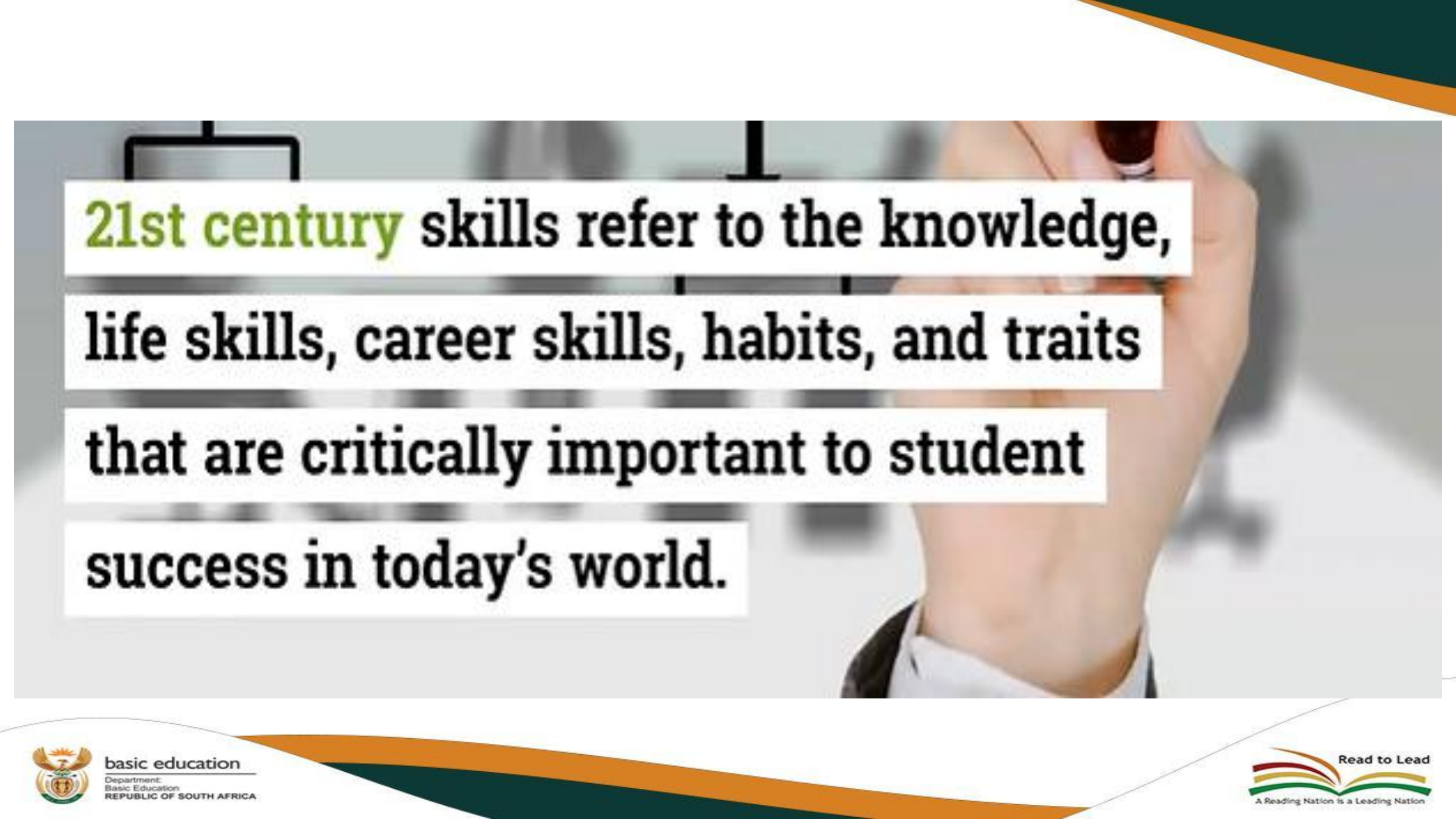




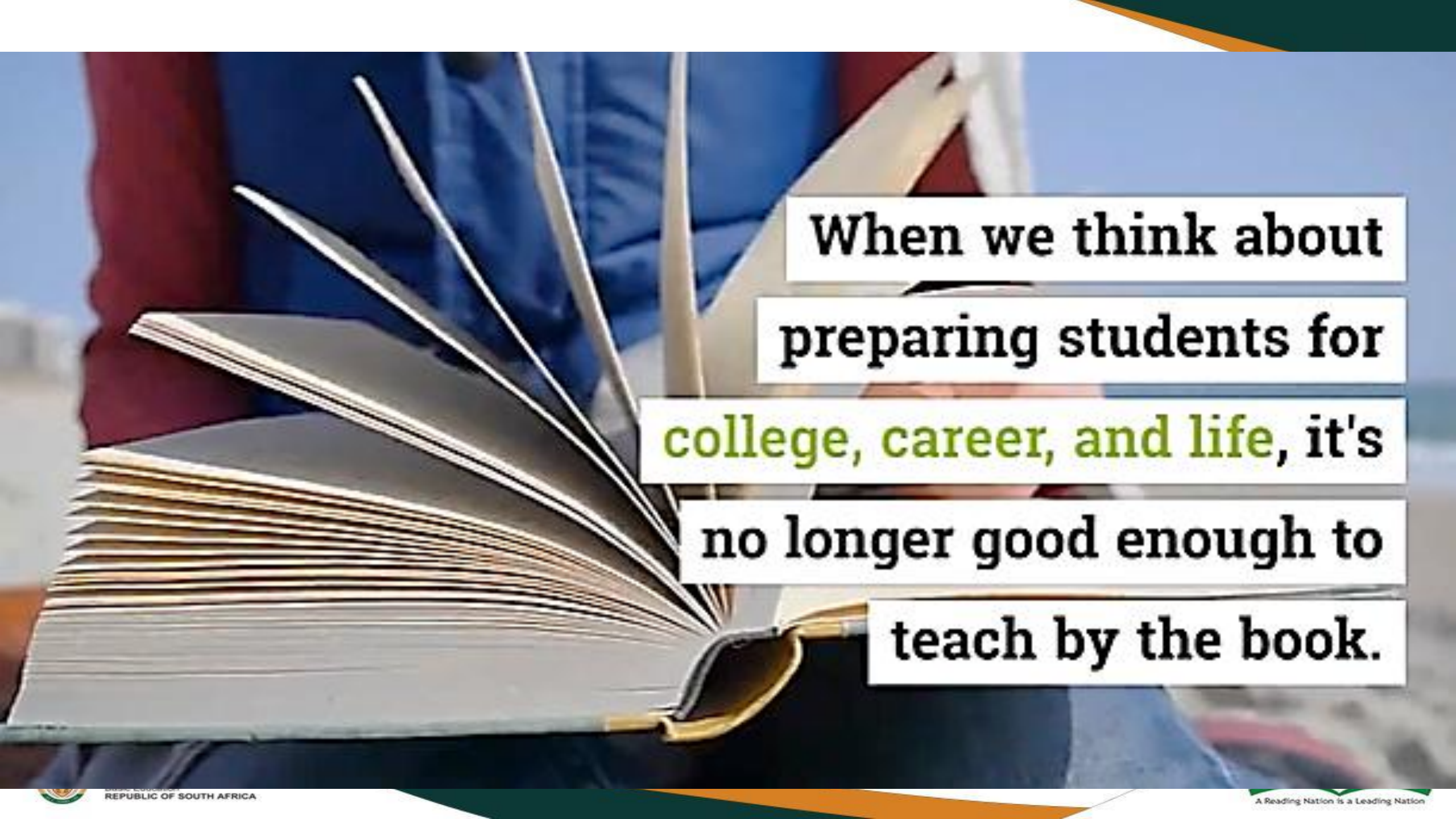
Changes in Education

- The job market today is changing and as we can see, teachers are updating their curriculum and teaching strategies to focus on new skills, values and attitudes to help students excel in the workplace, increasing their chances of getting jobs and avoiding redundancy.



21st century skills refer to the knowledge, life skills, career skills, habits, and traits that are critically important to student success in today's world.





**When we think about
preparing students for
college, career, and life, it's
no longer good enough to
teach by the book.**

Content knowledge from core subjects can only go so far; students need to be taught how to apply facts and ideas towards complex problems.





What do teachers need to do

- Teachers need to rethink their existing curricula in order to help students build 21st century skills that will help them in the workplace.



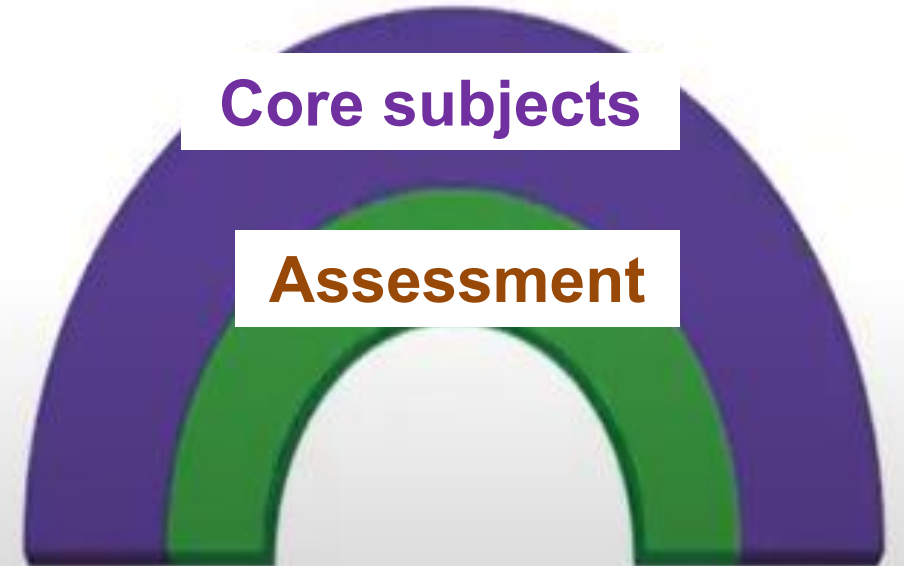
20th Century Classroom and framework



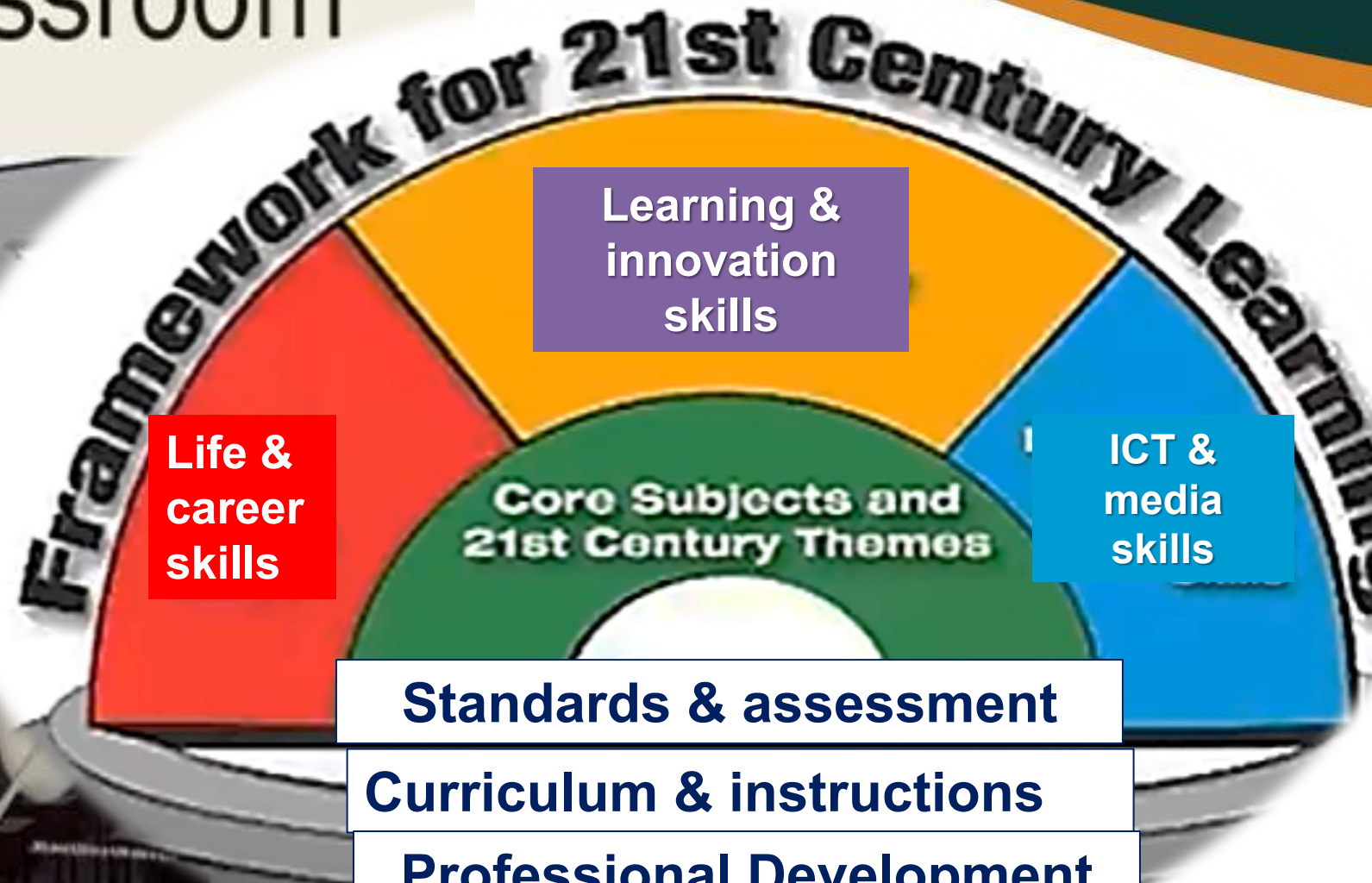
FRAMEWORK FOR 20TH CENTURY LEARNING

Core subjects

Assessment



21ST Century Classroom



Standards & assessment

Curriculum & instructions

Professional Development

Learning environments

21st CENTURY SKILLS

‘Employability skills’ are:

- **Personal qualities** → make you ‘employable’
- **SOFT SKILLS** / transferable skills
- **Separate from technical knowledge and work experience and**
- **can be applied to almost any job** in any industry.



Why are the SOFT SKILLS important?

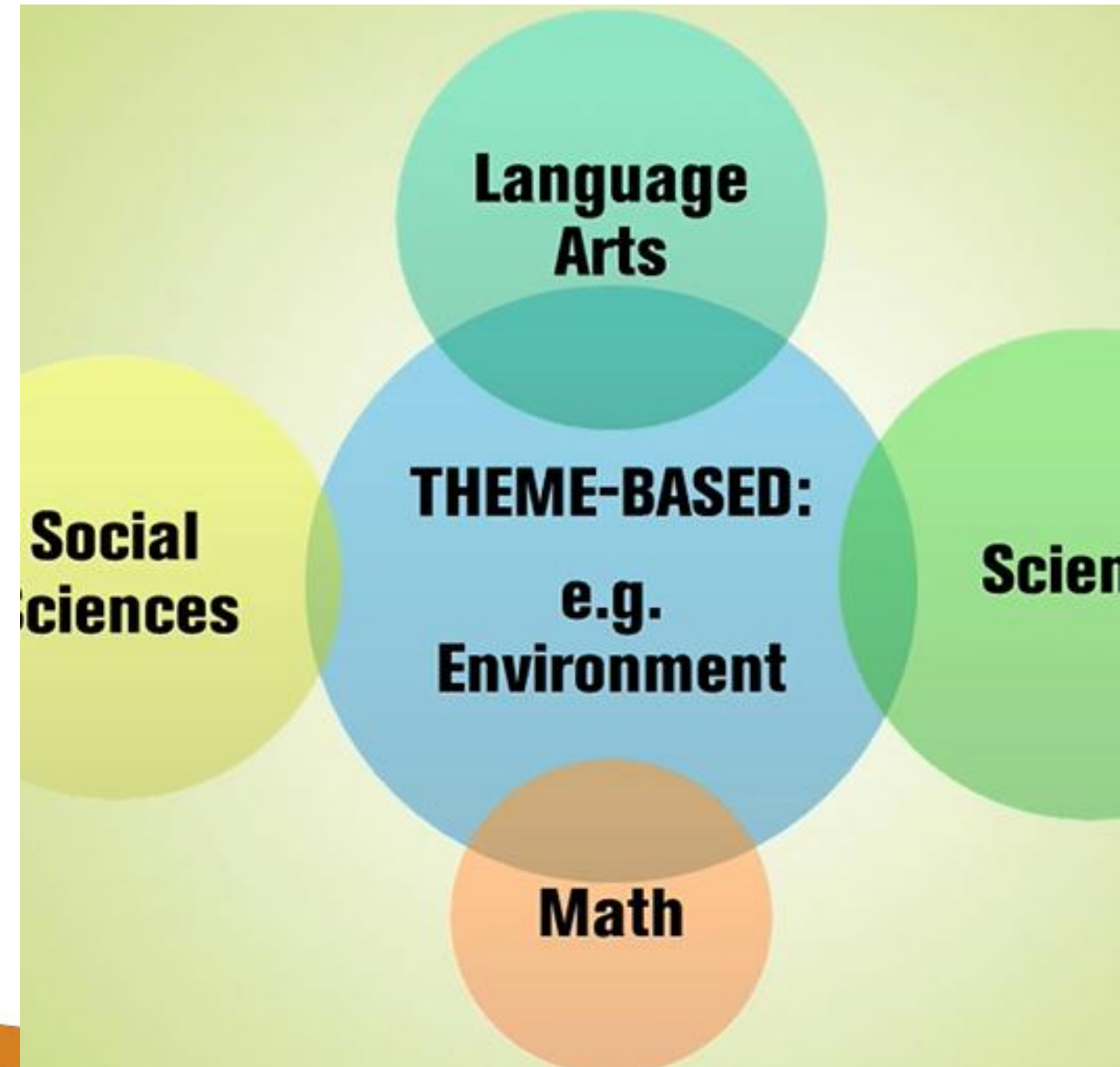


‘Job-readiness’ skills are behaviours that are **necessary for every job and essential attitudes** that allow you to **grow in your career** and also:

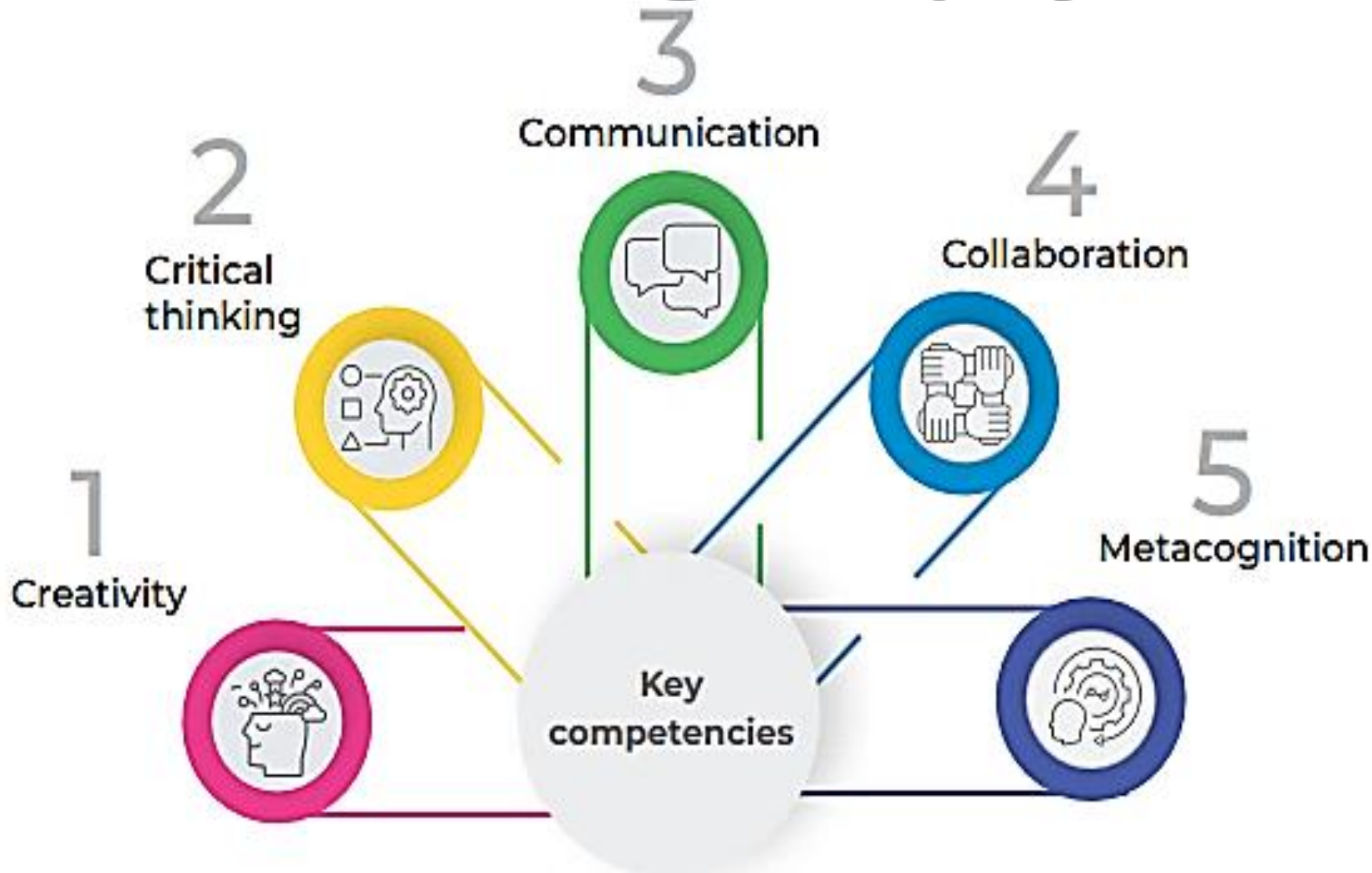
- **Connect** with co-workers
- **Solve problems**
- Be **part of** and understand your role within **a team**
- Make **responsible choices** for your job and career,
- Be **independent** and take charge of your career,
- **Personal characteristics, habits & attitudes** influence how you **interact with others**.
- Employers value **employability skills** → **how** you will **get along** with other employees and team members / customers,
- **How efficiently** you are going to **handle your job performance** and career **success**.

Key features of 21st century education

- Integrated subjects
- Technology (devices, AI, etc.)
- Hands-on learning
- Collaboration
- Student centered learning
- Assessment for Learning approach
- Innovation
- Entrepreneurship



Which 21st century skills are addressed in the integrated projects?



21ST CENTURY SKILLS IN THE PROJECTS

EXPLORING THE WORLD

INQUIRY LEARNING

Ask open-ended questions to explore & discover content.

Moving from known → unknown

Compare, organize & analyse discoveries

Communication

Collaboration

EMBRACING THE CHALLENGE

PROBLEM LEARNING

Define problems, work together as a team to find solutions, strategise.

Solve real-world problems collectively.

Creativity

Critical thinking

DESIGNING THE FUTURE

DESIGN LEARNING

Create products & services that can solve problems

Activism, advocating for change e.g. learning about climate change

Creativity

Critical thinking

METACOGNITION

Reflection(metacognition), feedback(communication) & iteration(critical thinking)

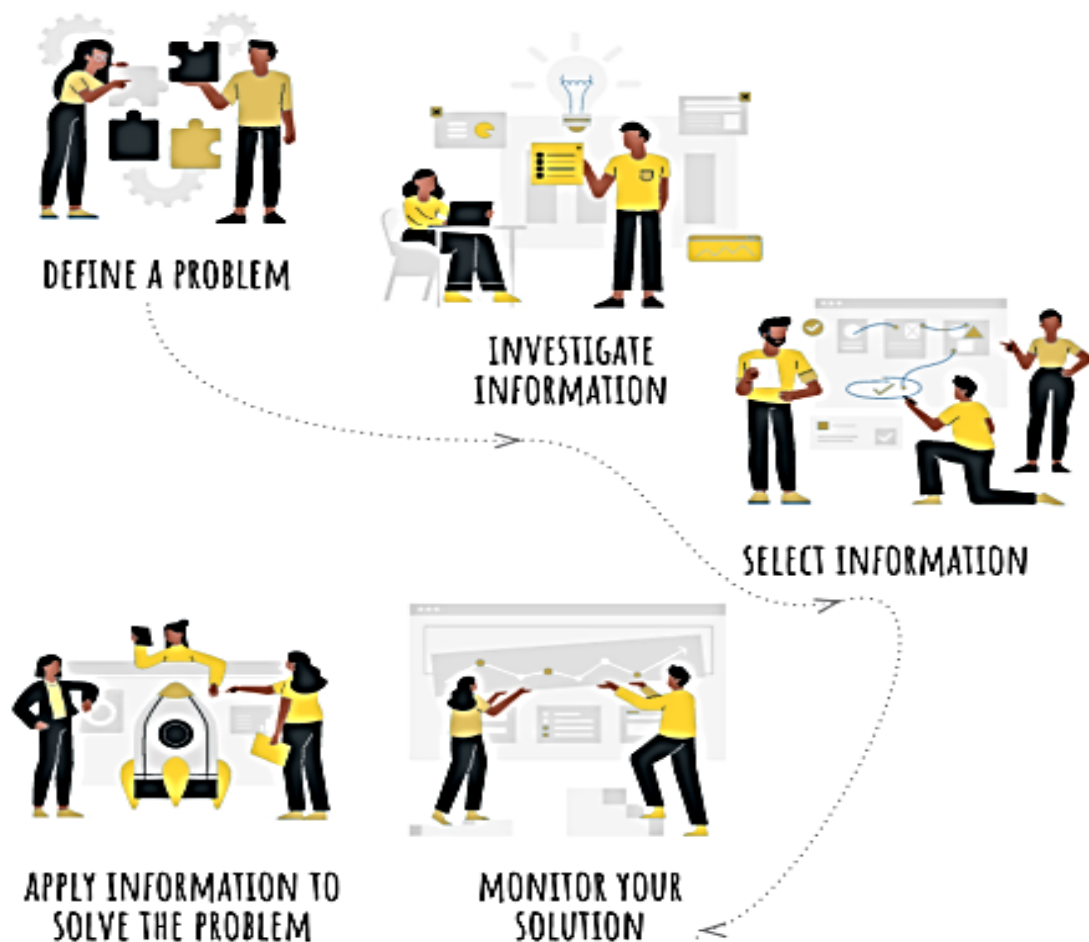
CRITICAL THINKING

21 st -CENTURY SKILL	DESCRIPTOR
• Critical thinkers ask questions, find the right information, and apply it to solve a problem	1.1 Asking questions: The learner asks appropriate questions to find out more information.
	1.2 Evaluating ideas: The learner identifies which information was helpful to solve the problem.
	1.3 Identifying patterns: The learner uses tools (e.g., mind maps and diagrams) to help organise his/her information.



CRITICAL THINKING

Critical thinkers ask questions, find the right information, and apply it to solve a problem (DBE-E³ team, n.d.). Once a critical thinker identifies a problem they follow the process of (Heard et al., 2020).



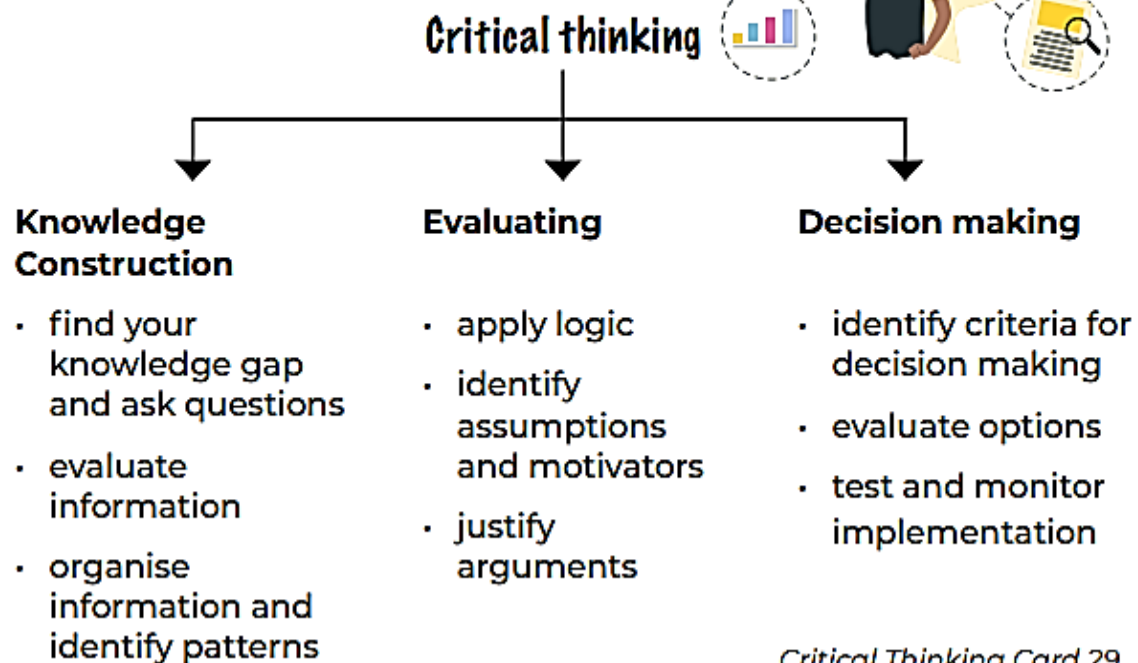
CRITICAL THINKING

Critical thinking involves asking questions and researching to find the right information that can be applied to solve a problem.



Want to learn more?

Critical thinking is made up of lots of different skills.



CREATIVITY / CREATIVE THINKING

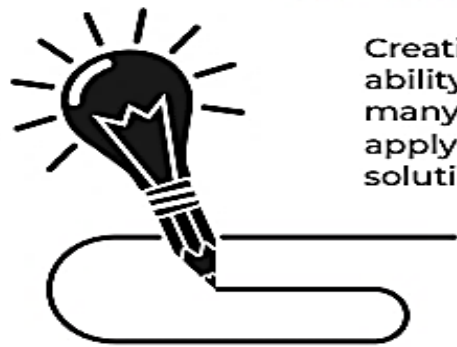
21 st -CENTURY SKILL	DESCRIPTOR
• Creative thinking is defined as the ability to come up with many different ideas and apply them to find realistic solutions to problems. • There are two important aspects to creative thinking: Originality and usefulness	3.1 Number of ideas : The learner comes up with many ideas.
	3.2 Range of ideas : The learner thinks of a range of different ideas.
	3.3 Feasibility of ideas : These ideas were realistically possible to implement as solutions to the problem.





CREATIVITY

CREATIVE THINKING



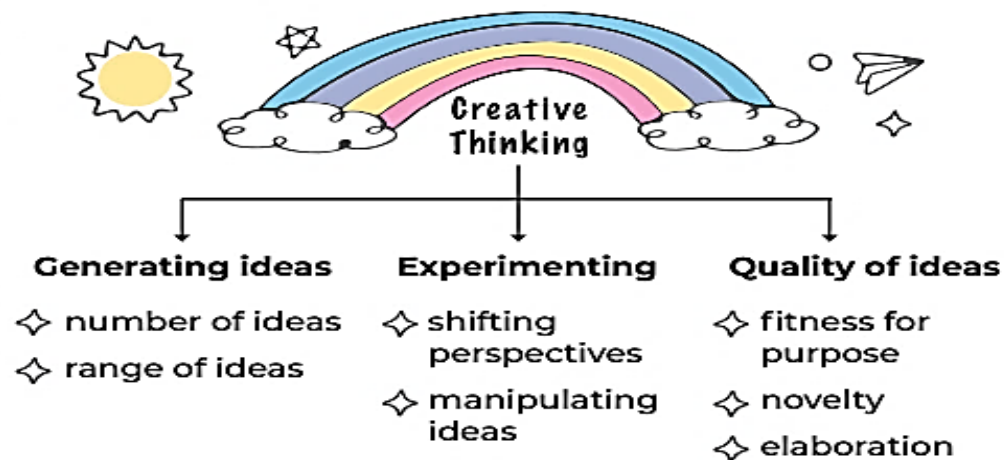
Creative thinking is the ability to come up with many different ideas and apply them to find realistic solutions to problems.

Creative thinkers come up with many different ideas that are relevant to solving a problem.

Creative Thinking Card 1

Want to learn more?

Creative thinking is made up of lots of different skills.



Creative Thinking Card 2



Originality

Are these ideas new?

Are they unusual?

Usefulness

Are they realistic and relevant?

Can they be applied to solve the problem?

COMMUNICATION

21 st -CENTURY SKILL	DESCRIPTOR
COMMUNICATION is the process of sharing information, attitudes, and values . Both “what we say” (verbal communication) and “how we say it” (non-verbal communication) are important.	2.1 Non-verbal communication: The learner recognises nonverbal cues such as tone of voice and expression.
	2.2 Articulation: The learner uses the correct language for the situation.
	2.3 Empathising: The learner tries to understand how others were feeling.





NON-VERBAL COMMUNICATION

Communication Card 63

...refers to how people say things. Their tone of voice, body language and expression can give us clues about how they feel about what they are saying.



Communication Card 66



ARTICULATION

Communication Card 64

...is **how** we say our words. It is important that we speak and write clearly so that people will understand what we are trying to say.

It is also important that we consider **who** we are talking to (the audience) and present our information in an appropriate manner.



Communication Card 67



EMPATHISING

Communication Card 65

...involves understand how other people are feeling and taking their emotions into consideration.



Communication Card 68

COLLABORATION

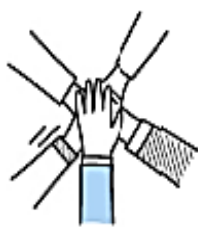
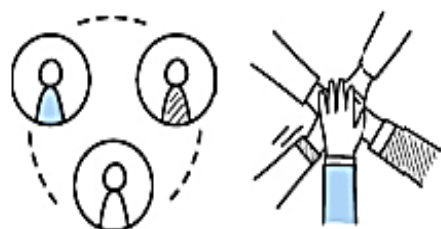
21 st -CENTURY SKILL	DESCRIPTOR
• Collaboration is when <i>two or more people work together</i> to <u>solve a problem</u>. • Interdependence is achieved when group members share responsibility and pool their information and resources to develop a shared understanding of the problem and their solution to it.	4.1 Negotiating roles and responsibilities: The learner negotiates and decides on the role he/she would play in the group.
	4.2 Pooling resources: The learner shares his/her own knowledge and experiences with the group to help strengthen the project.
	4.3 Engaging with roles and responsibilities: The learner completes and submit the required tasks for the group.



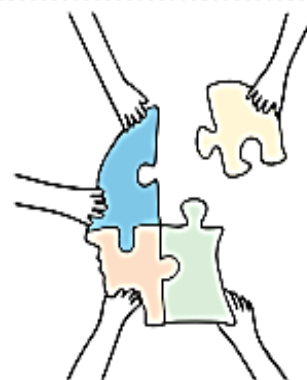
COLLABORATION

Want to learn more?

Collaboration is made up of lots of different skills.



Collaboration



Building shared understanding

- communicating with others
- pooling information & resources
- negotiating roles & responsibilities

Collectively contributing

- participating in group
- recognising the contribution of others
- engaging with roles & responsibilities

Regulating

- ensuring own contributions are constructive
- resolving differences
- maintaining shared understanding

Collaboration Card 104



COLLABORATION

Collaboration is when two or more people work together to solve a problem. It is important that the group is interdependent.



Collaboration Card 102



INTERDEPENDENT

Interdependent means that each group member relies on the other members.

Interdependence is achieved when group members share responsibility and pool their information and resources to develop a shared understanding of the problem and their solution to it.



Collaboration Card 103

METACOGNITION

21 st -CENTURY SKILL	DESCRIPTOR
• Meta-learning is about being aware of <u>how</u> we <u>think</u>, what we <u>know</u> and how we know it. • Metacognition helps us to reflect on our thinking, • set goals, and • monitor and evaluate our learning.	5.1 Setting goals and planning: The learner set goals and make a plan during the project.
	5.2 Monitoring progress against plans: The learner monitors their progress against their plans
	5.3 Reflecting on planned work: The learner reflects on their project and or their prior knowledge.





METACOGNITION

Skills that make up metacognition:

- **Reflection** on your thinking
- **Setting goals**
- Considering **different ways** to do things
- **Planning** your work
- **Monitoring** your plan
- **Evaluating** your plan
- **Adapting** your plan



METACOGNITION

Metacognition is about being aware of how we think, what we know and how we know it.

Metacognition helps us to reflect on our thinking, set goals, and monitor and evaluate our learning.



Metacognition Card 114



REFLECTIVE THINKING

People who are metacognitively aware are able to reflect on their thinking and feelings and change their ideas, behaviours, or goals as a result of their reflection.

This is often a very personal process that might even happen without our realising it.



Metacognition Card 115

2026 General Education Certificate

Section 1: What is being measured?

While learners are working on the project, your role as a facilitator is to **observe, listen, and record the process of their learning (21st-Century Skills)** during the project.

21st-Century Skills

21ST CENTURY SUB-SKILLS

CRITICAL THINKING	COMMUNICATION	CREATIVITY	COLLABORATION	METACOGNITION
1.1 Asking Questions	2.1 Non-verbal Communication	3.1 Number of ideas	4.1 Negotiating roles and Responsibilities	5.1 Setting goals and Planning
1.2 Evaluating ideas	2.2 Articulation (how we say things)	3.2 Range of ideas	4.2 Pooling resources	5.2 Monitoring progress against plans
1.3 Identifying patterns	2.3 Empathising	3.3 Feasibility of ideas	4.3 Engaging with roles and responsibilities	5.3 Reflecting on work

SCORING RUBRIC

0	Never: The behaviour was not seen
1	Rarely: The behaviour occurs but not often
2	Sometimes: The behaviour occurs about half the time
3	Often: The behaviour occurs most of the time
4	Always: The behaviour is consistent and regular

Note that the scores are not for marks, promotion, or progression. They simply state the frequency in which these skills have been practiced and observed. These scores do NOT imply any level of competence.

• **CREATIVITY**

- Think creatively
- Work creatively with others
- Implement innovation

• **CRITICAL THINKING**

- Reason effectively & evaluate evidence
- Solve problems
- Articulate findings

• **LEARNING TO LEARN & METACOGNITION**

- Self-motivation
- Positive appreciation of learning
- Adaptability and flexibility

WAYS OF THINKING

WAYS OF WORKING

• **COMMUNICATION**

- Competency in written and oral language
- Open minded and preparedness to listen
- Sensitivity to cultural differences when communicating

• **COLLABORATION & TEAMWORK**

- Interact effectively with others
- Work effectively in diverse teams
- Prioritise, plan and manage projects

• **INFORMATION LITERACY**

- Access and evaluate info
- Apply tech effectively
- Use and manage info

• **ICT LITERACY**

- Open to new ideas, info, tools & ways of thinking
- Use ICT accurately, creatively ethically and legally
- Aware of cultural & social differences
- Apply technology appropriately and effectively

TOOLS

OBSERVATION OF SKILLS PER SUBJECT

PROJECT 1:

Home Language	Critical Thinking, Creativity, Communication
First Additional Language	Communication, Collaboration, Creativity
Life Orientation	All FIVE 21 st Century Skills
Economic Management Sciences	All FIVE 21 st Century Skills
Creative Arts	Critical Thinking, Creativity, Metacognition
Social Sciences (History)	Critical Thinking, Communication, Metacognition

PROJECT 2:

Technology	Critical Thinking, Collaboration, Metacognition
Mathematics	Creativity, Communication, Metacognition
Natural Sciences	Critical Thinking, Creativity, Metacognition

SKILL	DESCRIPTION
1. CRITICAL THINKING	Asking Questions – The ability to probe assumptions, seek clarification, and challenge information sources. Includes open-ended and follow-up questions. Evaluating Ideas – Judging the credibility, relevance, logic, and evidence behind claims or solutions. Distinguishing fact from opinion. Identifying Patterns – Recognizing trends, relationships, cause-effect links, and inconsistencies across data or situations.
2. COMMUNICATION	Non-verbal Communication – Using eye contact, gestures, posture, facial expressions, and tone to reinforce or convey meaning. Articulation (how we say things) – Speaking or writing clearly, logically, and with appropriate vocabulary and structure for the audience. Empathising – Actively listening and responding with awareness of others' feelings, perspectives, and needs.
3. CREATIVITY	Number of ideas – Fluency: generating many possible solutions or approaches without early judgment. Range of ideas – Flexibility: producing diverse types of ideas across different categories or viewpoints. Feasibility of ideas – Evaluating practicality given time, resources, constraints, and context.

SKILL	DESCRIPTION
4. COLLABORATION	Negotiating roles and responsibilities – Discussing and agreeing who does what based on strengths, interests, and task needs. Pooling resources – Sharing information, materials, tools, or skills to achieve a common goal. Engaging with roles and responsibilities – Actively fulfilling agreed tasks, supporting others, and adapting when needed.
5. METACOGNITION	Setting goals and planning – Defining specific, realistic objectives and outlining steps or strategies before starting. Monitoring progress against plans – Checking in during the task to see if on track, and adjusting strategies as needed. Reflecting on work – After completion, analyzing what worked, what didn't, and what could improve next time.

OBSERVATION OF SKILLS

- WHEN to assess the different skills will be shared by the SA for each subject
- NOTE: SKILLS are observed NOT assessed → not for marks or promotion.

- **Tools used:**

- ✓ **Template 1: Observation**
- ✓ **Template 2: Teacher captures scores**
- ✓ **Template 3: Consolidation (auto-updates)**
- ✓ **SA-SAMS: For recording only**

Scoring scale:
Frequency of observed behaviour:

0 = Never
1 = Rarely
2 = Sometimes
3 = Often
4 = Always

RUBRIC TO OBSERVE 21ST CENTURY SKILLS:

Skill	4 ALWAYS	3 OFTEN	2 SOMETIMES	1 – 0 RARELY/ NEVER
CRITICAL THINKING ✓ Asking Questions ✓ Evaluating ideas ✓ Identifying patterns	Analyses information thoroughly and justifies decisions with evidence	Uses logical reasoning with relevant evidence	Attempts problem-solving with limited reasoning	Shows little understanding/ independent thinking
CREATIVITY ✓ Number of ideas ✓ Range of ideas ✓ Feasibility of ideas	Produces original and innovative ideas beyond expectations	Generates relevant and interesting ideas	Relies on basic or predictable ideas	Shows minimal creative effort

Skill	4 ALWAYS	3 OFTEN	2 SOMETIMES	1 – 0 RARELY/ NEVER
COMMUNICATION ✓ Non-verbal communication ✓ Articulation (how we say things) ✓ Empathy	Communicates ideas clearly, confidently and appropriately	Communicates ideas with minor difficulties	Ideas are unclear or poorly structured	Struggles to communicate ideas
COLLABORATION ✓ Negotiating roles and responsibilities ✓ Pooling resources ✓ Engaging with roles and responsibilities	Consistently contributes and supports group success	Works well with others <u>most of the time</u>	Participation is inconsistent	Rarely participates or disrupts group work
METACOGNITION ✓ Setting goals Monitoring progress against plans ✓ Reflecting on work	Clearly explains thinking, learning strategies and improvement areas	Reflects on learning with some insight	Limited or surface reflection	No meaningful reflection

SUBJECT: _____

Name of learner: _____

Class / group: _____

	ALWAYS (4) Consistently exceeds expectations; demonstrates leadership and initiative across sub-skills	OFTEN (3) Meets expectations competently; minor inconsistencies that don't hinder performance	SOMETIMES (2) Shows partial ability; needs support or practice to reach proficiency	RARELY / NEVER (1 – 0) Minimal or inconsistent demonstration; requires significant scaffolding	Date of observation
1. CRITICAL THINKING 1.1 Asking Questions 1.2 Evaluating ideas 1.3 Identifying patterns	Analyses information thoroughly and justifies decisions with evidence	Uses logical reasoning with relevant evidence	Attempts problem-solving with limited reasoning	Shows little understanding or independent thinking	
2. CREATIVITY 2.1 Number of ideas 2.2 Range of ideas 2.3 Feasibility of ideas	Produces original and innovative ideas beyond expectations	Generates relevant and interesting ideas	Relies on basic or predictable ideas	Shows minimal creative effort	
3. COMMUNICATION 3.1 Non-verbal communication 3.2 Articulation 3.3 Empathising	Communicates ideas clearly, confidently and appropriately	Communicates ideas with minor difficulties	Ideas are unclear or poorly structured	Struggles to communicate ideas	
4. COLLABORATION 4.1 Negotiating roles & responsibilities 4.2 Pooling resources 4.3 Engaging with roles & responsibilities	Consistently contributes and supports group success	Works well with others most of the time	Participation is inconsistent	Rarely participates or disrupts group work	
METACOGNITION 5.1 Setting goals 5.2 Monitoring progress against plans 5.3 Reflecting on work	Clearly explains thinking, learning strategies and improvement areas	Reflects on learning with some insight	Limited or surface reflection	No meaningful reflection	

