Balavani – A Comic Website for Kids to Teach Education for Life

Rajesh Kannan Megalingam, Ganesh Sai Apuroop, Vamsy Vivek, Gone Sriteja, Ashwin Kashyap
Department of Electronics and Communication Engineering, Amrita University, Amritapuri, India
megakannan@gmail.com, apuroopkgs@gmail.com, vamsyvivek.394@gmail.com, sriteja.gone97@gmail.com,
n.ashwin.k@ieee.org

Abstract—**Todays education system, has evolved through many changes and iterations. By this, the value of the education has increased for sure, but, the values which are supposed to be inducted in a kid is not seen everywhere. It is very rare to find value based education rather than education for jobs. Kids love reading comics and nowadays, there are not many comics which come out without having inappropriate material for children. Children need humane values to be incorporated in them even while they are growing. It is easy to create an impression on fresh grass rather than a stone. It is every parent's wish to see their children helping out others and doing something which is actually benefit to society. Some children are not intuitive enough to read novels or short stories to know them. But, it is universally accepted that irrespective of the age, comics are the best way to convey one's intentions. Sure, people can search for comics which are appropriate for all age groups, and surprisingly, there are hardly any website nowadays, that give the type of comics parents are actually searching for their children. Our research work is to use technology to fill this gap and create a platform for the children which actually serves this purpose. In this paper we discuss about the need for such a comic based website called Balavani, the architecture and implementation.**

Keywords – children, values, education, comic

I. INTRODUCTION

Young children are the quick learners of language, unlike adolescents and adults. They have the ability to imitate pronunciation, work out and learn the language by themselves. Mother tongue is the language that a person grows up speaking from the childhood. It is also known as the first language or native language. Being fluent in his mother tongue benefits an individual in many ways. Researchers say that the language acquisition skills peak at the age at or before the age of 7. Learning the language with the help of comics can create an engagement and motivation for the children and not just a fun art-enrichment activity. Students will understand the story, culture, values, plot, characters without any need of sophisticated wording skills. Students get a significant clue to word meaning just by the images supporting the words. Comics act as an uprise in student understanding. Having a website like Balavani that provides a portal of comics for the children with cultural, ethical, family values and historical education can help the parents make their children learn their own mother tongue that will be the education learned for life.

II. PROBLEM STATEMENT

Today, the children are more into learning a language other than their mother tongue and this is growing rapidly. Many linguistic groups are making sure that the young ones can keep the linguistic heritage. Many governments have recently established some education policies that encourage the children's first language. A publication of examples by United Nations Educational, Scientific and Cultural Organization (UNESCO) promotes to grow interest in mother tongue language based education. Similarly, many resources now are being developed to promote the mother tongue based learning programs. According to studies, one in three countries, more than one-quarter of the teachers are untrained. There is a lack of learning material to learn about the family values, culture and history, Balavani could help overcome these problems.

III. RELATED WORKS

In paper [1], the current issues faced with language and culture in education is explained. Most of the societies in many countries are multilingual and the education system in these countries mainly concentrate on only one or two languages and give the least preference to the first language. Paper [2] discusses that if you lose your language, this implies that you have lost the sole of your culture and are forever disconnected from the wisdom of ancestors. This explains the importance of the native language. Paper [3] discusses about the ideas and the productive skills associated with languages at various stages of learning. It explains the situations where we are considering the wrong perspective of other as a powerful language and uncertain about our own mother tongue. Paper [4] discusses the studies on literacy skills and language acquisition, in each scenario the performance of bilingual children is compared with the monolingual children and the results are interpreted as a theoretical framework. In paper [5], it mainly focuses on cultural manifestations on the website design, many websites ignore the cultural boundaries. Web being a global phenomenon which can reach many people including the children which they find easy to access. In paper [6], it elaborates the need of mother tongue, how the children in early age learn it easily and that can become the strength of thoughts and communication in his/her life later. Cultural and linguistic endangerment have become a serious problem nowadays, which would also include educational inequities. So, in order to make not this happen, we need to have some programs that can implement the mother tongue based

education. Authors in paper [11] discuss the usage of their device operated through a custom built GUI and this serves as a reference to develop a good GUI. In paper [12], the authors analyzed several ways to design and develop an efficient web architecture for IoT systems and it helped us to understand the efficient implementation of such a web system in the current project.

IV. NEED FOR BALAVANI

The objective of Balavani is to put a stop on the deteriorating culture and inculcate values in children as in ancient method of teaching in India. Our Indian education system used to be the greatest in ancient times. India is one of the few nations of ancient world where several enthusiastic students looked forward to her universities which taught culture, art, science and philosophy. One of the first few universities to be established in the world, Takshasila University in 700 BC which according to history, was a destination to lot of scholars and knowledge seekers to gain tremendous knowledge in various skills which includes War science, Engineering, Medicine, Law, Spirituality among various other sciences.

It is a fact that India has lost her value based education system in due course of time because of various factors like foreign invasions and forcible demolitions of educational institutes, etc. So it is high time that she tries to regain its original glory of value based education. This doesn't mean to be reluctant to the western way of education which is prevalent in the modern era but one should not forget one's nation's customs and culture. Our research work is just to start this process which would take several years or decades to regain to that status as in ancient India. Our website of Balavani is a platform where our prime objective is the value-based development of an individual. Young minds are like empty bowls which can be easily filled with knowledge because they don't question much and accept things the way they are. Acceptance is the key of learning any science. This should not be mistook for not reasoning at all. Discrimination and criticism are needed but to a certain extent. This is the reason why our target audience are primarily children of age group 3-12. Research says that this is the age group in which children's grasping level would have no bounds. They can learn whatever they wish to.

We see that these days, children are in a state of mind where they tend to waste this valuable potential of theirs in indulging in activities like watching TV, gaming or browsing the net even from a very early age. This is due to the impact of modern society where most of the families are nuclear in nature. With both the parents working, there is lack of communication amongst the family members. Kids come back home by early evening and are alone at their residence till parents come back. Some spend this time in useful activities by engaging themselves in doing homework, outdoor games etc. But most waste this time by indulging themselves in watching movies, computer gaming, social media etc. Children are addicted to TV and are so desperate to watch their favorite cartoon that they don't even care to fight with their family members. Then there are shows and episodes where children are exposed to excess of violence, vulgar, and

explicit content like smoking, drinking, taking drugs, etc. at a very early age which have a negative impact on their mind and thus on character. Children of today's time are not able to get guidance and support from elders as in joint family system of yester years. They are not getting to know the values and importance of discipline and hence their mind are not strong enough to boldly face any situation.

As is the case with television, gaming in personal computers is another medium where children find themselves so attached and addicted to. Games which they play would have an impact on their mind and most of the modern games are on violence, shooting, racing etc. When children are exposed to such negative traits even at the very young age, it can have a severe impact on the society that they are going to be part in the future. Schools which are supposed to imbibe values in young minds have become factories to train students to be only doctors, engineers and entrepreneurs.

The biggest threat of modern era of young children is the internet. It can do as much as harm when not used properly as can it be a boon to the user if used properly. But one should distinguish in which way to make use of it. Children must be made aware of this. Social networking has sunk into young minds so much that they find it as a part and parcel of their daily life and find it difficult to carry on their day-to-day affairs without this. The latest Russian application, "Blue whale" has gone to a higher level asking young teenagers to perform various tasks such as standing on the edges of tall buildings, cutting their veins, carving some letters on their body as told by the curator (the admin who is ordering) and watching scary videos by getting up early in the morning. There are a set of 50 events after which the kid is forced to commit suicide as the last task. More than 200 Russian children have fallen prey for this brutal application and it has taken a life of a child in Mumbai, India too. Government had banned this after knowing its effects. With these scenarios, there is a lot of change which has to be exercised by the society to get over all these social evils.

TV, computers and internet can have evil effects if not used properly but this idea is to use internet for a constructive purpose which is to inculcate values and educate young children with various essential things they need to know in this age which includes learning their mother tongue and master it, know the epics we have in Indian culture and science behind all that we do in day-to-day life, basic etiquette, Vedic mathematics, Yoga etc. In addition they get introduced to Indian culture which is tremendously rich in her heritage and values which is the reason why she was able to withstand all the obstacles that came in her way and is now the only ancient civilization which is still flourishing.

The implementation of this idea is planned for several months and has taken a shape now. At this point we are only building the website. To measure the impact and make a study will take several months. So we present this work as research in progress. The comic contents are developed according to the age group which are 3-5, 6-8, and 9-12 years. These would have stories from our epics like Ramayana, Mahabharatha, and puranas like Bhagavatha, etc. giving insights into what Indian culture is and how would this help us in leading our

daily life peacefully. The kings that who ruled India, their valour, their greatness to the saints and philosophers who walked over this great land will also be part of the comics. In 3-5 age group, there would be more of pictures which are self explanatory and 1-2 lines of explanation if required. All the scientific facts related to the story and the moral is given in the mother tongue itself. There would be a scientific approach to explain certain customs and procedures we follow in our culture which are often mistaken as blind beliefs. One should develop this kind of discrimination to know what really is a blind belief and what is not. Similarly for kids in age group of 5-8, the stories and morals would be of a higher level. Stress would be given in areas like basic etiquette, cleanliness, environmental problems, family values, vedic mathematics, cultural, ethical and historical education, mother tongue, dance forms, importance of yoga, Gitaamritam, scientific reasons, local cultural heritage of various places in our country and many other items making their way into this platform to benefit the mankind.

V.   SYSTEM ARCHITECTURE

The system architecture for the proposed Balavani comic access via website for the kids is shown in the Fig. 1. The children are categorized in three groups depending on their ages, 3 to 5, 6 to 8 and 9 to 12. Each group will have access to the Balavani webpage and the comics they access would depend on their age groups. The technology behind the Balavani webpage is the web engine which is shown in Fig. 2.
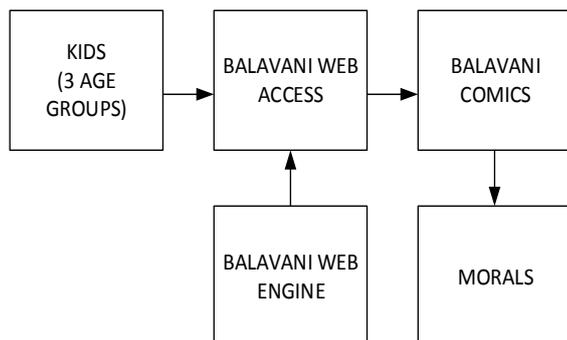

Fig 1. Block diagram of the proposed comic based website

The entire website runs on the latest HTML5 web technology and the styling of the website is done using CSS3 technology. HTML is a document layout language which serves by defining the structures and appearances of the web pages. For a better user experience, the website was tailored with a responsive design which can easily fit in any kind of screen without any compromise in the user experience. The website is tested on a local host and the coding is done using the Notepad++. Current websites require JavaScript for an easier and smooth flow of information and content. JavaScript is a scripting language designed for creating dynamic, interactive web applications that link together objects and resources on both clients and servers. The image in figure 2 shows a quick overview of the website Balavani. Inculcating

ethical and moral values to the young learners through various abridged comics is the vision of Balavani.
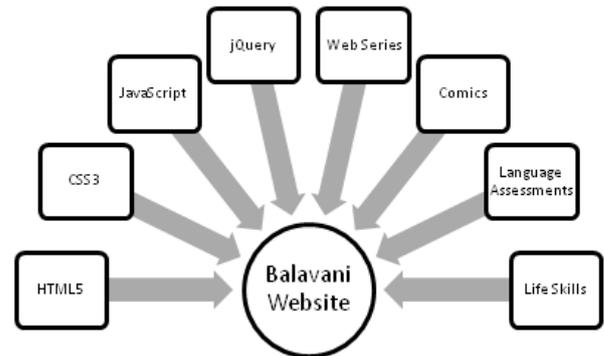

Fig 2: Technologies integrated into Balavani website

With the help of the JS, the webpage can be made to respond to the user directly with form elements and hyperlink texts. The JavaScript can also preprocess the data on the client side before submission to a server. The current website also uses JavaScript as part of storing relevant user data and providing better user experience. To help the kids to bring most of the content from the website, certain jquery plugins are used in the front-end design. The website will be hosted under the Top Level Domain (TLD) fetched from any of the leading TLD provider like GoDaddy, Bigrock etc. The homepage contains various tabs.
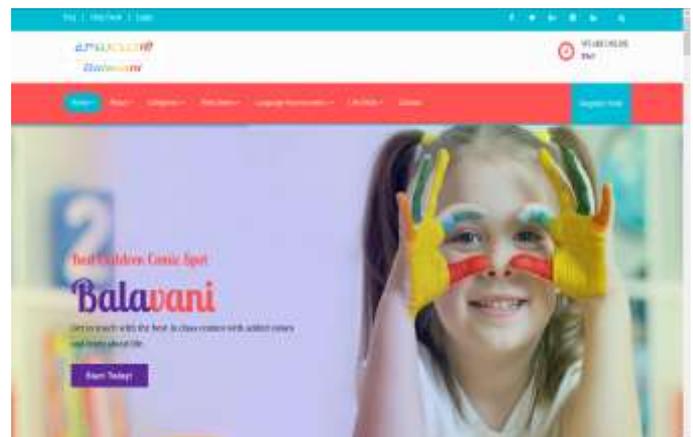

Fig 3. The main home page of the website

The main homepage contains tabs and hyperlinks which guides the users throughout the website as shown in figure 3. The menu bar includes tabs like 'About', 'Categories', 'Life Skills', 'Language assessment', 'Contact', 'Web Series'. Under each tab there are other hyperlinks which takes the user to the designated content. The website was designed strategically to make the kids understand and navigate through the web pages without any concerns. The image in figure 4 shows the category tabs for kids aged 3 to 5, 6 to 8 and 9-12. The comics are segregated under various age groups so as to inculcate interest among kids monotonically.

Fig 4: Tabs showing different age categories.

The image in figure 4 depicts the diversified content of Balavani which ranges from social responsibility, environment, moral values, ethics, culture, basic etiquette etc., thus catering to the all round development of the child and making him understand about the idea of 'Education for life.'

Fig 4. Tabs showing various topics of the comics

VI.   EXPECTED OUTCOME

In the following few paragraphs the expected outcome of the value based comic education site, Balavani is explained elaborately.

A. Basic etiquette

One is recognized in the society by the way one conducts oneself. The section of basic etiquettes would consist of very basic actions like washing hands and mouth before and after eating, drinking ample amount of water per day, carrying out exercises and prayers daily, respecting elders and teachers, studying daily and inculcating good manners.

B. Cleanliness

"Cleanliness is godliness," true to the saying one must imbibe the good practices of cleanliness in one's life. Shri. Narendra Modi, the Indian Prime Minister, took "Swatch Bharat" initiative to make cleanliness the first priority of the citizens. Things like keeping the toilets clean in home, school and any other institute, raising voice against public defecation, keeping our surroundings clean and hygienic, cleaning vegetables and fruits before consuming them, waste

management and so on would be part of the comics for the children to learn and imbibe.

C. Environmental problems

Mother Nature is the primary source for our survival. Human beings cannot survive without mother earth but mother earth can survive without humans. One must understand this basic fundamental fact. One of the major problems today is environmental problems which are growing at an alarming rate. So young generation should be introduced these problems and solutions have to be found out. There are problems like global warming, melting of polar ice-caps, deforestation-converting forests into concrete jungles, pollution - air, water, land, sound, light, nuclear, etc. Balavani would be a platform to create awareness among children about the environmental issues and motivate them to contribute their part for protecting environment.

D. Family values

Family is the first school to make the young brains grow towards the better and constructive society. Imbibing family values into kids make them understand the value of selfless service and compassion which makes them better individuals in the society. It will make them look at the whole world as their own family, "Vasudaiva Kutumbakam". We would introduce various relations and their names in mother tongue so that kids develop their vocabulary in their own mother tongue.

E. Vedic Mathematics

Indian mathematics is the pioneering science in the world. From the invention of 'Zero' to the most complex algorithms developed in India Vedic mathematics plays a major role. Vedic mathematics is also used in modern programming languages to increase the code efficiency by several folds. Vedic Mathematics, considered to be one of the oldest form of mathematics. Major theorems, proofs, cosmic calculations, astrology, existed thousands of years ago. The Pythagorean Theorem, is one such example, which is believed to be existed even before Pythagoras proved it. Indian mathematician Bhaskaracharya, gave its first proof, according to the epics. According to the research, the whole of mathematics is based on 16 central sutras or the word-formulae. Such was the intelligence of Indian mathematicians dated to thousands of years ago. Through comics kids would get opportunity to learn Vedic Mathematics.

F. Cultural, ethical and historical education

India is the land of the history and houses two humongous epics namely Ramayana and Mahabharat, each explaining about the various aspects of life in a detailed fashion. In addition to such a valued added epics there are a lot of other legendary writings from different saints and scholars. Cultural Education helps the kids through providing insights about specific characteristics of Indian Culture, and carry the legacy forward. Providing cultural education, at a young age, could mould the child's character and help the child in paving

a better path in life. All the epics, are not just for us to know what happened in the past, their main motive is to adapt the concepts, and apply them in our personal lives, and make it better ourselves.

G. Region Specific Festivals

India has 29 states. Each state has its own trademark festival, which is also followed by few other states. Some of the region specific festivals are - Bonalu in Telangana, Losar Festival in Arunachal Pradesh, Onam in Kerala, Baisakhi in Haryana. Each of the festivals has its own significance.Losar is the traditional festival-the new year for the people of Arunachal Pradesh, one of the 7-sister states in the north-east of India. The Tibetan New year is also known as Losar and is mainly celebrated for 3 days in late January or February. Marked with ancient ceremonies that represent the struggle between good and evil Losar has people chanting and passing fire torches through the crowds. It marks a significance of the fresh beginning.

Bonalu, which is a traditional festival only followed by the people of Telangana, south-central state in India. The word originated from "Bhojanalu" which is offered to goddess during festival time. It is believed that the goddess comes back to her maternal home during this time, so people come to see her and bring offerings of food. It is a festival prioritized for women. Women prepare food in a pot, decorate it with kumkum, turmeric and a lamp on top of it. They put the pot on their heads, and bring it to offer to the local deity.

Onam, a traditional festival of the south-eastern state of Kerala in India. It has its own significance, this is celebrated as a festival to welcome the King Mahabali, whose spirit is said to visit the state during Onam. Pookalam, the arrangement of flowers in a circular pattern, is made to welcome the king during Onam. This is celebrated for 10 days and on the last day, the "Thiru Onam", is marked with elaborate feasts, boat races across Kerala. Baisakhi, is celebrated on the harvest of Rabi Crop in the northern state, Haryana. People celebrate it with the traditional dance "Bhangra". Apart from these, there are many auspicious festivals in India such as Diwali, Dusshera, Pongal which are widely accepted and followed by many regions in India. Balavani provides a platform for the kids to learn in details about the festivals of their local region and what they stand for.

H. Science and Yoga

Yoga, took its origin approximately 5000 years ago during Indus- Sarasvati civilization (current northern India). The stretches designed to blend the human body and soul, meshing the physical with mental and spiritual. There are 5 types of Yoga, each of them contribute in their own way for the human body. Yoga has many positive effects on the functionality of the human body systems. Ashtenga, Vinyasa, Iyengar, Kundalini, Bikram are the types of Yoga. Yoga, in fact cures few chronic illnesses. Ashtenga, the oldest form of yoga, is also called 'power yoga' because of its fast pace. Vinyasa is focused on how breathing affects the mind and body. Iyengar is holding to a yoga pose for long time, which is

helpful in curing few illnesses. In Kundalini, participants focus on the effects of breathing based on postures. It also includes chanting. Bikram is also called as 'hot yoga' because it is done in hot temperatures (near to 32 degrees celsius). Science exactly defines how yoga enhances the functioning of human body. It is one of the greatest gifts from the olden civilizations to the mankind. Balavani would motivate the kids to take up learning Yoga and practice in their life to live a healthy one.

VII. CONCLUSION

In this paper we have proposed to use technology to create balance in the society which is deteriorating in moral values day by day. To this end we have proposed a value based education through comics with the help of Balavani, being developed exclusively for this cause. We have analysed the need for such an education and also discussed various benefits through Balavani. Though there are much more work to be done, including experimenting with children, analysis of the work and matching with expected outcome, we are confident that such a web based education would not harm children in any way and only to motivate them and educate them about the values which would be of great importance in their life.

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