



A Study on Opinion of Parents on Introducing Coding at School Level in Ranga Reddy District of Telangana State

Paripally Shankar

Department of Education, University College of Education, Osmania University, Hyderabad, Telangana, Member, NCTE-SRC, New Delhi, India.

ABSTRACT

Introduction: The use of computer programming is spread into schools worldwide in the 70s and 80s of the last centuries, but it disappeared from the educational landscape in the early 90s. With the development of visual programming languages such this movement has emerged again in recent years, as parents, at all educational levels and from different disciplines consider that the use of programming enhances learning in many subjects and allows students to develop important skills.

Objectives/Aim: The present investigation is taken up with aim to assess the opinion of parent's on introducing coding at school level in Ranga Reddy District.

Method: This investigation is employed by descriptive survey method.

Sample: Sample size of 100 drawn through simple random sampling.

Tool: A researcher developed tool was employed to gather data to study. This tool consists of 40 statements, where respondents are instructed to opt any options from Yes, Can't Say and No. Data analysis is done by using Descriptive including percentages, Mean & SD and inferential statistics including t-test and ANOVA were used.

Discussion: The study findings revealed that the majority of the responses (77.65%) unveils positive opinions of on introducing coding at school level in Ranga Reddy District. **Conclusion:** There is a significant difference in opinion of parent's on introducing coding at school level with regard to gender i.e., male and female of Ranga Reddy District.

Key Words: Computer Programming, Coding, Digital Learning, programming languages, Parents, Ranga Reddy District, Technology

INTRODUCTION

“Technology can become the “wings” that will allow the educational world to fly farther and faster than ever before—if we will allow it.”

Coding is the process of writing out steps for a computer to perform a task. Typically, coding is done using a programming language like Java or Python or JavaScript, which the coder uses to translate his or her ideas into words, phrases, and syntax that the computer understands. These instructions are also called “commands.” Coding is typically done as one critical step in the larger process of computer programming. Computer programming involves identifying a

problem or challenge, considering potential solutions, writing code that can enact those solutions, and then testing and revising the code to achieve the desired results. Coding also provides students with skills that apply across content areas. By learning to tell machines what to do, students engage in problem-solving and computational thinking, which apply to academic and professional disciplines across the board.⁶

The foundations laid in the early years will help the students to build the competencies in the area of AI data science and other disciplines.¹⁰ CBSE acknowledges the initiative by Microsoft India in developing this coding handbook for class VI teachers.⁹

Corresponding Author:

Dr. Paripally Shankar, Assistant Professor, Department of Education, University College of Education, Osmania University, Hyderabad, Telangana Member, NCTE-SRC, New Delhi, India; Mob: 9959443553; Email: shadiet@gmail.com

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Introducing coding and increasing exposure to technology at a young age will go a long way in helping the youth lead the way to a new world of innovation and creativity, thus, giving children the opportunity to set their own goals and reach new heights debarred of old teaching systems to pull them down.^{1,2,4} One of the prominent reforms announced in the NEP is the initiation of classes on coding for students from class 6 onwards.¹¹ Introducing coding and increasing exposure to technology at a young age will go a long way in helping the youth lead the way to a new world of innovation and creativity, thus, giving children the opportunity to set their own goals and reach new heights debarred of old teaching systems to pull them down.⁸

NEED AND SIGNIFICANCE OF THE STUDY

As parents are the most important feedback providers because their attitudes are influential on children's academic performances. Their involvement and support are considered the key factors that facilitate on effective implementation of coding education at schools. The study aims at validating parent's opinion on introduction of coding at school level in Ranga Reddy District. It is essential for parents to view their opinions on coding at school level, as it helps to bring better changes in the learning styles of their children's. As they want their children's to be excited about the many possibilities coding can unlock for themselves, for their communities and for society.⁷

REVIEW OF RELATED LITERATURE

Every review of the related researches chooses strong emphasis on the coding or programming among school students irrespective of their nation. Many researches focused on implementation of coding at school level.

Okal, G., Yildirim B. and Timur, S. (2020) found that coding has positive effect on 5th, 6th and 7th grade students.

Kong, Slu-cheung and Li, Robert and Kwok, Ron. (2018) found that parents have different perception on coding in P-12 students.

Young-Ho Seo and Jong.Hoon Kim (2016) found that coding improves computational thinking and creativity of elementary school students. Jens Bennedsen, Michael E Caspersen (2006) found that number of failure reasons on introducing coding.

Niloy Gupta, Tejovanth N, Preeti Murthy (2012) conducted research on little learning try creating: Interactive coding for Indian high schools and it is found that teaching coding at a high school level will be an asset to the learning environment

METHODOLOGY

In the present investigation "Descriptive Survey Method" is adopted to investigate into intended area of Research.

OBJECTIVES

The investigation is carried out to meet the following objectives.

1. To assess the opinion of parent's on introducing coding at school level in Ranga Reddy District.
2. To examine the opinion of parent's on introducing coding at school level with regard to gender i.e., male and female of Ranga Reddy District.
3. To assess the opinion of parent's on introducing coding at school level with regard to different age groups i.e., up to 25 years, 26-35 years, 36-45 years and 46-55 years of Ranga Reddy District.

RESEARCH QUESTIONS

1. There might be positive opinions of parent's on introducing coding at school level in Ranga Reddy District.
2. There is no significant difference in opinion of parent's on introducing coding at school level with regard to gender i.e., male and female of Ranga Reddy District.
3. There is no significant difference in opinion of parent's on introducing coding at school level with regard to different age groups i.e., up to 25 years, 26-35 years, 36-45 years and 46-55 years of Ranga Reddy District.

VARIABLES

Independent Variable in the study is Parents' Opinion and Dependent Variable is Introducing Coding in Schools.

SAMPLE

A sample of 100 parents were taken as sample by using simple random sampling technique.

TOOL

The present study tool is a kind of questionnaire consist of 40 statements and respondents are asked to opt any one option from the options Yes, Can't Say and No.

STATISTICAL TECHNIQUES USED

Descriptive including percentages, Mean & SD and inferential statistics including t-test and ANOVA were used.

RESULTS

1. OPINION OF PARENTS ON INTRODUCING CODING AT SCHOOL LEVEL IN RANGA REDDY DISTRICT (OVERALL)

Objective-1: To assess the opinions of parents on introducing coding at school level in Range Reddy District

Hypothesis-1: There will be positive opinion of parents on introducing coding at school level in Ranga Reddy District

Table 1: Showing the percentage of responses on introducing coding at school level by parents of Ranga Reddy District

PARENTS	YES	NO	UNDECIDED	TOTAL
FREQUENCIES	3108	285	607	4000
PERCENTAGES	77.65	7.125	15.175	100

INTERPRETATION

The above Table.1 infers that 77.65% of parents are exhibiting positive opinion on introducing of coding at school level. Therefore, the majority of responses (77.65%) of parents are appreciating and welcoming coding at school level in Ranga Reddy District.

Hence, the formulated declarative hypothesis is accepted.

2. ANALYSIS ON OPINIONS OF PARENTS ON INTRODUCING CODING AT SCHOOL LEVEL IN RANGA REDDY DISTRICT.

OBJECTIVE-2

To examine the opinion of parents on introducing coding at school level with regards to gender i.e., male and female of Ranga Reddy District.

HYPOTHESIS-2

There will be no significant difference in opinion of parents on introducing coding at school level with regard to gender i.e., male and female of Ranga Reddy District.

Table 2: Showing t-test value and p-value of male and female parents on introducing coding at school level in Ranga Reddy District

Gender	N	Mean	Standard deviation	t-value	p-value
Male	40	29.52	1217.98		
Female	60	32.12	1764.18	2.30161	0.11737
Total	3108				

INTERPRETATION

From the above Table.2, it is inferred that the obtained t-value 2.30 is found to be insignificant with p-value 0.11737 at

0.05 level of significance. Therefore, there is no significant difference between male and female in Ranga Reddy District.

Hence, the formulated hypothesis is accepted.

3. ANALYSIS ON OPINIONS OF PARENTS ON INTRODUCING CODING AT SCHOOL LEVEL IN RANGA REDDY DISTRICT.

OBJECTIVE-3

To examine the opinion of parents on introducing coding at school level with regards to different age groups of Ranga Reddy District.

HYPOTHESIS-3

There will be no significant difference in opinion of parents on introducing coding at school level with regard to different age groups of Ranga Reddy District.

TABLE 3: Showing one way ANOVA value and p-value on the opinions on introducing coding at school level by parents of Ranga Reddy District with respect to Age Groups

Age groups	N	Mean	Standard Deviation	f-value	p-value
Up to 25 years	16	31.384	5.855		
26-35 years	52	32	5.7271		
36-45 years	18	30.22	4.8453	0.49561	0.686183
46-55 years	14	30	5.9226		
Total	100	31.08	5.6348		

INTERPRETATION

From the above Table.3, it is inferred that the obtained f-value 0.49561 is found to be insignificant at 0.05 level of significance. Therefore, there is no significant difference among different age group of parents Ranga Reddy District.

Hence, the formulated hypothesis is accepted.

FINDINGS OF THE STUDY

1. Majority of the responses (77.65%) revealed positive opinions of on introducing coding at school level in Ranga Reddy District.
2. There is no significant difference in opinion of parent's on introducing coding at school level with regard to gender i.e., male and female of Ranga Reddy District.
3. There is no significant difference in opinion of parent's on introducing coding at school level with regard to different age groups i.e., up to 25 years, 26-35 years, 36-45 years and 46-55 years of Ranga Reddy District

DISCUSSION

The present study witnessed that there is no difference in the opinion of female and male parents about introducing coding at school level in Ranga Reddy district. This could be because of the mindset and thought process which is gender based, and this impacts the way of dealing with the psychological and materialistic aspects that they prioritize in their life.

CONCLUSION

Education system particularly from past decade period is massively influenced by technology. It is simply not confined to only some part of education but also almost all spheres of domain education including admission, administration, regulation, curriculum designing, technology led instructions, assessments, feedback, reporting etc. The present study results that the parents have a positive idea about the introduction of coding at school level. In the recent times the parents of Ranga Reddy district have more awareness about the coding and its importance to children in future. The pandemic situation taught the parents that they should make their child to learn coding. As coding become important to sustain the future, more parents have positive opinion on introducing coding at school level only.

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