

21st CENTURY SKILLS

**POST GRADUATE EXPERIENCE:
CURRENT STATUS**

Traditional Learning	21 st Century Learning
Schooling	Lifelong Learning
Knowing (factual knowledge based learning)	Understanding
Broadcast/ Teacher centred / Transmission model/passive learning	Constructivist / student centred L/ information exchange/ active learning
Single sense stimulation / single media	Multi-sensory stimulation / multimedia
Traditional Content / isolated, artificial context	Contemporary Content/ real world, authentic context
Learning Tech Skills / individual work/	Developing 21 st Century Skills / collaborative work / critical thinking

21st Century Themes

Global Awareness

Financial, Economic, Business and Entrepreneurial Literacy

Civic Literacy

Health Literacy

21st Century Skills

Learning & Innovation Skills

Information, Media and Technology Skills

Life and Career Skills

Creativity & Innovation

Information Literacy

Flexibility & Adaptability

Critical Thinking & Problem Solving

Media Literacy

Initiative & Self Direction

Communication & Collaboration

ICT Literacy - information and communication technologies

Social & Cross Cultural

Productivity & Accountability

Leadership & Responsibility

21st Century Tools

When technology is used as a tool, the curricular content resides not in the software but in the instructional activity for which the tool is used. The technology itself does not convey the content (except in the limited cases where the instructional goal is to learn to use the technology tool). Examples include but are not limited to: Blogs, wikis, spreadsheets, graphing calculators, computers, internet resources, websites, databases, digital libraries, observational and measurement tools, movie making, word processing, presentation tools, smart boards, GPS, probes, digital cameras, multimedia, scanners, digital recording software, editing equipment, mp3 technology, cell phones.....

Core competencies for the 21st century

OXFORD

Key competences (EU)

Eight key competences:

communication in the mother tongue, to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts;

communication in foreign languages, main skill dimensions of communication in the mother tongue, mediation and intercultural understanding. **mathematical competence and basic**

competences in science and technology, to solve a range of problems in everyday situations, with the emphasis being placed on process, activity and knowledge.

digital competence involves the confident and critical use of information society technology (IST) and thus basic skills in information and communication technology (ICT);

learning to learn is related to learning, the ability to pursue and organise one's own learning

social and civic competences, to participate in an effective and constructive way in social and working life. An understanding of codes of conduct and customs in the different environments in which individuals operate is essential.

sense of initiative and entrepreneurship is the ability to turn ideas into action. It involves creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives.

cultural awareness and expression, which involves appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media (music, performing arts, literature and the visual arts).

P21 Framework

Key Subjects and 21st Century Themes

Key subjects include English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics.

In addition, schools must weave 21st century interdisciplinary themes into core subjects:

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy

Learning and Innovation Skills

They include:

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration

Information, Media and Technology Skills

Effective citizens and workers must be able to exhibit a range of functional and critical thinking skills, such as:

- **Information Literacy**
- **Media Literacy**
- **ICT (Information, Communications and Technology) Literacy**

Life and Career Skills

Some of those skills are:

- Flexibility and Adaptability
- Initiative and Self-Direction
- Social and Cross-Cultural Skills
- Productivity and Accountability
- Leadership and Responsibility

The 21st C Learner is . . .





21ST CENTURY SKILLS



WAYS OF THINKING

1. Creativity and Innovation
 - Think creatively
 - Work creatively with others
 - Implement innovations
2. Critical Thinking, Problem Solving and Decision Making
 - Reason effectively and evaluate evidence
 - Solve problems
 - Articulate findings
3. Learning to Learn and Metacognition
 - Self-motivation
 - Positive appreciation of learning
 - Adaptability and flexibility

WAYS OF WORKING

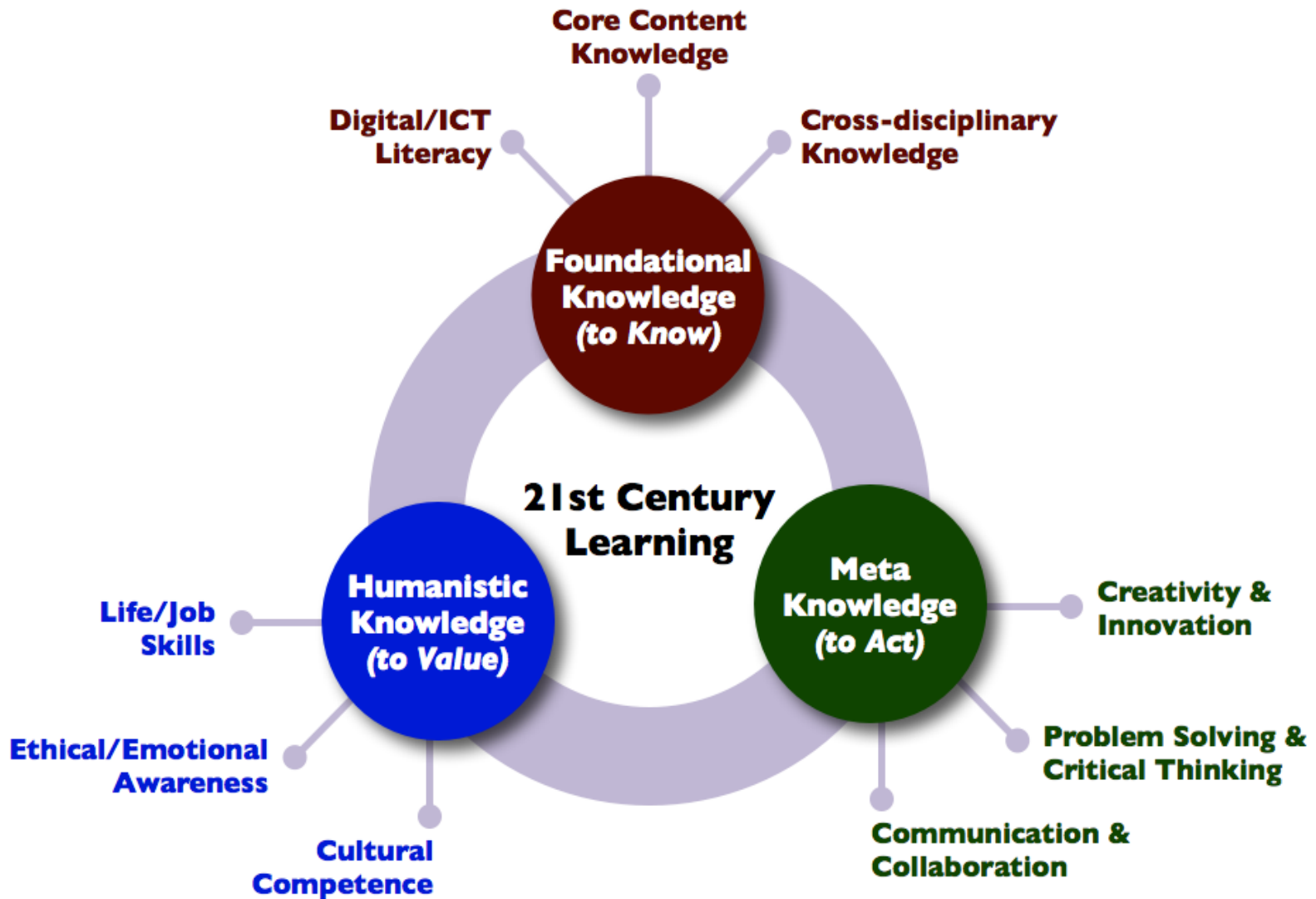
1. Communication
 - Competency in written and oral language
 - Open minded and preparedness to listen
 - Sensitivity to cultural differences when communicating
2. Collaboration and Teamwork
 - Interact effectively with others
 - Work effectively in diverse teams
 - Prioritises, plan and manage projects

TOOLS FOR WORKING

1. Information Literacy
 - Access and evaluate information
 - Use and manage information
 - Apply technology effectively
2. ICT Literacy
 - Open to new ideas, information, tools and ways of thinking
 - Use ICT accurately, creatively, ethically and legally
 - Be aware of cultural and social differences
 - Apply technology appropriately and effectively

LIVING IN THE WORLD

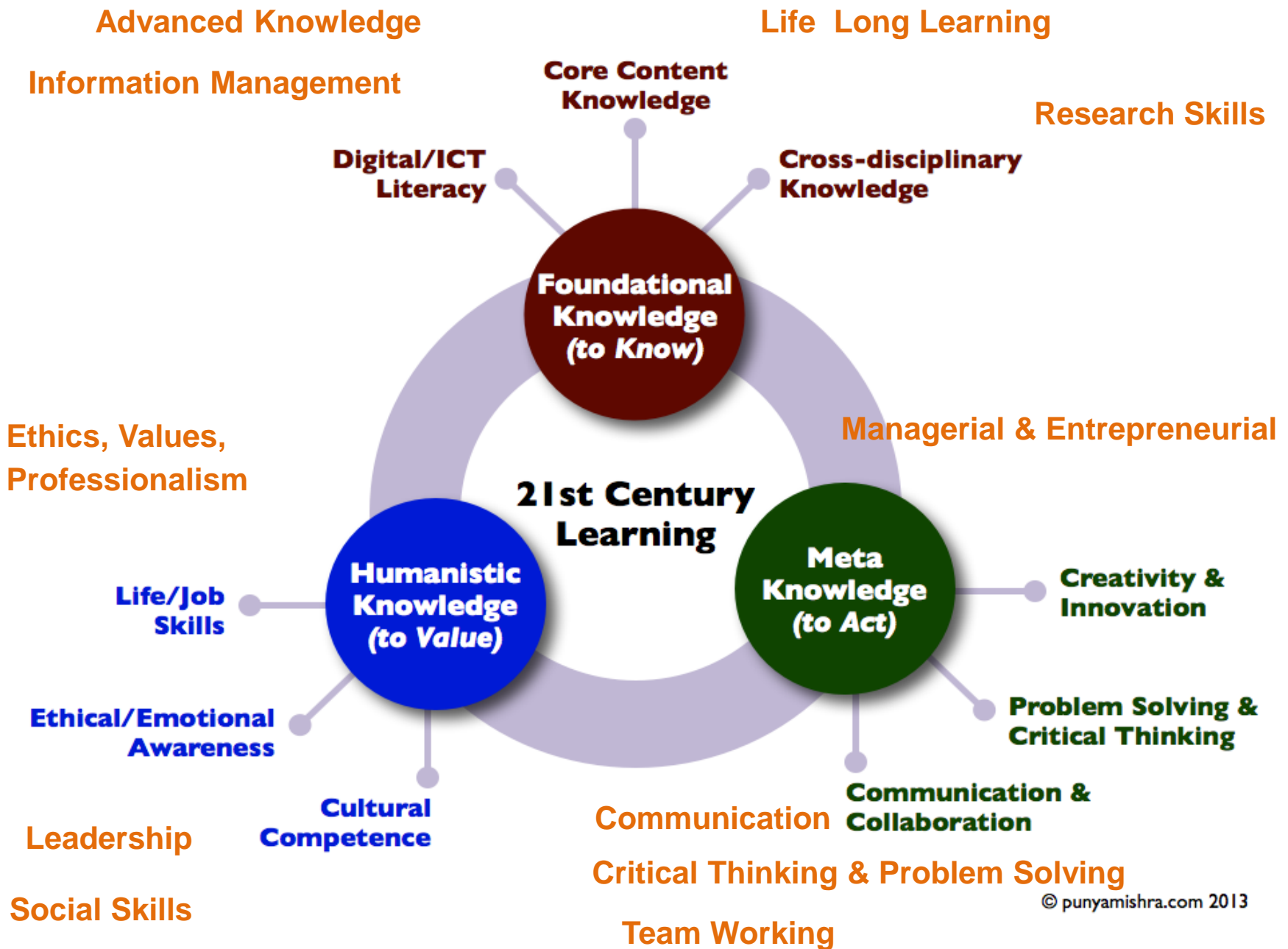
1. Citizenship – global and local
 - Awareness and understanding of rights and responsibilities as a global citizen
 - Preparedness to participate in community activities
 - Respect the values and privacy of others
2. Personal and Social Responsibility
 - Communicate constructively in different social situations
 - Understand different viewpoints and perspectives
3. Life and Career
 - Adapt to change
 - Manage goals and time
 - Be a self-directed learner
 - Interact effectively with others



GRADUATE UTM.. Current status

BILANGAN	9 MOHE LO	8 MQF LO	6 GRADUATE ATTRIBUTES (UTM)
1	Pengetahuan	Pengetahuan	Scholarship Of Knowledge
2	Kemahiran Praktikal	Kemahiran Praktikal	Research Skills
3	Kemahiran Sosial, Berpasukan & Bertanggungjawab	Kemahiran Sosial Dan Tanggungjawab	
4	Nilai, Etika & Moral	Nilai, Sikap & Profesionalisme	Ethics & Integrity
5	Komunikasi Kepimpinan Kerja Berpasukan, Kemahiran Sosial & Bertanggungjawab	Komunikasi, Kepimpinan & Kerja Berpasukan	Communication Leadership & Teamwork
6	Kemahiran Berfikir & Sainifik	Kemahiran Menyelesai Masalah & Sainifik	
7	Kemahiran Pengurusan Maklumat & Pembelajaran Sepanjang Hayat	Kemahiran Pengurusan Maklumat & Pembelajaran Sepanjang Hayat	Life Long Learning Research Skills
8	Keusahawanan	Pengurusan & Keusahawanan	

SUSUNAN HASIL PEMBELAJARAN (PO)	SENARAI HASIL PEMBELAJARAN (PO)	KEMAHIRAN TEKNIKAL (KT)	KEMAHIRAN GENERIK (KG)
CORE			
PO1	Advanced Knowledge	KT	
PO2	Research Skills	KT	
PO3	Critical Thinking & Problem Solving	KT	
PO4	Ethics, Values, Professionalism		KG
PO5	Communication		KG
PO6	Life Long Learning		KG
OPTIONAL			
PO7	Social Skills		KG
PO8	Team Working		KG
PO9	Leadership		KG
PO10	Information Management		KG
PO11	Managerial & Entrepreneurial		KG



PO BAHARU	PO SEDIA ADA						
PO	FAB	FC	FGHT	RAZAK	FS	FBME	AIS
Advanced Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge
Research Skills	Research skills & Praktikal	Practical	Practical	Practical	Practical	Practical	Practical
Critical Thinking & Problem Solving	PS	CT	PSCT	CTPS	CTPS	CTPS	Scientific Methods, CTPS
Ethics, Value & Professional	Ethics	Ethics, Value, Professional	Ethics, Professional	Professional Skills	Ethics	Ethics	Ethics, professionalism, humanities
Communications	Communication	Communication	Communication	X	Communication	Communication	communication
Life Long Learning	X	Lifelong Learning	Lifelong Learning	Lifelong Learning	Lifelong Learning	Lifelong Learning	Lifelong Learning
Social Skills	Social Skill	Social Skill	Social Skills	Social Skills	Social Skills, Responsibility	X	Social Skills, Responsibility
Team Working	TW	TW	TW	X	TW	X	TW
Leadership	Leadership	Leadership	Leadership	X	Leadership	X	Leadership
Information Management	IM	IM	IM	X	X	IM	IM
Managerial & Entrepreneurship	M&E	M&E	X	Entrepreneurship	Entrepreneurship	X	Entrepreneurship

PO BAHARU	FAKULTI	PO SEDIA ADA			
PO	PO	FP	AB	IBS	FM
Advanced Knowledge	PO1	Knowledge	Knowledge	Knowledge	Knowledge
Research Skills	PO2	Application & Research	Research	Practical	Application of Practical Skills & Research
Critical Thinking & Problem Solving	PO3	Problem solving	X	Problem Solving	Problem solving + critical thinking
Ethics, Value & Professional	PO4	Ethics	Ethics	Responsibilities, value attitudes, Professionalism	X
Communications	PO5	Communication	Communication	Communication	communication
Life Long Learning	PO6	Life long Learning	Life long Learning	lifelong learning skills	Life long Learning
Social Skills	PO7	Social Skills	X	Social skills & responsibilities	Ideas with societal issues
Team Working	PO8		Team working	team skills	Team working
Leadership	PO9	Leadership + networking	Leadership	leadership	Leadership
Information Management	PO10	X	X	Info Management	X
Managerial & Entrepreneurship	PO11	Entrepreneurship	Entrepreneurship	Managerial & Entrepreneurial skills	X

PO BAHARU	PO SEDIA ADA				
PO	FKA	FKM	FKE	FKT	FBME
Advanced Knowledge	Knowledge	Knowledge	Advanced Knowledge	Knowledge	Knowledge
Research Skills	Research	X	Research	Research	Research
Critical Thinking & Problem Solving	Critical Thinking	Critical Thinking, Problem Solving	X	X	Problem Solving
Ethics, Value & Professional	Ethics	Ethics	X	Ethics	Ethics
Communications	Communication	Communication	Communication	Communication	Communication
Life Long Learning	Life long Learning	Life long Learning, Sustainability	Life long Learning	Life long Learning	Life long Learning
Social Skills	X	X	X	X	X
Team Working	Teamwork	X	X	X	Teamwork
Leadership	Leadership	Leadership	X	Leadership	X
Information Management	Management	X	Management	X	X
Managerial & Entrepreneurship	X	Entrepreneurship	X	Entrepreneurship	Entrepreneurship

Characteristics of a 21st Century Teacher

The Adaptor

The Communicator

The Learner

The Visionary

The Leader

The Model

The Collaborator

The 21st Century teacher, as a risk taker, must

- have a vision of what s/he wants and what the technology can achieve to be able to identify goals and facilitate learning
- take risks and sometimes surrender to the students' knowledge and use the strengths of these digital natives to
 - ✓ understand and navigate products
 - ✓ have students teach each other



21st Century Educator

Required Skills

The Networked Teacher

Popular Media

Family/Local Community

Print & Digital Resources

Conferences

Curriculum Documents

Social Bookmarking

Video Conferencing

Blogs

Wikis

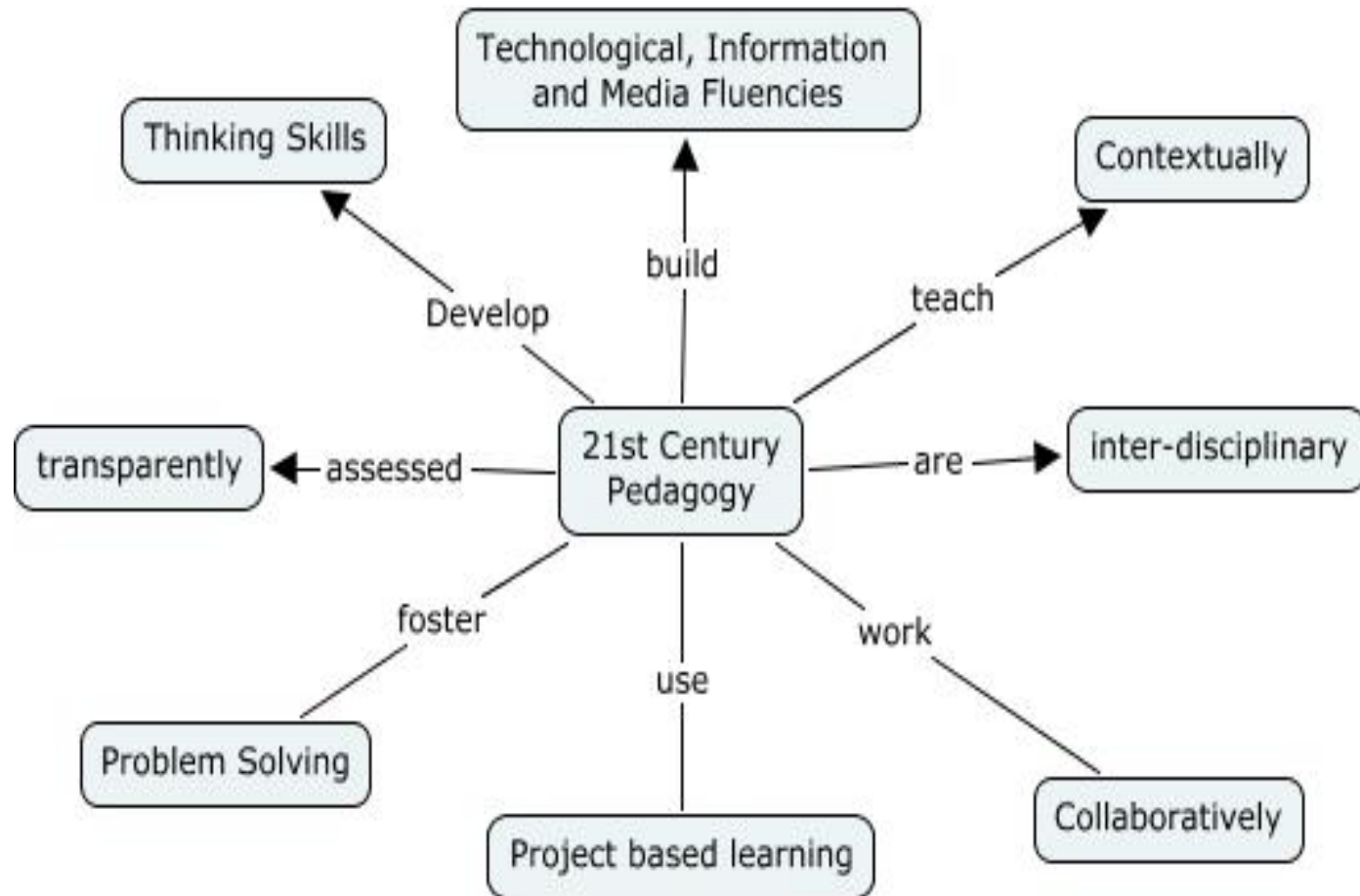
Podcasts

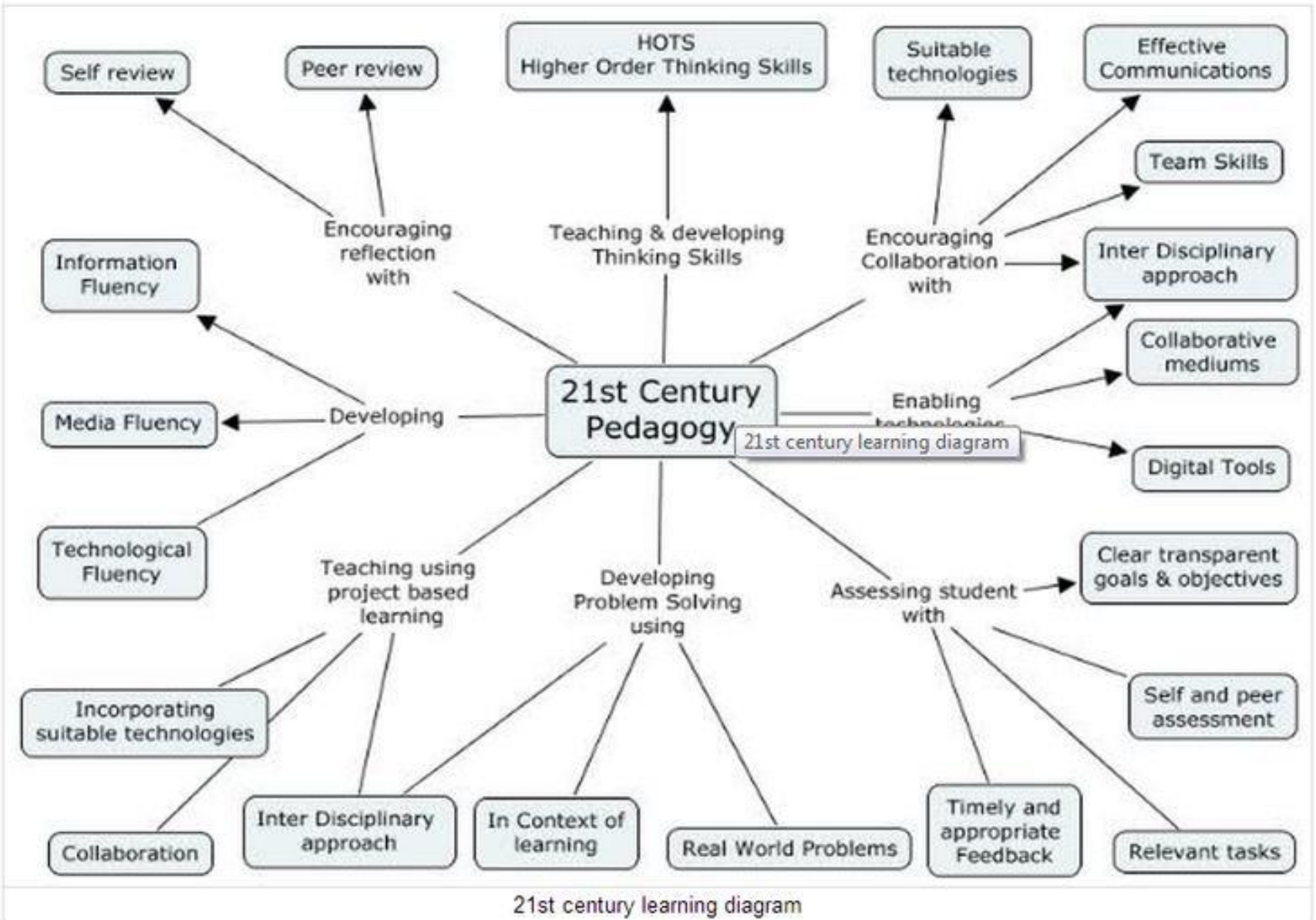
Twitter

Social Network Sites

Photo Sharing

Colleagues





QUIZLET

EVERNOTE

PRINCIPAL

ALGEBRA

GOOGLE-READER

SOCIAL BOOKMARKING

21ST-CENTURY

DROPBOX

PRACTICAL-LIVING

BLOGGING

TEACHER

WIKI

WEBPAGE

WALLWISHER

BACK-CHANNEL

PREZI

GLOGSTER

TWITTER

TOOLS

CLASSROOM MANAGEMENT

POWERPOINT

The 21st Century Teacher





Critical thinking & problem-solving

Effective oral & written communication



Collaboration across networks



Initiative & entrepreneurialism



Agility & adaptability



Curiosity and imagination



Hope & Optimism

Skills & Attributes of Today's Learner



Resilience

Self-Regulation



Vision



Empathy & Global Stewardship

TERIMA KASIH