

## Examination of Village School with Multigrade Class Students according to Nine Types of Temperament Models<sup>1</sup>

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### Abstract

In this article, a detailed examination was made about the Nine Types of Temperament Model and it was examined how each of the Nine Types of Temperament emerged over the students studying in the village schools with combined classrooms, and which student type's characteristics match with which temperament type. The scope of this research on the students with combined classrooms, we worked with village school students. Multigrade classes are two or more classes learning together in a single group under the leadership of a teacher. Teaching in this way is called teaching in multigrade classes. The case study method, one of the qualitative research methods, was used in research. Nine Types of Temperament Model reflection was searched 14 students in a multi-class primary school in a village in the Southeastern Anatolia Region of Turkey. Observations and interviews were made by the classroom teachers in the lessons and outside of class hours. Games and activities in which children could exhibit their behaviors comfortably were organized, and notes were taken for the examinations. In addition, in this article, the benefits of directing education with the Nine Types of Temperament Model for primary school children and the relationship of NTTM and education with their future educational lives are mentioned.

**Keywords:** Multigrade classes, Nine type temperament model (NTTM), Primary school

### Introduction

Temperament is the most fundamental factor that determines how people perceive life, how they interpret events and situations, how they communicate, their decisions and orientations, their motivation to work and the dynamics of all social relations. It is known that all of the internal tendencies of the human being are called temperament. Examination of temperament and personality traits with scientific methods started with Allport's use of the concept of trait in psychology (Schultz & Schultz, 2015).

Distinctive feature refers to the tendency to behave in the same way in different situations, which is stable over time (McAdams, 2009). The Nine Types of Temperament Model (NTTM) is a model that concentrates on understanding where human behavior originates from and places the concept of temperament at the center of personal differences. According to the Nine Types of Temperament Model, every child is born with one of nine different temperament types. All of these nine temperament types have their own seeking, disposition and motivation. The primary defense of the Nine Types of Temperament Model is its approach to seeing people as a whole, not their individual aspects. According to the defense of this model, it is necessary to have a holistic perspective in terms of both ontology and epistemology. According to NTTM, people are in the position of being overstretched, strained or relaxed more than necessary; tends to show the negative and positive temperament features of a temperament type different from the basic temperament.

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When people return to their natural conditions; he turns to the appearance and mechanisms of his own basic temperament type from the appearances he shows in being tense and relaxed. The Nine Types of Temperament Model deals with people with personal differences and interprets them with a holistic perspective; It is a model that can interpret the person's operational, emotional and cognitive behavioral characteristics by centered on the concept of temperament. The Nine Types of Temperament Model is a framework model that allows individuals to understand their behavior, realize their strengths and weaknesses, and build a balanced and healthy personality. According to the Nine Types of Temperament Model, every person is born with one of nine different temperament types. Each of the nine temperament types has its own quest, orientation and motivation. The innate temperament of man has a great influence on human actions, emotions and thoughts. So much so that temperament is the most fundamental factor that determines how life is perceived, how events and situations are interpreted, communication styles, decisions and orientations, work motivations and the dynamics of all social relations.

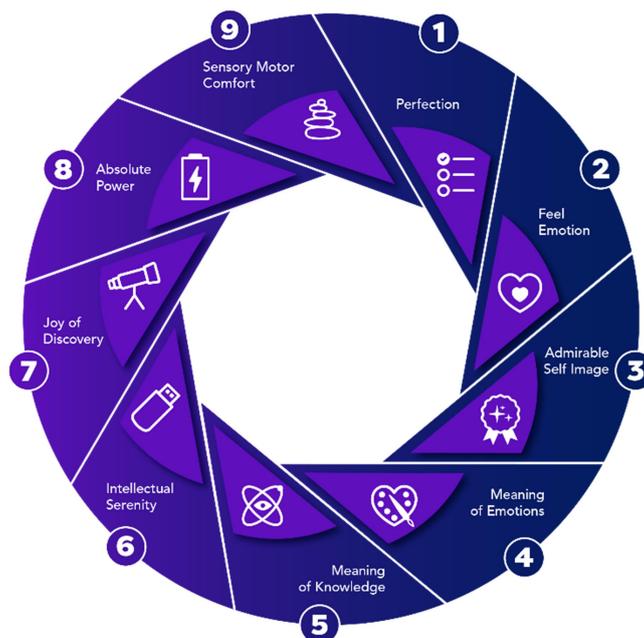
Nine Types of Temperament Patterns; It explains in a comprehensive, consistent and holistic manner the innate potentials of each individual, the characteristics that need to be balanced, the changes in his behavior in situations of comfort or stress, the natural personality traits originating from his temperament and the synthetic personality traits that the person acquires later on. It is accepted that personality has a wide range of influence from school success to career choice and job satisfaction (Costa & McCrae, 1994). There are some educational models with scientific validity for revealing the personality, which has a great impact on the determination of the profession of individuals, and these models are used. Nine Types of Temperament Model (NTTM), one of these models, departs from the concept of temperament, which expresses the innate and life-long structural characteristics of the individual, and explains how to use the knowledge and methods in many different areas such as intelligence, personality traits, interests and abilities. shows a systematic way (Yılmaz et al., 2014). NTTM is a holistic model that can reveal the connections with all sub-elements in its ecosystem, based on scientific data, with a rational approach, as well as getting to know the individual comprehensively (Selçuk & Yılmaz, 2015).

According to the Nine Types of Temperament Model, each individual is born with a behavioral repertoire that oscillates between the characteristics of the basic temperament, the temperament under stress, the temperament in the relaxed state and the wing temperament type that he is influenced by (Yılmaz et al., 2014). According to Yılmaz (2011) temperament types should be evaluated together with all the adjectives and features that make up that type, instead of an adjective specific to each type and the number symbolizing the type. The Nine Types of Temperament Model advocates the point of view that the helping arm effect, compelling lifestyles and comfort concepts can be explained with a multi-field approach and methodology (psychology, mathematics, philosophy). This holistic approach, which places great value on the uniqueness and specialness of the individual, is considered as the superiority of the model. This approach also creates an opportunity to foresee his own potential, such as the skills, abilities and tendencies that he will develop for his own cat without any help, and the skills and predispositions that he will develop by getting help from someone else. With this foresight, possible risks can be eliminated before they occur, and an approach suitable for the person's character can be adopted. Nine Types of Temperament Model, briefly NTTM, is one of the education models that is expected to become widespread, although it is not very common in the world and in our country.

The Nine Types of Temperament Model includes the following temperament types: Perfection-Seeking Temperament Type (NTTM1), Sensing Emotions Type (NTTM2), Admirable Self-Image-Seeking Temperament Type (NTTM3), Meaning-Seeking Emotional Type (NTTM4), Meaning-Seeking Knowledge (NTTM5), Intellectual Calmness-Seeking Temperament Type (NTTM6), Pleasure Seeking Temperament Type (NTTM7), Absolute Power Seeking Temperament Type (NTTM8), Sensory-Movemental (Physical) Comfort Seeking Temperament Type (NTTM9). These temperament types that make up the Nine Types of Temperament Model are shown in Figure1.

### **Figure 1**

*Nine Types Temperament Model (<https://humna.co/en>)*



*NTTM1 Perfection-Seeking Temperament Type:* In general, they are perfectionists who are serious, dignified, careful in their attitudes and behaviors, very careful about what they do and what they say, and always try to be correct, consistent and fair in order to make themselves perfect. They take things like cleanliness and order very seriously. They are very sensitive about their duties and try to perform them flawlessly. They are very reluctant to do the wrong thing or to leave something missing, in which case they immediately criticize themselves. They take great care to be a just and trustworthy person. Individuals with NTM1 temperament experience stress when moral rules are ignored, their principles and ideals are not taken into account, they cannot interfere with the mistakes and flaws they see, and are forced to work outside the method they know (Yılmaz, 2010). When everything works in accordance with the rules, systematically and smoothly, when things go more smoothly than they expected, and when conditions are controllable, their curiosity to explore and their tendency to creativity increase (Yılmaz 2014).

*NTTM2 Temperament Seeking to Feel Emotions:* They are relationship-oriented and loving people and act in accordance with their emotions. They are extremely sociable, friendly, positive, enthusiastic, caring about their environment, getting along quickly, friendly and helpful. They are easily liked for their friendly demeanor and demeanor. They "exist in the relationship" and care too much about their relationship. They quickly become aware of the needs and expectations of those around them and feel obliged to help. Individuals with NTM2 temperament experience stress when they feel unloved, do not receive attention, their wishes and expectations are not met, and their fear of being alone is triggered (Yılmaz, 2010). In addition, when they see love, attention and value in general relationships, they like to be alone and indirectly express the meaning of their feelings with art and aesthetic images.

*NTTM3 Admirable Self Image Seeking Temperament Type:* They are people who are self-confident, energetic, attach great importance to their image and appearance, and want to have features that will arouse admiration and influence in their environment. They pay close attention to how the other party sees and evaluates them. Having a goal, they want to achieve in every aspect of their lives, DTM3s have an ambitious, competitive and competitive nature. Success, prestige, status and having a career have a very important place in the lives of these people. The productivity of individuals with NTM3 temperament decreases when they experience successive failures and fall behind their competitors in the process of reaching their goals (Yılmaz, 2010). When they achieve success and are appreciated and admired, they can pay attention to details and work more planned and systematically.

*NTTM4 Temperament Seeking the Meaning of Emotions:* In general, they are introverted, kind, naive, who value originality and individual difference. They have an intense imagination and emotional world. They are sensitive people who understand the feelings of others well and develop empathy. They treat people warmly and sincerely. They have a natural and unique style that values living in their own way. They value finding meaning in life and living it with deep feelings. Individuals with NTM4

temperament become more reactive and touchy when their emotions are not noticed and ignored, they cannot reveal their individual and unique identities, and are generalized or categorized (Yılmaz, 2010). When their originality and creativity are appreciated by their environment and their individuality is accepted, they attach importance to the necessity of being organized, planned and organized and become more involved in daily functioning.

*NTTM5 Temperament Seeking the Meaning of Knowledge:* They are introverted, quiet, cold and distant people who like to be alone and think. They may be shy and reluctant to interact with people. They dislike physical contact and intimacy, emotional attitudes and reactions. They are uncomfortable with attracting attention and being the center of attention. They are highly rational, logical and analytical thinkers, not emotional. They have highly developed conceptualization, abstraction, observation and analysis skills and a high intellectual curiosity. They attach great importance to knowledge and deepening in knowledge. Individuals with NTM5 temperament behave carelessly, uncontrollably and impulsively if they are constantly in the spotlight and attention, cannot be alone enough, and are forced to socialize (Yılmaz, 2010). When they specialize in knowledge and are confident in their competencies, they become more extroverted and active, take initiative and lead those around them with self-confidence.

*NTTM6 Intellectual Calmness Seeking Temperament Type:* They are calm, logical, calculated and controlled people who take care to be in harmony with their environment, pay attention to their duties and responsibilities. They have a very curious, research-loving, observant, questioning and cautious nature. They tend to be meticulous and organized throughout their lives. They care more about "safety" than anyone else throughout their lives. For this reason, they take care to obey the rules, act carefully and in control, and avoid behaviors that may create distrust in their relationships. Individuals with NTM6 temperament display tense, accusatory and damaging behaviors when they are disappointed by their focus of trust, their self-confidence is shaken due to failure, and they feel insecure (Yılmaz, 2010). When uncertainty and future anxiety are minimized, they become calm, comfortable and peaceful, and they become more uncalculated in their relationships.

*NTTM7 Type of Temperament Seeking the Pleasure of Discovery:* They are cheerful, funny and very active people. They place great emphasis on enjoying life. They can change the atmosphere of their environment with their jokes and jokes. They are adventurers who get tired of doing the same things quickly and like innovations and changes. They stay away from things that are painful and distressing. They are optimistic, practical and solution-oriented in the face of problems. They do not allow problems to occupy their minds too much. Imaginations are very wide. Individuals with NTM7 temperament ask for accountability by focusing on the negativities in cases of frustration and not being able to be as free as they wish, prolonged periods of pain, distress and grief, and narrowing of their range of motion (Yılmaz, 2010). When their wishes are fulfilled immediately and they feel free, they can approach deeply and analytically the subjects they come into contact with, and they can focus on a single job or subject.

*NTTM8 Absolute Power Seeking Temperament Type:* In general, they are courageous, confident, leader, authoritative, assertive, generous, protective and possessive. They are apathetic, sociable, take risks, stand out in all circumstances and situations, never like to be ignored and tend to lead. They are people who can make quick decisions, be persistent in their decisions, review them and display strong, resilient and combative attitudes against difficulties. They express their feelings openly and honestly in every environment. They reveal their own existence by dominating other people in the environment. Individuals with NTM8 temperament lose their self-confidence and turn into avoidant and watchful observers when they are unable to control their environment and establish authority, become incapable, or be betrayed that will undermine their dominance (Yılmaz, 2010). When they see that those around them are loyal and sincere, they become more sensitive and sensitive, humble, loving and helpful when there is no threat to their authority.

*NTTM9 Sensory-Movemental Comfort Seeking Temperament Type:* They are harmonious, calm, respectful, mild, shy, do not like tension and restlessness, are peaceful and mediator people. They tend to avoid conflict situations and disruptive behavior. They want to live in peace and reconciliation, to discuss the problems with everyone without knowing it. They immediately adopt a peaceful, conciliatory and mediator stance in cases of arguments, fights, conflicts, tensions and unrest that take place around them. Individuals with NTM9 temperament become tense, anxious, reactive and suspicious when forced to take action, exposed to oppressive and coercive attitudes, and exclusion

and ignorance (Yılmaz, 2010). When their physical comfort is provided and they feel competent and competent with what they do, they become more assertive, productive and efficient, and come forward more easily.

Within the scope of this research, in which we examined the reflection of the Nine Types of Temperament Model on the students studying in village schools with combined classrooms, it was studied with primary school students in a village in the Southeastern Anatolia Region of Turkey. In our country, multi-class schools still exist in rural areas. Joined classes are two or more classes learning together in a single group under the leadership of a teacher. Teaching in this way is called "teaching in combined classes" (Binbaşıoğlu, 1999, 1). The concept of a combined classroom is expressed by Anras (2020) and Çınar (2004) as: "It is the classroom where students from different levels are gathered in one class, especially in village and town primary schools, where education studies are carried out due to reasons such as insufficient number of teachers and classrooms and low number of students". In multi-class village schools, students from different classes interact and communicate with each other. It aims that students at different developmental levels and readiness levels go through a learning-teaching process in the same class in accordance with their level.

The low number of students in a class in villages with a small population and the impossibility of assigning a separate teacher for classes with small numbers have made it a necessity to combine more than one class and teach it as a group, under the direction of a teacher. This necessity has led to the emergence of the unified class system in education. It is necessary to know the importance of the existence of combined classes and ensure their continuity for necessary reasons such as increasing the quality of primary education services by making primary education widespread in rural areas, leading social development in rural areas, providing public education services to the village people, providing compulsory education services to children living in remote villages and creating employment. Students studying in multi-class schools gain the habit of benevolence and working together, instead of racing and individual promotion, and the sense of responsibility and sharing that comes from working with a group is constantly developing. Since the student studying at the multi-class school is in constant communication with his peers, his communication skills are highly developed and he has more opportunity to develop his personality freely. Village schools with combined classrooms, which provide more opportunities for the development of skills such as tolerance and respect for differences, critical thinking and being entrepreneurial, have many advantages for students. Teaching in the multigrade classroom has many benefits for students as well as government resources and teachers. There are also benefits such as using the teacher fluently within the country as a resource and opening schools in more settlements within the country. The benefits of peer learning for students, learning from each other and helping each other can also alleviate the workload of the teacher. It is observed that mental skills such as self-learning, self-direction, and research develop more in students studying in multigrade classes. This is one of the factors that can alleviate the workload of teachers teaching in multigrade classes.

There are some characteristics expected of students studying in multigrade classes. Some of these are as follows:

- To work in a planned way, to understand what to do and how to benefit,
- Finding the source of the information,
- To know how to conduct research, observation, experiment and examination,
- To know how to benefit from the library,
- To have learning materials ready,
- To know how to benefit from the materials, to acquire the habit of silent reading,
- Express your thoughts in graphs, charts, maps, pictures, etc. be able to explain using ways,
- To be able to organize the results of experiments, observations, research and examinations and prepare a report,
- Being able to work silently,
- Being organized and organized,

- To be able to manage time well,
- Being careful and patient.

With these skills, it will be easier to examine the reflection of the Nine Types of Temperament Model on students. While teaching in multigrade classes has advantages, it also has limitations. The increasing duties and responsibilities of the teacher cause less attention to the students. The preparatory work, which is difficult to do, is a limitation for teachers who teach in multigrade classes. Having to achieve a lot of gains in a short time is a disadvantage compared to the education in detached classrooms. Teachers who are generally appointed to rural areas for the first time may encounter many difficulties in the process of gaining experience. The lack of guidance service in multi-class schools is a major shortcoming for both teachers and students.

In our country and in many of the world's countries, students are tried to be educated through a uniform model, and as a result, children are directed to elite professions that are accepted in the society instead of the professions they are inclined to. As it is known, education in the traditionalist education approach is teacher and program centered. The teacher is an informative person and is not open to questioning by the students they will teach. Therefore, there is an understanding that makes the teacher active and the student passive. In traditional education, the affective aspect of the student is not taken into account, the developmental stages of the child are accepted as the same in every child, and only the cognitive aspect of the child is taken into account. Since the pedagogical relationship unit is teacher-student in traditional education, cooperative learning and group work are generally not used. This leads to poor communication and interaction between students. In the traditionalist education approach that does not encourage participation, creativity, curiosity or initiative, students' imaginations cannot develop accordingly.

In our country, because of the reasons such as the shortage of students and the inadequacy of the number of teachers, which are generally seen in rural areas, the application of multi-class schools is carried out. This application has some advantages as well as disadvantages. Since the teacher teaches his lessons with homework and teacher during the day, the time and energy he spends on preparation for the lesson increases. Especially during homework hours, preparation takes a lot of time to direct students to self-study and to do this effectively. The coexistence of more than one classroom brings along classroom management problems. It is also a disadvantage that the lesson is divided by the other homework group while teaching with a group in teacher-led lessons. For these reasons, teachers cannot find the opportunity to use new teaching models and therefore they use teaching models that are included in the most easily known traditional approach. One of the most used methods in the traditionalist education approach is the method of expression. The teaching method, which is the most used method by teachers, is teacher-centered and is based on the teacher's transfer of the subject to the students. This method can be given a significant place in courses that can be covered theoretically. Since the knowledge taught by this method is difficult to apply in practice, it is almost impossible to determine which activities or skills the student is inclined to. Question-answer method, which is another method used in the traditional education approach, is the method where the teacher asks questions and waits for the answers from the students, as the name suggests. In this method, since only the cognitive level of the students is considered, skills and tendencies are not considered. In all methods of traditional education, students' skills and tendencies are not taken into account, and it is known that these methods are still used in our country due to reasons such as time constraints and unfavorable conditions. Especially in village schools with combined classrooms, where two or more classes are educated together, traditionalist education methods are used more.

Considering the traditionalist education that is known to be applied and the disadvantages in multigrade classes, how the Nine Types of Temperament Model reflects on students in multigrade classes has been examined in this study.

## **Method**

### **Research Design**

In our research named "Examination of 9 Type Temperament Model (NTTM) on Multi-Class Village School Students", the case study method, which is one of the qualitative research methods, was used. Nine Types of Temperament Model reflection was investigated by case study method on 20 students in a multi-class primary school in a village in the Southeastern Anatolia Region of Turkey. The reason

for choosing the case study is that it is a qualitative research method that provides in-depth information. Yıldırım and Şimşek (2011) define qualitative research as a research in which qualitative data collection methods such as observation, interview and document analysis are used, and a qualitative process is followed to reveal perceptions and events in a natural environment in a realistic and holistic way. This case study based research allows students (participants) to examine in depth a phenomenon or event that the researcher cannot control, based on their thoughts about the lesson and also their how and why questions (Yıldırım & Şimşek, 2011). In case studies, data is usually obtained through observation, interview, and documentation, and includes an intense, holistic description and analysis of a single delimited episode (Merriam, 2009). Case study; It is a method in which a single situation or event is examined in depth longitudinally, data is collected systematically and what is happening in the real environment is looked at. With the results obtained, it reveals why the event occurred in that way and what should be focused on in future studies (Davey, 1991). Yin (1984) is the case study; 1) when research focuses on "how" and "why" questions, 2) when the researcher has little or no control over events, 3) when you study the event or phenomenon in its natural context, 4) when the link between the event and real life is not clear enough defined as a research method used. Hancock & Algozzine (2006) define the deeply grounded studies as case studies, which try to richly describe events that occur in their natural conditions, under the constraints of time and space, using various data collection tools.

Unlike experimental studies, case studies do not compare, they try to explore. Instead of testing the hypothesis or proving the relationships, the researcher tries to define the categories of events and behaviors (Hancock & Algozzine, 2006). The use of case studies in explaining, describing and discovering events that involve interventions that cannot be explained by experimental or survey methods in real life and that are assumed to have a causal connection between them distinguishes it from other studies (Yin, 1984). In this study, it was tried to explain the reflection of the temperament models in the Nine Types Temperament Model on the students by making in-depth interviews and limited observations with the students in the multi-class village school.

### Study Group of Research

The distribution of the participants by gender and education level is as seen in Table 1.

**Table 1**

*Study Group*

<b>Student Codes</b>	<b>Gender</b>	<b>Grade Level</b>
<b>S 1</b>	Girl	1st grade
<b>S 2</b>	Girl	1st grade
<b>S 3</b>	Boy	1st grade
<b>S 4</b>	Girl	2nd grade
<b>S 5</b>	Girl	2nd grade
<b>S 6</b>	Girl	2nd grade
<b>S 7</b>	Girl	2nd grade
<b>S 8</b>	Boy	2nd grade
<b>S 9</b>	Boy	2nd grade
<b>S 10</b>	Girl	3rd grade
<b>S 11</b>	Boy	3rd grade
<b>S 12</b>	Girl	4th grade
<b>S 13</b>	Girl	4th grade
<b>S 14</b>	Girl	4th grade

Students studying in a village in the Southeastern Anatolia Region of Turkey constitute the study group. Most of the families could not live in metropolitan cities due to economic reasons and migrated to the village. The parents of the children are alive and the father of two siblings is mentally handicapped. Their financial livelihoods mostly consist of olive growing, animal husbandry and horticulture. While the father of one student works as a village guard, the father of two students as an imam and the father of one student as a headman, the fathers of other students do not have regular jobs. The mothers of the students are usually engaged in gardening. Students usually have families

with an average of 4 siblings. Some of the students are shepherds and do not come to school to help their families during the olive harvest.

### **Data collection Tool**

In this study, interviews and observations prepared for students studying in a multi-class village school were used as data collection tools. Interview questions were examined by teachers who are experts in their fields. The questions are prepared in a way to reveal the reflection of the Nine Types of Temperament Model on the students of village schools with combined classrooms and are completely genuine. The observations were made by the teacher of the multi-class village school, and the results of the observations are included in the conclusion part. The interview questions are as shared in Table1.

**Table 2**

*Interview Questions*

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1. Would it make you happy to be the person who attracts the most attention in the environments you enter?

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2. What do you do in a subject that you think is unsuccessful in school?

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3. Are you the one who decides on matters that concern you at home?

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4. Do you think the rules should always be followed?

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5. Do you get into an argument with your friends about something you can't agree with?

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6. What kind of person are you according to you? Can you comment on your personal characteristics?

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7. What do you do when someone new comes to your grade?  
What would you do if you saw a friend crying in your 8th grade?

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9. How do you greet your friends' jokes?

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10. Do you love to play with your friends?

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11. Do you like to be the one who starts the games?

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12. Are you good at determining the rules of the game?

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13. Can you do your homework on time, do you have any homework left for the last day?

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14. Do you like to create new games?

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15. Do loud arguments affect you?

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16. How much do you enjoy listening to your friends?

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17. Do you like having your friends listen to you?

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18. Do you get bored in games until it's your turn?

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19. Do you like classroom games or garden games more?

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20. How do you feel when you can't see a member of your family after school?

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Interview questions consist of questions that can reveal temperament types. It was determined with the support of experts in the field. These questions were created because they would be useful in revealing which temperament type children have.

### **Data Analysis and Process**

A number of interviews were conducted to determine the personalities and temperaments of the children, various interviews were made by communicating with the families of the children, and the temperament types of the children were tried to be determined as a result of the observations of the classroom teachers for about two years. First of all, the students were observed by the teacher in various lessons.

In Free Activity classes, various creative drama activities were carried out in order for the child to act freely and observe his behavior in a natural environment. Thanks to the creative drama activities, the child develops the use of body language and easily gets the opportunity to express his feelings and thoughts both verbally and physically. Since creative drama activities also enable the child to express himself comfortably, the child's temperament characteristics can be observed easily during such activities. When a child's behavior is most natural, it is when he is playing. For this reason, observations were made by playing various games by the classroom teacher in Physical Education and

Game lessons. The interview questions used for the analysis of the data were examined by experts in the field and it was determined that the questions were aimed at determining the temperament types.

Various scenario questions were prepared to determine the child's feelings. For example, with the question "Do you like to produce new games?", the creativity of the child can be questioned. It is an obvious fact that a child's temperament cannot be determined by considering only his behavior at school. For this reason, parent visits were made by the classroom teacher to make interviews with the families on the days when the child was also at home. During these visits, the questions asked to the child before were directed to the family this time. It has been found that the answers given by the family and the answers given by the child are almost compatible with each other.

### Findings

Some questions about the interviews with the students and the answers given by the students are as shown in the tables below.

**Table 3**

*Some Questions and Student Answers*

<b>Question</b>	<b>Answers Received</b>	<b>Students Codes</b>
<b>Does it make you happy to be the person who attracts the most attention in the environments you enter?</b>	Yes, I would be very happy	S1, S2, S3, S4, S8, S11, S13
	No, I would be unhappy	S5, S7, S10, S14
	I am ashamed	S6, S9, S12
	No, I'm embarrassed and scared	S14
<b>Do you think the rules should always be followed?</b>	Yes, it must be obeyed	S1, S2, S5, S6, S8, S9, S10, S11, S14
	It must always be obeyed.	S3, S7
	It must be strictly adhered to	S13
	Sometimes	S4, S12
<b>Do you like to create new games?</b>	Yes	S1, S2, S4, S8, S9, S11, S12, S13
	No	S5, S7, S10, S14
	Yes, I also love to create new toys.	S3, S11
	Sometimes	S6

It has been observed that students with high self-confidence and who like to receive attention gave answers such as "I would be very happy" to the question "Will it make you happy to be the person who attracts the most attention in the environments you enter", while students with low self-confidence and shy give answers such as "I would be unhappy". While some children are very happy to be the center of attention, some children do not like this situation. In the Nine Types of Temperament Model, DTM3 is a person who is self-confident, energetic, attaches great importance to their image and appearance, and wants to have characteristics that will arouse influence and admiration in their environment, according to the DTM3 Temperament Type. It can be said that students who like to be the center of attention and do their best for this cause may have NTM3 temperament type.

It was observed that the students throughout the class answered "yes" to the question "Should the rules always be followed?" It can be said that students who give the answer "it should definitely be followed" or "it should always be followed" are strictly adhered to the rules and it can be said that they have NTM1 Perfection-Seeking Temperament Type according to the Nine Types Temperament Model. Individuals with NTM3 Temperament Type are generally very sensitive about their duties and try to fulfill them perfectly. They are very reluctant to do the wrong thing or to leave something missing, in which case they immediately criticize themselves. They take great care to be a just and

trustworthy person. In addition to all these, they show strict adherence to the rules of the society they belong to.

It was observed that the students throughout the class gave answers such as "yes", "I like it very much" to the question "Do you like to produce new games". Two students showed that they are open to productivity and innovation by saying that they produce new toys with waste materials at home. It can be said that for students who show their productivity, they have similar characteristics to NTM7 Temperament Seeking the Pleasure of Discovery from the Nine Types of Temperament Model. Individuals with this temperament are adventurers who get tired of doing the same things quickly and like innovations and changes. They are optimistic, practical and solution-oriented in the face of problems. Imaginations are very wide.

A number of interviews were conducted to determine the personalities and temperaments of children, various interviews were made by communicating with the families of the children, and as a result of the observations of the classroom teachers for about two years, the temperament types of the children were tried to be determined, and the student-based results were examined. The temperament of the answers given by some students in the interviews, together with the question tables, is as follows.

**Table 3**

*Examples of the Answers Given by Some Students according to the Temperament Model*

<b>Questions</b>	<b>Students</b>	<b>Student answer</b>	<b>Temperament Code</b>
<b>1. Would it make you happy to be the person who attracts the most attention in the environments you enter?</b>	S1	yes i would be very happy	NTTM3
<b>2. What do you do in a subject that you think is unsuccessful in school?</b>	S2	I'm so sorry, I work hard to achieve	NTTM1
<b>3. Are you the one who decides on matters that concern you at home?</b>	S3	Yes, I decide.	NTTM3
<b>4. Do you think the rules should always be followed?</b>	S4	Sometimes, it cannot be obeyed.	NTTM7
<b>5. Do you get into an argument with your friends about something you can't agree with?</b>	S5	I'm sorry to argue	NTTM9
<b>6. What kind of person are you according to you? Can you comment on your personal characteristics?</b>	S6	Good, quiet, timid	NTTM4
<b>7. What do you do when someone new comes to your grade?</b>	S7	I do nothing	NTTM9
<b>What would you do if you saw a friend crying in your 8th grade?</b>	S8	I help him	NTTM8
<b>9. How do you greet your friends' jokes?</b>	S9	I don't like jokes	NTTM6
<b>10. Do you love to play with your friends?</b>	S10	Yes, I play house the most	NTTM5
<b>11. Do you like to be the one who starts the games?</b>	S11	Yes	NTTM3
<b>12. Are you good at determining the rules of the game?</b>	S12	Yes	NTTM8

<b>13. Can you do your homework on time, do you have any homework left for the last day?</b>	S13	Sometimes I leave it to the last day	NTTM7
<b>14. Do you like to create new games?</b>	S14	No	NTTM4
<b>15. Do loud arguments affect you?</b>	S2	Yes I'm scared and I'm crying	NTTM1
<b>16. How much do you enjoy listening to your friends?</b>	S4	Some	NTTM7
<b>17. Do you like having your friends listen to you?</b>	S5	I don't like to talk	NTTM9
<b>18. Do you get bored in games until it's your turn?</b>	S13	yes I'm bored	NTTM7
<b>19. Do you like classroom games or garden games more?</b>	S9	I like garden games more	NTTM6
<b>20. How do you feel when you can't see a member of your family after school?</b>	S1	I don't feel a thing, I go home by myself	NTTM3

As a result of the interviews and observations, Student 1 coded student; In general, he is success-oriented, very ambitious and self-confident. He tries to be popular in the environments he enters and to win the admiration of his surroundings. He adapts the accepted values and images of his environment to himself very quickly and takes on the color of the environment. He is very competitive and competitive because he is very ambitious. Since he cannot digest defeat and failure, he may spend hours trying to be successful. It focuses on its goal, tries to reach the result in the most practical way by following the rules. He may try every way to be successful, popular and popular, and may resort to cunning acts from time to time for his own interests. It can be said that the student has NTM3 Admirable Self Image Seeking Temperament Type which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, Student 2 coded student; In general, he is success-oriented, very ambitious and self-confident. He tries to be popular in the environments he enters and to win the admiration of his surroundings. He adapts the accepted values and images of his environment to himself very quickly and takes on the color of the environment. He is very competitive and competitive because he is very ambitious. Since he cannot digest defeat and failure, he may spend hours trying to be successful. It focuses on its goal, tries to reach the result in the most practical way by following the rules. He may try every way to be successful, popular and popular, and may resort to cunning acts from time to time for his own interests. It can be said that the student has NTM1 Perfection-Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, Student 3 coded student, in terms of his general structure; Success oriented, very ambitious and self-confident. He tries to be popular in the environments he enters and to win the admiration of his surroundings. He adapts the accepted values and images of his environment to himself very quickly and takes on the color of the environment. He is very competitive and competitive because he is very ambitious. Since he cannot digest defeat and failure, he may spend hours trying to be successful. It focuses on its goal, tries to reach the result in the most practical way by following the rules. He may try every way to be successful, popular and popular, and may resort to cunning acts from time to time for his own interests. It can be said that the student has NTM3 Admirable Self Image Seeking Temperament Type which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 4; in general, he is a calm, harmonious and mild child. It is relatively slow in movement and reactions. He does not like

unrest at all, has a conciliatory, peaceful and accepting nature. He is very fond of his sleep, eating, resting, in short, his comfort. He especially avoids conflicts and fights. Generally, he obeys the preferences and decisions of those around him and tries to be in harmony with those around him. Although he has no difficulty in establishing relationships, he can be shy in crowded and social situations. Although he is generally very calm and compliant, he is very stubborn when he is forced to do something he does not want. He may show the anger he has silently accumulated in the form of sudden outbursts of anger, although rarely. It can be said that the student has NTM7 Temperament-Seeking Temperament Type, one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, Student 5 coded student; as of its general structure, it is focused on trust and safety. He does not stand out much until he feels safe in new environments. He is very cautious when he is with people he does not trust or that he has just met. He always tries to be cautious. Pays attention to follow the rules. He takes care to adapt to those around him. It gives importance to cleanliness and order. It is very inquisitive. He thinks about all kinds of possibilities, positive and negative. It may be difficult to make a decision alone. Often in such situations, she seeks approval from an adult she trusts. In the face of uncertain situations, they worry and worry relatively quickly compared to their peers. It can be said that the student has NTM9 Sensory-Movemental Comfort-Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 6; as of its general structure, it is focused on trust and safety. He does not stand out much until he feels safe in new environments. He is very cautious when he is with people he does not trust or that he has just met. He always tries to be cautious. Pays attention to follow the rules. He takes care to adapt to those around him. It gives importance to cleanliness and order. It is very inquisitive. He thinks about all kinds of possibilities, positive and negative. It may be difficult to make a decision alone. Often in such situations, she seeks approval from an adult she trusts. In the face of uncertain situations, they worry and worry relatively quickly compared to their peers. It can be said that the student has NTM4 Temperament Type Seeking the Meaning of Emotions, one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, Student 7; in its general structure, it is focused on trust and safety. He does not stand out much until he feels safe in new environments. He is very cautious when he is with people he does not trust or that he has just met. He always tries to be cautious. Pays attention to follow the rules. He takes care to adapt to those around him. It gives importance to cleanliness and order. It is very inquisitive. He thinks about all kinds of possibilities, positive and negative. It may be difficult to make a decision alone. Often in such situations, she seeks approval from an adult she trusts. In the face of uncertain situations, they worry and worry relatively quickly compared to their peers. It can be said that the student has NTM9 Sensory-Movemental Comfort-Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 8; in its general structure, it is focused on trust and safety. He does not stand out much until he feels safe in new environments. He is very cautious when he is with people he does not trust or that he has just met. He always tries to be cautious. Pays attention to follow the rules. He takes care to adapt to those around him. It gives importance to cleanliness and order. It is very inquisitive. He thinks about all kinds of possibilities, positive and negative. He can decide alone. Often in such situations, she seeks approval from an adult she trusts. In the face of uncertain situations, they worry and worry relatively quickly compared to their peers. It can be said that the student has NTM8 Absolute Power Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 9; in terms of his general structure, he is a child who is restrained in his behavior, who pays attention to the right thing and how it should be done. It attaches great importance to cleanliness, is meticulous and organized. He takes great care to act and behave in accordance with the rules. It pays great attention to fulfilling its responsibility fully and completely. He feels more comfortable in systematic, planned and programmed environments. When something is wrong, inaccurate, or missing, it becomes very uncomfortable and can quickly get tense. He is very careful not to do injustice and can quickly get angry when he sees someone being treated unfairly. It can be said that the student has NTM6 Intellectual Calmness Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 10; in terms of its general structure; He is very friendly, loving and relationship oriented. He always expects love, attention and even unlimited closeness from his surroundings, and makes a special effort for this. He is friendly, he can start a relationship and mingle with anyone right away. He expresses his feelings very easily both verbally and with gestures and movements. He is very helpful and can share what he has with others without thinking. He is immediately affected by the troubles of others and gets upset. When he does not get the attention and love he expects, he is immediately taken away, gets offended and cries easily. If their requests are rejected, they can be emotionally broken, persistent and fixated. He does not like to argue and is in favor of following the rules. It can be said that the student has NTM5 Temperament Type, which is one of the Nine Types of Temperament Model types, Seeking to Reach the Meaning of Knowledge.

As a result of the interviews and observations, the student with the code of Student 11; in terms of its general structure; Success oriented, very ambitious and self-confident. He tries to be popular in the environments he enters and to win the admiration of his surroundings. He adapts the accepted values and images of his environment to himself very quickly and takes on the color of the environment. He is very competitive and competitive because he is very ambitious. Since he cannot digest defeat and failure, he may spend hours trying to be successful. It focuses on its goal, tries to reach the result in the most practical way by following the rules. He may try every way to be successful, popular and popular, and may resort to cunning acts from time to time for his own interests. It can be said that the student has NTM3 Admirable Self Image Seeking Temperament Type which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 12; In general, he is a confident, brave and fearless child. She wants to manage and direct those around her. He does not particularly like to stand behind his friends, and can immediately come forward and lead them. He does not hesitate to show his physical energy and power. It is clear, determined and assertive, and does not easily relinquish its claim. Not being able to do something, being inadequate and powerless is very uncomfortable. He is protective, possessive and generous to those he loves. May react very harshly to limitation and suppression. He gets angry quickly, experiences anger intensely and violently. He does not hesitate to fight to protect himself and those around him. It can be said that the student has NTM8 Absolute Power Seeking Temperament Type, which is one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 13; In terms of his general nature, he is a child who is restrained in his behavior and pays attention to the right thing and how it should be done. It attaches great importance to cleanliness, is meticulous and organized. He takes great care to act and behave in accordance with the rules. It pays great attention to fulfilling its responsibility fully and completely. He feels more comfortable in systematic, planned and programmed environments. When something is wrong, inaccurate, or missing, it becomes very uncomfortable and can quickly get tense. He is very careful not to do injustice and can quickly get angry when he sees someone being treated unfairly. It can be said that the student has NTM7 Temperament-Seeking Temperament Type, one of the Nine Types of Temperament Model types.

As a result of the interviews and observations, the student with the code of Student 14; in terms of its general structure; has an intense emotional, naive and very sensitive nature. He is sincere, friendly and compassionate in his dealings. He is relatively introverted and particularly enjoys spending time alone, even if he establishes warm relationships in his social relationships. It has a deep and creative emotional world of its own. He has a natural aesthetic perception that will make his activities and products different from those of his friends. He may be easily hurt, but he seeks to be understood rather than openly expressing his feelings. Rude behavior is very quickly and deeply affected by conflict or loud arguments. When he feels that he is not understood, he can display gruff and rebellious attitudes. It can be said that the student has NTM4 Temperament Type Seeking the Meaning of Emotions, one of the Nine Types of Temperament Model types.

### **Discussion, Conclusion and Recommendations**

According to Aksoy (2008), the inadequacy of administrative and financial support, the lack of experience of pre-service teachers in these schools during their education, and the fact that the

teachers working in these schools are left alone with the problems increase the impossibilities of the students who have no choice but to receive education in multigrade classes. In addition, in the interviews with the classroom teachers, it was determined that the primary school teacher candidates' self-efficacy levels of being a teacher in multigrade classes were low (Erbaş & Karakaş, 2021). It can be expected that the trainings with the temperament model will be more effective against such negative situations. In addition to these, it has been observed that positive features such as developing a sense of cooperation in students, encouraging socialization through group work, teaching to take responsibility and gaining leadership awareness are taught in multigrade classes (Bilir, 2008).

The Nine Types of Temperament Model (NTTM) is a model that focuses on understanding the origin of human behavior and places the concept of temperament at the center of individual differences. According to the Nine Types of Temperament Model, every person is born with one of nine different temperament types. All of these nine temperament types have their own quest, orientation and motivation. Our innate temperament type is very effective on our "behavior, emotions and thoughts". So much so that our temperament type is the most fundamental factor that determines how we perceive life, how we interpret events and situations, how we relate, our decisions and orientations. Nine Types of Temperament Patterns; It is a scientific and original human recognition model that deals with human existence as a whole physically, psychologically and spiritually, can determine its positive potentials and risky features open to negativity, thus individual differences by going down to its structural and functional resources, and draws its strength from its universality without neglecting locality. Temperament and Talent Based Education approach developed based on the Nine Types of Temperament Model; it makes the individual mature in terms of social skills, value awareness, global and universal life skills in terms of personality development. At the same time, it supports the individual to reveal their mental abilities in the highest quality. Thus, besides producing science, art and ideas at a universal level, it makes it possible to raise mature individuals in terms of human qualities and understanding.

According to the researchers, it is important to examine the changes within the individual as well as the differences between individuals (Jeronimus, et al, 2018; Mroczek & Spiro, 2003). According to NTTM, differences between individuals are basically explained by nine different temperament types. However, there are also differences between individuals of the same temperament type due to the wing temperament effect. In addition, each individual differs in personality appearance under the influence of internal and environmental factors. In addition, individuals differ in terms of their characteristics and severity in stressful and comfortable situations. Thus, NTTM can evaluate both interpersonal differences and the uniqueness of the individual together with the nine temperament categories it proposes. In other words; According to NTTM, each individual is associated with four temperament types throughout his life. 1) Basic temperament 2) Affected wing temperament 3) Temperament under stress 4) Temperament in relaxed state (Yılmaz, 2010). NTTM focuses on understanding individuals by bringing a holistic approach to the behavioral, emotional and cognitive aspects of human nature. It takes into account the uniqueness of the individual while developing towards temperament, personality and Individuality in determining the differences between individuals based on temperament in a consistent manner. Also in very relaxed and stressful situations, possible changes in individual behavior become obvious. NTTM correctly evaluates the concepts of temperament and personality.

Tubman et al. (2010) states that some temperament structures from childhood to early adulthood may change according to the environment and geographical features. Lerner (1982), on the other hand, emphasized in his research that better psychosocial adjustment can be achieved if the individual's temperament is compatible with environmental demands. In addition to this perspective, we see the temperament type of the individual as the primary search. Accordingly, it has been determined that the ability of the environment to respond to individual needs increases psychosocial compliance. For example, according to the main search for an individual with NTM5 temperament; can read and work alone, is not forced to socialize, but shares a common interest. The individual will be better off when an environment is provided for the individual to come together to exchange information.

In our research conducted with the case study method, the subject of Examining the Multigrade Village School Students according to the 9 Type Temperament Model (NTTM) was investigated. The

reason for choosing the case study is that it is a qualitative research method that provides in-depth information. Yıldırım and Şimşek (2011) define qualitative research as a research in which qualitative data collection methods such as observation, interview and document analysis are used, and a qualitative process is followed to reveal perceptions and events in a natural environment in a realistic and holistic way. This case study based research allows students (participants) to examine in depth a phenomenon or event that the researcher cannot control, based on their thoughts about the lesson and also their how and why questions (Yıldırım & Şimşek, 2011). In case studies, data is usually obtained through observation, interview, and documentation, and includes an intense, holistic description and analysis of a single delimited episode (Merriam, 2009). Case study; It is a method in which a single situation or event is examined in depth longitudinally, data is collected systematically and what is happening in the real environment is looked at. With the results obtained, it reveals why the event occurred in that way and what should be focused on in future studies (Davey, 1991).

The fact that teaching methods that include the constructivist approach, which has been postponed for various reasons, are not included in the classrooms, are not suitable for the children in the development of the age, and especially cause the primary school students to not grow up according to their tendencies. It has been observed that the education in the village schools with combined classes, where they are educated together, takes place in more difficult conditions than in the detached classes. The Nine Types of Temperament Model has been examined in detail in our research and it has been determined that this model is suitable for the understanding of education required by our age.

According to the research conducted on primary school students in a village in the South-eastern Anatolia Region of Turkey, the reflection of the models in the Nine Types of Temperament Model on the students was examined. As long as each student is evaluated and guided with a suitable temperament model, the future education life will be built on a more solid foundation. It can be suggested that education should be given considering the temperaments of the students, especially in terms of obtaining higher quality efficiency in the education of primary school students. In addition, taking into account the variables such as individual learning methods, multiple intelligence theory and learning styles that take into account the individual differences of the students in the teaching process will be effective in the quality of education.

## References

- Anras, B. (2020). Mesleğe yeni başlayan öğretmenlerin ilk okuma yazma öğretimi sürecinde karşılaştıkları güçlükler. *Okuma Yazma Eğitimi Araştırmaları*, 8(1), 51-67. <https://doi.org/10.35233/oyea.712690>
- Aksoy, N. (2008). Multigrade schooling in Turkey: An overview. *International Journal of Educational Development*, 28(2), 218-228.
- Bilir, A. (2008). Birleştirilmiş sınıflı köy ilköğretim okullarında öğretmen ve öğretim gerçeği. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 41(2), 1-22.
- Binbaşıoğlu, C., (1999). *Birleştirilmiş Sınıflarda Öğretim*, Anı Yayıncılık.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2014). *Bilimsel araştırma yöntemleri*. PegemA Akademik Yayıncılık.
- Cho, S. C., Hwang, J. W., Lyoo, I. K., Yoo, H. J., Kin, B. N., & Kim, J. W. (2008). Patterns of temperament and character in a clinical sample of Korean children with attention-deficit hyperactivity disorder. *Psychiatry and Clinical Neurosciences*, 62(2), 160-166.
- Çınar, İ. (2004). Birleştirilmiş Sınıflı İlköğretim Okullarında İlkokuma Yazma Öğretimine İlişkin Bir Araştırma. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 5(7), 31-45.
- Costa, Jr. P.T., & McCrae, R. R. (1994). Set Like Plaster? Evidence for The Stability of Adult Personality. Heatherton TF, Weinberger JL (Eds) *Can Personality Change?* APA PsycBooks. <https://doi.org/10.1037/10143-002>

- Davey, L. (2009). The application of case study evaluations. (Çev: Tuba Gökçek). *Elementary Education Online*, 8(2), 1-3. <https://dergipark.org.tr/tr/pub/ilkonline/issue/8598/107042>
- Erbaş, Y. H., & Karakaş, H. (2021). Birleştirilmiş sınıflarda öğretmen olmak: Sınıf öğretmenleri ile yapılan görüşme etkinliklerinin sınıf öğretmeni adaylarının öz-yeterlik algılarına etkisi. *Bolu Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 21(2), 481-496. <https://dx.doi.org/10.17240/aibuefd.2021.21.62826-913625>
- Hancock, R. D., & Algozzine, B. (2006). *Doing case study research*. Teachers College Press.
- Jeronimus, B. F., Riese, H., & Ormel, J. (2018). *Environmental influences on neuroticism in adulthood: A systematic review*. In book: Environmental influences on neuroticism: A story about emotional (in) stability, Chapter 4, 75-131. <https://doi.org/10.13140/2.1.3452.2407>
- Lerner, V. J. (1982). The role of temperament in psychosocial adaptation in early adolescents: A test of a "goodness of fit" model. *The Journal of Genetic Psychology: Research and Theory on Human Development*, 143(2)
- McAdams, D. P. (2009). *The person: An introduction to the science of personality psychology*. (5th Ed.) Wiley Publishers
- Merriam, S. B. (2009). *Qualitative research: A guide to design and interpretation*. JosseyBass.
- Mroczek, D. K., & Spiro, A. (2003). Modeling Intraindividual change in personality traits: findings from the normative aging study. *Journal of Gerontology*, 58(3), 153-165. <https://doi.org/10.1093/geronb/58.3.p153>
- Schultz, D. P., & Schultz, S. E. (2015). *A history of modern psychology*. Cengage Learning.
- Selçuk, Z., & Yılmaz, E. D. (2015). *Öğretmen benim: Dokuz tip mizaç modeline göre öğretmen-öğrenci ilişkileri*. Elma Yayınevi.
- Tubman, J. G., Lerner, R. M., Lerner, J. V., & Eye, A. (2010). Temperament and adjustment in young adulthood: A 15-year longitudinal analysis. *American Journal of Orthopsychiatry*, 62(4), 564-574. <https://doi.org/10.1037/h0079367>
- Yıldırım, A., & Şimşek, H. (2011). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin Yayıncılık.
- Yılmaz, E. D., Gençer, A. G., Aydemir, Ö. (2011). Tarihsel Bir Sistemin Yeni Bir Mizaç Modeline Evrimi: Dokuz Tip Mizaç Modeli. *Anadolu Psikiyatri Dergisi*, 12(2), 165-166.
- Yılmaz, E. D., Gençer, A. G., Aydemir, Ö., Yılmaz, A., Kesebir, S., Ünal, Ö., Örek, A., & Bilici, M. (2014). Dokuz Tip Mizaç Ölçeğinin Geçerlik ve Güvenirliği. *Eğitim ve Bilim Dergisi*, 39(171).
- Yılmaz, E. D., Gençer, A. G., Ünal, Ö., & Aydemir, Ö. (2014). Enneagram'dan Dokuz Tip Mizaç Modeli'ne: Bir Öneri. *Eğitim ve Bilim Dergisi*, 39(173), 396-416.
- Yin, R. (1984). *Case study research: Design and methods*. Sage Publications.