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Thinking About The Embedding of Essential Skills

Especially in Terms of
21st Century Learners

Where we need to go

includes learners' dispositions, capacities or competencies to deal with new situations and environments, including those with high degrees of complexity, fluidity and uncertainty

The
wi
we
C
The
citizens functional
these different communities

-The European Union

Each individual must be equipped to seize learning opportunities throughout life, both to broaden her or his knowledge, skills, and attitudes, and to adapt to a changing, complex and interdependent world. Twenty-first century learning thus needs to be organized around four fundamental types of learning:

Learning to know, that is acquiring the instruments of understanding; *learning to do*, so as to be able to act creatively on one's environment; *learning to live together*, so as to participate and cooperate with other people in all human activities; and *learning to be*, an essential progression which proceeds from the previous three.

[click here](#)

-R. Hipkins

So what are Essential Skills according to the Government of Canada?



Essential Skills are the skills needed for the **workplace**. They provide the **foundation** for learning all **other skills** and enable people to **evolve with their jobs** and adapt to **workplace change**.

They include the four skills traditionally associated with literacy:

- Reading
- Writing
- Document Use
- Numeracy

as well as the following five skills:

- Computer Use
- Thinking
- Oral Communication
- Working with Others
- Continuous Learning



Government of Canada Definition

- employment and workplace-centric
- narrow and limiting
- 20th century (from the 1990's)
- does not specifically address 21st century needs and realities
- does not reflect cultural priorities and differences
- overlooks creativity and innovation
- does not link Essential Skills to sustainable development, global citizenship, democracy, the demands of new technologies and social media, individual and collective responsibilities, etc.
- overlooks Essential Skills as an important agent of change as well as a tool for managing change

Essential Skills

(A Deeper Look)

The skills “required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning.”

-WCEFA, 1990:11

Skills that “enhance people’s ability to exercise a degree of control over their own lives; to take part with others in decisions that affect the contexts of their lives; and to envisage an alternative future.

-ADEA 2012

Skills “that all people, both young and old, should be able to acquire in the beginning or at some point in their lives in order to grow as human beings and to effectively participate in the socio-cultural, economic and political development of their society. This definition assumes not only the acquisition of particular abilities but also the interest and commitment of acting upon this learning.”

- Triennial on Education & Training in Africa

click boxes to see text

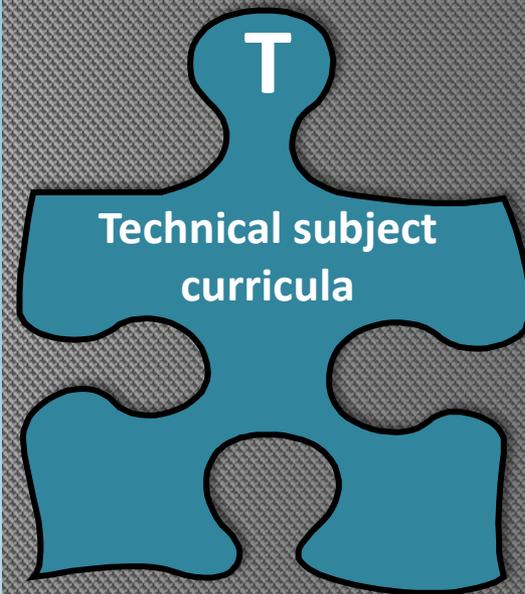
Essential Skills As Intervention

Technical skills / technical information / ES technical skills are the **subject matter**.

PowerPoint, lectures, demonstrate and do, learning modules, e-learning, mentoring, etc.

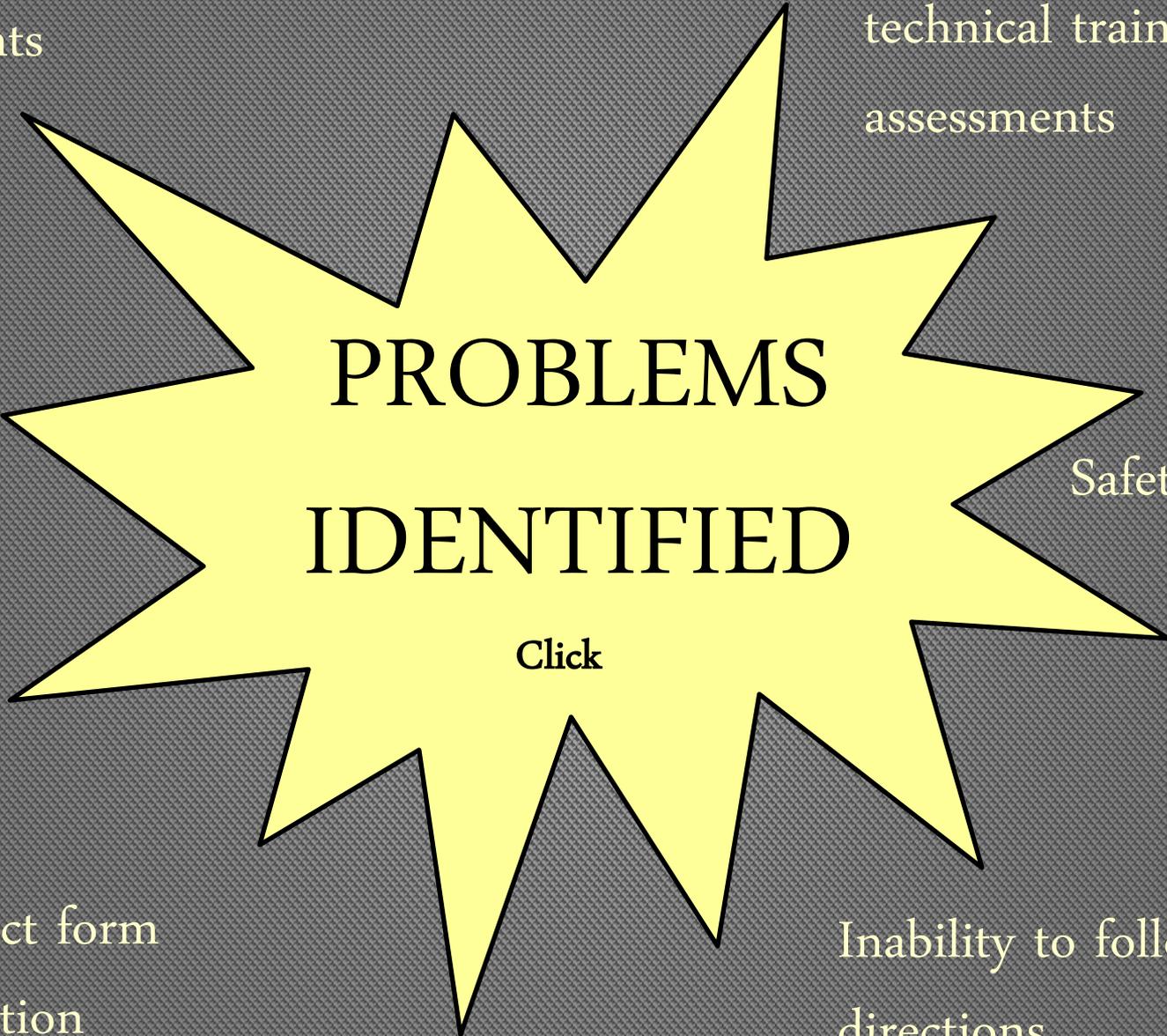
Assessment: **technical skills**

Trainer: **technical expert**



Low scores on ES
assessments

High failure rates on
technical training
assessments



**PROBLEMS
IDENTIFIED**

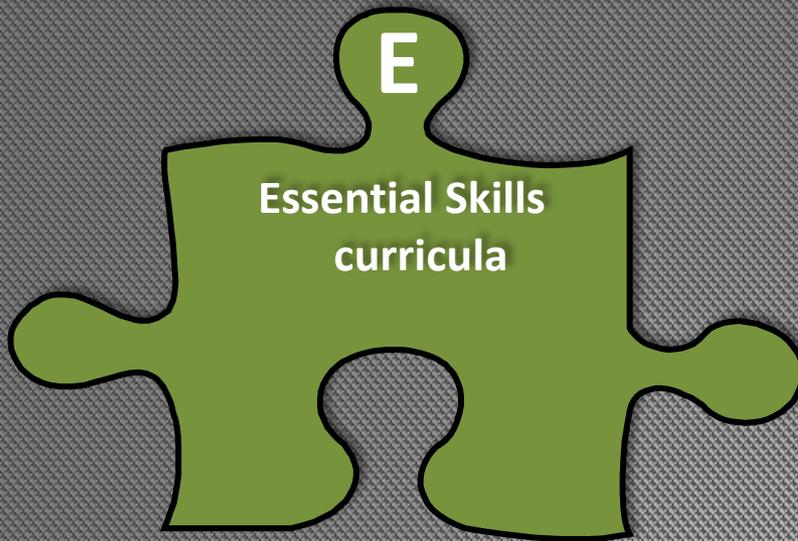
Safety issues

Inefficient
production.

Click

Incorrect form
completion

Inability to follow written
directions



Essential Skills are the **subject matter**.
(e.g.), skimming, scanning, using documents, numeracy, etc.

Generic workplace examples
OR technical subject-specific examples.

Usually learning modules.

Assessment: **Essential Skills**

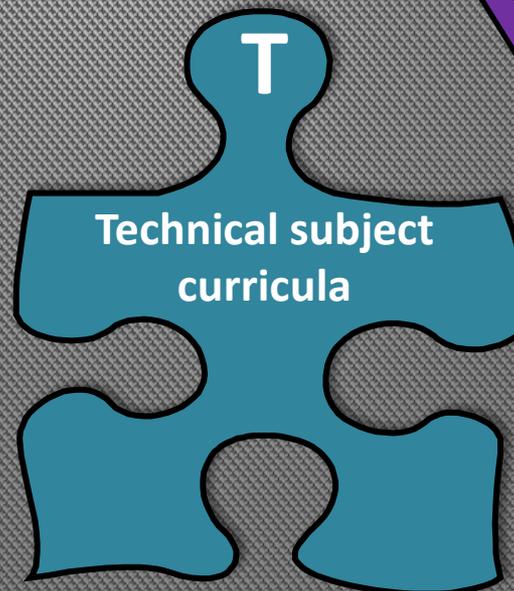
Trainer: **literacy or ES practitioner**

Technical skills / information / ES technical skills are the **subject matter**.

PowerPoint, lectures, demonstrate and do, learning modules, e-learning, etc.

Assessment: **technical skills**

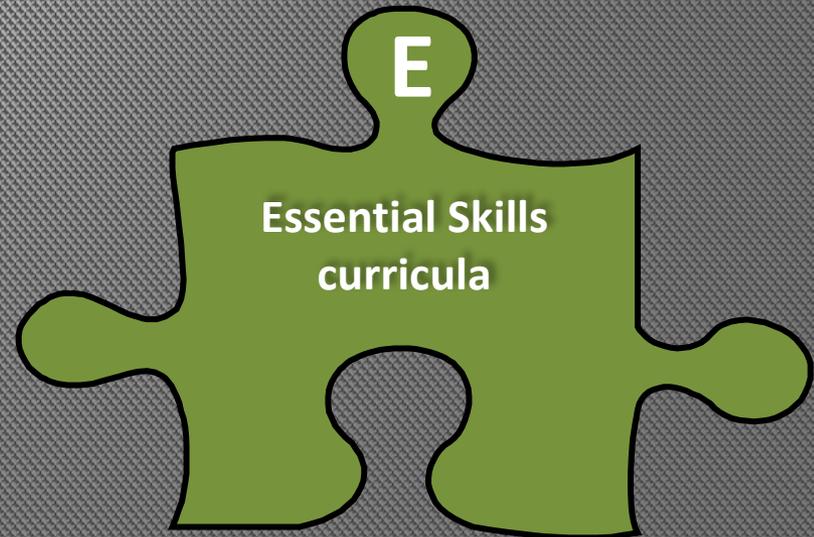
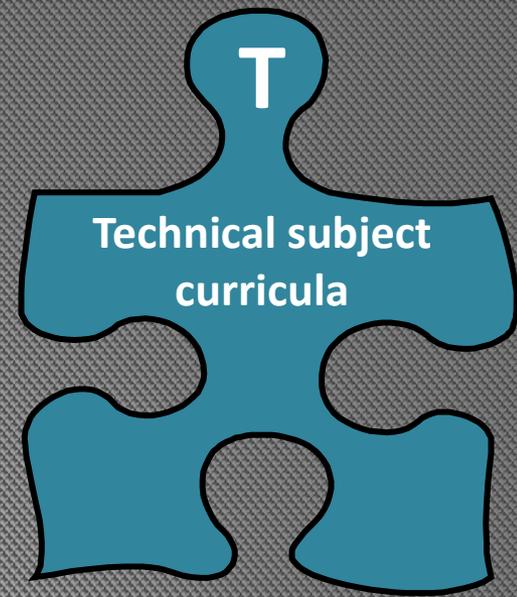
Trainer: **technical expert**



ES specialist learns about the technical area (superficially) to develop activities.

Essential Skills As Integration

[Click Here](#)



**Theory
(generic or
specific
examples)**

**back stepping,
breaking down,
building up**

**Specific
Practice
Activities**

**build in terms
of complexity**

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TECHNICAL CURRICULUM

ES Integration Point

- ES subject intersects with technical subject matter
- potential / identified need for intervention

ES Integration Point

- Another ES subject intersects with technical subject matter
- potential / identified need for intervention

but...Do these models
give us the skills we
need?



Skills that enable individuals to deal effectively with the demands and challenges of everyday life and enable people to continue learning and adapting throughout their lives, to act as responsible citizens, to understand their rights, to maximize livelihood opportunities, to work collaboratively, and to maintain their health and the health of their families.

-CIDA

Click each arrow

Essential Skills

(time to re-think)

ES include right brain –
artistry, empathy, seeing
the big picture,
transcendence

ES are crucial for **knowing**,
doing and **being**.

ES are crucial for **self-**
motivated learning.

Skills needed to survive the
21st century.

Skills needed for learners to
learn how to learn (a **learning
approach** that offers learners
tools & strategies to work
with knowledge &
information).

Creative skills needed to
create, use and critique **new
knowledge NOW**.

ES facilitate the
unpacking and
repacking of
information

A Bigger
Vision

Upon completion of this program, you will be able to:

- Weld (Not enough anymore)
- **Learn** how to weld ← **click**

Subject Matter

A context or a vehicle for learning

A context for developing learning capacity and reflection

Subject Matter Training

Includes learning tools and strategies

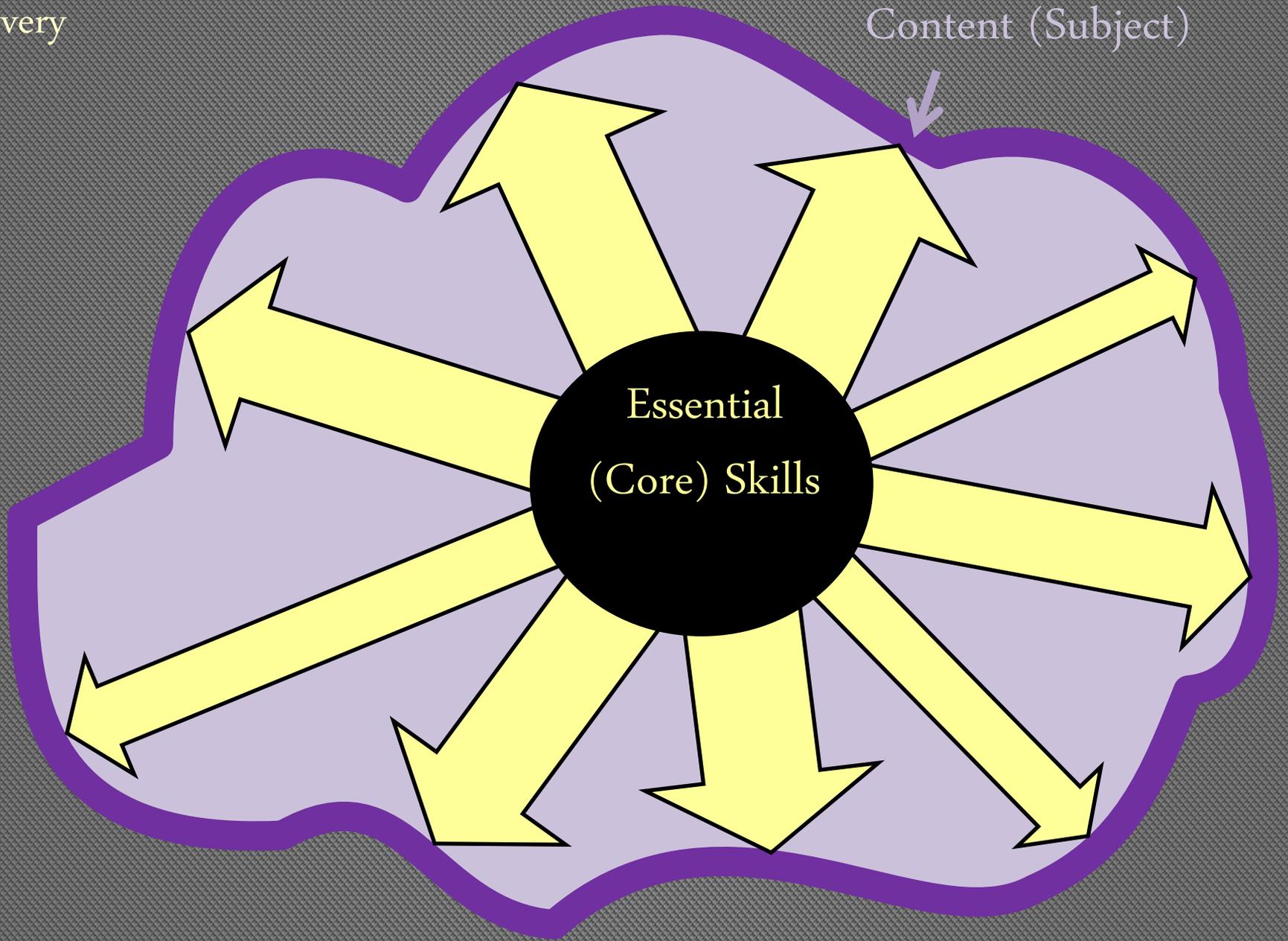
And how to adapt what is learned for new contexts

ES must become a **training design & delivery approach.**

- Learn to learn / learn to think / learn to create / learn to empathize
- Learner centred and holistic
- Collaborative
- **How to turn information into knowledge, and information consumption into learning and innovation**
- Mobile – anytime, anywhere (24/7 pocket internet)
- Social, global, interactive, instant (tweets, blogs, wikis,
- Context and purpose-dependent
- Just in time
- Nonlinear
- Assisted (Apps are the new learning aids)

ES must shape and drive learning & training
delivery

Content (Subject)



When learners know how to learn, they are both learners and teachers.

When learners know how to learn, they are able to pursue life-wide, life-deep, and life-long learning.

click words

referring to the breadth of learning across family, cultural settings, communities, work and leisure

referring to contemplative, meditative, spiritual learning practices

referring to the four stages of life – childhood, productive age, age of maturity, old age

The Need to Re-think

There is a need to rethink and broaden the notion of lifelong education. Not only must it adapt to changes in the nature of work, but it must also constitute a continuous process of forming whole human beings – their knowledge and aptitudes, as well as the critical faculty and the ability to act. It should enable people to develop awareness of themselves and their environment, and encourage them to play their social role at work and in the community.

- UNESCO

Skills needed to address 21st century wicked problems

- huge, persistent, complex, value-laden problems
- have dire impacts and consequences
- tend to settle into “clumsy” solutions (run out of patience)
- might not be the best we can hope to do
- is coping with the harm they do
- different answers to the same question, but
- they harm one another
- symptoms of the same problem
- conventional problem solving does not work – we can’t define then solve (we don’t understand the problem until we have a solution)

climate change, poverty, terrorism,
treatment of women, environmental
destruction, waste disposal, world
economic collapse, violence

[click here for examples](#)



Super Wicked Problem

- Time is running out.
- No central authority.
- Those seeking to solve the problem are also causing it.

• Policies discount

ES for the 21st century must enable us to...

- Be collective (a network and not individuals acting alone)
- Be inclusive and involve all those impacted – can't rely on experts or authorities or corporations or special interest groups
- Cross domains and specialities (break down silos)
- Create new problem solving models (agile and innovative) – each wicked problem is unique and solutions don't transfer
- Be global (wicked problems are global)
- Build in early detection and coping mechanisms
- Be reflective (reflection on unmanageable complexity)
- Overcome denial (denial precedes problem identification)

The Information Age is Ending – The Conceptual Age is Upon Us

To flourish in this age, we'll need to supplement our well-developed high tech abilities with aptitudes that are "high concept" and "high touch." **High concept** involves the ability to create artistic and emotional beauty, to detect patterns and opportunities, to craft a satisfying narrative, and to come up with inventions the world didn't know it was missing. **High touch** involves the capacity to empathize, to understand the subtleties of human interaction, to find joy in one's self and to elicit it in others, and to stretch beyond the quotidian in pursuit of purpose and meaning.



And now, as we enter the **Conceptual Age**, a new set of skills is required, mostly related to **creativity** and **emphasis**, what Daniel Pink and others have identified as dominant *right-brain* or ***Right-directed thinking***.

...the development of empathy must accompany the development of logic and critical thinking (considered important for the information age):

The capacity for logical thought is one of the things that makes us human. But in a world of ubiquitous information and advanced analytic tools, logic alone won't do. What will distinguish those who thrive will be their ability to understand what makes their fellow woman or man tick, to forge relationships, and to care for others.

A related attribute identified by Pink (2005) is the ability to tell a story, not just present an argument. His point is that the use of logic and argument is endless; with access to unlimited amounts of information, it is just a matter of time before someone discovers a counter argument that seems to be just as valid a use of logic. Rather “[t]he essence of persuasion, communication, and self-understanding has become the ability also to fashion a compelling narrative”. This suggests that creative thinking will become at least as important as critical thinking.

Another attribute related to empathy, creativity, and story telling is the importance of design over utility and function. As Pink (2005) states:

It's no longer sufficient to create a product, a service, an experience, or a lifestyle that's merely functional. Today it's economically crucial and personally rewarding to create something that is also beautiful, whimsical, and emotionally engaging.

(William G. Huitt)

The underlying principle is that an ability to analyze discrete parts and see patterns among them, to focus on individual tasks and simultaneously engage in multiple activities, to resolve distinct conflicts and live with unresolved tension, are all necessary in the Conceptual Age.

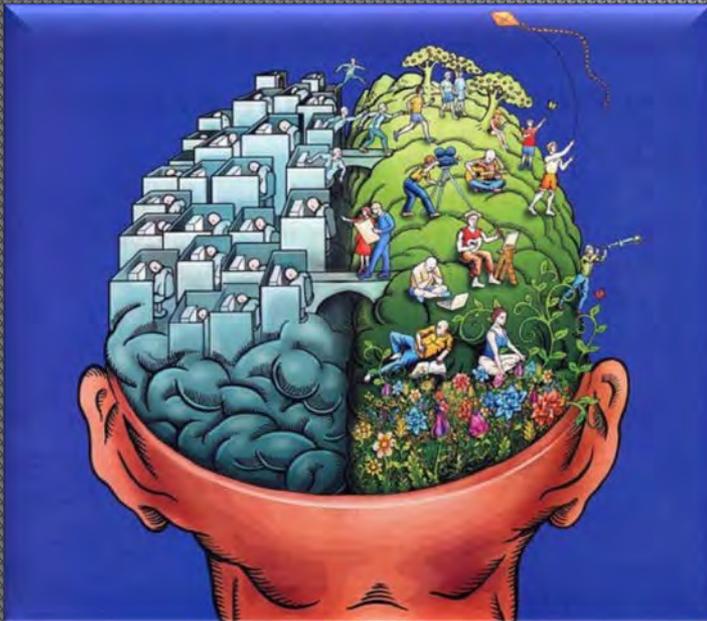
-William G. Huitt

What Embedded Skills Must Address

A New Business Model

Because future success and sustainability will belong to people and businesses that have a strong right-brain sensibility and can offer something that can't be easily outsourced or automated, companies and individuals need to recognize and develop their right-brain skills (such as creativity and empathy) while creating a balance with those still-necessary skills typical of the left part of the brain (analytical, sequential, rational).

-Innovange



New aptitudes Required

DESIGN



not only function

STORY



not only argument

SYMPHONY



not only focus

EMPATHY



not only logic

PLAY



not only seriousness

MEANING



not only accumulation

You are helping learners to use and/or develop tools and strategies:

that enable learners to gather information and to assess, select, arrange, manage and use it.

that empower learners to teach themselves to do something or to understand something, and to act upon what has been learned in a meaningful way.

to adapt their skills to work in new contexts and in new combinations – supplement well-developed high tech abilities with aptitudes that are "high concept" and "high touch."

to cope and survive.

to connect and collaborate with others in order to complement or generate new knowledge and ideas.

to know one's strengths; to reflect on one's personal mission; and to assess the tools, strategies and values used to accomplish it (what works and what doesn't work).

Embedding ES (micro level)

authentic tasks & learning tasks

PurPoSe, context, Learner Experience

Train-the-trainer

Innovative Reflective Assessment

Activities and learner choice

Resources

<http://magspd.wikispaces.com/>

(a look at assessing embedded ES with some good links

<http://keycompetencies.tki.org.nz/>

<http://www.innovange.com/about-2/vision/>

<http://www.thirteen.org/edonline/concept2class/inquiry/exploration.html>

(an excellent overview of inquiry-based learning even though child-based)

<http://www.media.mit.edu/>

Common core skills for lifelong learning and sustainable development in Africa

Assessing Key Competencies: Why Would We? How Could We?

Reframing the Essential Skills

Revenge of the Right Brain (Pink's ideas re: Conceptual Age)

Success in the Conceptual Age

Learning: The Treasure Within

The Definition And Selection Of Key Competencies

Key competencies: Capabilities for living and lifelong learning

“The planet will not survive unless it becomes a learning planet.”

Thank-you!

PLS

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