ISSN (ELECTRONIC): 2945-3135

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & REVIEWS

journal homepage: www.ijmrr.online/index.php/home

COMPARISON OF CHALK AND BOARD VERSES DIGITAL AYURVEDA TEACHING

Dr. Prachi Pandey Ojha

Associate Professor

Department of Kriya Sharir, Government Ayurvedic College Patiala Punjab

Guru Ravidas Ayurvedic University, Hoshiarpur, Punjab

How to Cite the Article: Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

https://doi.org/10.56815/ijmrr.v4i3.2025.281-290

Keywords	***Abstract***
Chalk And Board, *Powerpoint,* *Blended Learning,* *Flipped Classroom,* *Ayurveda Education,* *Student Perception,* *Traditional vs Digital Teaching.*	The Ayurvedic education system was earlier chalk-and-talk and sequential, participatory and basic concepts, Sanskrit shlokas and clinical reasoning were taught to the students. The COVID-19 pandemic accelerated the digital transformation in medical education and impacted what students do with the content and how teachers present it. This review will address the cognitive dimensions of this transition, with the emphasis on the effects of technology on learners' attention patterns, memory, and spatial reasoning and on their satisfaction with attention patterns. Interactive technology and availability of resources worldwide are more flexible and engaging for students, but there's concerns on how long students can focus, how much they can retain and how they are utilizing digital aids to learn. The use of digital tools to support the visualization of Ayurvedic teachings, the flexibility of self-paced learning, the flipped approach to activities and learning, and the strengths of teaching and learning with chalk and talk, combine to create the best educational outcome. As noted in this review,

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

	teacher training, infrastructure and other empirical research are needed to modernise the education of Ayurveda effectively without losing its basic and traditional principles

INTRODUCTION

The ancient Indian practice of Ayurveda is said to have its origins as far back as five thousand years, making it the world's oldest holistic treatment method [1]. It was the primary method of medical treatment throughout the middle Ages and the Dark Ages. An earlier form of Ayurvedic education was the Gurukula system, a component of the Vedic approach to learning in which students lived with their instructor (Guru) for the duration of their studies to ensure they learned everything there was to know. The Gurukula system of education faded and lost its lustre in subsequent centuries due to cultural influences, invasions by other empires, and the rise of alternative medical systems [2]. There have been tremendous shifts in Ayurvedic education throughout the years, and the current system is quite different from its predecessors.

Educators in the medical field have long argued that the "Blackboard & Chalk" approach to teaching has a place, either in isolation or in combination with PowerPoint. Technological advancements are having a profound impact on the medical education system, changing the game for both students and educators.

Meanwhile, in 2020 and 2021, the world was struck by the devastating COVID-19 pandemic, which caused significant casualties and economic, social, and educational setbacks [3]. During this period, traditional classroom education abruptly gave way to online learning since schools were ordered to shut [4]. Those educators and students for whom the traditional methods of delivering material had always been the norm found this to be an entirely novel experience [5]. With the urgent need to ensure the safety of students, faculty, and staff at educational institutions in mind, the federal and state governments reached a consensus decision to implement nationwide online education. There are benefits and drawbacks to this relatively new approach to online education, particularly for students pursuing careers in medicine.

Therefore, the antiquated method of teaching with chalk and board was ceremoniously abolished. After Corona, most educators preferred using computers with slide shows instead of chalk and blackboards because they found it simpler. Consequently, traditional teaching and learning of lectures has been replaced by more interactive audiovisual teaching and learning which stimulates students' participation in the learning process. Students/Teachers can copy and paste, only text will be displayed on the screen. Using tables, charts, videos, and projecting photos can be helpful for grabbing student attention and teaching effectively with PowerPoint. Moreover, it meets with the short attention spans of Gen Z students, who have a tendency to lose interest in traditional didactic courses.

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

The new era of digital technology is impacting the way we think, behave, and feel. Some who've been against excessive screen time say it's bad for the brain to get distracted, to have attention and memory impaired; others say it's good. But the truth is, there are positives and negatives to excessive screen time. With just a tap on the smartphone screen, people can find a ton of information about health and other related issues, as well as ways to communicate with each other. There is a video on YouTube for about anything—and these days it's not about the best professor at the university; it's about the best YouTube professor. While traditional lecture-based medical education is being replaced by more integrated learning, blackboards are being replaced by virtual simulations as a teaching tool. Recently, the discussion has been about the integration of technology in the education sector. Lectures are enhanced with digital boards and PowerPoint presentations to improve lecture intelligibility, including route and mechanism diagrams.

Chalk and discourse are the usual tools of the traditional educator:

- Lectures: Lessons are presented by teachers with little to no student participation.
- Learning from textbooks: Students learn best from textbooks.
- A lack of engagement: students only sit back and take in knowledge without actually doing anything practical.

Traditional classrooms use time-honoured tools like textbooks, whiteboards, and chalk. Teachers usually use this method when they want to discuss a topic and then write key points on the board for pupils to replicate. This approach has worked for a long time, but it lacks the interactivity that new digital technologies offer. No matter how much or how little AI is enabled, the "Smart Board" keeps students' attention on the screen in front of them as they work on presentations, write or draw on the spot, collaborate, etc. The difficulty of engaging the learner visually, cognitively, and physically persists. The old standby, "chalk and blackboard," works quite well here.

The use of a digital whiteboard in the classroom:

- Integration of multimedia: Lessons may be enhanced with the presentation of movies, animations, and interactive activities.
- Teamwork: Different groups of students may work together to make learning more engaging by interacting with the board at the same time. The objective should be to capture the pupils' attention in any way possible; yet, depending only on visual tricks will not accomplish this. During an assignment, quiz, etc., the focus should move from the screen to the blackboard.
- Instant feedback: With the built-in quizzes and interactive features, teachers may easily evaluate student progress. Even students can take stock of their own progress through self-evaluations.

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

In most classrooms, students and teachers alike use large digital touchscreens, called digital blackboards or interactive whiteboards, to engage with course content in real time. Basically, educators can annotate information directly on the displays by writing, highlighting, or drawing. In particular, the abundance of interactive elements on smart boards gives them a smooth feel. More student involvement and interaction, more personalised learning, teaching cooperation and feedback, quick feedback and assessment, and access to a limitless variety of materials are all benefits of a medical classroom with a digital board. Teachers may access interactive simulations, films, databases, and instructional applications directly from the board. Teachers can work more efficiently with digital boards because they spend less time preparing. Teachers are free to focus on instruction rather than administration when resources are readily accessible and well organized. The inability of the presenter to participate in a conversation and respond to audience questions is a significant downside of using AI and other technological tools to prepare lectures and presentations. The best educational tools can't replace open, honest conversation in real classrooms when students need a quick, reasonable answer to their questions. Therefore, one must exercise caution and have a thorough understanding of the subject matter when using technology. Which method, digital board or chalkboard, is more appropriate for today's medical classrooms? Both have their advantages and disadvantages. This question is worth a million dollars. So, let's have a look at how our medical schools are adapting to the digital age of learning. To be a good teacher, you need to know all there is to know about your topic. To do this, the educator might consult books and periodicals, consult AI, etc. This is a recipe for catastrophe, however, if the instructor generates the whole presentation using AI without first mastering the material. AI can provide data, but it is the teacher's job to use their intelligence to turn that data into knowledge capsules that students can take with them. To sum up, AI cannot replace a teacher's knowledge. On the other hand, we can't definitively hold AI responsible for instructors' shortcomings in instruction, since AI doesn't know the teacher's level of knowledge. Similarly, AI cannot replace human teachers because it cannot gauge how much each kid is paying attention in class.

METHODOLOGY

In Ayurveda education, this narrative review seeks to assess and contrast the efficacy of digital vs conventional means of instruction. This review brings together modern educational methods and technical developments, particularly after COVID-19, with traditional Ayurvedic teachings (Guru-Shishya Parampara).

Search Strategy: Electronic databases such as PubMed, Google Scholar, Scopus, AYUSH Research Portal, DHARA, and ERIC (Education Resources Information Center) were used to do a thorough literature search. Additionally, comments and classical Ayurvedic writings pertaining to pedagogical approaches were studied. For example, those terms such as 'Ayurveda education', 'COVID-19 impact on medical education', 'Flipped classroom', 'Chalk and board teaching', 'Traditional teaching in

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

Ayurveda', 'Digital teaching', 'E-learning in Ayurveda', 'Blended learning', 'Flipped classroom', 'Guru-Shishya Parampara' and similar combinations were used.

Review Methodology: Classical texts on Ayurvedic education have been included irrespective of the timing; literature that was written mostly between 2010 and 2025 has been judged. Appropriate research materials that included full text articles, review papers and other reliable sources were identified and evaluated. The cognitive, pedagogical and practical aspects of both of these methods of instruction were compared in terms of the student's engagement, retention, satisfaction, and acquisition of clinical skills. To convey the results thematically, stressing the benefits, limits, and promise of blended learning approaches, a narrative synthesis technique was used.

Data Synthesis: The information was categorised into the following main categories: Traditional Guru-Shishya system, contemporary digital and mixed teaching techniques, role of technology in Ayurveda education, and benefit of combined traditional and digital education. To find out the best practices in education of Ayurveda, we searched the connection between the traditional teaching and technology.

Ethical Consideration: Ethical clearance was unnecessary for this study since it is a survey of existing material and classic works. All sources have been cited properly to ensure academic integrity.

INCLUSION AND EXCLUSION CRITERIA

Inclusion Criteria Literature was included in this review if it met the following criteria:

- Books and articles on classical pedagogy, the Guru-Shishya Parampara, and other ancient Ayurvedic modes of instruction.
- Research or writings pertaining to medical or Ayurvedic education that make use of digital teaching approaches, such as e-learning, blended learning, PowerPoint, the flipped classroom, and others.
- Studies contrasting online and face-to-face education with an emphasis on student participation, achievement, retention, and happiness.
- Articles discussing how COVID-19 has altered medical and Ayurveda curricula, particularly in relation to online learning.
- Books, scholarly papers, and genuine Ayurvedic texts published in English that have undergone peer review.
- Included are articles published between 2010 and 2025, with a focus on traditional Ayurvedic writings.

Exclusion Criteria The following were excluded from the review:

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

- Articles that don't address Ayurveda at all and instead concentrate on standard medical education.
- Research having nothing to do with instructional strategies or technological tools for instruction.
- Speculative writings, editorials, conference abstracts, and other forms of non-scholarly writing that lack citations.
- Studies that focus only on areas of Ayurveda that have nothing to do with schooling or completely different disciplines.
- Non-English language articles published in periodicals.
- Publications that are too similar to one another or that fail to provide sufficient empirical or theoretical support.

TRADITIONAL TEACHING SYSTEM IN AYURVEDA

The Guru-Shishya Parampara is the foundation of ancient teaching of Ayurveda. In this paradigm the student stayed near the teacher and learned from the teacher's teaching and from the informal learning opportunities, such as the observation of the teacher's behaviour, examination methods, the way the teacher interacted with patients, and therapeutic judgement. Learning was slow and continuous and discipline was essential to this [6]. Pupil listened carefully during first instruction. This level can be compared to Shravana. The learner then reflected on this, raised some questions about it and made some links to other ideas. It's like Manana. Lastly, the material was put into practice, and the learner retained it. This is indicative of deeper understanding and application. Thus learning was emotional and not mechanical. It was indeed a revolutionary stride in a word [7]. Another characteristic of the old system was the provision of personal attention. The teacher knew the student's ability, strengths, and weaknesses and how the student can grow. This issue was addressed immediately. There was also an increase in monitoring during clinical practice. The student could apply the knowledge on Lakshana, Nidana, DoshaDushya Sammurchchhana and others provided in the literature [8] through the practice with real patients. In today's institutional settings it is more difficult to maintain these characteristics in their entirety.

Large class sizes, time constraints, test pressure and curriculum load reduces the level of individualised instruction. This is where the new concept of blended learning can enhance and even rejuvenate some of the advantages of the old system [9].

MODERN METHODS OF TEACHING

E-Teaching

Learning via interaction, self-paced study, and quick access are all options made possible by e-learning. Electronic learning has rapidly replaced traditional classroom instruction in medical

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

schools, particularly in the wake of the COVID-19 epidemic. Because it allows for greater flexibility and simpler adaptation, e-learning is more student-friendly. During the epidemic, online e-learning played a significant role in satisfying educational demands. The online courses were held using a variety of digital platforms, including Google Classroom, Zoom, Cisco Webex, Free Conference call, Microsoft Teams, and others. If they want to succeed in online classrooms, educators must hone their skills in pedagogy, technology, and subject matter expertise.

Blended Teaching

The term "blended learning" describes a strategy that mixes online and in-person instruction. This approach to education combines conventional teaching methods with digital tools. To cater to their students' individual requirements, teachers may use a wide variety of tactics, both old and new, that use digital elements.

Flipped classroom

Students in a flipped classroom often watch video lectures before class and complete assignments based on what they've learned. The students then return to class to work together on cases, do further research, and solve them. Along with the assigned reading, students are free to view the video lecture whenever and wherever they choose, at their own speed. They are free to go over the material as much as they need to grasp the ideas. In subsequent years, individuals return to school to acquire knowledge and skills beyond what can be covered in a standard classroom setting.

Mentor Teaching

As a form of interactive knowledge transfer, it involves more seasoned members of the group helping less experienced individuals with their professional development by sharing what they've learned and accomplished. Examples include peer, group, and one-on-one mentoring. A contemporary approach to education, problem-based learning involves students working in small groups with an instructor or facilitator. Throughout the sessions, students discuss case studies, brainstorm potential differential diagnoses, set learning objectives, and plan any necessary follow-up investigations. Students should reflect on and analyse the topics learned during a Problem-Based Learning session before moving on to the next cycle. Teachers face several challenges when they take on the role of facilitator, including maintaining students' attention and energy levels through the use of open-ended questions and resolving group disputes.

Interactive Teaching

Students take an active role in their own education via this kind of communication engagement. Students' needs are the center of this approach. In this context, the teacher's responsibility is to help pupils achieve their objectives, taking into account their strengths and areas of interest. There are several scheduled activities and tasks that students will participate in throughout the class.

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

Excursions, role-playing, imitation, case studies, brainstorming, bringing in experts, etc., are all part of the program. Both the instructor and the student's perspectives on medical education have evolved significantly in this age of rapidly developing information technology. The educator must adapt to the ever-changing demands of the student in light of the most recent changes and implementations of the Competency-Based Curriculum in Medical Education.

To improve in this regard, the National Medical Commission has decided that medical institution teachers will attend training workshops to ensure compliance with these requirements. In recent years, many new teaching methods have been introduced in medical education in a systematic way to enhance teaching and learning and prepare better doctors. The potential of online education is still not fully realized, especially in less developed countries such as India. However, with the spread of the COVID-19 virus around the world, the traditional classroom way of teaching is no longer relevant. Most of the studies revealed that, in contrast to more traditional methods of teaching, the lecturers were more bored and less motivated when teaching online and therefore less interested in their students' performance. However, Zalat M et al. [10] noted overwhelmingly that participants were interested in online education due to the flexibility and convenience it offered in relation to time and place. The greatest difficulties in adjusting to online learning were cited to be inconsistent internet connection, lack of technology and other technical problems.

ROLE OF TECHNOLOGY IN AYURVEDA EDUCATION

Ayurveda education is enhanced by technology, which both supports and facilitates it. It is primarily used in accessibility, display, interactivity and modification. It can be used to improve quality of instruction delivery through a variety of media including text, images, audio and video. This is even more useful when working with pupils who have a variety of learning styles. If Samhitas, commentaries, dictionary, and transliteration tool etc. for textual topics can be digitised, technology can be of tremendous help. Students find the lessons on challenging subjects, keyword searches, and verse comparisons to be easier. Audio recordings of the Shloka may be used to help with pronunciation and to help memorisation [11]. Students can use computer-generated support like 3D-models, annotated graphs and video demonstration to aid their understanding of concepts related to anatomy and physiology. Visual aids are provided to aid in learning for example Sharira Rachana structures and Kriya Sharira functions. In a clinical environment, technology can be of great assistance for case discussions, playing films of procedures, data shaping, analysis of digital records etc. Recorded instructional materials [12] may be used to reinforce teaching techniques like Nasya, Basti, Kshara Karma, Jalaukavacharana, etc. Communication is also aided by technology. This can help with academic updates, answering questions, online, assignment announcements, sharing of materials, etc. It therefore helps to achieve uniformity of education.

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

EDUCATIONAL VALUE OF COMBINING SHASTRA AND TECHNOLOGY

The teaching benefits of the combination between Shastra and technology are profound because of the different attributes they have. Shastra is a gift that provides authenticity, conceptual grounding, philosophical profundity and a sense of one's own academic identity. The use of technology improves accessibility, accuracy, and flexibility and student engagement. These are well embedded in education and it is robust and flexible. The terminology, classification, logic and therapeutic approach of Ayurveda is pointed out to the students through shastra. The use of the original scientific voice is maintained. Today's learners will be able to dissect that voice using a technology that will support visualisation, accessibility and revision. They collaborate to ensure that things don't get too bad. Without Shastra, the science of Ayurveda may be demystified and it may lose its pureness and become diluted. Without technology, time, format and accessibility are still obstacles to learning. Together they build a relationship as a place for the teacher and student to learn.

It also promotes learning through reflection. For instance a student can hear a Shloka read aloud in class, read it online, read it in a case study and then take a quiz to test his/her understanding. Layering the material provides greater understanding and retention. Hence, it can be inferred that introducing Shastra and technology in the classroom could effectively aid the students in learning and yet retain the values of the discipline.

CONCLUSION

Teaching others how to pass on information is a great profession. It has evolved over the years, and is supplemented by various audio-visual aids. This study revealed that to date, the most widely used instructional method was a blend of the old school model of chalk and board and PowerPoint presentations, but there is increasing evidence that more advanced methods are more effective. For teachers, the ability to be creative is equally important to make the best use of current teaching methods, such as e-learning and online lectures, particularly with the reduced duration of courses. Once the technical issues are resolved, this will greatly enhance the efficiency and effectiveness of conveying the main points.

AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Prachi Pandey Ojha (2025). ***Comparison Of Chalk and Board Verses Digital Ayurveda Teaching.*** International Journal of Multidisciplinary Research & Reviews. 4(3). 281-290.

PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will take care by all authors. Journal and editors are not liable for aforesaid matters.

SOURCES OF FUNDING

The authors received no financial aid to support for the research.

REFERENCES

[1]. Rastogi, S. (2021). Emanating the specialty clinical practices in Ayurveda: Preliminary observations from an arthritis clinic and its implications. *Journal of Ayurveda and Integrative Medicine, 12*, 52–57.

[2]. Jaiswal, Y. S., & Williams, L. L. (2017). A glimpse of Ayurveda – The forgotten history and principles of Indian traditional medicine. *Journal of Traditional and Complementary Medicine, 7*, 50–53.

[3]. World Health Organization. (2020). *Impact of COVID-19 on people's livelihoods, their health and our food systems*. Retrieved September 11, 2023, from WHO

[4]. Kim, S., & Oh, J. (2021). The relationship between e-health literacy and health-promoting behaviors in nursing students: A multiple mediation model. *International Journal of Environmental Research and Public Health, 18*, 5804.

[5]. Schleicher, A. (2020). *The impact of COVID-19 on education (Insights from education at a glance 2020).* Retrieved September 25, 2023, from OECD Report PDF

[6]. Sushruta. (2013). *Sushruta Samhita* (Sutra Sthana, pp. 1–8). Varanasi: Chaukhambha.

[7]. Tiwari, S. (2017). Concept of Shravana, Manana, Nididhyasana. *International Journal of Ayurveda Research, 8*(2), 55–60.

[8]. Sharma, P. (2016). Clinical training in Ayurveda. *AYU, 37*(3), 210–215.

[9]. Joshi, H. (2020). Challenges in Ayurveda education. *Journal of Ayurveda and Medical Sciences, 5*(2), 95–100.

[10]. Zalat, M. M., Hamed, M. S., & Bolbol, S. A. (2021). The experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. *PLOS ONE, 16*(3), e0248758.

[11]. Mishra, S. (2021). Digital tools in Ayurveda education. *AYU, 42*(1), 10–15.

[12]. McGaghie, W. C. (2010). Simulation in medical education. *Medical Education, 44*(1), 50–63.