ISSN: 2455-0531

மலர்:5 இதழ்:20 திசம்பர் 2019

Vol. 5 Issue: 20 December 2019









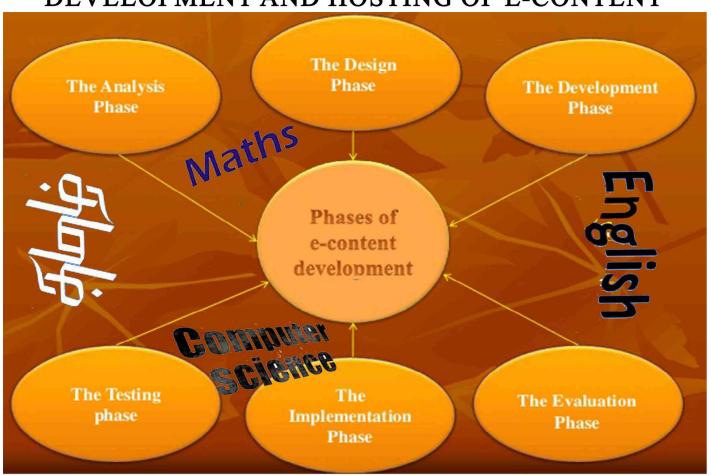
கே.எஸ்.ஆர். மகளிர் கலை அறிவியல் கல்லூரி

திருச்செங்கோரு, நாமக்கல் - 637215

ஐந்தாவது பன்னாட்டு ஆய்வரங்கம்

இணைய உள்ளடக்கங்கள் : உருவாக்குதலும் பரவலாக்கமும்

FIFTH INTERNATIONAL COLLOQUIUM ON DEVELOPMENT AND HOSTING OF E-CONTENT



பதிப்பாசிரியர்கள்

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UAN.TN03D0061112



பன்னாட்டு இணையத் தமிழாய்கிதழ் International E-Journal of Tamil Studies

கே.எஸ்.ஆர். மகளிர் கலை அறிவியல் கல்லூரி திருச்செங்கோடு — 15

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Fifth International Colloquium on Development and Hosting of E-Content

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<u>பதிப்பாசிரியர்கள்</u>

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பதிப்புரை

இனம்: பன்னாட்டு இணையத் தமிழாய்விதழ்

கற்பித்தல்-கற்றல் நிலையிலும், ஆய்வுக்கான தரவுகள் தேடல் எனும் நிலையிலும் இன்று இணைய உள்ளடக்கங்கள் குறிப்பிடத்தக்க இடத்தைப் பெற்றுள்ளன. அதேவேளை, இணைய உள்ளடக்கங்கள் நூறு விழுக்காடு மெய்ம்மைத் தன்மையுடனும், சமூகத்தில் நிலவும் பண்பாடுசார் விழுமியங்களைச் சிதைக்காவண்ணமும் திகழ வேண்டும் எனும் எதிர்பார்ப்பானது சமூகத்தினரிடையே நிலவி வருகின்றது என்பதும் உண்மை!

கற்பித்தல்–கற்றல் எனும் இணைச்செயல்பாடானது காலந்தோறும் பல்வேறு பரிமாணங்களைப் பெற்றுத் தம்மைத் தகவமைத்துக் கொண்டு வந்துள்ளது. இச்செயல்பாடானது வளர்ந்து வரும் தகவல் தொடர்பாடல் தொழில்நுட்பத்தினை உள்வாங்கிக்கொண்டு தன்னை மேலும் மெருகேற்றிக் கொள்கின்றது என்றுதான் கூற வேண்டும்.

அவ்வகையில், கற்பித்தல்–கற்றல் செயல்பாட்டினை மையப்படுத்தி இயங்கும் நவீன நுட்பங்களின் செயல்திறன்களை அறிமுகப்படுத்துதல், மதிப்பிடுதல் என்பதனை மையநோக்கமாகக் கொண்டு, திருச்செங்கோடு – கே.எஸ்.ஆர் மகளிர் கலை அறிவியல் கல்லூரியினரால் (தமிழ், ஆங்கிலம், கணிதம், கணினி அறிவியல், கணினிப் பயன்பாட்டியல் துறை) திட்டமிடப்பெற்ற "இணைய உள்ளடக்கங்கள் : உருவாக்குதலும் பரவலாக்கமும்" எனும் மையப் பொருண்மையிலான ஆய்வரங்கம்.

இந்த ஆய்வரங்கில் 'இனம்' இதழ் உள்ளிட்ட தமிழியல் அமைப்புகளையும் இணைத்துக்கொண்டு அறிவுசார் செயல்பாட்டில் தன்னைத் தொடர்ந்து அடையாளப்படுத்தி வருகின்றது கே.எஸ்.ஆர். மகளிர் கலை அறிவியல் கல்லூரி. குறிப்பாக, இனம்: பன்னாட்டு இணையத் தமிழாய்விதழோடு இணைந்து நிகழ்த்துவது இது இரண்டாம் முறை. அவ்வகையில், தொடர்ந்து கல்விப்புலத்தில் தம்மை நிலைநிறுத்தி வருகின்ற இக்கல்லூரியின் தாளாளர், செயலர், செயல் இயக்குநர் உள்ளிட்ட நிருவாகக் குழுவினர்க்கு நன்றி.

மூத்தோர், புகழ்வாய்ந்தோர் உள்ளிட்டவர்க்கே சில வாய்ப்புகளை வழங்கும் 'பண்டித மனநிலை' கொண்ட இன்றைய 'புகழ்விரும்பி'களிலிருந்து முற்றிலும் மாறுபட்டு திறமை, தகுதிக்கு மதிப்பளித்து வாய்ப்பு வழங்கும் இக்கல்லூரியின் முதல்வர் முனைவர் மா.கார்த்திகேயன் அவர்களுக்கு வணக்கமும் நன்றியும்!

இனம் இதழின் செயல்பாடுகளைக் கூர்ந்து நோக்குபவரும், இதழின் வளர்ச்சிநிலையில் அளவுகடந்த அக்கறை கொண்டவரும், அரங்க மேடைகளிலும் இணைய மேடைகளிலும் தனது 'சொல்–செயல்' இரண்டிலும் வேறுபடாது 'கணினித்தமிழ்' வளர்க்கும் இளைஞரும், இந்த ஆய்வரங்க ஒருங்கிணைப்பில் முன்நின்றவருமான முனைவர் இரா.குணசீலன் அவர்களோடு தொடர்ந்து இணைந்து பணியாற்றுவதில் பெருமிதம் கொள்கிறது 'இனம்'.

புதியன சிந்தித்து எழுதுதல் என்பது அரிய பணியாயின் அப்பணியை நடுநிலையோடு மதிப்பிடுதல் அதனைக் காட்டிலும் அரும்பணி. அவ்வரும்பணியை எங்களோடு இணைந்து திறம்படச் செய்த, தாய்லாந்தைச் சேர்ந்த முணைவர் ப.சிவமாருதி (இனம் – பதிப்பாசிரியர் குழு) அவர்கட்கும் இலங்கையைச் சேர்ந்த திருமிகு அகம்மது சிப்லி (இனம் – பதிப்பாசிரியர் குழு) அவர்கட்கும் இவ்வேளையில் நன்றி தெரிவித்து மகிழ்கின்றோம்.

இந்த ஆ<mark>ய்வரங்கி</mark>ற்குக் கட்டுரைகள் வழங்கி, நேரில<mark>ும் கலந</mark>்துகொண்டு சிறப்பித்த பல்வேறு கல்லூரிகளைச் சேர்ந்<mark>த ஆய்வாளர்க</mark>ளுக்கும் நன்றி!

நல்லதொரு கல்லூரியி<mark>ல், நல்லதொரு பொருண்மை</mark>யில் நி<mark>கழ்த்தப்</mark>பெற்ற ஆய்வரங்க<mark>ில் தன்</mark>னையும் இணைத்துக் கொண்டு செயலாற்றியதில் பெருமிதம் கொள்கிறத<mark>ு 'இனம்</mark>'.

பெருமி<mark>த</mark>த்துடன்,

பதிப்பாசிரியர்கள்

E – Content in Education

கல்விசார் இணைய உள்ளடக்கங்கள்

Ms. K. Dhivya Prabha / செல்வி க. திவ்ய பிரபா²⁶

ஆய்வுச்சுருக்கம்: மக்கள் விரும்பும் துறைகளிலும் மக்களின் வளர்ச்சியிலும் கல்வி முக்கியப் பங்கு வகிக்கிறது. இது வரலாற்றில் பல மாற்றங்களை அடைந்து வருகிறது. கல்வியில் தொழில்நுட்ப வளர்ச்சியின் பின்னர், கல்வி நிலையில் உயர்ந்து வருகிறது. மின் உள்ளடக்கத்தின் உதவியுடன் கல்வி கற்றல் கற்பித்தல் மிகவும் எளிதானது மற்றும் பயனுள்ளதாகிறது. உள்ளடக்கங்கள் கற்றல் - கற்பித்தல் செயல்முறைக்கு மேம்பட்ட உதவிகளை இக்கட்டுரை மின் உள்ளடக்கத்தின் நன்மைகள் வழங்குகின்றன. விவரிப்பதை நோக்கமாகக் கொண்டுள்ளது, மேலும் தீமைகளை உயர்கல்வியில் மி<mark>ன் உள்ளடக்</mark>கத்தின் பங்கு குறித்து<mark>ம் கவனம்</mark> செலுத்துகிறது. உள்ளடக்கம், மின<mark>் உள்ள</mark>டக்கங்களை கற்பவர்கள் ப<mark>யன்படுத்த</mark>ும் மின் வடிவமைத்து வளர்ப்பதற்கான படைப்புக் கருவிகள் பற்றியம் விவரிக்கப்பட்டுள்ளன.

Abstract: Education plays a vital role in the development of people in their own desired fields. It becomes many drastic changes in history. After the development of technology in education, it goes high in its sphere. Education becomes very easy and also effective with the help of E-Content in education. E-content enables learners to utilize advanced areas for the process of teaching-learning. This paper aims to describe the advantages and disadvantages of E-Content and it also focuses on the vital role of e-content in higher education. In this paper, the authoring tools for designing and developing E – content, E-content tools used by the learners are described.

Keywords: Technology, Education, தொழில்நுட்பங்கள், E- content, இணைய உள்ளடக்கங்கள்.

Nowadays everyone starts to use technology for learning. It makes learning easy and convenient. Digitalization affects the traditional learning process. The traditional classroom enables the learner to acquire knowledge whereas e-learning is possible anywhere and anytime. Technology is being used for learning new things that are unfamiliar to the learners. Unknown things are become known at any time which is possible only with the updating of technology. The Internet affects all spheres in the learning process. E classroom, technology, and mobile phones are used frequently by the learners; it also replaced the traditional classrooms as well as the library.

In the process of learning, people searched every new idea from books, journals and etc. in libraries. People used to visit the library for learning. The sources are searched in

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libraries, are changed by the development of technology. For searching for new information everyone goes accessing the internet. Web platforms are very much needed in today's learning process. PDF books are also available on the internet so it becomes less useful for libraries. The main reason for the addiction to technology is that one can learn new information easily and can share easily and can update it easily.

The learners are determined by the quality of teachers who teach them, with their own skills. Skills and knowledge of the learners are shaped by the teachers and the teachers are asked to learn using technology in their process. It is difficult for the teacher using technologies in their teaching process innovatively. The teachers find difficult to be in trend.

E-Content offers tremendous opportunities for creating, editing/updating, storing, disseminating and communicating information at a time at so many levels and platforms. Due to the rapid expansion of sound knowledge, availability of a variety of formats for information and easy accessibility of E-platform has made inclusion and integration of ICT in teaching and learning inevitably now. Moreover, ICT also provides an option to promote international collaboration and networking in education and provide more easy, flexible, effective and feasible ways for professional development for teachers too.

E-Content is also known as digital content refers to the content or information delivered over network-based electronic devices. E-Content is the digital text and images on the web page.

E-content comprises all sorts of formats of information that can be placed on a digital platform like text, audio, video, graphics, animation, etc. E-Content is the learning process using electronic technologies. It delivers the course materials and contents with the use of the Internet, Intranet, Broadcast, Audio/video clips, interactive TV and CDs. E-Content has many pros and cons to learning. The learners use it in a positive way.

Pros of E-Content:

- 1. **Mobility:** E-Content gives a comfortable way to learn at any place and at any time. The learners access the internet on mobile phones. There is no need to stay in the same place. The learners are in online classrooms and interact with the experts through video conferencing and it enables the learning process very easy. In the traditional classroom, the learners should be in one place and have a time limit to access their teachers, but whereas in the digital classrooms, the learners are free to access the online learning platforms at any time and at any place and there is no time limit. They can use the given course materials on how many times they are in need. If they do not understand the concepts, they can go for the same course material many times until they understand. The learners can take their own pace for learning through digital classrooms. It also reduces manual work like testing, correcting and evaluating. The teaching and learning process became very effortless.
- 2. Accessibility of faculty members: The learners benefit in interacting with the faculty members through message boards, mail, etc. Not like the traditional classroom, the digital classroom allows using the forum at any time and any number of times. In the olden days, the conventional method of learning restricts the learning to approach the teachers in a given period whereas E-Content gives many possibilities to listen to online videos many times.
- 3. Convenient: Digital learning makes the learners acquire new things in a convenient way. The learners are not restricted to age in digital learning. They can learn in their

- own scheduled period. Everyone has their own commitments so they can make a study schedule and utilize their time for online education.
- 4. **Accessibility of experts:** In the past centuries one needs to travel to many places to meet the experts in the relevant field. But now in this digital world, one can access the experts of their own individual field in his own comfort place. And also one can access the videos of the experts many times until one learns the concept.
- 5. New ways of learning: In this digital learning platform, peer learning is possible. In traditional classrooms, the learners can develop certain skills from their same age group, but in digital classrooms, the learners can develop their skills with the correlation of same quality learners. The learners create many new platforms for interacting with others through blogs, wikis and other online portfolios. The learners can create their own community for their own enhancement.
- 6. **Lifelong learning:** Digital course material allows people to use it at long last. One, who could not continue the education, can learn through online platforms simultaneously. The course material which is used by the learners can be used whenever it is necessary. Without an age limit, any people can learn any course through the online classrooms.
- 7. Less expensive: Online education is less expensive. Through the internet, one can learn the courses. It saves conventional educational expenses, travel expenses. If learners have computers, they have their own classrooms.
- 8. No restriction: In online education, there is any restriction for learning. They can learn any course in any language. Without having any barriers like culture, nationality, language, the learners learn their courses.
- 9. Immediate Updates: Online materials are frequently updated. According to the development of technology, E-content is also updated. So, the learners learn the courses up-to-date.
- 10. No Wastage: As compared to the traditional method in which the learners used books and printed materials digital learning there won't be any wastage of books and printed materials.

Cons of E-content:

- 1. Lack of Encouragement: In digital learning, the learners cannot receive any motivation from the teachers and the peer group. They also don't have any specific deadlines or goals which will not encourage the learners to complete their assignments.
- **2. Isolation:** Learning through computers makes learners be in isolation. The digital classroom leaves them with a feeling of isolation and discouragement for support. It gives frustration and also being demotivated. It is not made the learners to be involved in the human community face to face.
- 3. **Technology Issues:** In the early stage of the learners in the digital classrooms, the learners find difficulty in knowing the accessibility of the technology and the usage of E-Content sources. Lack of internet connection, power reliability make issues in technology in digital learning. Recovering technology issues is difficult for learners in different geographical areas. They also cannot get adequate network accessibility.
- **4. Impersonal:** In the digital classroom, there is no human contact. So, it is hard to have direct human communication in online platforms. This method is not natural. It keeps the learners away from the peer group.
- **5. Proficiency in Computer:** Not all the learners are very efficient in using computers. Thus, learners feel difficulty in acquiring knowledge. Though the E-Content is user-

friendly, it may be difficult to use. So, the learners may not be successful in their education.

Tools for E-Content:

E-Content tools are very useful for e learning. It makes the e-learning efforts to the next step because the learners can easily access the platforms of e-content only through the tools available on the internet. It plays the role of mediator between the e-content and the learners and also creates the connection between e – creators and learners. Through the tools, the learners can place a learning position in the online era. There are many tools for learning the course with text and images, text and voice-over, text and animations, text and videos, text and instructions and all together.

Blogs are a common tool used for learning. In blogs, a writer gives a series of entries on their own fields with their own analysis. One, who comes for searching for any new information, could certainly go for blogs. Blogs are the very frequent tool for uploading econtent to make the new learners gain knowledge over the course. It only gives materials for the courses not for acquiring a new course.

Swayam is the e-content tool that is used for learning a new course. In this e-content platform, the learners can learn any course in their own field or out of their field as their interest in topics. The working people can learn and can get a new certificate through this. It enables the teachers to learn in their careers.

There are many available apps for learning. There are many creators of apps for any kind of person. Kids who start to talk, school children, adults, middle-aged people and, old aged people are benefitted with the apps for immediate reference and learning. Though it has many demerits, the learners access apps and acquire knowledge.

Many aspirants spend their time to create many videos and learning materials for the learners and spread those materials through YouTube, Facebook, WhatsApp, and other social media. The lack of that is there is no direct instructor for correcting the errors of the learners.

BYJU's is the leading educational apps of the age. It provides the learning materials of school education. The school students can use it for their better understanding. It also trains the students for many competitive examinations available in the present scenario. It focused on many animation videos for science and maths. The feedback about the students is connected with the parents for their monitor. It is the best self-improvement application in the VAL E.JOURNAL online platform.

E-Content goes to the next level with a unique step with games. In mobiles, the internet and in many software, learning is encouraged with games. The games are used for learning and checking their knowledge. The games increase the curiosity of the children to learn the course. They can come across with the number of new words in their young age that may encourage them to use in their daily life.

Vital Role of E-Content in Higher Education

E-Content plays an important role in Education. Now a -days in every school and college the traditional classrooms are replaced by Digital classrooms. Smart classes are used for education which enhances the capacity of the learners as well as the teachers. It created a huge impact on the system of education. It changed the process of course delivery and student learning. Smart classes with internet connection are used for immediate visual learning for the students. The videos on YouTube and demo classes are used to give practical knowledge to the students. E-Content can be accessed with smart boards in the schools and colleges. The students are guided to go for online courses to add additional qualifications related to their own field and also the students are encouraged to learn their desired courses from any field. Video conferencing is enabled for their learning betterments.

Many universities in India and in other foreign countries produce many online courses with a duration of six months, one year. Many diploma courses are also available in universities. The people, who could not continue their education, can learn through online courses. The learners should access the website of the universities for receiving materials, submitting their assignments, knowing the evaluation and also for examination.

E-Content is used for learners from distance. Once in the past, distance education is possible only through posts, but now it is online. It provides flexible learning opportunities to individuals or a group of learners. Audiotape, videotape and Compact Disc are used for online education to provide course materials and lectures. According to the development of technology, online materials are being changed. It gives possibilities to many learners to learn beyond limits.

The illiterates, who cannot continue their education, are passionate to learn, receive the right platform for education. They can continue their education through online courses. They also receive degrees through distance education.

E-Content designing and development process:

The traditional materials are not easily transformed into the e-content format. It takes huge manual power. For transforming the e-content materials, there are many instructional design methodologies to be followed for the expected outcome. Content preparation takes much effort and before publishing the e-content, one needs to go for many stages. The materials should be analyzed and finalized by the content developer. The finalized materials should be designed in an effective way to make the learners acquire quickly. The design of the content should be developed properly for highly satisfying production. In the phase of designing and developing, the developer of the content can add a relevant video or audio clips, animations, pictures, etc. the developed contents should be tested for the errors, functions, clarity of the pictures and animations, timing of videos and audios, hyperlinks. The tested contents are meant for implementation and it enables the learners to direct them with methods of using the e-content in their learning process. The implemented content is evaluated for checking its effectiveness, accuracy, and quality. In evaluating the content, according to the feedbacks, necessary changes are made. The fine content is created and published in the online platforms for the reference for the learners.

Authoring tools for E-content:

For designing the e-content, certain tools are very useful and certainly to be used. Without these authoring tools, designing an effective e-content page is impossible. The authoring tool is a software application used for creating e-content with images, animations, videos, and audios. HTML, Flash and PowerPoint are some categories used for authoring tools.

Lectora Online is the easiest way of developing e- content. It gives possibilities to study the course, to write the test, to evaluate the assessment for tracking the development of the course process.

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Adobe Captivate is the authoring tool that supports a wide range of media includes images, videos, and presentations. It provides separate templates that save time. It is very flexible in using the tool for content development. In this tool, the e-creator can preview the course page how it will be in the various devices so that the creator could change the format of displaying in the devices.

Articulate Storyline gives an easy way to use in the home. It gives interactive slides. It gives high resolution for the images. It possesses a screen capture platform, articulate replay, software simulation creation, and a robust assessment builder. It also helps to access free templates, expert guidance, and user posts.

Elucidat is the authoring tool used for cloud-based content. It enables collaboration between members of a team. It is for customized courses. It saves time and used to meet up with many experts. It has separate pre-built themes, many images, and objects. The given master elements help to combine the courses together for the learners' interest.

There are many other authoring tools with various using techniques for the fine use of creators. The creators can provide advanced materials by using authoring tools. The tools make an easy way for e-content creators and developers to give efficient materials. The updates in the tools give many new features for the online developers.

E-Content enables everyone to learn and it is beyond the limitations for learning. Traditional classrooms are available only for the people who are only for learning. They cannot go for working and learning simultaneously. The working people would become lifelong learners with the help of online education. The online education gives the courses for the learners to learning for their passions. The online education gives away to the learners of today that leads to a great drawback in schools and colleges. In decreases the number of teachers and the value of teachers. The students are shaped by the direct care of the teachers would be less in online education though it has many merits.

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