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## TEACHING PRIMARY CLASS STUDENTS TO SOLVE TIME PROBLEMS

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### Abstract

Teaching time to elementary school students is important because this knowledge is useful for them in terms of time management. This research aims to describe the process of teaching time to students in elementary schools in Uzbekistan. This is a case study research (descriptive study case) where the researcher explains the Focus on providing a detailed and accurate description of the case, including the background, context, and outcomes. The data collection method used was observation. The researcher made observations during classroom learning when the teacher explained time material to students in elementary schools in Uzbekistan. The results of the research showed that the teacher succeeded in explaining the time material by providing lots of story problem practice. The conclusion obtained from this research is that story questions are an effective medium for teaching time material to students in elementary schools in Uzbekistan.

**Keyword:** proportional, magnitude, speed, amount, time of movement

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## INTRODUCTION

Teaching time to elementary school students is crucial for several reasons: (1) **Foundation for Daily Life:** students need to understand the concept of Time Management: Understanding time helps children manage their daily routines effectively. It allows them to follow schedules, such as school timetables, homework sessions, and extracurricular activities. It also helps student to understand self-Reliance: By learning to read clocks and understand time, children become more self-reliant and independent in managing their own activities and responsibilities (Bergman, 2023). (2) **Cognitive Development:** it teaches student Mathematical Skills. Learning to tell time involves counting, understanding the passage of time, and working with fractions (like quarters of an hour), which supports overall mathematical reasoning. It also teaches students about Conceptual Understanding.

Time helps children develop an understanding of abstract concepts, such as the passage of minutes and hours, which are not immediately tangible but are crucial for grasping more complex ideas later (Gravesen, 2018). (3) **Life Skills:** it teaches students to understand Planning and Scheduling. Understanding time helps children plan and organize their tasks. It teaches them how to estimate how long tasks will take and how to prioritize activities. It also teaches students about Punctuality. Learning to tell time fosters punctuality and teaches children the importance of being on time for various commitments, from school to appointments (Hsieh, 2023). (4) **Social and Emotional Benefits:** it helps students to understand Structure and Routine. A good grasp of time helps children adhere to routines, which can be comforting and reduce anxiety. Knowing what to expect and when can help them feel more secure. It also helps students to understand Coordination with Others.

Understanding time allows children to coordinate with peers and family members, improving their ability to work in groups and engage in social activities effectively (Rudzinska, 2024). (5) **Academic Achievement:** it helps students to understand Test Taking. Many academic tasks and tests involve time management. Being able to understand and manage time helps children perform better in timed tests and assignments. It also helps students to understand Instruction Following. Many classroom activities and instructions are time-based. Children who understand time can follow these instructions more effectively and complete tasks within given time frames (Thomas, 2023). (6) **Cultural and Practical Understanding:** it helps students in daily Life Integration. Time is a fundamental part of everyday life and cultural practices.

Knowing how to read and understand time is essential for participating fully in community and cultural activities. It also helps students to understand about Media and Technology. Many aspects of media and technology, including TV schedules, digital devices, and apps, involve time. Understanding these elements is important for effective use and comprehension (van Bommel, 2023). (7) **Safety and Responsibility:** it helps students understand Awareness. Knowing how to tell time helps children be aware of their environment and the timing of various events, which is important for personal safety and responsible behavior. It also helps students to understand Emergency Situations. In emergency situations, understanding time can be crucial for responding appropriately and following instructions (Vivas-Moreno, 2021).

Overall, teaching time equips children with essential skills that impact their daily lives, academic success, and personal development. It lays the groundwork for their ability to

navigate a time-oriented world effectively. Based on the data above, researcher conduct this research to describe the process of teaching time in elementary school in Uzbekistan.

## **METHOD**

This research is a case study research (descriptive case study) where the researcher provides a description of the research object, namely the learning process with time material in elementary schools. The data collection method used is observation. As support, researchers also carry out literature reviews regarding the material being researched. Various materials are given in various literatures on learning time measurement units for elementary school students. During the research, extensive analysis of the literature was carried out, using the experimental method to form children's understanding of nature, perceptions of animate and inanimate objects in nature.

## **DISCUSSION AND RESULTS**

In this article, an effective method of teaching elementary school students to solve time-related problems is studied. Today, it is very important to teach primary school students to solve time problems. By learning the concepts of movement between objects in nature, time traveled and time of movement, they will have the ability to think independently and widely about nature.

We should not forget that the foundation of our future is created in the fields of knowledge, in other words, the future of our people depends on the education and upbringing of their children today.

For this, every parent, teacher, and coach needs to see a person first in the person of each child. Based on this simple requirement, we should accept that the main goal and task of the field of education should be to raise our children to be full-fledged people who have the ability to think independently and broadly. This requires the harmonious conduct of education and training (Abdullayeva, 2010).

The type of problem that children encounter before and more often than others is the problem of finding the fourth proportional quantity. This type of problem includes three related (proportional) quantities, for example: 1) price, cost and quantity; 2) speed, distance traveled and time of movement; work, working hours and the amount of details prepared. In this case, two values are given for one size (for example, the quantity: 6 notebooks were purchased once, and 14 notebooks were purchased the second time); one value is given for the second quantity, and the second one must be found (example: the value of the first purchase is 12 tyins, how much did you pay the second time?); the values of the third dimension are not given, but they are said to be the same (in our example, the value of the notebooks is not shown, but it is the same). Thus, 3 quantities and 3 values of these quantities are introduced into the problem (Bikboyeva, 1996).

The following methods are used to solve problems related to finding the fourth proportional quantity: 1) the method of rounding to unity; 2) the method of inverting to unity; 3) ratio method (Jumayev, 2006).

Let's look at each of these methods.

The method of correcting to the unit consists in first finding out the value (price) of one unit of one of the proportional amounts (goods, work, etc.), and then finding out how much the amount indicated in the condition is worth. In this case, two given values are brought to unity. For example, let's consider the following issue: "The worker received 42 soums for 6 days from the same daily wage. How many soums does this worker get for 25 days on account of that salary?"

Masalani jadval tarzida yozamiz:

1 day's salary	Working hours (days)	Salary (soums)
The same	6	42 ?
	25	

In this matter, both values of the amount of time are known, one value of the wage is unknown, and the wage paid per day is the same. When solving by the method of correcting to the unit, we first find the price of the first unit of size or how much it costs, that is, the daily income of the worker, and then we calculate how many soums the worker receives in 25 days (Abdullayeva, 2011).

Children solve this problem by dividing and find the worker's salary for one day:  $42 : 6 = 7$  (souv). After that, they multiply and find the worker's salary for 25 days:  $7 * 25 = 175$  (soums).

Answer: the worker receives 175 soums in 25 days.

Problem: "The master prepares 60 parts in 6 hours. If the craftsman works at the same level, how long will it take him to make 80 such details?"

We write the problem in the form of a table:

1 hour's worth of work	Working time	Tailor made detail
Tailor made detail	6 hours	60
	?	80

It can be seen from the table that one value is given for time and two values are given for the number of prepared details. It is necessary to solve by the method of inverse unitization and bring the first quantity (time) to the unit, that is, it is necessary to know how many details can be prepared in 1 hour (Akhmedov, 2003).

Rounding method:

1) How long does the master make 1 part?

$6 \text{ hours} = 360 \text{ (minutes)}$

$360 : 60 = 6 \text{ (min)}$

2) How long will it take to make 80 parts?

$6 * 80 = 480 \text{ (minutes)}$

$480 \text{ minutes} = 8 \text{ hours}$

Method for inverting to unity:

1) How many details does the master make in 1 hour?  $60 : 6 = 10 \text{ (det.)}$

2) How many hours does the craftsman make 80 parts?  $80 : 10 = 8 \text{ (hours)}$ .

Elementary school students get acquainted with units of time measurement - seconds, minutes, hours, days, weeks, months, years, centuries or hundred years. They learn to express the calendar time interval in units of time, solve the problem of finding the elapsed time between

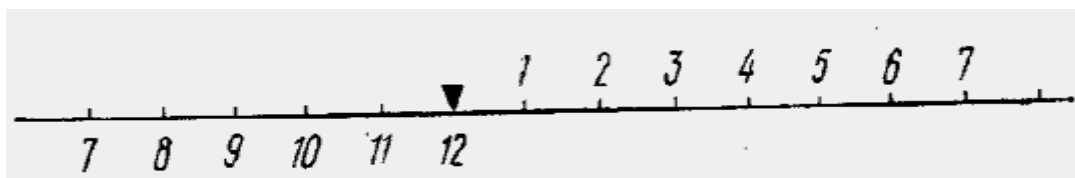
two events, as well as the problem of finding the elapsed time of previous and subsequent short-term events (within a few days or a year) (Azixodjayeva, 2003).

Children gradually get acquainted with units of time and at the same time use them to solve problems. After children are introduced to units of time measurement - year, month, week, they are given a question about expressing the time interval given in the calendar. After getting acquainted with the duration of the day, children should learn to express the time interval determined by calendar dates in days and hours. For example: "On December 25, the sun rises at 9 o'clock and sets at 4 o'clock. How many hours does this light day last?"

Solving is tracked by counting in miles per hour. From 9 o'clock to 12 o'clock  $12-9=3$  (hours) pass. 4 hours pass from 12 o'clock to 4 o'clock. From 9 in the morning to 4 in the evening,  $3+4=7$  (hours) will pass.

Let's create an inverse problem for this problem. On December 25, daylight will last 7 hours. On this day, the sun rose at 9 o'clock. What time does the sun set?

It is useful to follow the solution with an illustration



We mark the beginning of the count in the divided section and find:

$9 \text{ hours} + 7 \text{ hours} = 16 \text{ hours}$ . Counting until midnight is carried out until 12 o'clock in the afternoon, so it is necessary to calculate the time of sunset:  $16-12 = 4$  (hours) (Abdullayeva, 2010).

Answer: On December 25, the sun sets at 4 o'clock.

The second inverse problem: "On December 25, the length of the day is 7 hours. The sun sets at 4 o'clock, what time does the sun rise today?"

We will use the previous drawing to solve this problem. We define the end of the calculation as 4 hours and find:

1) How long does it take from sunrise to 12 noon?

$7-4=3$  (hours).

2) What time does the sun rise on December 25?  $12-3=9$  (hours).

After children get an idea of a 24-hour dial and become familiar with counting the time of day from 0 to 24 hours, the above problem is solved differently: 4 o'clock in the evening is expressed as  $12+4=16$  (hours). from 9 o'clock to 4 o'clock  $16-9=7$  (hours) pass. The solutions to the inverse problems are as follows: First problem:

$9+7=16$  (hours) Second problem: 1)  $4 + 12=16$  (hours)

2)  $16-7=9$  (hours) These solutions are so simple that they do not need an explanation (Bikboyeva, 1996).

## CONCLUSION

In conclusion, it is important to teach students an effective method of teaching elementary school students to solve time problems. With the help of these concepts, students are able to freely express their independent opinion about nature and learning in nature.

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