

# History of Computers in Education

**Phase 1:  
1977-  
1982**



computer = object of study



**Phase 2:  
1983-1990**

Computer = programming tool

**Phase 3:  
1991-  
1996**



Computer = communication device/resource tool

**Web 2.0**

**Phase 4:  
1997-  
present**

Computer = learning/social tool

## ISTE Standards

### Teachers

**creativity**    **teach and assess**



**safety and  
etiquette**



**communicate**



**Notice the  
similarities!**

### Students

**safety and  
etiquette**

**creativity**



**research and  
evaluation**



**communicate**



## Stages of Technology Integration

**1**

**beginning**

- Selects resources
- Discuss strategies
- Design instructional activities

**2**

**developing**

- Student understanding
- Guide students
- Adapt instruction
- Students use technology

**3**

**proficient**

- Model resources creativity
- Design activities based on students' learning style
- Students use technology

**4**

**transformative**

- Engage & explore
- Collaborate with students
- Create activities with students
- Students collaborate

**Chapter 1  
questions:**

**Q:** What are some differences between the beginning of Phase 1 and Phase 4 now?

**Q:** What might technology integration look like in different grades? In SPED?

**Q:** How do schools in impoverished areas meet ISTE standards? Are consequences they may face fair?