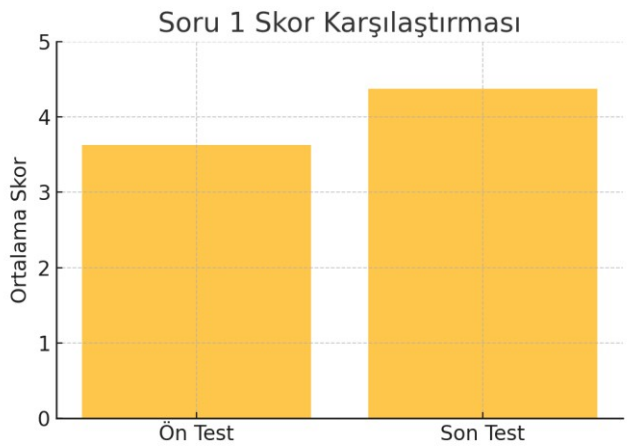
ROBOTICS AND CODING EDUCATION SURVEY ANALYSIS

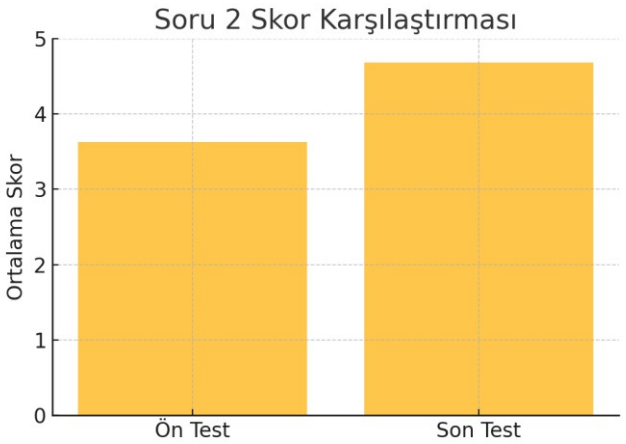
THIS REPORT IS BASED ON PRE-TEST AND POST-TEST RESULTS FOR ROBOTICS AND CODING EDUCATION.



QUESTION 1

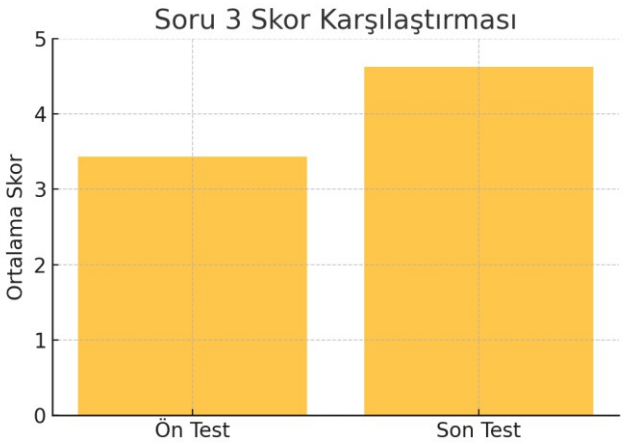
- Question: Robotics and coding education my interest has increased.
- Pre-test mean: 3.62
- Post-test mean: 4.38
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 2



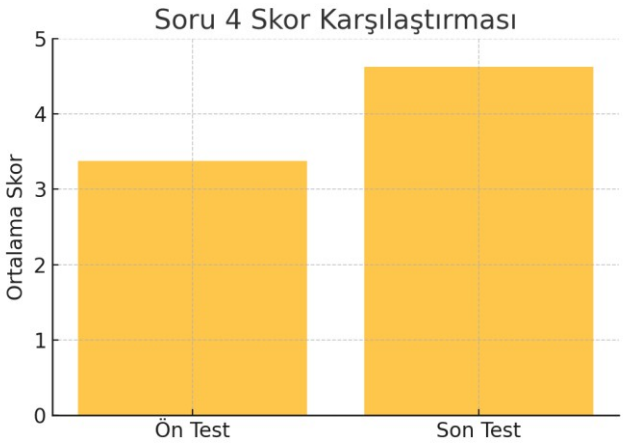
- Question: The materials provided during the training process were adequate.
- Pre-test mean: 3.62
- Post-test mean: 4.69
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 3



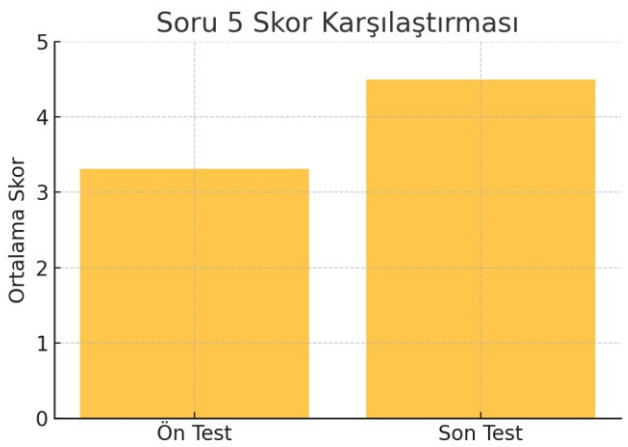
- Question: My skills in creating robotic projects have improved.
- Pre-test mean: 3.44
- Post-test mean: 4.62
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 4



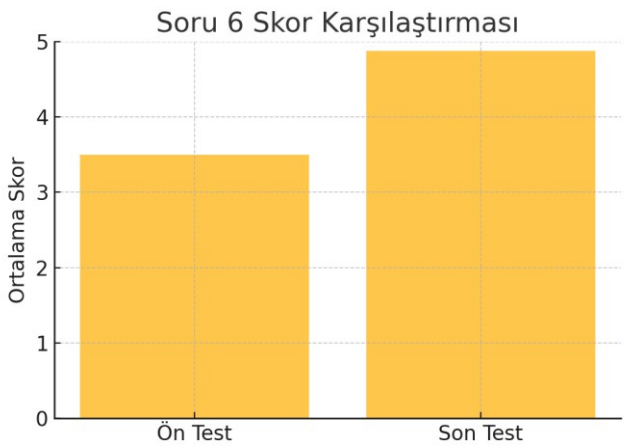
- Question: My knowledge about coding has increased.
- Pre-test mean: 3.38
- Post-test mean: 4.62
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 5



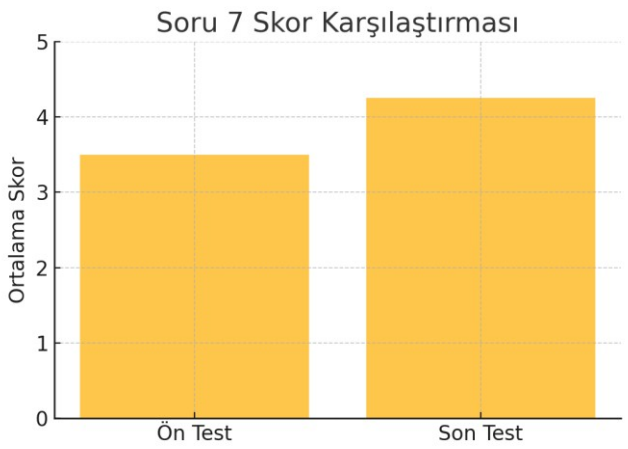
- Question: I had no difficulty in applying what I learned during the training.
- Pre-test mean: 3.31
- Post-test average: 4.50
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 6



- Question: This training will help you my development.
- Pre-test average: 3.50
- Post-test mean: 4.88
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 7

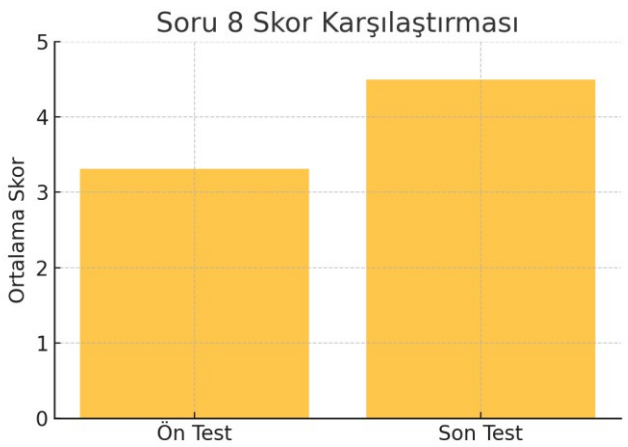


- Question: Methods and methods used in education
  techniques were effective.

- Pre-test average: 3.50
- Post-test average: 4.25

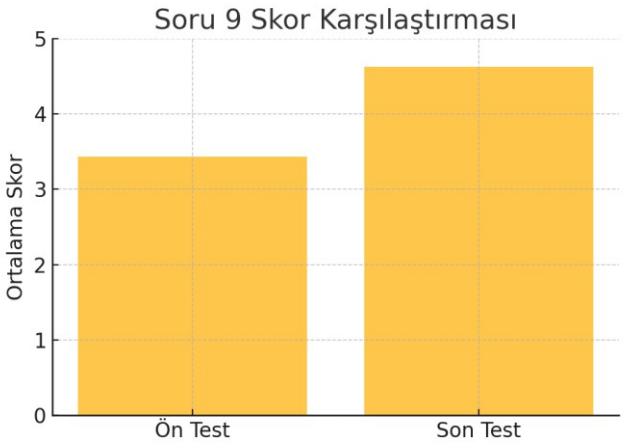
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
  has developed.

QUESTION 8



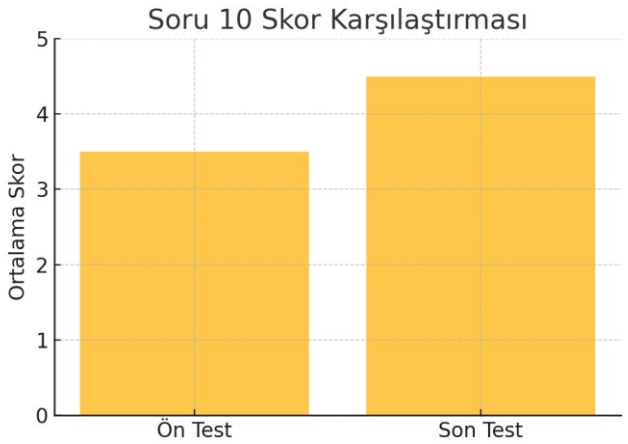
- Question: The duration of the training was sufficient for the learning objectives.
- Pre-test mean: 3.31
- Post-test average: 4.50
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 9



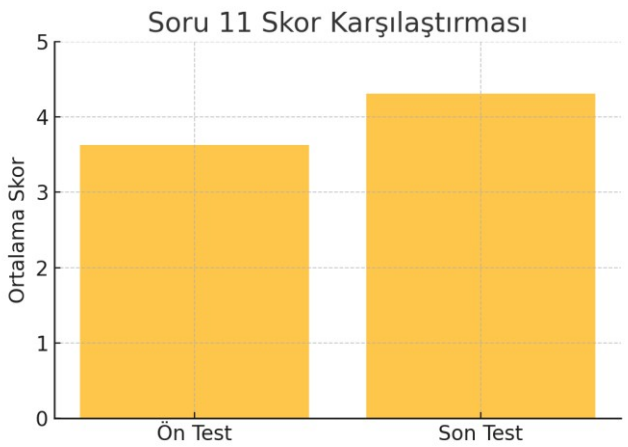
- Question: I was motivated during the training.
- Pre-test mean: 3.44
- Post-test mean: 4.62
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 10



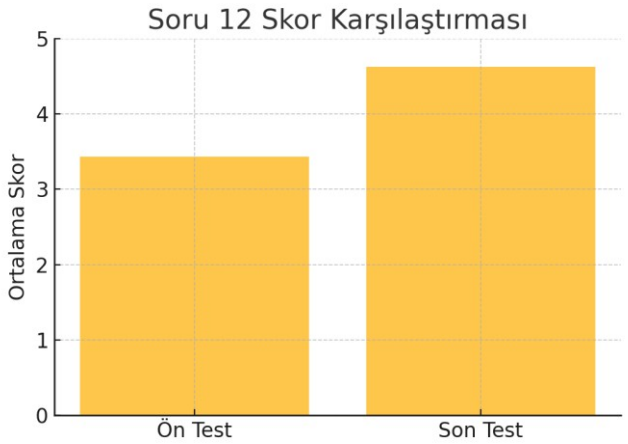
- Question: Recommend this training to others I'll do it.
- Pre-test average: 3.50
- Post-test average: 4.50
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 11



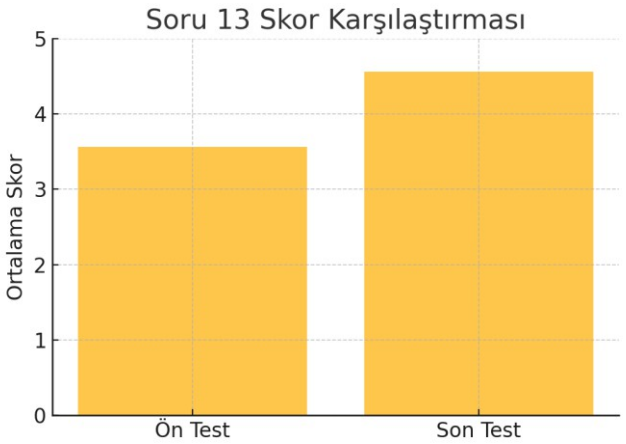
- Question: Basic principles of robotic systems components.
- Pre-test mean: 3.62
- Post-test mean: 4.31
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
  has developed.

QUESTION 12



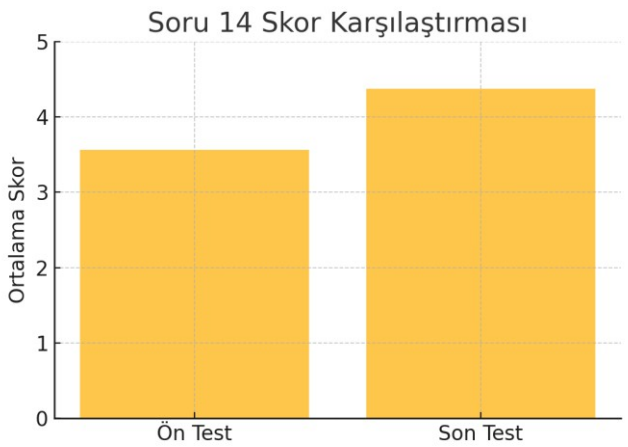
- Question: My ability to use robotic programming tools has increased.
- Pre-test mean: 3.44
- Post-test mean: 4.62
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 13



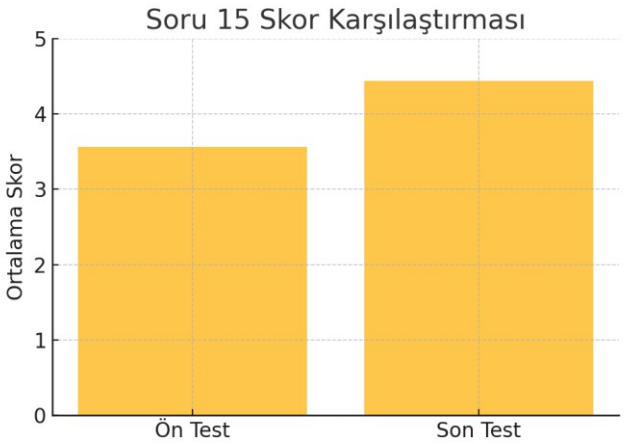
- Question: My ability to plan and manage robotic projects has improved.
- Pre-test average: 3.56
- Post-test average: 4.56
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 14



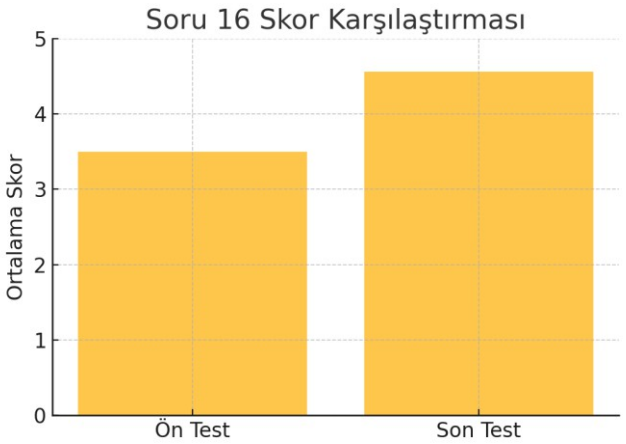
- Question: My problem solving skills were strengthened during the coding process.
- Pre-test average: 3.56
- Post-test mean: 4.38
- Analysis: For this question, the post-test results showed significant increase compared to the pre-test results. The training improved participants' skills and knowledge on this topic.
has developed.

QUESTION 15



- Question: Robotics and coding applications offer solutions that can be used in daily life.
- Pre-test average: 3.56
- Post-test mean: 4.44
- Analysis: For this question, the post-test results were compared with the pretest results.
  showed a significant increase according to the results. The training improved participants' skills and knowledge in this area.

QUESTION 16



- Question: Robotics and coding I learned in education
  I can use my knowledge in the classroom.

- Pre-test average: 3.50
- Post-test average: 4.56

- Analysis: For this question, the post-test results were compared with the pretest results.
  showed a significant increase according to the results. The training improved participants' skills and knowledge in this area.

GENERAL EVALUATION

- The pre-test and post-test results of the Robotics and Coding Training show that the training had a positive impact on the participants. Both the knowledge and skill levels of the participants increased significantly at the end of the training process.

- The post-test results revealed that the materials and methods used during the training were effective and the training objectives were achieved. It was observed that the participants' competencies increased especially in creating robotic projects, using coding tools and solving problems.

- This training not only contributed to the professional development of the participants, but also enabled them to integrate robotics and coding into the classroom environment. The training process is a valuable guide for the planning and implementation of future training programs.

ROBOTICS AND CODING EDUCATION EVALUATION

According to the evaluation report of the Robotics and Coding Training, the impact of this program on the participants was very positive in terms of both increasing their knowledge and improving their application skills. When the pre-test and post-test results were analyzed, a significant increase was observed in the participants' interest in robotics and coding during the training process. The significant increase in the post-test averages, especially in items such as "My skills in creating robotic projects improved" and "My knowledge about coding increased", shows that the training achieved its goals in terms of content and application. The fact that the participants found the materials used in the training process sufficient an important factor that contributed to the learning process.

The methods and techniques presented in the training enabled the participants to develop their knowledge and skills permanently, and this was supported especially by the participants' problem solving skills and their progress in coding processes. For example, the high post-test mean for the statement "My problem solving skills were strengthened during the coding process" indicates that the competencies acquired by the participants from this training were transformed into practical skills. In addition, the increase observed in items such as "My ability to plan and manage robotic projects has improved" reveals that the training was also effective on the participants in terms of strategic thinking and the ability to structure projects.

The fact that the knowledge acquired in the training can be applied in the classroom environment is another important finding that strengthens the connection of education with real life. The post-test results of the participants in the item "I can use the robotics and coding knowledge I learned in the training in the classroom environment" clearly support this situation. Moreover, it is seen that the training contributed not only to individual knowledge and skills but also to the professional development of the participants. For example, the very high post-test mean in the item "This training will be useful for my future professional development" emphasizes the long-term professional benefits of the training.

The results show that the training process offered a motivating atmosphere and the participants experienced a high motivation to learn during the training. The participants expressed their satisfaction with the training in the statements "I was motivated during the training" and "I would recommend this training to others". This that the training left a positive impression on the participants both in terms of content and the way it was implemented. In general, this training not only increased the knowledge level of the participants, but also valuable contributions to their daily lives and professional fields by enabling them to be more active in coding and robotics projects.

The findings suggest that the materials and methods used in planning such trainings are applicable in the future. Further optimization of the training duration and content can increase the impact of these trainings. In conclusion, this training model provided an effective learning experience in the field of robotics and coding and was a powerful tool in developing the professional and pedagogical skills of the participants. Future expansion and dissemination of such programs will enhance the success of technology and education integration.