A STUDY ON IMPACT OF E-LEARNING ON STUDENTS WITH SPECIAL LEARNING DISABILITIES

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ABSTRACT

The right to education is available to all citizens including the (disabled) special students. The study aims at finding impact of E-learning on students with special learning disabilities. The data of 100 students have been collected and SPSS tool have been used to find the results. This study to find what is the gap between special students and E-learning, how to improve technology for providing good education to them. Key words: Educational Technology; Student Preferences; Disabled students; Students satisfaction, Self-regulation, Switching to technology.

INTRODUCTION

E-Learning, or electronic learning, is providing education through digital resources. Although E-learning is based on formalized learning or study, we can operate E-learning through such as computers, tablets and even smart phone that are connected to the internet. This makes it easy for user to learn anytime, anywhere even if internet connect is not available they can download courses and use anytime.
In present scenario E-learning had been growing rapidly in recent years, India is now accepting new normal an E-learning boom since the pandemic emerged. And many of the college, institute, or university, and school are switching to online class and developing their teaching techniques.

**REVIEW OF LITERATURE**


2. **Eleonora Guglielman (learning Community Srl)(2010)** specifics to make e-learning platforms accessible, the pedagogical and didactic perspective of accessibility is not enough studied; disabled students can access to the e-learning platform but not to contents, resources, activities, collaboration and interaction tools. Starting from the basic assumption that an elearning course is really inclusive when accessibility is addressed both technically and pedagogically, this research has the purpose to examine methods, tools and practices to propose a reference model for designing accessible elearning courses in the higher education context.

3. **Zainab Pirani (2013)** The purpose of this paper is to provide a an e-learning framework for understanding functional limitations related to learning Disability (LD) and to identify various learning principles and dimensions that can be used to overcome limitations and enhance functional capacities in home, school and college settings. The focus of the research is limited to the academic disorders associated with LD and will not address the physical and sensory limitations that often accompany LD.


5. **Matthew J. Erickson, Karen H. Larwin (2016)** this investigation suggest that there is an absence of empirical research on this topic in the existing published research. Results presented include findings from the K-12 data examining this impact, and the results from federal investigations on the prevalence of individuals with disabilities attending post-secondary institutions.
OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE

- To study on impact on E-learning on students with special learning disabilities.

SECONDARY OBJECTIVE

- To identify their perceived skill improvement while using virtual learning.
- To study self-regulation.
- To measure affection. (Attitude, Motivation, Anxiety towards online education system.)

SCOPE OF THE STUDY

- The study defines and analyses the effectiveness of technology on special students.
- The study completes the gap between education and special students.
- This study changes in the motivational and performance levels of special students.

MODEL OF THE PROJECT
Dynamic learning interfaces
Dynamic learning means adapt new technology and updating personal skill.

• **Abundant information resources**
  Abundant information resources refers to using present technology and make sure to accept it and make ourselves comfortable in that.

• **Indirect social interaction**
  Indirect social interaction means to using e-book, pdf, website for learning. Face to face interaction is not involved.

• **Flexible time and space**
  Students can learn anytime and anywhere.

• **Perceived skills**: Comprehension skill, self-awareness, internet skill □ **Affection**: Attitude, motivation, anxiety.

• Self-regulation: Time management, self-regulation, concentration.

RESEARCH METHODOLOGY

SOURCE OF DATA- The data collected for this project work was from two sources

1. Primary Source
2. Secondary Source

PRIMARY DATA- Primary data is collected from people by using structured questionnaire.

SECONDARY DATA- The secondary data was collected by websites, books and internet, Wikipedia.

SAMPLE SIZE- The sample of 100 responded was taken into consideration for my study and the data was collected.

SAMPLE TECHNIQUE- To study the project simple random sampling technique under descriptive method is used.

PERIOD OF STUDY- The period of study is 4 month.

STRUCTURE OF QUESTIONNAIRE- Closed Ended
ANAYTICAL TOOLS- The analytical tools used for the study in SPSS used to study hypothesis

- Correlation
- Chi- Square test
- Anova

DATA ANALYSIS AND DISCUSSION

CHI-SQUARE TEST

1. TABLE SHOWS THAT HOW TEACHER HELPFUL TOWARDS SPECIAL STUDENTS WHILE STUDYING.

H0 (Null Hypothesis) = There is no significant relationship between teachers help towards special students while learning online.

H1 (Alternate Hypothesis) = There is a significance relationship between teachers and special students (teacher is always ready to help their students while learning online).

<table>
<thead>
<tr>
<th>Disability * Teachers Cross tabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
</tr>
<tr>
<td>Teachers</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>Disabili</td>
</tr>
<tr>
<td>2.00</td>
</tr>
<tr>
<td>3.00</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Case Processing Summary

<table>
<thead>
<tr>
<th>Cases</th>
<th>Valid</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Disability * Teachers</td>
<td>100</td>
<td>100.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Disability

Teachers
Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.578a</td>
<td>8</td>
<td>.296</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>10.741</td>
<td>8</td>
<td>.217</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>.503</td>
<td>1</td>
<td>.478</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is .22.

INTERPRETATION

Since p value is higher than 0.05, we accept the null hypothesis and reject the alternative hypothesis. Therefore there is no relationship between teachers helping while special students learning online.

PEARSON CORRELATION

2. TABLE SHOWS THAT DOES ONLINE LEARNING MOTIVATE STUDENTS TO LEARN BY THEIR OWN.

Correlations

<table>
<thead>
<tr>
<th></th>
<th>Disability</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.008</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.937</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.008</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.937</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

INTERPRETATION

Since p value is (.008) it is positive correlation. Hence there is a positive correlation between respondents and online learning motivation.
ANOVA

3. SPECIAL STUDENTS AND THEIR OPINION ABOUT E-LEARNING MOTIVATION.  

H0 (Null Hypothesis) = There is no significant relationship between no. of respondents and their opinion about online learning motivation.

H1 (Alternate Hypothesis) = There is a significance relationship between no. of respondents and their opinion about online learning is motivate them to learn by their own.

ANOVA

<table>
<thead>
<tr>
<th>Motivate</th>
<th>Sum Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.628</td>
<td>2</td>
<td>.314</td>
<td>.495</td>
<td>.611</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.562</td>
<td>97</td>
<td>.635</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.190</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INTERPRETATION

From the above analyzed data, it is interpreted that the anova .611 which is above the significance level 5, therefore reject the null hypothesis and accept the alternative hypothesis. Thus, there is a significance relationship between no. of respondents and their opinion about online learning is motivating them to learn by their own.

LIMITATION

- The study confines within the limited period.
- The study may be bias due to primary data.
- The study will be better if pandemic situation is not there.
- The study want to connect their respondents by face to face but because of pandemic is not possible to do that.
SUGGESTION

• E-learning is helpful for special students and it is one of the best technique to upgrade students and providing education. But some where face to face interaction is missing and students are not satisfied by E-learning. Teachers are not connecting to students for solving their problems or doubt.

• Teacher should organized meeting every week to connect or face to face with special students and make sure to solve their problem.

• Families have to provide proper environment to concentrate their children on studies.

• Courses are so expensive, it should be low in cost.

• Teacher and parents should motivate students.

• Courses should be interesting and engage students.

CONCLUSION

As per my research E-learning is one of the best platforms for learning. It’s really helpful for disabled students, and they can do wonders by using online technology. It easy for them to manage their schedule with studies. Even it is easy to operate, and best part of e-learning can be use anytime and anywhere. . If net connection is not available then they can download the video, audio, pdf, e-book, for learning. E-learning give comfort to special students but it have to improve. Even parents are also helping special students for providing study environment.

REFERENCE


