

- Schools will go from 'buildings' to 'nerve centers', with open walls and are roofless while connecting teachers, students and the community to the breadth of knowledge in the world.
- **Teachers will transform their role from being dispensers of information to becoming facilitators of learning** and help students **translate information into knowledge and knowledge into wisdom.**
- Therefore, the 21st century will require **knowledge generation, not just information delivery**, and schools will need to create a "culture of inquiry".
- Learners will become **adaptive to change.** Today, learners are viewed in a new context. These changes have implications for teachers:
 - Teachers must discover **student interest** by helping them see what and how they are learning to prepare them for life in the real world;
 - They must **instill curiosity**, which is fundamental to lifelong learning;
 - They must be **flexible** in how they teach; and
 - They **must excite learners** to become more resourceful so that they will continue to learn outside formal school.

THE 21ST CENTURY CURRICULUM AND LEARNING ENVIRONMENT

- The twenty-first century curriculum has critical attributes that are **interdisciplinary, project-based, and research-driven.**
- It is **connected to local, national and global communities**, in which students may collaborate with people around the world in various projects.
- The curriculum also **integrates higher-order thinking skills, multiple intelligences, technology and multimedia, multiple literacies and authentic assessments**, including service-learning.
- Typically, a 21st Century classroom is not confined to a literal classroom building but a **learning environment where students collaborate with their peers, exchange insights, coach and mentor one another and share talents and skills with other students**
- **Cooperative learning** is also apparent in which students **work in teams** because **cooperation is given more emphasis than competition**, and **collaborative learning more than isolated learning.**
- They use technologies, including Internet systems and other platforms. Hence, in the process of creating a world-class 21st century learning environment, building new schools and remodeling of present school facilities can be

addressed toward creating environmentally friendly, energy-efficient, and "green" schools.

- Inside every classroom students shall **apply their knowledge of research in life**, which is a clear indication of a relevant, rigorous, 21st century real-life curriculum

TECHNOLOGY IN THE 21ST CENTURY PEDAGOGY

- Technologies are not ends in themselves but these are tools students use to create knowledge for personal and social change.
- 21st Century learning recognizes full access to technology. Therefore, a better bandwidth of Wi-Fi access should be available along areas of the school for the students to access their files and supplement their learning inside the classroom.
- Various laboratories and learning centers are set up in such a way that they allow space needed for students' simulation and manipulative works.
- All classrooms should have televisions to watch broadcasts created by the school and other schools around. Other resources in the school should also be utilized by students in creating opportunities for their knowledge exploration.

UNDERSTANDING 21ST CENTURY LEARNERS

- Today's students are referred to as digital natives while educators as digital immigrants (Prensh, 2001).
- **Digital natives** – usually react, are random, holistic and non-linear. Their **predominant senses are motion and touch.** They learn through **experience and learn differently.**
- **Digital immigrants** – often reflect, are sequential, and linear. Their **predominant senses are hearing and seeing.** They tend to **intellectualize and believe that learning is constant** (Hawkins and Graham, 1994).
- Students' entire lives have been immersed in the 21st Century media culture.
- They take in the world via the filter of computing devices, such as cellular phones, hand-held gaming devices, PDAs, and laptops plus the computers, TVs, and game console at home.
- A survey by the **Henry J. Kaiser Family Foundation** found that **young people** (ages 8-18) **spend on electronic media an average of six hours a day.**
- In addition, many are multitasking, such as listening to music while surfing the Web or instant-messaging friends while playing a video game.