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A STUDY ON DIGITAL INTELLIGENCE OF SECONDARY SCHOOL STUDENTS OF ERNAKULAM DISTRICT

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Abstract

The education system now confronts swift digital progress. The dynamicity in the development of digital world demands new intelligence from teachers and students which is termed as digital intelligence. Digital intelligence includes all those skills which can be social, emotional or cognitive and are necessary to equip individuals to face difficulties and requirements of digital life. Hence the investigator selected out five components of digital intelligence and did normative survey to find out level of digital intelligence of secondary school students using digital intelligence inventory. The sample was selected out using random sampling method.

Keywords: Digital intelligence, Secondary school students.

INTRODUCTION

The magnanimity of the digital world is progressing fast and influencing life. It's the great purpose of education to equip each individual with the skills essential to live life. The digital world has developed so fast and it demands more digital skills from each individual. So, the investigator tried to find modern trends in experiential learning to equip individuals with dynamicity of life especially digital world. Digital intelligence for e learning is found as one among many trends of experiential learning(Zoglovek,2018). The investigator did literature survey on many types of intelligence and found digital intelligence as the latest intelligence and it is the ability of one individual to interact with digital field (Rahman et al., 2021). Digital intelligence says about why, what, where, when, who, how much of digital technology so as to enhance output (Boughzala et al., 2020). We human beings have relationships to each other likewise in digital intelligence; technology is related to individual.

Serious efforts have been taken by so many institutions and countries to develop digital intelligence (Rahman et al., 2021). On the felt need the investigator did study on digital intelligence of secondary school students in Ernakulam district.

NEED AND SIGNIFICANCE OF THE STUDY

Modern times require significant changes in the attainment of digital skills to interact efficiently with digital world. Digital tools are changing the world. "The current educators are challenged on capacity to cope up with digital technology (McLuhan, 1964).

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In 1983 Howard Gardner gave a variety contribution to the theory of intelligence by explaining seven intelligences while in 1995 he added on one more intelligence. Thence in 1999 he explained spiritual and existential intelligence. The digital intelligence was the newest type of intelligence added to the theories of intelligence (Park,2016). The individuals with high levels of digital intelligence are expected to access digital world more and bring more learning output. If education system is taking appropriate measures to use digital intelligence uplifting, the world can witness revolutions in knowledge access and output. High level of digital intelligence is inevitable for all sectors of education including educators, students and administrators. Aforesaid context obligated investigator to pursue a research study to find out digital intelligence level of secondary school students so as necessary measures can be taken to enhance digital intelligence among students if found less.

OBJECTIVES OF THE STUDY

- 1. To find out level of digital intelligence of secondary school students
- 2. To find out level of academic achievement of secondary school students
- 3. To find relationship between digital intelligence and academic achievement of secondary school students

HYPOTHESES OF THE STUDY

- 1. There will be significant difference in the level of digital intelligence and academic achievement among secondary school students
- 2. There will be significant relationship between digital intelligence and academic achievement among secondary school students

METHODOLOGY

The methodology followed normative survey method. "The descriptive survey method or (normative survey method) as a process through which the data is collected by the researcher using observations. The first step in the survey, namely to identify the different groups of end-users, was undertaken by using this method." (Leedy, 1980). The sample selected was 300 secondary school students of Ernakulam district based on purposive sampling technique.

TOOLS USED

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Investigator used two tools for the study

1. Digital Intelligence Inventory:

The investigator selected out 5 subcomponents of digital intelligence such as digital identity,

digital use, digital safety, digital security and digital emotional intelligence and prepared and standardized a digital intelligence inventory

2. Achievement Test in Science:

An achievement test was made on science to assess achievement of students based on Bloom's taxonomy

ANALYSIS AND INTERPRETATION

1. Existing level of digital intelligence of secondary school students

The scores obtained after applying digital intelligence inventory were statistically analysed and the responses were collected, scored and tabulated. The descriptive statistics like Mean, Median, Mode and standard deviation and percentage analysis were calculated

Table 1. Mean, Median, Mode and Standard Deviation of Digital Intelligence Scores of Secondary School Students

Descriptive Statistics	Values
Mean	137.23
Median	139
Mode	139
Standard deviation	13.94

From the table 1 descriptive statistics mean was 137.23, Median was 139, mode was 139 and standard deviation 13.94

Level of Digital Intelligence	Total Sample
Low	17.66
Average	66.33%
High	16%

From the table 1.1 data it can be said that 66.33 percentages of secondary school students have average level digital intelligence and only 16 percentage of secondary school students showed high level of digital intelligence.17.66 percentage showed low level of digital

intelligence.

Descriptive Statistics	Values
Mean	55.21
Median	52
Mode	60
Standard deviation	17.77

From the table 2 descriptive statistics, mean was 55.21, Median was 52, mode was 60 and standard deviation 17.77

Table 2.1. Level of Academic Achievement of Secondary School Students

Level of Digital Intelligence	Total Sample	
Low	19.66	
Average	61.33%	
High	19%	

From the table 2.1 data it can be said that 61.33 percentages of secondary school students have average level digital intelligence and only 19 percentage of secondary school students showed high level of digital intelligence.19.66 percentage showed low level of digital intelligence.

On analysis of tables 1,1.1,2,2.1 the hypothesis one-There will be significant difference in the level of digital intelligence and academic achievement among secondary school students is accepted.

2. Relationship between Digital Intelligence and Academic Achievement of Secondary School Students

The relationship between digital intelligence and academic achievement was found using Karl Pearson correlation coefficient and was found as 0.658 which shows high positive correlation.

Variables	Number of groups	Sample	Calculate r value	Comment

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Digital	Total	300	0.658	High
intelligence and				positive
academic				correlation
achievement				

MAJOR FINDINGS

- Majority of secondary school students showed medium level of digital intelligence [66.33%]
- Only 16% of secondary school students showed high level of digital intelligence
- 17.66% of secondary school students showed low level of digital intelligence
- 4.61.33% secondary school students showed medium level of academic achievement
- 19% of secondary school students showed high level of academic achievement
- 19.66% of secondary school students showed low level of academic achievement
- There is significant difference in the level of digital intelligence and academic achievement among secondary school students
- There is significant positive relationship between digital intelligence and academic achievement [0.65 r value] among secondary school students

CONCLUSION

- The aforesaid facts are to be considered on school education
- Much of the existing knowledge and skills are no longer necessary for life of today's world
- Current needs are fully met by the concept of digital intelligence [Doaster,2016]
- Hence necessary measures can be taken in the curriculum to enhance digital intelligence

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