



E-LEARNING

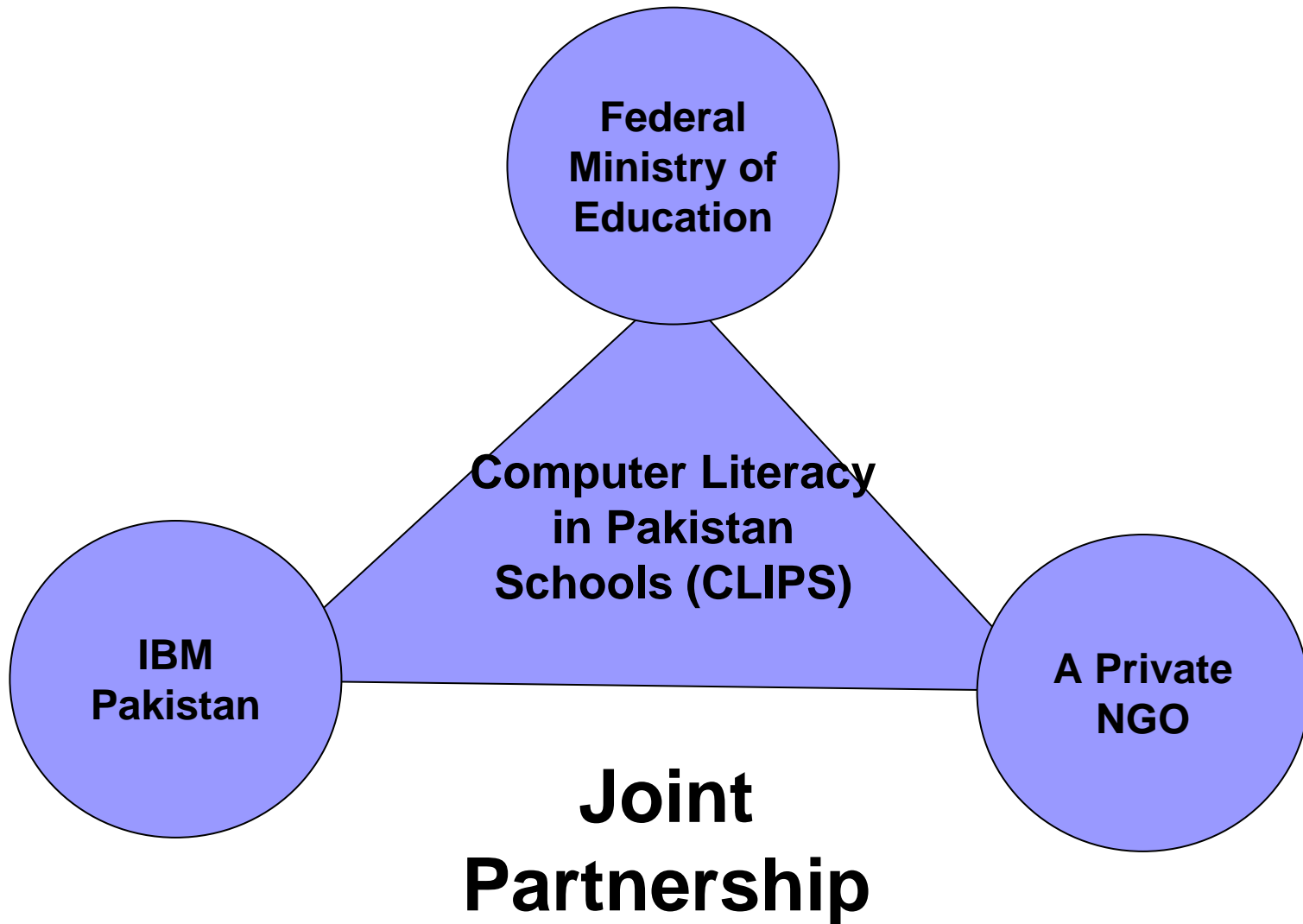
POTENTIALS, CONSTRAINTS AND FUTURE: Pakistan Experience

TARIQ MAHMOOD

Director

**National Institute of Science & Technical Education (NISTE),
Ministry of Education, Islamabad, Pakistan**

An Early Scene – A Project in 1993



A Project - Responsibilities

Federal Ministry of Education

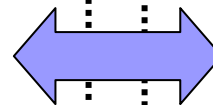
- **Select 50 Schools from all over Pakistan**
- **Select 2 Teachers from each School**
- **Preparation & Approval of the Project**
- **Monitor the implementation**

The NGO

- **Develop Material for Teacher Training**
- **Conduct Teacher Training Program**
- **Monitor the Implementation of the Project**

IBM Pakistan

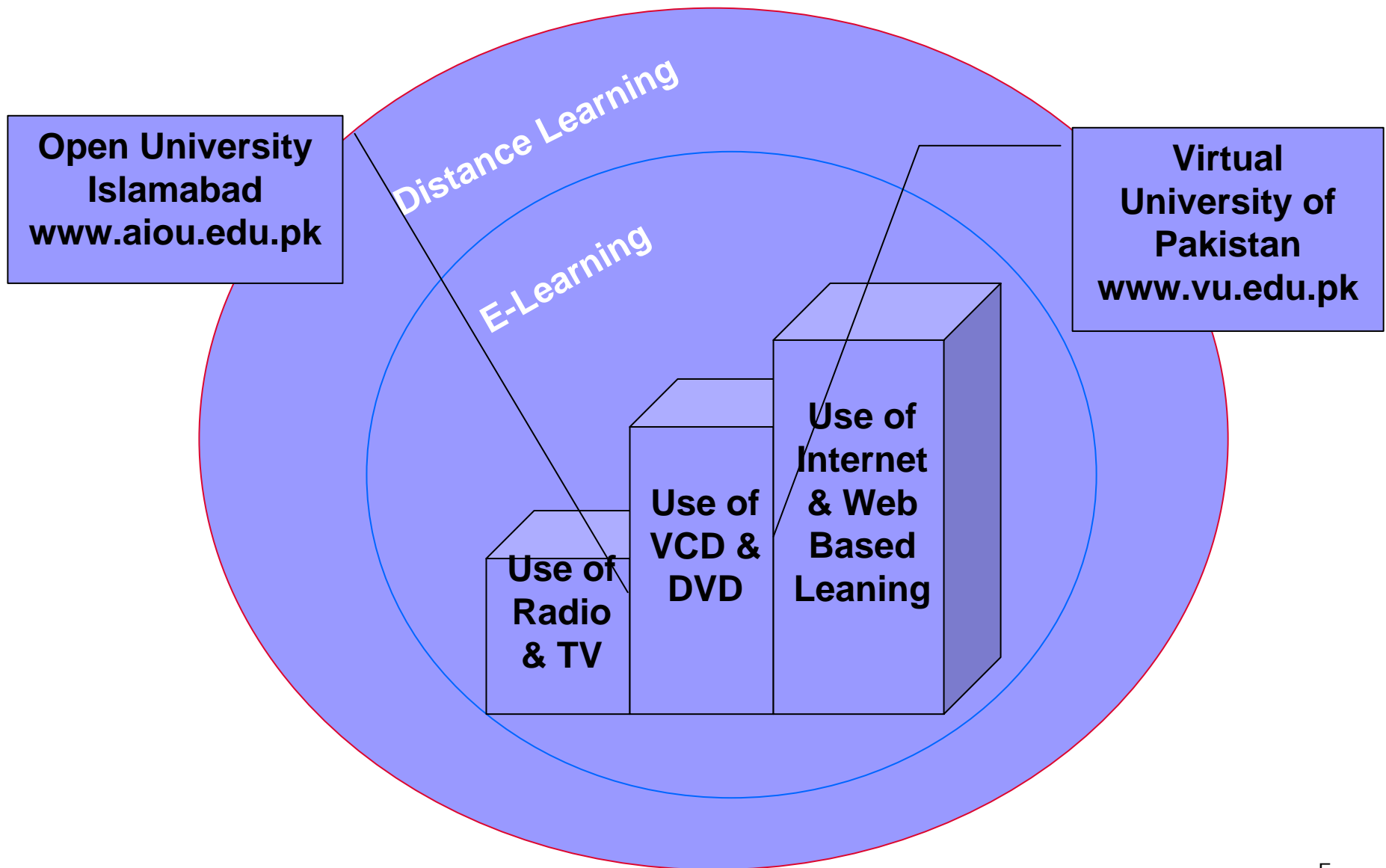
- **Provide 2 Computers and 1 Printer to each School**



A Project – The Outcome

- **Only 5% Schools – 10 out of 50 could start well**
 - **Dedicated Teacher**
 - **Management Support**
- **Realization that Computer Studies should be a subject of Study in School**
 - **Computer Studies Curriculum and Textbooks were Developed**
 - **Appointment of Special Computer Teachers**
 - **Addition and Purchase of more Computers for Schools**
- **Arrival of Educational Software and Games**
 - **Use of Specific Educational Software**
 - **Use of Generic Software**
- **Internet and Emails**

E-TEACHING AND LEARNING – The Current Scene



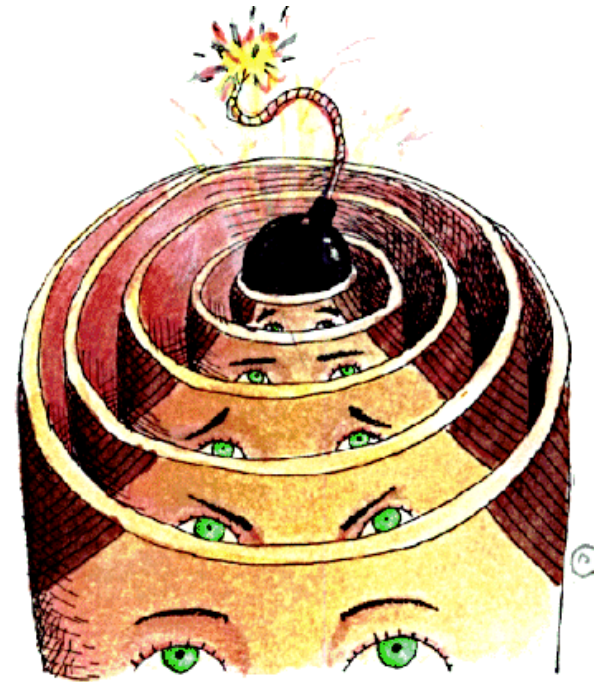
E-LEARNING POTENTIAL

- **PEDAGOGICAL VALUE**
 - SELF PACED & SELF DIRECTED, LIFE LONG, MULTIPLICITY IN DELIVERY OF CONTENT & VARIETY OF MATERIAL
- **EDUCATION ANY TIME ANY WHERE**
- **NO GEOGRAPHICAL BARRIERS AND 24/7 ACCESSIBILITY**
- **COST REDUCTION**
 - REDUCTION IN TRAVEL TIME AND COST, NO PURCHASE OF BOOKS AND COSTLY MATERIAL



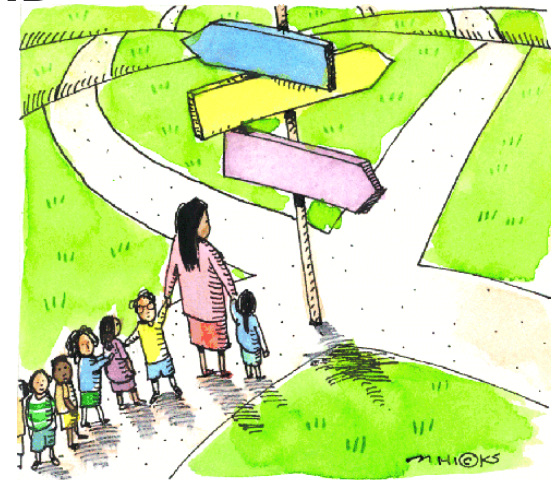
E-LEARNING CONSTRAINTS

- NETWORK AND BANDWIDTH SPEED
- NO FACE TO FACE MEETING AND MISSING STUDENT-TEACHER-STUDENT INTERACTION
- AUTHENTICITY AND ACCREDITATION OF E-LEARNING COURSES
- SECURITY AND VALUE OF ASSESSMENT AND TEST
- AVAILABILITY OF THE SKILLED AND COMPETENT INSTRUCTORS



E-LEARNING FUTURE

- **AVAILABILITY OF ABUNDANCE OF MATERIAL ON THE INTERNET FOR RESEARCH**
- **AVAILABILITY OF INCREASED BANDWIDTH AND INTERNET SPEED**
- **INCREASE IN THE COMPUTER GAMES FOR EDUCATIONAL PURPOSES**
- **INCREASE IN USE OF MOBILE E-LEARNING TECHNOLOGY**
- **E-LEARNING WILL MOVE SIGNIFICANTLY ACROSS NATIONAL BOUNDARIES TO SERVE STUDENTS WORLDWIDE. AND PRESSURE WILL INCREASE FOR E-LEARNING PROVIDERS TO DEVELOP COURSES WITH HIGHER LEVELS OF ENGAGEMENT AND MULTIMEDIA**

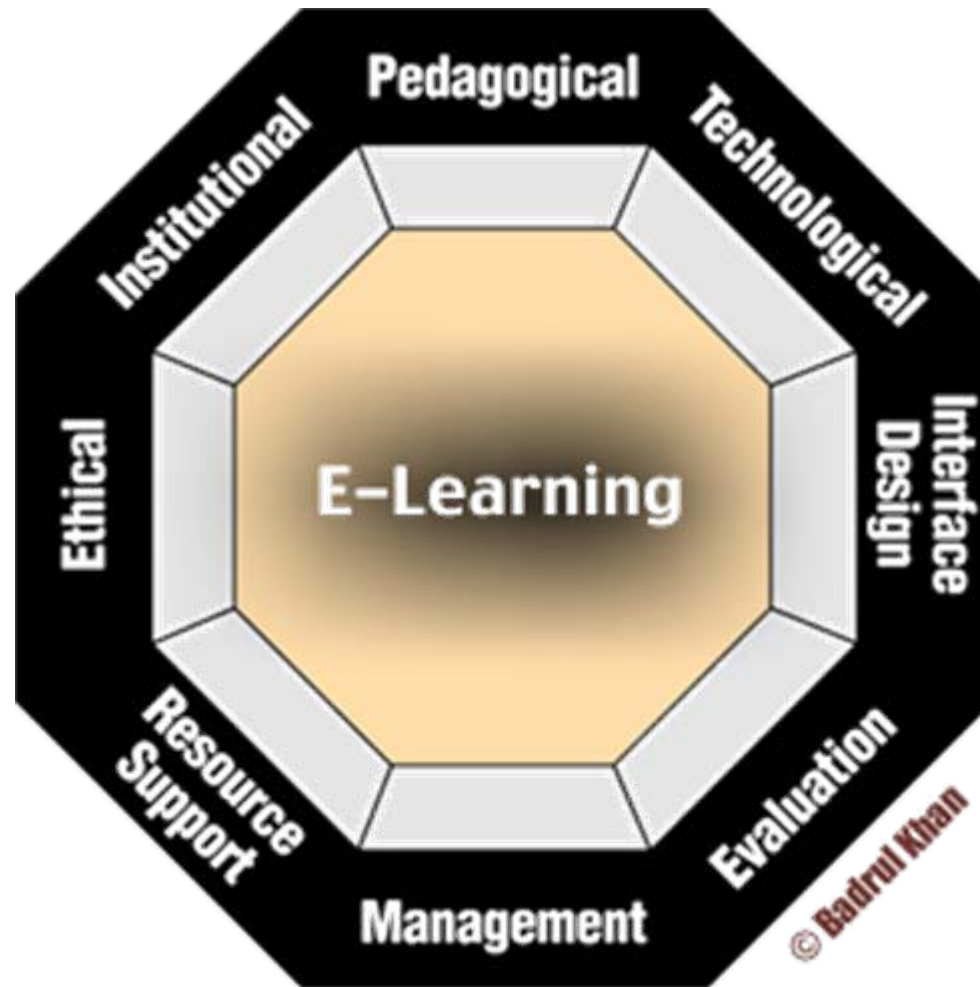


CHALLENGES FOR THE EDUCATION

- **ENSURE THAT INSTITUTIONAL INFRASTRUCTURE IS AVAILABLE**
- **PROPER HARDWARE AND SOFTWARE ADDED WITH ADEQUATE INTERNET SPEED AND BANDWIDTH IS ENSURED**
- **CAPABLE AND QUALITY TEAM OF INSTRUCTORS IS AVAILABLE TO DEVELOP, IMPLEMENT AND MAINTAIN E-LEARNING COURSES**
- **QUALITY OF THE INSTRUCTIONAL DESIGN AND CONTENT OF THE E-LEARNING COURSES IS ENSURED**
- **COURSES AND PROGRAMS ARE ACCREDITED**
- **SECURITY AND VALUE OF THE ASSESSMENT AND TESTS IS ENSURED**



E-LEARNING FRAMEWORK

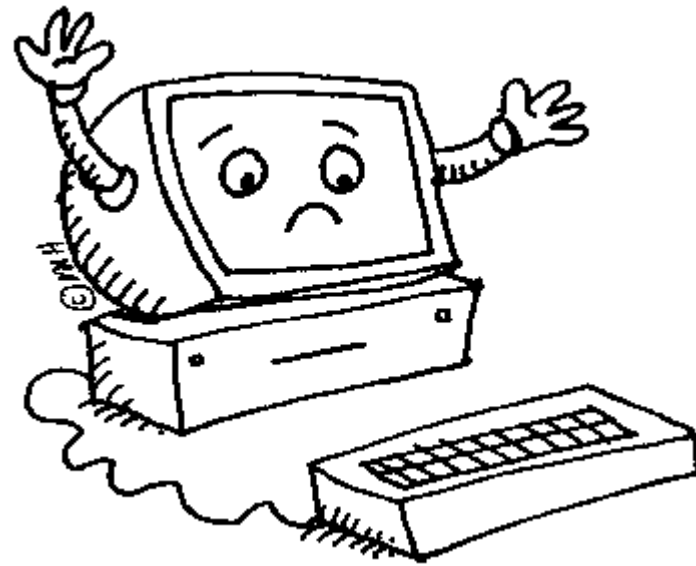


QUESTIONS FOR US

- How much are we prepared to jump on e-learning band wagon?

☞ The history repeatedly tells us that powerful technology is always irresistible and e-learning technology has already been termed as **Explosive, unprecedented, amazing and disruptive.**





THANK YOU