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## Construction of e-content: A challenge for the knowledge creativity on the digital highway

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### Abstract

E-Contents used in education can be from a number of sources: from traditional electronic journals (E-Journals), and electronic books (eBooks) to more specific formats such as: electronic research reports (E-Research-reports), electronic lecture modules (E-Lecture-modules), electronic lecture notes (E-Lecture notes), and electronic lecture slides (E-Lecture-slides). For the upcoming generation i.e. Digital Natives (Prensky Marc, 2001), we need to create a digital learning culture and environment. E-Learning serves this purpose in its various forms such as web-based learning, computer based learning, mobile-based learning, virtual classrooms, and digital collaboration. The ultimate aim of E-Content development is to create an information rich society where everyone, irrespective of caste, religion, race, region, gender etc., are empowered to create, receive, share and utilize information and knowledge for their economic, social, cultural and political upliftment and development. The investigator developed e-content for selected topics on Motivation, Intelligence, Creativity, Theories of personality in Educational Psychology. The finding of the study reveals that peer group rating scale analysis of e-content for Educational Psychology, as 72% is excellent, 24% very good, 4% good. Hence, the study is highly contributive and challenging for technology integrated pedagogy to the field of Teacher Education.

**Keywords:** Construction of E-Content, Knowledge Creativity, Digital Highway.

### 1. Introduction

Information technology and the internet are major drivers of research innovation, growth and social change. The growth in internet has brought changes in all walks of life including the education, e-content includes all kinds of content created and delivered through various electronic media from old Medias such as print and radio to the increasingly sophisticated electronic tools with combination of sounds, images and text. E-content requires huge amounts of creativity both at information 'level as well as the technology' level.

E-content is a very powerful tool of education. Teaching plays a vital role in formal educational system. In spite of established sound theories of teaching. It still continues to be a challenging task. Teaching centre and group oriented methods of instruction hardly provide for individual difference of the learners. The like e-learning is used technology such as computer or internet.

E-content is very useful to learning purpose. We might use this facility without restriction of time and place. It is much useful to animation and audio & to video effects which make subject understands with interesting to the learners.

### Need for the study

“Any subject can be taught effectively in some intellectually honest form to any child at any stage of development”. “The child is ready to learn when the teacher is ready to teach”. (- Bruner). To create interest and maintain it among the students is a major problem for any teacher. Loss of student’s interest is one of the main causes of student’s failure. Interest in the subject can be effectively aroused and maintained by using numerous special devices and activities. Teachers are anxious to stimulate interest and participation and to increase the effectiveness of their teaching. An effective teacher should not only know his subject but also the learning experiences of the students so that she can employ a new technique in order to produce the desired and improved achievement. Experience of seeing something new, leaves a long lasting impression on students.

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This motivated the investigator to study the effect of innovative tools on learning Educational Psychology. So the investigator selected this area of study. The investigator has made an attempt to prepare E-content for Teaching Educational Psychology.

**Title of study**

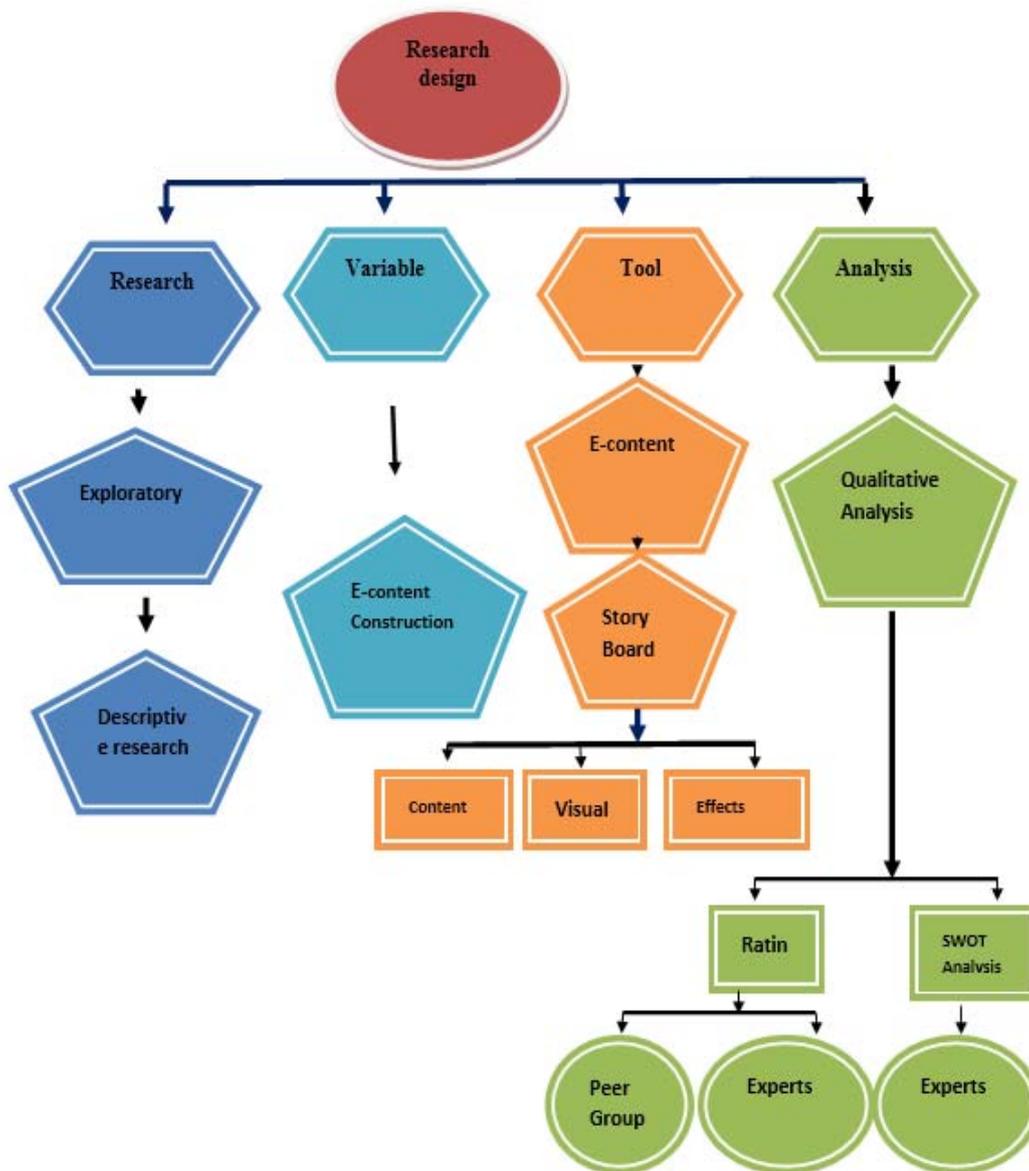
The statement of the problem is “Construction and validation of e- content”

**The objectives of the study are:**

- To construct the e-content for a selected topics in Educational Psychology.
- To validate the developed e-content for selected topics in Educational Psychology.

**Methodology**

**Research Design**



**Construct stages of e-content package**

**Story board**

A storyboard is a written or graphical representation of the all of the elements that will be included in a digital story. The storyboard is usually created before actual work on creating the digital story begins and a written description and graphical depiction of the elements of the story, such as images, text, narration, music, transitions, etc. are added to the storyboard. The elements of the story are arranged in the storyboard in the chronological order in which they will appear in the story and this allows the developer to organize and re-arrange the content for maximum effect. Creating storyboards is an often overlooked component of digital storytelling and for many students, storyboarding may seem like a tedious extra step. However, storyboarding can be a

valuable component in the creative process by allowing the developer to organize images and text in a blueprint fashion before the development begins.

**Topic (Educational Psychology)**

- Stage: 1** Selecting a topics in Educational Psychology
- Stage: 2** Discussing about e-content with experts
- Stage: 3** Writing story board
- Stage: 4** Suiting
- Stage: 5** Editing
- Stage: 6** Adding visual, text, audio
- Stage: 7** Expert’s opinion
- Stage: 8** Modifications and clarification
- Stage: 9** Educational Psychology
- Stage: 10** Ready for administration

**Peer Group Rating Scale**

The investigator received the Rating Scale from all the 34 students of Department of Education GRI, for the validation of the constructed e-content for the selected topics Motivation, Intelligence, Creativity, Theories of personality in Educational Psychology.

**Feedback Analysis Frame Work**

The Investigator collected feedback analysis from the subject experts, technical staff, school head teachers, teachers and the students. The analysis reveals the following

**Strength**

- Good in Content coverage
- More Curious
- It is very helpful and useful to the students. Because through this package, they can easily learn and grasp the content.
- Concentration power of the learners has been increased.
- Content has been organized in a form of well-structured and good organization

**Weakness**

- The font size in the text is not visible in some areas and its need to reduce the speed while explaining the concepts.

- In some areas text display comes away from the frame.
- More animation could be incorporated.

**Opportunities**

- Cater to the need of Digital natives
- Learner – Centered
- Self – Learning package
- Creates motivation
- Sustain interest
- Optimize Learning

**Challenges**

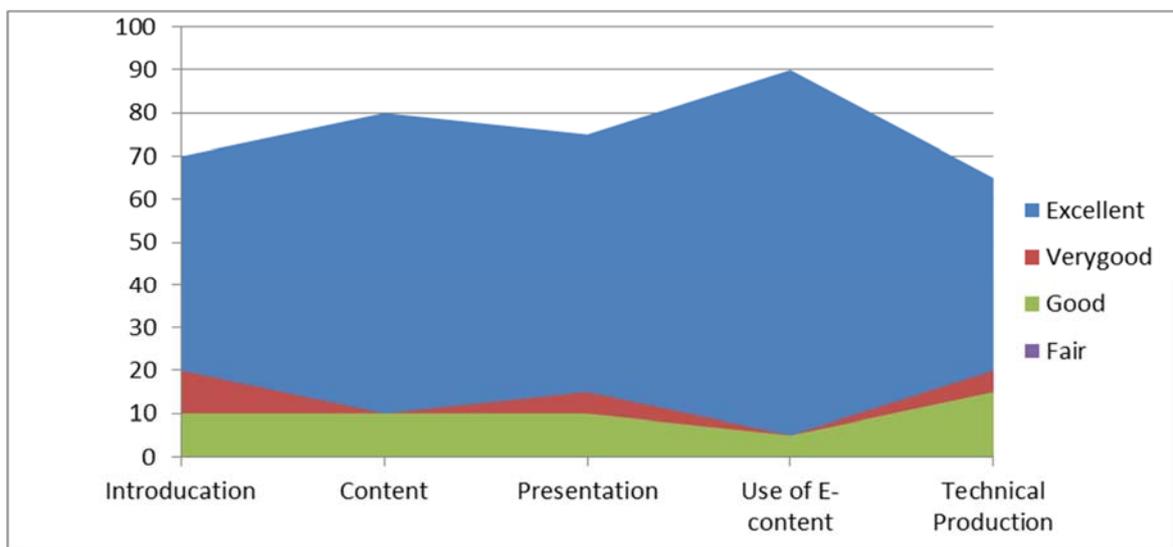
- Need the more technical experts/ technocrats full-fledged.
- Infrastructure facilities such as Technology Studio, E-content development Studio.
- E-content development software
- Availability of electronic gadgets.

**Any other suggestions:**

- Include a few videos.
- It is an excellent effort.

**Table 1.1:** Experts opinion on rating scale analysis

Category	Excellent In %	Very good In %	Good In %	Fair In %
Introduction	70	20	10	0
Content	80	10	10	0
Delivery/ Presentation	75	15	10	0
Use of E-content ( Video + Audio + Text)	90	5	5	0
Technical production	65	20	15	0



**Fig 1.1:** Experts Rating Scale Analysis

The table 4.7 on the Expert opinion reveals that rating scale analysis of E-content for Educational Psychology. It reveals 70% of Experts stated that introduction was excellent, 80% stated content was excellent, 75% stated Use of E-content was excellent, 65% stated technical Presentation was excellent.

**Table 1.2:** Peer Group Rating Scale Analysis

Content	Percentage (%)
Excellent	72%
Very Good	24%
Good	4%
Fair	0%

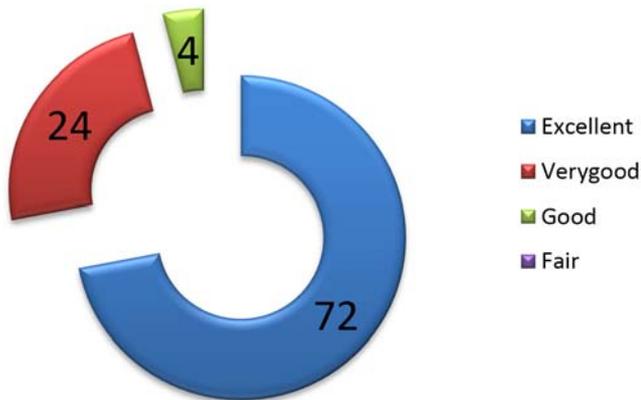


Fig 1.2: Peer Group Rating Scale

The peer group rating scale analysis of e-content for Educational Psychology, It reveals 72% of peer group students stated that e-content is excellent, 24% very good, 4% good.

### Findings

1. The investigator constructed the E-content meticulously for the selected topics on Educational Psychology.
2. The investigator validated the developed E-content for selected topics in Educational Psychology using Peer group analysis, Expert opinion and SWOT analysis.
3. The Expert rating scale analysis of E-content for Educational Psychology reveals 70% of Experts stated that introduction was excellent, 80% stated content was excellent, 75% stated Use of E-content was excellent, 65% stated technical Presentation was excellent.
4. The peer group rating scale analysis of e-content for Educational Psychology, It reveals 72% of peer group students stated that e-content is excellent, 24% very good, 4% good.

### List of Reactions of the M. Ed Students

- Curious
- Surprise
- In attentive
- Attractive
- Interesting
- Interactive
- Concentration

### General Experts Opinion

- This content is new
- Teaching is innovative
- Teaching method is good
- Easy to learned student
- Content cover is good
- Content well structure
- Voice is good

### Results and Discussion

E-content is a very power full tool of education. E-content is valuable to the learners and also helps to teachers of all individual instruction systems. E-content is the latest method of instruction that has attracted more attention to gather with the concept of models. Education is en rich the qualities of head, hand and heat. Education is one of the basic needs of men and women. The rule of the education is the attainment of human excellence and perfection not just in the field of knowledge or activity but life totality.

E-content is very useful to learning purpose. We might use this facility without restriction of time and place. It is much useful to animation and audio & video effects which make subject understand with interesting to the learners. E-content is facilitating to the teacher to effectives manner. It is enhancing the learner knowledge level which leads to creative thinking. Furthermore, it gives possible to future generation happiness on the basis of enjoyment and attractiveness. In short, the ultimate aim of the E-content is abolish the disparity among the learner through effective education. The E-content education method is variation from the traditional method, because of this method concerned technological features such as attractive images, animations, links, audio and videos.

### Educational Implications

The research result implies that,

- This is a good contribution as; it is today's tools to use today children for class room instruction.
- It provides opportunities for peer tutoring to both high and low achievers
- Any resource and committed teachers can adopt this technique in the class.
- The study motivates teachers to participate in E-content developing content sponsored by Tamil Nadu Government.

### Recommendations

- On the basis of the findings the following recommendations are offered.
- Every college can use the E-content package for teaching Educational Psychology.
- E-content package must be used to teach to prepare the E-content package for teaching Educational Psychology.
- Laptop, PC, DVD, player, TV with LCD panel, modern whiteboard could be provided in every classroom.
- Equipping adequate infrastructure in the premises of the colleges is the need of the hour.
- Provide more hands on training to developing E-content for the entire subject.

### Conclusion

E-content package is useful for enhancing teaching ability of teachers and also learning ability of students. This method of teaching can be made more interactive between teacher and learner. E-content package in stills more confidence and teaching interest in the teacher. This can be implemented to all subjects for making the students to learn subject for making the students to learn interestingly. The influence of E-content package can be used to improve the achievements of the students. This E-content when used in higher education students is very effective to get high achievement scores in examination. Education content is key element of ICT use in education. Content development may see to be minor issue in ICT to create disseminate, and or access to educational context can have a profound impact of issues of equity and access to education. Content may appear in many forms and different kinds of contexts, including printed materials such as book and newspapers, movies and radio, television, electric content presented via computers and mobile devices as well as live performance of drama and music such as those presented in a theatre. Educational content whether in audio-visual aids or self-study materials is an important component in technology use in education.

Hence, this research work on “Construction and validation of E-content” is a greatest contribution to the field of Teacher Education.

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