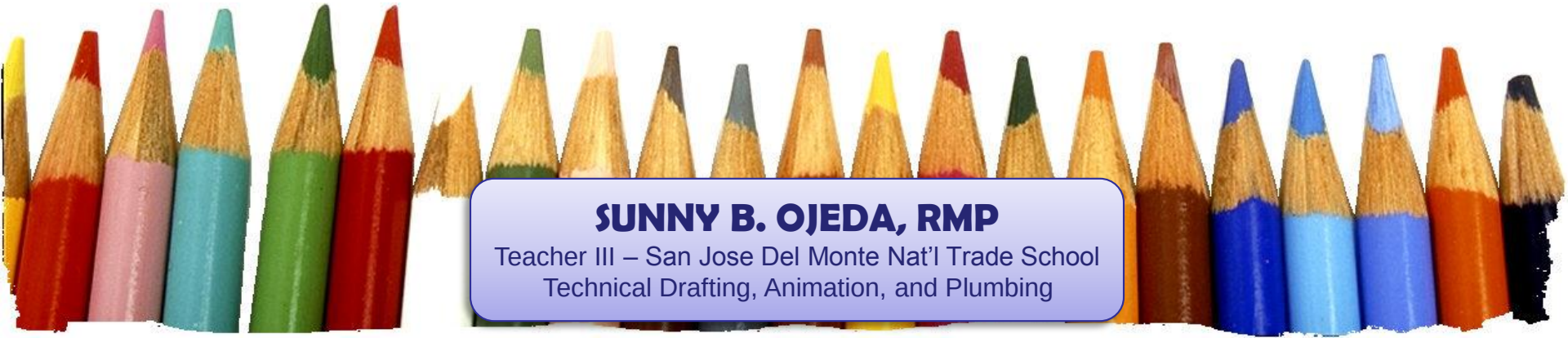
Division Seminar on Content & Pedagogy for Grade 7&8 TLE Teachers

21ST CENTURY TEACHING STRATEGIES



SUNNY B. OJEDA, RMP
Teacher III – San Jose Del Monte Nat'l Trade School
Technical Drafting, Animation, and Plumbing

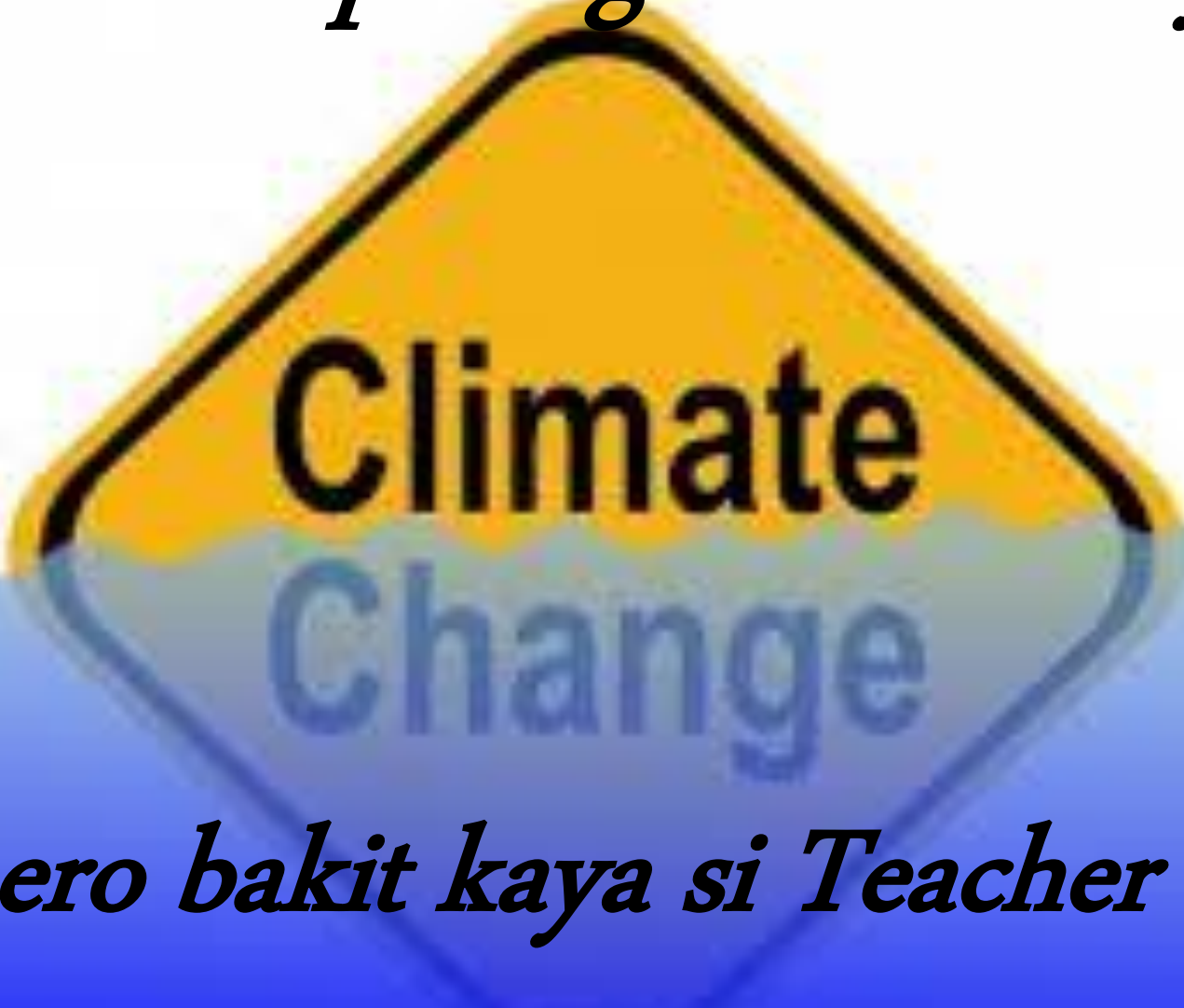
TLE/STVE GROUPING

GROUP 1 – AGRICULTURE e.g. Animal, Aquaculture, Crop Production, etc.	**GROUP 2** – ICT e.g. ICF and other computer related subjects.
GROUP 3 – HOME ECONOMICS e.g. Garments, Cosmetology, Food Trades, etc.	**GROUP 4** – HOME ECONOMICS e.g. Garments, Cosmetology, Food Trades, etc.
GROUP 5 – INDUSTRIAL ARTS e.g. Electricity, Welding, Drafting, Carpentry, Electronics, and etc.	**GROUP 6** – INDUSTRIAL ARTS e.g. Electricity, Welding, Drafting, Carpentry, Electronics, and etc.

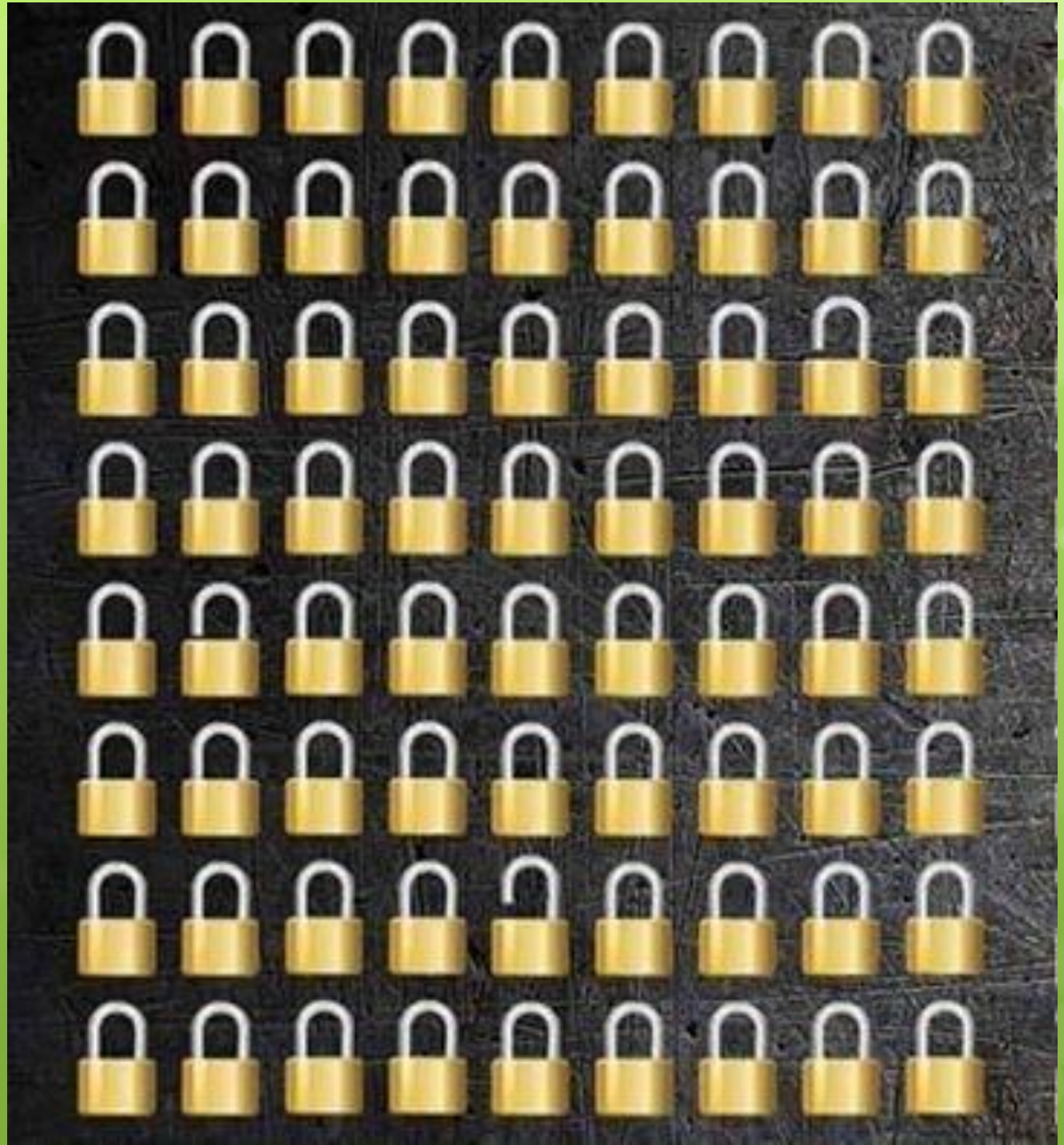
OBJECTIVES

- Explain possible pedagogical approaches in teaching TLE/STVE subjects.
- Identify the strategies and methods which are congruent to 2C2I1R approaches.
- Evaluate different strategies and methodologies which are applicable to TLE/ STVE subjects.

“Mabuti pa ang mundo may



pero bakit kaya si Teacher ay walang Teaching Change?”



21ST CENTURY STANDARDS

- Focuses on 21st century skills, content knowledge and expertise.
- Emphasizes deep understanding rather than shallow knowledge.
- Engages students with the real world data, tools, and experts they will encounter in college, on the job, and in life.
- Allows for multiple measures of mastery.

21st Century Curriculum & Instruction

- Focuses on applying 21st century skills across content areas and for a competency-based approach to learning.
- Enables innovative learning strategies that integrate the use of supportive technologies, inquiry- based and problem-based learning.
- Encourages the integration of community resources beyond school walls.

21st Century Learners

Students today are partly shaped by their environment, which is:

- Collaborative, networkers and communicators
- Adaptive and creative
- Information, media and technology savvy
- Partially dwell to instant gratification
- Reliant on media in its various forms

21st Century Teachers

Adaptor

They are able to adapt software and hardware designed for an industry model into tools suitable for education and specifically for a variety of age groups and abilities.

21st Century Teachers

Visionary

A visionary teacher can look at other people's ideas and methodologies and see how they would use these in his or her classes.

21st Century Teachers

Collaborator

The teacher's role here is often that of moderator, facilitator and referee: shaping conversation, refocusing discussion and leading by example. The teacher learns how to structure and develop conversation.

21st Century Teachers

Risk Taker

Takes risk and is prepared to tap into students' knowledge of technology.

Learner

Educators too must continue to absorb experiences, knowledge and stay current.

21st Century Teachers

Communicator

Educator must be a communicator, fluent in tools and technologies that enable communication and collaboration. They must also know how to facilitate communication, stimulate and control it, moderate and manage it.

21st Century Teachers

Model

Teachers model the behaviors they expect from students. There is an expectation that teachers will teach the value of learning.

21st Century Teachers

Leader

The teacher must be champion of ICT integration or quiet technology coach, a teacher leads by example. Leadership, like clear goals and objectives, is crucial to the success or failure of 21st century teaching.

PEDAGOGY

- "Any conscious activity by one person designed to enhance learning in another" (Watkins and Mortimer, 1999).
- Study of methods and activities of teaching (Cambridge Dictionary).

What pedagogical approaches and strategies should I apply?

2C-2I-1R

FIVE PEDAGOGICAL APPROACHES

- ❑ Constructivist
- ❑ Collaborative
- ❑ Integrative
- ❑ Inquiry Based Learning
- ❑ Reflective

Legal Basis:

RA 10533

Enhance Basic Education Act of 2013

CONCERNS FOR PREPARING THE INSTRUCTIONAL PLAN

Who are the learners? What do they need **(learning competencies)** to achieve the desired results **(content standards)** and to perform well **(performance standard)**?

K to 12 BASIC EDUCATION CURRICULUM

JUNIOR HIGH SCHOOL TECHNICAL LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL

INFORMATION AND COMMUNICATIONS TECHNOLOGY – TECHNICAL DRAFTI

Grade 7/Grade 8 (Exploratory)

Course Description:

This is an exploratory and introductory course that leads to a **Technical Drafting** National Certificate Level II (NC II a **Grade 7/Grade 8** Technology and Livelihood Education (TLE) student ought to possess, namely: 1) use of tools and equip instruments, equipment, and paraphernalia; 3) performing mensuration and calculation; 4) interpreting technical drawing and and Safety (OHS) procedures.

The preliminaries of this exploratory course include the following: 1) discussion of the relevance of the course, 2) ex and 3) exploration of career opportunities.

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	
Introduction 1. Relevance of the course 2. Basic concepts in Technical Drafting 3. Career opportunities	The learners demonstrate an understanding of basic concepts and theories in Technical Drafting	The learners shall be able to demonstrate common competencies in Technical Drafting as prescribed by the TESDA Training Regulations	*The learners...* 1. Discuss the relevance of the course 2. Explain basic concepts in Technical Drafting 3. Explore opportunities for a career in Technical Drafting	

demanding, mysterious and challenging, pulling students to inquiry

engaging

Learning Plan: Best Designs

effective

help learners become more competent and productive

HOW CAN WE ENGAGE OUR STUDENTS?

…when learning activity

- Is hands-on
- Involves mystery or problem
- Provides variety

When are students most engaged?

…when learning activity

- Is built on real-world challenges
- Gives learner opportunity to modify and personalize the challenge
- Balances cooperation and competition

When is learning most effective?

…when learning activity

- Is focused on clear and worthy goals
- Provides for models and exemplars
- Has clear criteria to monitor progress

Vocational pedagogy normally requires a subtle blend of theory and practice, action and reflection, solo and group, and learner-led and expert mediated.

LEARNING APPROACHES & STRATEGIES FOR TLE-STVE

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

TEACHING APPROACH

It is a set of principles, beliefs, or ideas about the nature of learning which is translated into the classroom.

Examples: constructivist, collaborative, integrative, inquiry based and reflective.

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

TEACHING STRATEGY***

It is a long term plan of action designed to achieve a particular goal.

Examples: Direct Instruction, Indirect Instruction, Cooperative / Interactive Learning, Individual Study, and Experiential Learning.

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

METHOD & TECHNIQUE***

It is a systematic way of doing something. It implies an orderly logical arrangement of steps. It is more procedural.

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

Constructivist Approach allows learners to be active in the process of constructing meaning and knowledge rather than passively receiving information. It fosters critical thinking and provides learners with a learning environment that helps them make connections with their learning.

Cooperative, Indirect, Direct, Experiential & Individual

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

Collaborative Approach requires learners to work together towards a common goal. This type of learning has been called in various names like collective learning, peer learning or team learning.

CIDEI

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

Integrative Approach provides learners with a learning environment that helps them make connections of their learning's across curricula. It focuses on connections rather than teaching isolated facts. It underscores the elements of content based instruction, focusing inquiry, thematic teaching and generic competency model.

CIDEI

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

Inquiry Based Approach is a way of acquiring or obtaining information by investigation carried out by learners who are eager to know the phenomenon in question. As a process, learners are involved in their learning by formulating questions, investigating, building their understanding and creating meaning and new knowledge on a certain lesson.

PEDAGOGICAL APPROACHES & STRATEGIES FOR TLE-TVL

Reflective Approach the students control their own learning process, and they lead the way by reflecting on their experiences in which the teacher consider *alternative means* for achieving the required competencies.

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LEARNING STRATEGIES FOR TLE/STVE

COOPERATIVE LEARNING / INTERACTIVE LEARNING

Cooperative / interactive learning is sometimes called as small-group learning, in which small groups of students work together on a common task.

Group Project Making, Group Research Work, Group Video Project, Role Playing, Group Model Making,Collaborative Reporting, Software-based or Computer-based Instruction

LEARNING STRATEGIES FOR TLE-STVE
❑ COOPERATIVE LEARNING/ INTERACTIVE LEARNING

- **Student achievement**
- **Student retention**
- **Improved relations**

- **Improved critical thinking skills**
- **Oral communication improvement**
- **Promoted social skills**
- **Heightened self-esteem**

Factors Affecting the Success of Cooperative Learning

- Group goals
- Individual accountability
- Equal opportunities for success

LEARNING STRATEGIES FOR TLE-TVL

DIRECT INSTRUCTION

Direct instruction is the use of straightforward, explicit teaching techniques, usually to teach a specific skill.

Lecture
Demonstration
Problem based learning
Handout
Workbook
Drill & Practice, etc.

LEARNING STRATEGIES FOR TLE-TVL

INDIRECT INSTRUCTION

Indirect instruction is an approach to teaching and learning in which concepts, patterns, and abstractions.

Decision Making
Individual Research Work
Problem based learning
Project based learning
Computer-Aided Instruction
Modular or CBLM
Video Tutorial

LEARNING STRATEGIES FOR TLE-TVL

EXPERIENTIAL LEARNING

Experiential learning is a process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting.

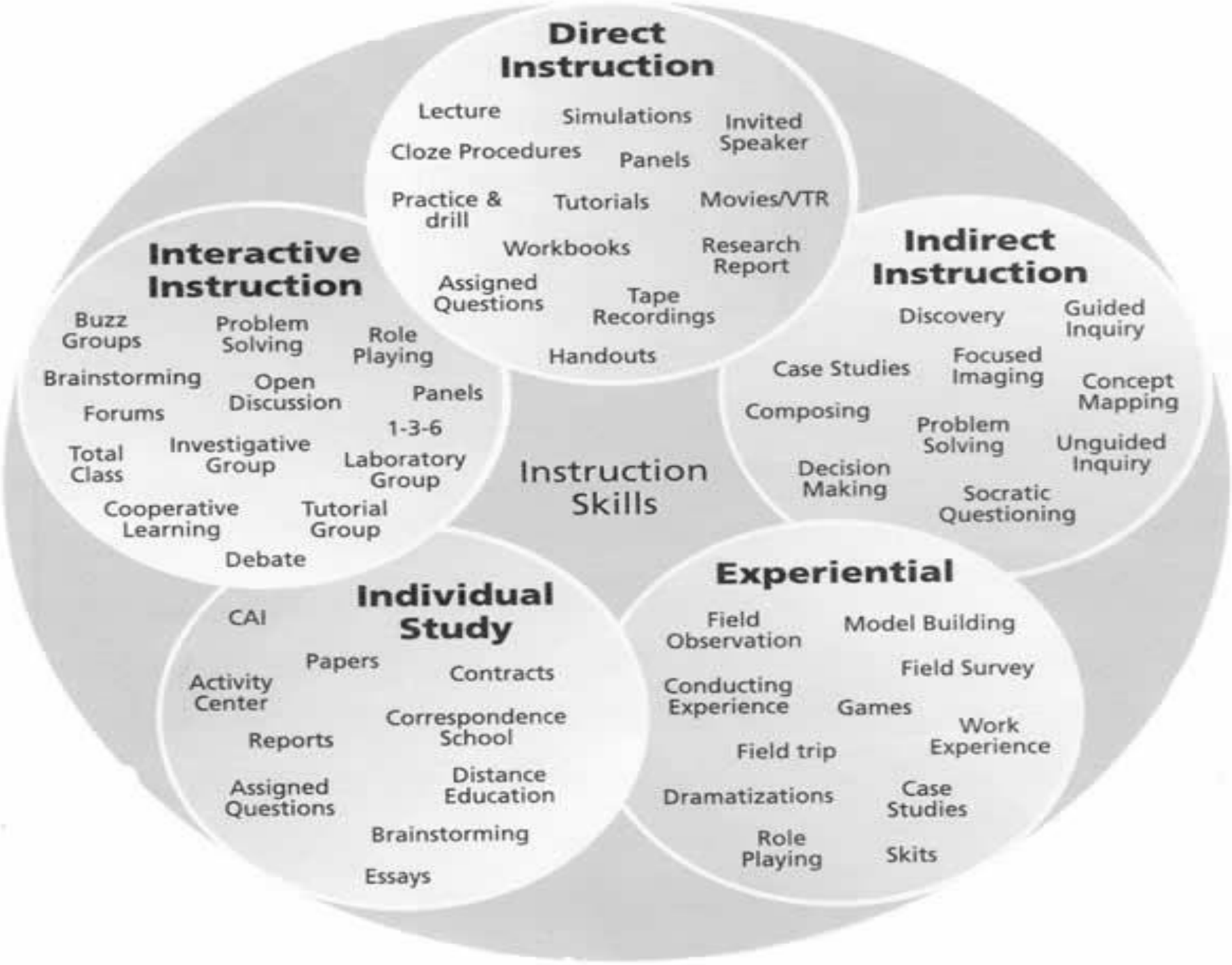
Project Making
Model Making
Field Trip
Games
Role Playing
On-the-job training

LEARNING STRATEGIES FOR TLE-TVL

INDIVIDUAL STUDY

The student in this learning strategy is guided by a teacher but usually does not take classes with other students every day.

Distance Education, Computer-Aided Instruction, Individual Reporting, Essay, Modular or CBLM, Assigned Questions, Project Making, Model Making, Video Call, Video Project and etc.


Direct Instruction
Lecture
Simulations
Invited Speaker
Cloze Procedures
Panels
Practice & drill
Tutorials
Movies/VTR
Workbooks
Research Report
Assigned Questions
Tape Recordings
Handouts
Interactive Instruction
Buzz Groups
Problem Solving
Role Playing
Brainstorming
Open Discussion
Panels
Forums
1-3-6
Total Class
Investigative Group
Laboratory Group
Cooperative Learning
Tutorial Group
Debate
Indirect Instruction
Discovery
Guided Inquiry
Case Studies
Focused Imaging
Concept Mapping
Composing
Problem Solving
Unguided Inquiry
Decision Making
Socratic Questioning
Instruction Skills
Individual Study
CAI
Papers
Contracts
Activity Center
Correspondence School
Reports
Distance Education
Assigned Questions
Brainstorming
Essays
Experiential
Field Observation
Model Building
Field Survey
Conducting Experience
Games
Work Experience
Field trip
Dramatizations
Case Studies
Role Playing
Skits

CROUP WORKSHOP

TLE/STVE GROUPING

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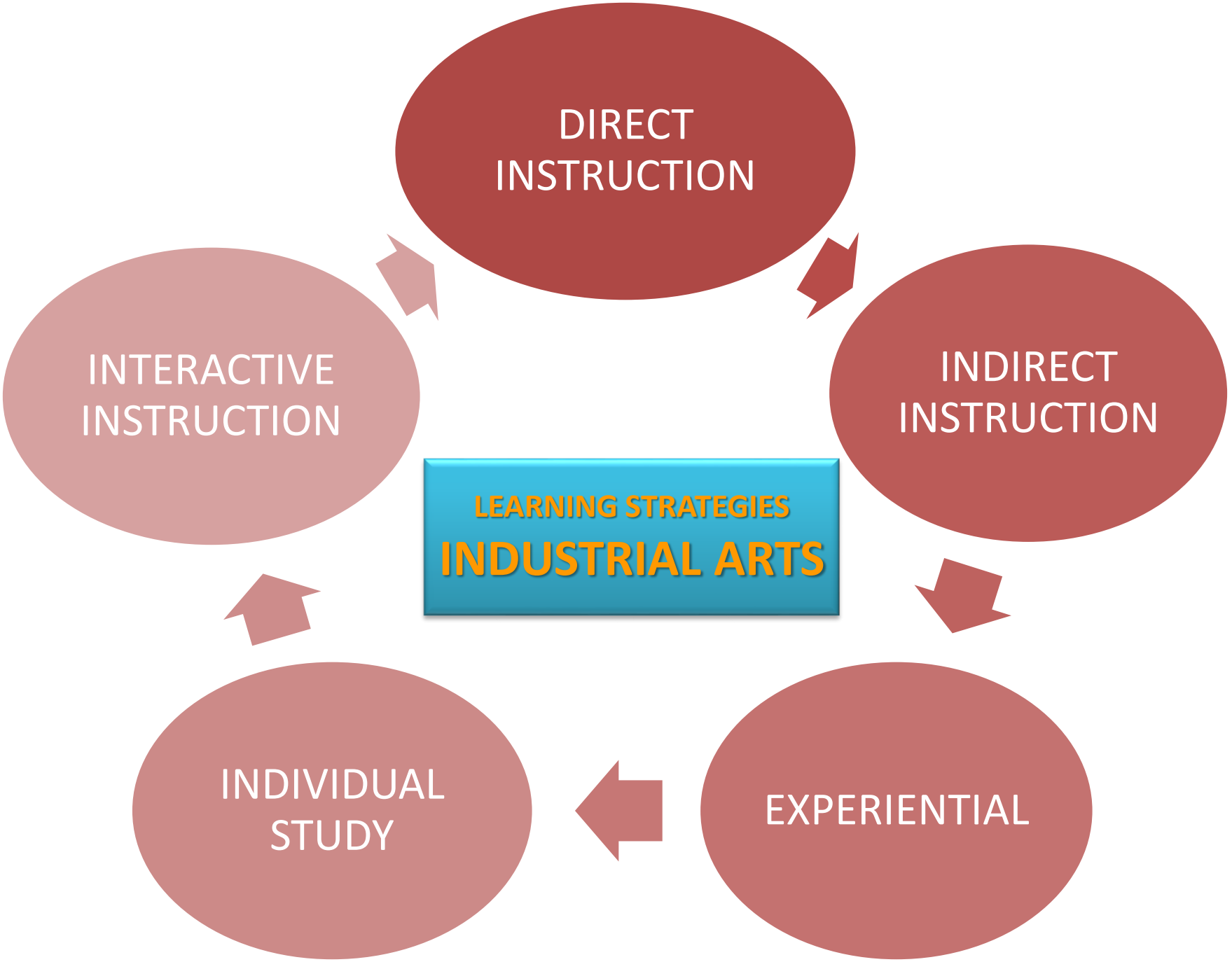

DIRECT INSTRUCTION
INDIRECT INSTRUCTION
EXPERIENTIAL
INDIVIDUAL STUDY
INTERACTIVE INSTRUCTION
LEARNING STRATEGIES
INDUSTRIAL ARTS

INDUSTRIAL ARTS GROUP

	STRATEGY	DESCRIPTION	METHODOLOGY
1	Cooperative / Interactive Learning	Cooperative / interactive learning is sometimes called as small-group learning, in which small groups of students work together on a common task.	• Group Project Making • Group Video Project • Group Model Making • Collaborative Reporting • Computer-Aided Instruction

STUDENTS (DIGITAL NATIVES)	TEACHERS (DIGITAL IMMIGRANTS)
Multiple multimedia information sources	Slow controlled information-limited sources
Parallel process & multi-task	Singular process or limited task
Processing Order Picture, Video & Sound--→TEXT	Processing Order TEXT--→Picture, Video & Sound
Random access to interactive media	Logical sequential access
Interact / network to many	Interact / network to few
Just in time learner	Just in case learner
Instant access, rewards & gratification	Delayed access, rewards & gratification
Learning is relevant, instantly useful and fun	Learning is to teach from the CG and standardized test

Source: http://edorigami.wikispaces.com/Reading

Traditional Classroom

- teacher-centric
- designed for “single-to-many” communication style
- lack flexibility
- poorly designed for collaboration and communication
- have limited support for technology,
- rigid in design often unable to be adapted for any other purpose
- individual focused rather than group focused.

21st Century Classroom Design

The classroom must be designed to enable group collaboration. It must have the flexibility for furnishings and technology to be rearranged with ease and speed. The rooms must be able to switch rapidly between individual or group format, between presentation, and collaboration modes.

SOURCES:

Region IV-A CALABARZON Regional Memo No. 11 s. 2015

Partnership for 21st Century Sklls (www.21stcenturyskills.org.)

http://www.21centuryconnections.com/node/538

www.teachhub.com/top-5-teaching-strategies

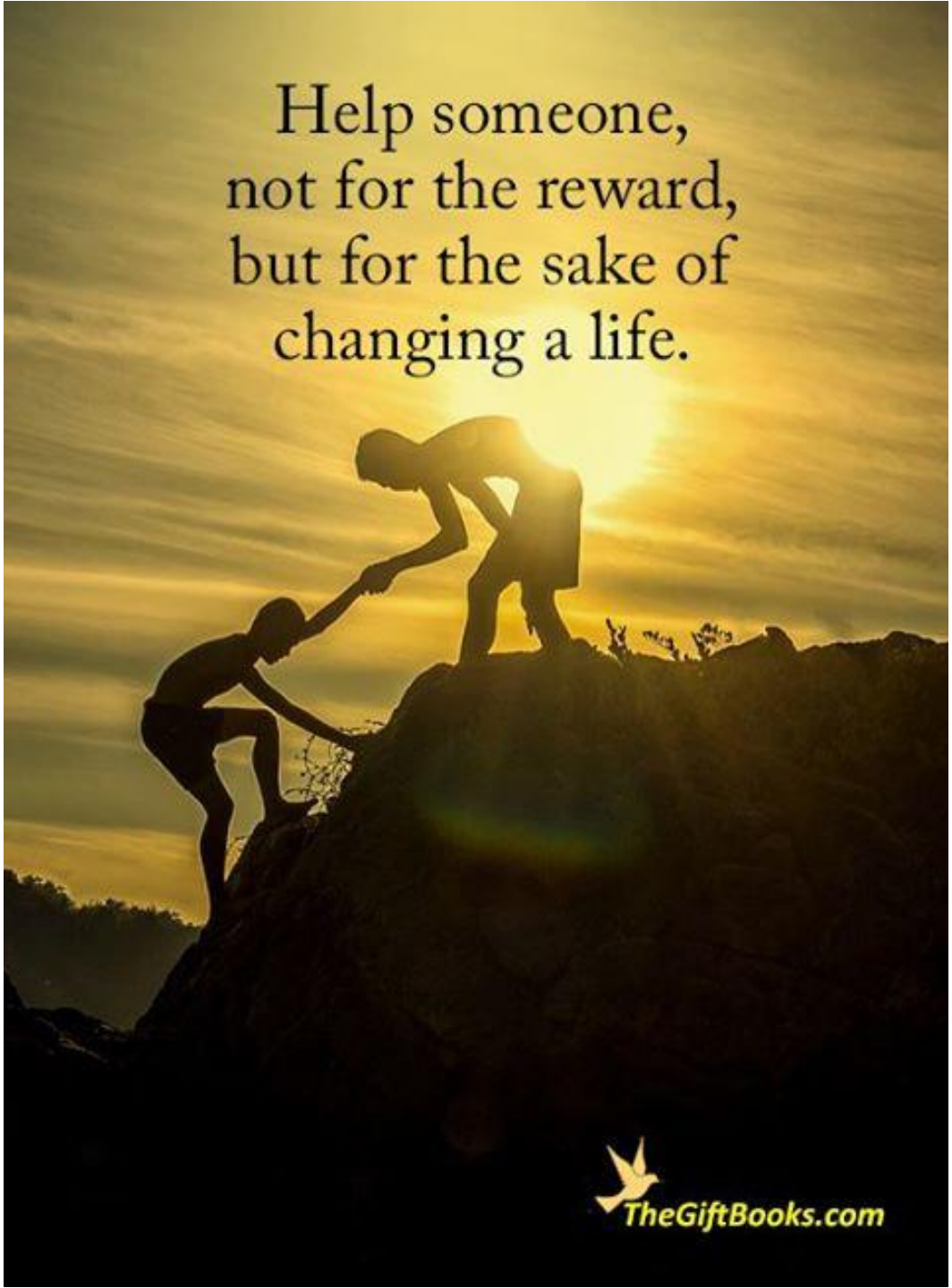
Blog: http://edorigami.wikispaces.com/

Marc Prenksy, Digital native, Digital Immigrants Parts I and II,
http://edorigami.wikispaces.com/Readings

Dr, Chris Moersch, What is LoTI.
http://www.drchrismoersch.com/

Level of Technology Implementation (LOTI) scale
(http://edorigami.wikispaces.com/LOTI)

21st Century Connections web site
http://www.21centuryconnections.com/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but for the sake of
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