Education on the Brink…. (In the Rye Computer Lab..)
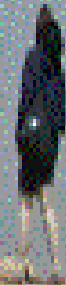
Presented at Rye Elementary School

to

5th Grade Rye Parents

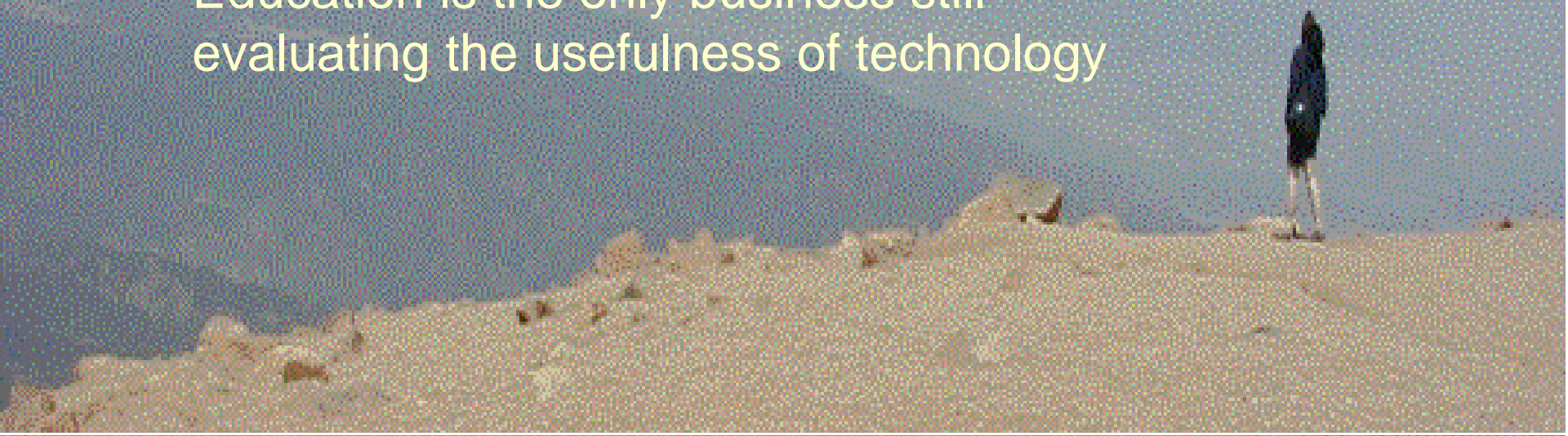January 17th, 2004

By Barb Schulz, Ed.S., ABD

On the Brink Of a Digital Renaissance

Thoughts from Susan Patrick - Director of the Office of Educational Technology in the Office of the Secretary for the U.S. Department of Education

Susan Patrick

- Knowledge Economy
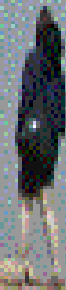- Education is the only business still evaluating the usefulness of technology

Think about…..

- 1900's
  - Farms
  - Hardware Stores
  - Surgeon's offices Teachers are "shepherds" of education
- What do they look like today?
  - Could a farmer of 1900 run a farm today?
  - How would a 1900 carpenter find his materials today?
 - How would a 1900 surgeon operate in a hospital today?

Now think about .....

- A school house of the 1900's……….….
- Could a 1900's teacher survive today?
- How are we different?

Now think about our students….
Aka Millenials

- They are neurologically (Ian Jukes, Author of **NetSavvy : Building Information Literacy in the Classroom)** different from us because…
  - Born as digital natives
  - IM is their first language
  - What will their work world look like?
  - They currently have purchasing power of $170 Billion
  - 72% of 1st graders use computers on a weekly basis
  - They are now on the internet more than they watch TV….
  - Only 28 % of 12th graders think that school is meaningful…of those STILL in school…
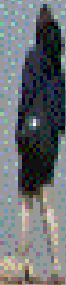
Now think of the revolution taking place in some schools…

- By the year 2006, all 8th grade students must be technologically literate as per NCLB
- 25% of all K-12 schools offer e-learning
- The USDE predicts that ALL students will take an online course at least once during their K-12 career

So What's the Plan?

- National Educational Technology Plan includes:
  - Four major priorities (see handout)
  - Teacher Training
  - Support of E-learning
  - Key word is "Student Centered" … asking students what they need and individualizing instruction
  - Move toward digital content
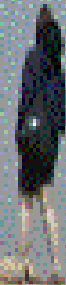
And at the state level??

- 10 year technology plan expires this year
- Looking for input in the rewriting.
- Decided that it will be impossible to write another 10 year plan -- what skills will students need for jobs in the year 2015?
- A 10 year plan cannot work; we need a dynamic, living document. -Jared Polis
- Students should be at the center of the plan. -Kent Tamsen
- Prepare students to compete in a global marketplace. -Leroy Williams

State Thoughts cont'd

- Support school services to be available at home to empower and involve parents. -Leroy Williams
- Online schools are public schools too; they should be treated and measured equally. -Jared Polis
- Students don't think they need to know all the facts, but rather be able to effectively and quickly gain access to valid facts and use them in their lives. -Kelly Craig
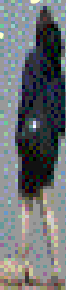
So what's Rye's Plan?

- How prepared are our faculty to face these challenges?
- How prepared are our parents to face these challenges?
- What can we do to help those who aren't prepared?
- What can we do to improve things for our students?
- Suggestions –
  - Formation of a technology committee to write a technology plan and look for grants, etc.

Main points in my Philosophy of Technology in Education

- Students are digital natives, and we should be teaching them in their 1st language (digitalish - computerese?).

- Most kids have grown up knowing computers as toys, and need to learn that they are tools also.

- At one time or other in their educational career, students will be taking an online course, so they need to be familiar with the environment.

- Students need to be "interactive communicators" to be able to thrive in the 21st Century. Therefore, learning to express themselves appropriately in this new medium is a necessity.

- Literacy has changed…
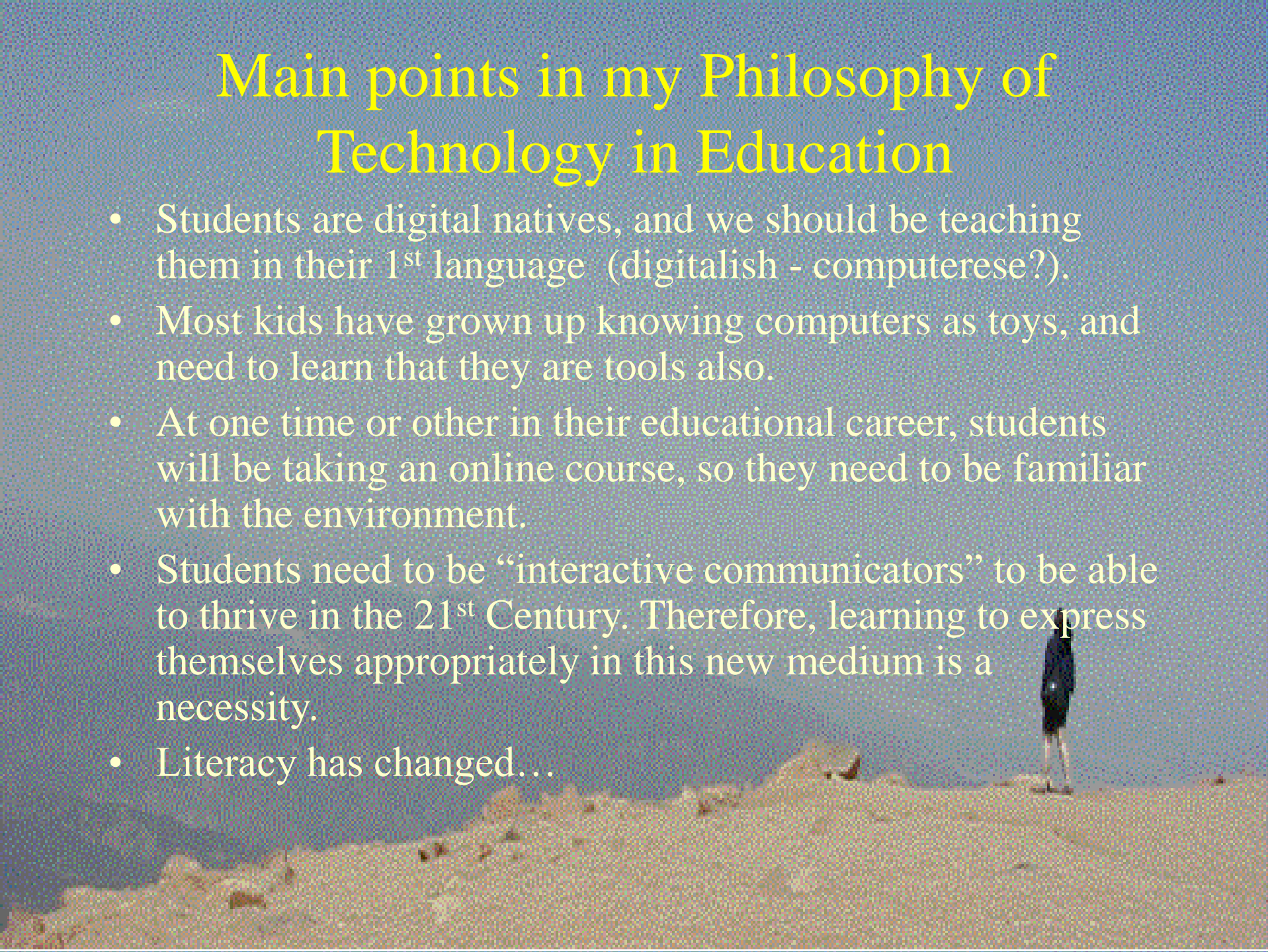
.. To be multidimensional

- Online resources have
  - hypertext,
  - hypermedia,
  - video, etc.
- so students need to know how to evaluate and utilize these resources.

Information Literacy

- Has been defined by the American Library Association to include nine standards:
  - **The student who is information literate**
    - accesses information efficiently and effectively.
    - evaluates information critically and competently.
    - uses information accurately and creatively.
  - **The student who is an independent learner is information literate and**
    - pursues information related to personal interests.
    - appreciates literature and other creative expressions of information.
    - strives for excellence in information seeking and knowledge generation.

Information Literacy

– **The student who contributes positively to the learning community and to society is information literate and**

- recognizes the importance of information to a democratic society.

- practices ethical behavior in regard to information and information technology

- participates effectively in groups to pursue and generate information
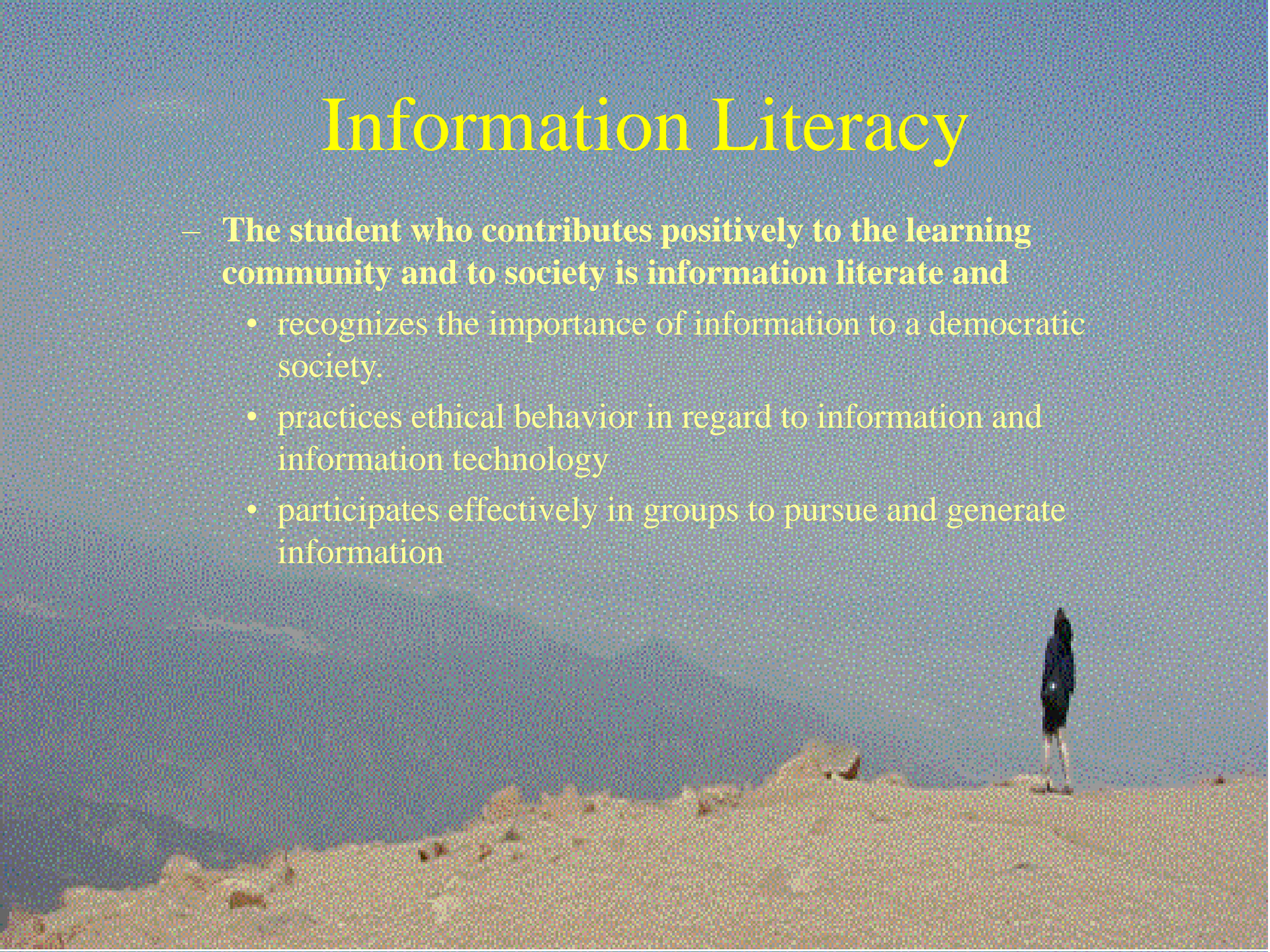
21ˢᵗ Century Skills As per North Central Regional Educational Laboratory (NCREL) and the Metiri Group

- Risk Takers
  - able to hold their work up for critical appraisal by their peers, and
  - changing their thinking when appropriate, or
  - defending their ideas when ideas are unconventional

Burkhardt, G., Monsour, M., Valdez, G., Gunn, C., Dawson, M., Lemke, C., Coughlin, E., Thadani, V., Martin, C., (2003). *21st Century Skills: Literacy in the Digital Age - For 21ST Century Learners* (ED-01-CO-0011): North Central Regional Educational Laboratory and the Metiri Group.

21st Century Skills (cont'd)

- Interactive Communicators.
  - use electronic environments to …… interact with virtual communities for learning.
  - use different media (such as voice, text, video, and image), to make the most of an online environment.
  - be comfortable with communication with peers by seeking mutual understanding and a full sharing of information.
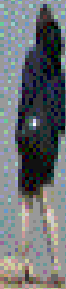
21ˢᵗ Century Skills (cont'd)

- "soft skills" such as
  - interpersonal skills,
  - management, and
  - problem-solving skills
  - adapt to the competitive fields of the future

ISTE Nets*S

- 1 **Basic operations and concepts**
  - ➢ Students demonstrate a sound understanding of the nature and operation of technology systems.
  - ➢ Students are proficient in the use of technology.
- 2 **Social, ethical, and human issues**
  - ➢ Students understand the ethical, cultural, and societal issues related to technology.
  - ➢ Students practice responsible use of technology systems, information, and software.
  - ➢ Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- 3 **Technology productivity tools**
  - ➢ Students use technology tools to enhance learning, increase productivity, and promote creativity.
  - ➢ Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

ISTE Nets*S

- 4 **Technology communications tools**
  - ➢ Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
  - ➢ Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- 5 **Technology research tools**
  - ➢ Students use technology to locate, evaluate, and collect information from a variety of sources.
  - ➢ Students use technology tools to process data and report results.
  - ➢ Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
- 6 **Technology problem-solving and decision-making tools**
  - ➢ Students use technology resources for solving problems and making informed decisions.
  - ➢ Students employ technology in the development of strategies for solving problems in the real world.
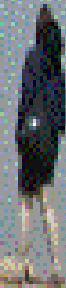
Plan for 5ᵗʰ Grade

- Keyboarding Skills
- Troubleshooting Skills
- Microsoft Word
- Microsoft Excel
- Microsoft Power Point
- Microsoft Publisher
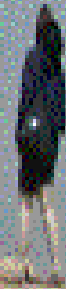
Plan for 5ᵗʰ Grade (cont'd)

- Online Tools
  - Kidlink
  - Tapped In
    - Discussion Boards
    - Chat room
    - File Storage
    - File Exchange
    - Online etiquette

Plan for 5th Grade (cont'd)

- Research Skills -(Information Literacy)
  - Using a search engine
  - Finding other sources
  - Narrowing and evaluating sources
  - Citing sources correctly

Plan for 5th Grade (cont'd)

- Tie- in with curriculum as much as possible
  - Writing Activities
  - Explorer Research/ Want Ad/ tied in with literacy and coming explorer game
  - Native Tales tied in with Native American unit
  - Thanksgiving Poems taught basic skills about fonts, word art, etc. while using a writing theme.
  - Global CyberMall ties in with inventions in Science Unit.
  - Mission Nutrition was to tie in with Science unit (cancelled due to tech challenges)
- Drills reinforce skills such as grammar, and keyboarding

How to keep in touch & get information

- 5S Calendar - http://my.calendars.net/5scalendar
- Parents Discussion List - send email to mrsschulz@learningbyts.net
- Parents Mailing List
- Learningbyts.net – http://www.learningbyts.net

- Tapped In - www.tappedin.org (Use your child's login and password)
- Rye School webpage at http://rye.district70.org is in the process of being redone, so check back later on it.

Will our students be ready to face the coming changes in education?…… time will tell…… but where do we go next??