

# Role Of ICT Tools In Teaching Sanskrit Language To Students

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ICT tools significantly enhance Sanskrit language teaching by making it more engaging, interactive, and accessible to a wider audience, ultimately promoting its preservation and dissemination. They provide opportunities for personalized learning, access to a wealth of resources, and facilitate effective communication, transforming traditional classroom settings. In recent years there has been a groundswell of interest in how computers and the Internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings. But ICTs are more than just these technologies; older technologies such as the telephone, radio and television, although now given less attention, have a longer and richer history as instructional tools. For instance, radio and television have for over forty years been used for open and distance learning, although print remains the cheapest, most accessible and therefore most dominant delivery mechanism in both developed and developing countries. The use of computers and the Internet is still in its infancy in developing countries, if these are used at all, due to limited infrastructure and the attendant high costs of access.

**Key Words:** computer, education, ICT, infrastructure, learning process, students, teaching.

## Introduction

Sanskrit, one of the oldest and most complex languages in the world, has been used for communication and literary purposes for over three thousand years. It is an essential part of India's cultural and intellectual heritage, with a rich literary and philosophical tradition. However, the language is facing a severe crisis of declining interest among younger generations, leading to a decrease in its use and preservation. As Teaching and learning Sanskrit is an essential part of preserving the language. To address this issue, integrating

information and communication technology (ICT) in Sanskrit teaching-learning has been proposed as a solution. Sanskrit is an ancient language that has been used for communication and literary purposes for over three thousand years. It is considered one of the oldest and most complex languages in the world, with a rich cultural and historical heritage., but it has become a challenge to attract younger generations to learn it. To address this issue, integrating information and communication technology (ICT) in Sanskrit teaching-learning has been proposed as a solution.

Information and Communication Technologies have recently gained groundswell of interest. It is a significant research area for many scholars around the globe. Their nature has highly changed the face of education over the last few decades. For most Asian countries, the use of ICT in education and training has become a priority during the last decade. However, very few have achieved progress. Indeed, a small percentage of schools in some countries achieved high levels of effective use of ICT to support and change the teaching and learning process in many subject areas. Others are still in the early phase of Information and Communication Technologies adoption.

Blanskat, Blamire, kefala (2006) conducted a study carried out in national and international schools. With the aim to draw evidences regarding the advantages and benefits of ICT in schools achievements, there is a need to measure the impact of ICT on students' outcomes. This study tried to establish a link between the use of ICT and students' results in exams. The findings are interesting: ICT has positive impact on students' performances in primary schools particularly in English language and less in science. Schools with higher level of e-maturity show a rapid increase in performances in scores compared to those with lower level.

## **ROLE & ACTIVE TOOLS OF ICT IN TEACHING SANSKRIT**

### **ENHANCING ENGAGEMENT AND ACCESSIBILITY:**

#### **Multimedia and Interactive Content:**

ICT allows for the creation of multimedia resources like videos, audio clips, and interactive simulations that make Sanskrit learning more engaging and accessible.

#### **Online Platforms and Resources:**

Online learning platforms provide access to a wealth of Sanskrit resources, including dictionaries, grammars, texts, and online courses.

#### **Personalized Learning:**

ICT enables teachers to tailor instruction to individual student needs and learning styles, fostering a more personalized learning experience.

#### **Global Reach:**

ICT tools facilitate the reach of Sanskrit education to a global audience, breaking down geographical barriers and promoting its preservation.

## **FACILITATING COMMUNICATION AND INTERACTION:**

### **Online Collaboration:**

ICT tools like video conferencing software and online forums enable students to collaborate and interact with each other and with teachers, fostering a sense of community.

### **Real-time Feedback and Assessment:**

ICT tools allow for real-time feedback and assessment, providing students with immediate information on their progress and helping them identify areas for improvement.

### **Interactive Quizzes and Games:**

ICT can be used to create interactive quizzes and games that make learning Sanskrit more enjoyable and engaging.

## **SUPPORTING TEACHERS:**

### **Professional Development:**

ICT tools can help teachers stay up-to-date with the latest research and best practices in language teaching.

### **Administrative Tasks:**

ICT can streamline administrative tasks like lesson planning, grading, and record-keeping, freeing up teachers' time for more valuable activities.

### **Resource Sharing:**

ICT allows teachers to easily share resources and collaborate with colleagues, fostering a sense of community and professional growth.

## **ADDRESSING CHALLENGES:**

### **Bridging the Digital Divide:**

It's crucial to address the digital divide and ensure that all students have access to the necessary technology and training to fully benefit from ICT in Sanskrit education.

### **Teacher Training:**

Teachers need adequate training to effectively integrate ICT into their teaching practice and utilize these tools to their full potential.

## **SPECIFIC EXAMPLES OF ICT TOOLS:**

### **Online Dictionaries and Lexicons:**

Sanskrit dictionaries and lexicons provide instant access to word meanings and etymological information.

### **Sanskrit-Specific Software:**

Computer-assisted language learning (CALL) software can assist with grammar exercises, vocabulary drills, and reading comprehension.

### **Multimedia Presentations:**

ICT can be used to create engaging multimedia presentations on Sanskrit grammar, literature, and culture.

### **Virtual Sanskrit Labs:**

Virtual labs can be used to simulate Sanskrit grammar exercises, vocabulary drills, and other learning activities.

### **Challenges in Integrating ICT in Sanskrit Teaching-Learning**

Despite the many benefits of integrating ICT in teaching-learning, there are also several challenges that educators must overcome. One of the primary challenges is the lack of infrastructure in many schools and universities that prevents students from accessing the necessary technology. In many cases, schools in rural areas do not have computers, internet connectivity, or other necessary ICT tools, making it impossible to incorporate technology into their learning.

Another challenge is the lack of trained teachers who can use ICT tools effectively in Sanskrit teaching. Many educators are not familiar with the latest technology and are not trained to use them effectively. Therefore, the use of technology in the classroom may not achieve the desired results if teachers do not have the necessary skills to use it. Furthermore, there is a shortage of digital content in Sanskrit language teaching. Many educational institutions still use traditional teaching methods and materials, such as textbooks and chalkboards, which do not engage students as well as interactive digital content.

### **Opportunities in Integrating ICT in Sanskrit Teaching & Learning**

Despite these challenges, integrating ICT in Sanskrit teaching-learning offers many opportunities. The use of technology can help to make Sanskrit language learning more engaging, interactive, and enjoyable. Interactive multimedia tools, such as videos, animations, and games, can make learning Sanskrit fun and exciting for students. Moreover, integrating ICT tools can make Sanskrit teaching more accessible. Online resources and courses can be made available to students regardless of their geographic location, opening up new opportunities for students to learn the language.

The flexibility, high speed and huge storage capacity of ICT is causing Sanskrit teachers to reconceptualize and review the traditional chalk and talk method of teaching-learning. The role of Sanskrit teachers has also changed and continues to change from being an instructor to a facilitator and organiser of learning by creating digital learning environment along with

digital Instructional approaches for their students. They need to appreciate the potential of ICT and have positive attitude towards implementing and integrating ICT tools into learning activities throughout the curriculum to support teaching-learning. Finally, integrating ICT in Sanskrit teaching can provide an opportunity for educators to collaborate and share their experiences and resources.

The use of social media platforms and online forums can connect educators and learners worldwide, leading to the exchange of ideas, best practices, and innovative teaching methods.

Here are some examples of online Sanskrit courses and tutorials available.

### **Sanskrit Studies**

This platform offers a variety of online Sanskrit courses for beginners, intermediate learners, and advanced students. The courses cover Sanskrit grammar, vocabulary, pronunciation, and reading of classical texts.

### **Learn Sanskrit Online**

This website provides self-paced online Sanskrit courses designed for learners of all levels. The courses focus on grammar, vocabulary, and reading comprehension, with interactive exercises and assessments.

### **Sanskrita Bharati**

Sanskrita Bharati is an organization dedicated to promoting the learning and usage of Sanskrit. They offer online Sanskrit courses that emphasize conversational Sanskrit, making it accessible and enjoyable for learners.

### **My Sanskrit**

My Sanskrit is an e-learning platform that offers online Sanskrit courses for beginners and intermediate learners. The courses cover grammar, vocabulary, and reading skills, with interactive lessons and practice exercises. University Courses Many universities worldwide offer online Sanskrit courses as part of their distance learning programs. These courses are often structured and comprehensive, covering various aspects of Sanskrit language and literature.

The explosion of digital technology has created a paradigm shift in the field of educational instructions. It is important to prioritize bridging the digital divide and providing access to technology to all students. At the same time, educators must receive adequate training to effectively use ICT tools in their teaching. With the development of interactive digital content and the availability of online resources, ICT tools have the potential to make Sanskrit teaching more engaging and accessible for students worldwide. Additionally, integrating technology can create opportunities for collaboration and sharing of resources among educators. Overall, integrating ICT in Sanskrit teaching-learning can help to preserve and revitalize the language for future generations.

Computer has become a powerful and inevitable tool in teaching and even in research fields. Language teaching and research in the literature of a language also require the usage of modern innovations for the effective results. Researchers found that the usage of Computer (as it's an ICT tool) in Language teaching yielded better results.



**CALL or CAI or CALI** (Computer assisted language learning CALL, or Computer aided Instruction CAI or Computer aided language instruction CALI) is the study of applications of the computer in language teaching and learning. It has begun its journey from the "traditional" drill-and-practice programs that characterised CALL in the 1960s and 1970s to the latest innovations of CALL, e.g. as used in a virtual learning environment and Web-based distance learning. It suggests the use of Computer-mediated communication (CMC), language learning in virtual worlds, interactive whiteboards and mobile-assisted language learning (MALL).

**The Realistic form of CALL takes place in the classroom and it can be through a PPT presentation while Virtual CALL includes Apps, Online Courses and useful URLs such as**

[https://play.google.com/store/apps/details?id=com.srujanjha.vachaspatyam&hl=en\\_US](https://play.google.com/store/apps/details?id=com.srujanjha.vachaspatyam&hl=en_US)

<https://play.google.com/store/apps/details?id=com.sparshapps.sanskrit&hl=en>

<https://play.google.com/store/apps/details?id=org.srujanjha.dhatuvrttis&hl=en>

[https://play.google.com/store/apps/details?id=org.srujanjha.paniniashtadhyayi&hl=en\\_US](https://play.google.com/store/apps/details?id=org.srujanjha.paniniashtadhyayi&hl=en_US)

<https://www.microsoft.com/en-in/p/shabdkalpadrumsanskrit/9nblggh4447w>  
<http://sameapk.com/amarkosh/> <https://apkpure.com/siddhanta-kaumudisanskrit/org.srujanjha.siddhantakaumudi>  
[http://www.sanskrit.nic.in/sanskrit\\_language\\_teaching.php](http://www.sanskrit.nic.in/sanskrit_language_teaching.php)  
[http://sanskrit.nic.in/correspondence\\_courses.php](http://sanskrit.nic.in/correspondence_courses.php) <https://sanskritfromhome.in/>  
<https://www.vyomlabs.com/> <https://www.samskrittutorial.in/>  
<https://blog.practicalsanskrit.com/> <http://blog.sanskritcentral.com/>  
<https://vaak.wordpress.com/>

Teaching Sanskrit through computational tools is an effective way due to which a language as difficult as Sanskrit would become relatively easy and more students would be able to learn it. Computational linguistics is defined as a combination of Computer Science and any language.

Speaking to Education Times, Amba Kulkarni, Professor, Department of Sanskrit Studies, University of Hyderabad, says, "In order to read any Sanskrit text one needs to know the suffix attached to the Sanskrit word which is not seen separately.

This suffix is integrated with the Sanskrit word. Learning Sanskrit is a difficult task as the learners would have to memorise all the forms of Kriya (verb). In the Sanskrit language, there are, in addition to singular and plural, dual forms of the words. In order to help users, we have designed a computational tool where we just give a word and the machine shows all the forms of that Sanskrit word. For instance, if we enter the word Rama, the computer will provide us with all its forms in the Sanskrit language."

The computational tool is meant to recognise the word. But, in Sanskrit language a learner need to identify the word and sentence boundaries which is a challenge. "Computational tools help in resolving all these difficulties. These computational tools are used as an assistant to the learners to understand the text and rules of the grammar. Another aspect that needs to be paid attention to is that Sanskrit is rich in poetry. Almost all literature in Sanskrit is in verse or poetry form and is difficult to understand. Now we have computational tools that can convert these poetic forms into prose form which are easy to comprehend."

## Conclusion

In conclusion, ICT plays a vital role in modernizing Sanskrit education, making it more accessible, engaging, and effective. By leveraging these tools, teachers can enhance student learning outcomes, preserve the language, and promote its dissemination to future generations. ICT develops self-discovery and self-evaluation skills in learners. One of the enormous advantages of ICT is that it can incorporate many different media into one machine. Inclusion of voice, text, photographic images, music, sound effects and video provide Sanskrit teachers with an extremely powerful learning tool.

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