

Enhancing Medical Teaching by using Smart Boards

Country	Romania
Institution/Organisation	"Grigore T. Popa" University of Medicine and Pharmacy, Iași, Romania
Type of setting	Community health delivery across five counties
National Context	Tertiary education and academic research institution focusing on advanced medical learning and development of innovative healthcare solutions.

In medical schools, updated infrastructure is essential as medical concepts grow more complex. Interactive learning has become increasingly important, with smart boards offering a modern solution by combining whiteboard functions with computer capabilities. They support material projection, direct interaction, and remote learning. However, despite growing investments, smart board implementation remains uneven across Romanian medical universities due to limited funding.

Description of Technology or System

The smart board is an interactive touch-sensitive display that enhances learning by providing high-resolution visuals and compatibility with various external devices and online resources. It supports real-time demonstrations through a document scanner lamp, enables simultaneous broadcasting across multiple rooms, and offers audio-video recording for creating educational archives. Overall, it improves the medical learning process at all stages by ensuring clear presentations, easy access to information, and the ability to review recorded materials.

Implementation Process

- The acquisition and implementation of the smart board system was a project carried out in several stages, over several years.
- The teaching staff creates a database of study materials and constantly enriches it, based on student and young doctor's feedback and observed educational needs. The first target was preclinical education. Later the project was propagated to clinical education.

Impact and Results

- Quantitative: 20% increase in student performance scores in exams.
- Qualitative: It accelerates medical knowledge acquisition, boosts student confidence, provides rapid access to updated materials and visual resources, including new or rare medical procedures.

Success Factors

- Effective communication between direct beneficiaries of education.
- Efficient integration into existing teaching methods and structures.

Challenges and Barriers

- The initial cost and long-term cost.
- Time to train all teaching staff;
- Teaching staff resistance (difficulties related to the use of modern technologies and computer systems).

Key Lessons Learned

- Educational progress evolves in parallel with progress in learning infrastructure.
- Dynamic and interactive learning increases interest in studying.
- The rate of understanding of the knowledge taught and improves students' qualifications.