage. In this context, based on the results of this study, the achievements that the social studies curriculum wants to give students about the concept of culture are realized as a thought under the categories of cultural element, unifying, leader, heritage, and continuity.

Participants associated the concept of culture with concepts such as heritage, gifts, and our ancestors. These metaphors are consistent with the characteristic of being the social heritage in which the culture is transferred from generation to generation, as expressed by Özkul (2013). When the categories are examined in terms of gender variables, the rates of girls and boys in the categories are close to each other. There is a significant difference only in the heritage category. In this category, there are cultural metaphors of 8 male participants. In this regard, it was observed that there was no significant difference in terms of gender variables in the studies of Erdilmen Ocak, Çiydem and Mindivanlı Akdoğan (2017) on the concept of culture. The researchers categorized the concepts obtained in the study into five groups: cultural element, heritage, unifying, leader, and continuity. In the studies of Çelikten (2006) and Akyol and Kızıltan (2019), there is a category related to the unifying aspect of culture. The studies mutually reinforce the notion of culture as a unifying element. In the study, the researchers observed that the students did not have a negative judgment about the culture.

As a result of the research, it was seen that there was no negative metaphor about culture. This demonstrates that students develop a constructive metaphor for culture. Based on the study, the following suggestions can be included: *students can be taken to ethnographic museums when covering topics related to culture.*

Practical studies can be carried out to improve students' perceptions of culture. Different components of culture can also be emphasized in lessons. The concept of culture can be addressed with more concrete examples. Students can be enabled to embody the culture.

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