

THE HAGUE 24TH - 27TH OCTOBER

Surveys

What do you think is the most important aspect to develop 21st Century mindset?

- Technology
- Professional Development
- Students
- Resources / Funds
- Other

What strategy is key to create 21st Century mindset?

- Communication
- Professional Development
- Technology
- Curriculum

What is the ideal learning environment to promote 21st Century mindset?

- Professional Learning Communities
- Technology rich environments
- Open classrooms
- Structured Lessons using technology

What innovation is required for 21st Century mindset?

- Computers, iPads, Phones
- Internet
- Software / Applications
- All of the above
- None of the above

How do you assess 21st Century mindset in your educational setting?





Creatively Embracing Life-Long Learning for the 21st Century

The trouble with our times is that the future is not what it used to be.

Paul Valery

Imagination is more important than knowledge.

Albert Einstein





Creatively Embracing Life-Long Learning for the 21st Century - Session Objectives

- Pre-Session Survey
- Mindsets
 - Students
 - Teachers
 - Administrators
- Developing Life-Long Learning
- Developing 21st Century Mindset & Skills
- Action Plan





How is your mindset different today than it was last year?

How is your mindset different from those around you?

- In this conference
- In your school
- In your hometown

How is your mindset different from those you teach and interact with?





- Most educators are from a different generation than their students'...
- Most of us were born before the technology revolution....
- We were raised in an era that had access to information and knowledge, but it was not as easily accessed as today's generation.





"Mindsets are the assumptions, expectations, and beliefs that guide our behavior and our intentions with others."

Sousa & Tomlinson

"Culture is a significant component of an individual's mindset."









Sousa & Tomlinson



- Imagine that we are immigrants to this new age of technology...
- We communicate using technology in varying degrees and some of us are more fluent than others.
- However, we retain many of our "old country" traditions, customs, "mindsets"...
- How effective are we in communicating with those who are "native" technology users? Those who have known technology since birth.
- Are we really communicating with our students?

Jukes, McCain, Crockett "Understanding the Digital Generation: Teaching and Learning in the New Digital Landscape".

Digital Learners & Non-Digital Teachers

Digital Learners

- Prefer receiving information quickly from multiple multimedia sources.
- Process pictures, sounds, color and video before text.
- Access hyperlinked multimedia
- Network simultaneously with other learners
- Learn "just in time"
- Prefer instant gratification with immediate and deferred rewards
- Prefer learning that is relevant, active and instantly useful and fun.

Non-Digital Teachers

- Prefer slow and controlled release of information from limited sources
- Provide text before pictures, sounds, color, and video
- Provide information linearly, logically, and sequentially.
- Prefer students to work independently before they network and interact.
- Teach "just in case"
- Defer gratification and delay rewards.
- Teach memorization in preparation for standardized tests.





21st Century Mindset

- Digital tools have created a culture that transcends our concept of cultures....
- The use of technology has altered and rewired brains....there is no going back!
- We must either understand how our brains have been rewired and work with our students or be castaways.
- Educators, parents, adults who are not willing to accept and understand the changes which have taken place in the digital world are frustrating to their students and children.
- We must recognize that we are the ones who must adopt a new mindset in order to help our students and children be prepared for the unimaginable world which awaits them.





21st Century Mindset

- Most of our students do not need to look at a manual or a textbook.
- Students do not see any value in memorizing data or facts which they can easily access on their phones, iPads, laptops, etc.
- Students are not afraid to take risks because they have used the "reset" buttons....
- Students are not shy to question authority and to seek the answers to their questions when they are not convinced with the answers they have received...."Google"





Challenges for Administrators in the 21st Century

- Changing technology
- Globalization
- Changing economies
- Cross-Cultures
- Internationalism
- Democratization
- Information
- Access to education and knowledge





Partnership for 21st Century Skills







Developing Life-Long Learning



educate create

Techniques to Develop 21st Century Skills

Effective learning can be fostered:

- Teachers should create environments which are interactive, inviting, safe, challenging, personalized, and supportive. The environment should allow questioning, patience, be open to new ideas, and develop a high level of trust and confidence.
- Teachers should be able to clearly identify essential knowledge, understanding, concepts, and skills.
- Teachers should know that students expect assessments to be done regularly and results known immediately.
- Teachers should create environments which encourage collaboration, teamwork, creativity, innovation, and understanding.



Essential 21st Century Skills

Problem Solving Communication Teamwork Technology Innovation





Developing 21st Century Skills

These skills can be learned through a wide variety of methods, but they are best learned **socially**—by directly communicating and collaborating with others, either physically, face-to-face, or virtually, through technology.





Developing 21st Century Skills

"The new social contract is different: only people who have the knowledge and skills to negotiate constant change and reinvent themselves for new situations will succeed."

Bellanca & Brandt





Strategies to Develop 21st Century Learners

- Genuine application of knowledge to solve real problems. Knowledge is in constant motion.
- Collaborate with peers / classmates on problems and publish solutions / ideas
- Students take ownership of their learning and seek knowledge on their own.
- Students are exposed to different ideas, solutions, problems, etc.





Technological Advances in Education

- Flexibility and adaptability are now essential skills for learning, work, and citizenship in the 21st century. The rapid pace of technological change forces us all to adapt quickly to new ways of communicating, learning, working, and living.
- Net Generation Survey (2007 / 7,705 college students)
 - 97% own a computer
 - 94% own a cell phone
 - 76% use IM and social networking sites
 - 34% use websites as their primary source of news
 - 28% author a blog and 44% read blogs
 - 75% have Facebook accounts

– Schrum & Levin





Technology in our Classrooms

- Laptops, iPads, interactive projectors, electronic whiteboards
- Blogs, Wiki, Podcasts, E-mail, Nings, Skype, Facetime, Facebook, Instagram,
- Edmodo, Edline, Google docs, Google Earth
- Khan Academy, Ted Talks, You-Tube, Webcams, iTunes U,
- Kindle, iBooks, Nook, Twitter, WhatsApp
- Zoho Polls, Survey Monkey,
- ETC.





Professional Development

Teachers must become 21st Century learners to be able to teach 21st Century students... -learning from inquiry -design -collaboration

IBDP Opportunities

- IB Learners
 - Learner profile attributes
- IB Teachers
- Teaching and Learning in the IB





IB Learners: Learner Profile attributes - focus

- Inquirers
- Knowledgeable
- Thinkers
- Open-minded
- Risk-takers

IB Learners

- Have their own learning styles
- Have their own Strengths
- Have their own Challenges





IB Learners

Learning how to learn:

 In the modern information age, as the amount of information and knowledge increases exponentially, it is the process of learning, applying and evaluating knowledge that matters more than ever before, not just the acquisition of knowledge.

IB Teachers

- Intellectual leaders who can empower student to develop confidence and personal responsibility.
- Challenging learning environments help students to develop the imagination and motivation they need in order to meet their own needs and the needs of others.
- Creative teacher professionalism refers to the central responsibility that teachers have in the design and delivery of the programme, which needs to be supported by ongoing professional development.





Teaching and Learning in the IB

- Asking
- Doing
- Thinking

IB prepares a community of learners to engage with global challenges through inquiry, action and reflection.



Inquiry – Action - Reaction







Inquiry – Action - Reaction

- Inquiry
 - Structured
 - Students' curiosity
- Action
 - Principled
 - Learning by doing
 - Responsible choices
 - May involve service learning, advocacy and educating self and others.



Inquiry – Action - Reaction

- Reflection
 - A process by which curiosity and experience can lead to deeper understanding.
 - IB fosters creativity and imagination.

Through inquiry, action and reflection, IB programmes aim to develop a range of thinking, self-management, social communication and research skills.





Opportunities in IB; students learn best when:

- Their prior knowledge is considered to be important
- Learning is in context
- Context is relevant
- They can learn collaboratively
- The learning environment is provocative
- They get appropriate feedback to support their learning
- Diverse learning styles are understood and accommodated
- They feel secure and their ideas are valued and respected
- Learning is engaging, challenging, rigorous, relevant and significant.
- They are encouraged in everything they do in school to become autonomous lifelong learners.

The pivotal role

• Theory of Knowledge

 Offers students and teachers the opportunity to reflect critically on different ways of knowing and areas of knowledge, and to consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world.

• Extended Essay

- Offers an opportunity for students to engage in an in-depth study of a question of interest within a chosen subject.
- Creativity, Action, Service
 - An opportunity for experiential learning and reflection about that learning.
 - An opportunity to extend what is learned in the classroom.





ACTION!



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