



PROMOTING HOTS THROUGH CASE STUDIES

FAIZAH ABD MAJID, PhD

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CASE STUDIES

WHAT, WHY AND HOW?



02



HOTS



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ASSESSING CASE STUDIES



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SAMPLE RUBRICS



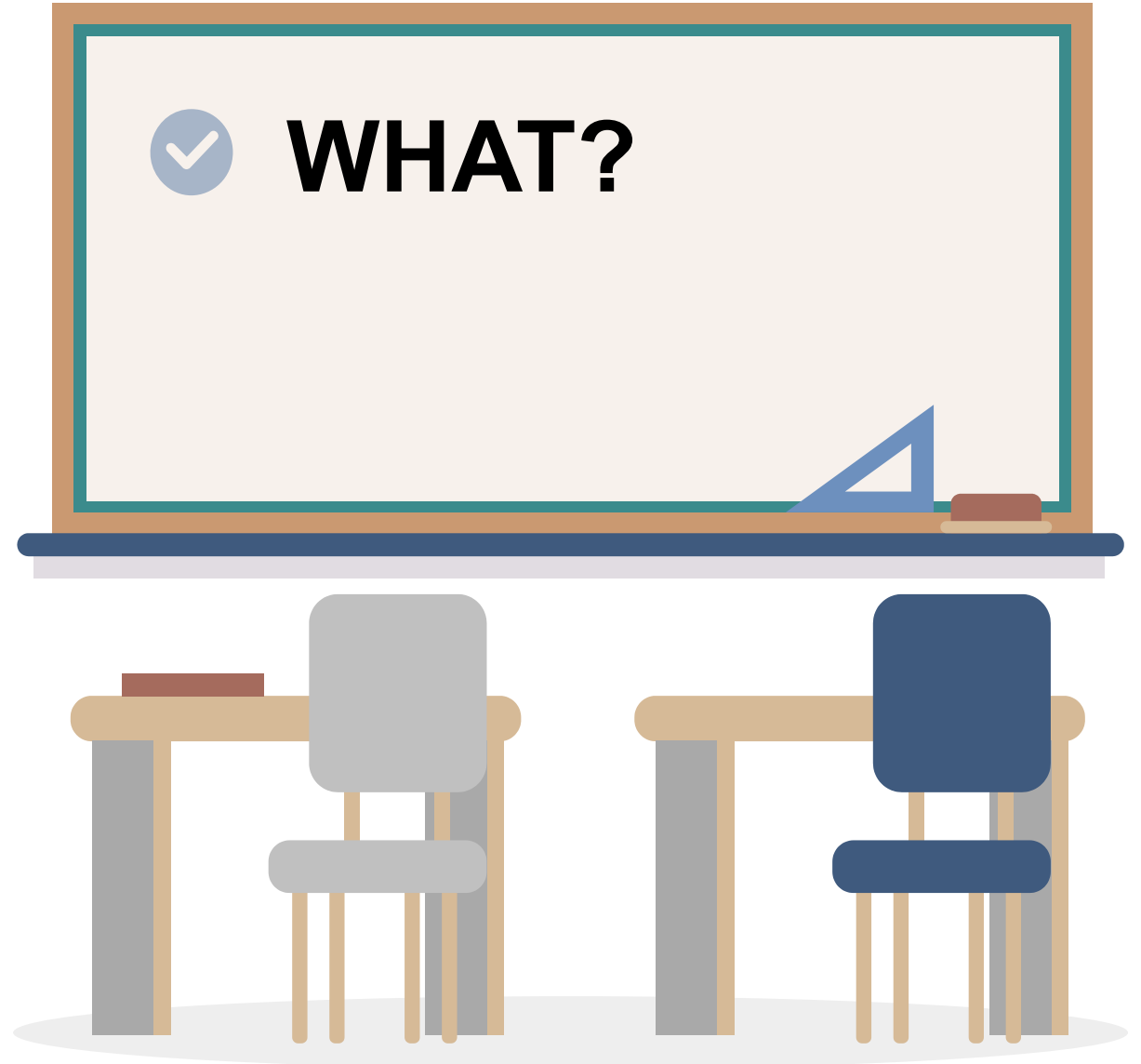
05




MEANINGFUL ENGAGING LEARNING




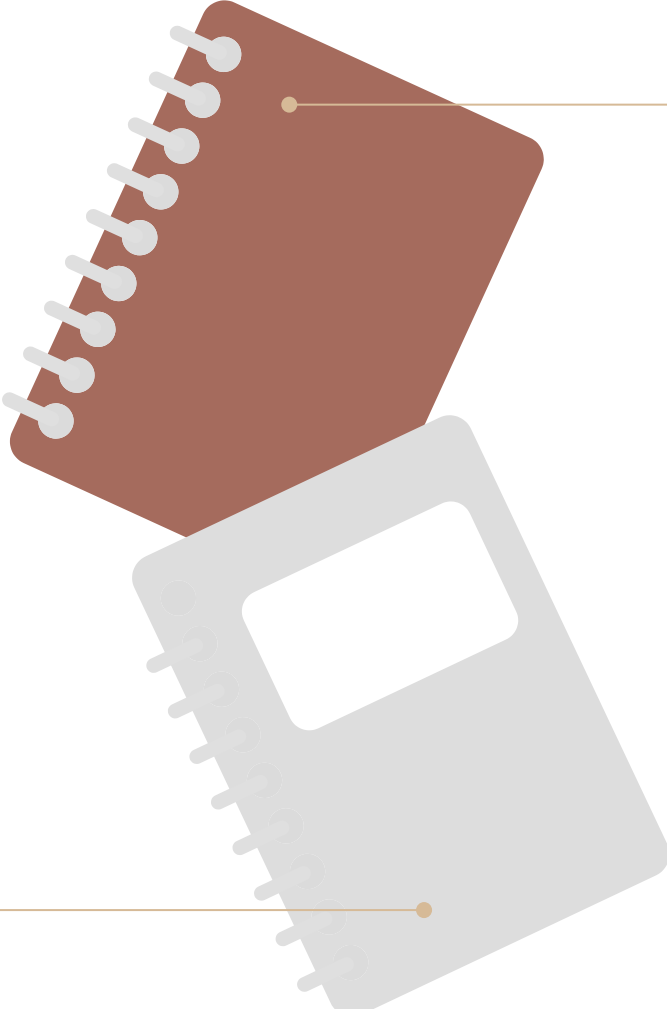
Case Studies



A CASE STUDY IS...



“an **empirical inquiry** that investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context” (Yin, 2014, p. 16).



[...especially when the boundaries between phenomenon and context are not clearly evident]

THE CASE STUDY INQUIRY



01

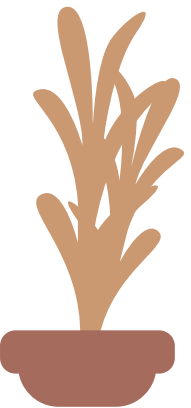
There will be many **more variables of interest** than data points

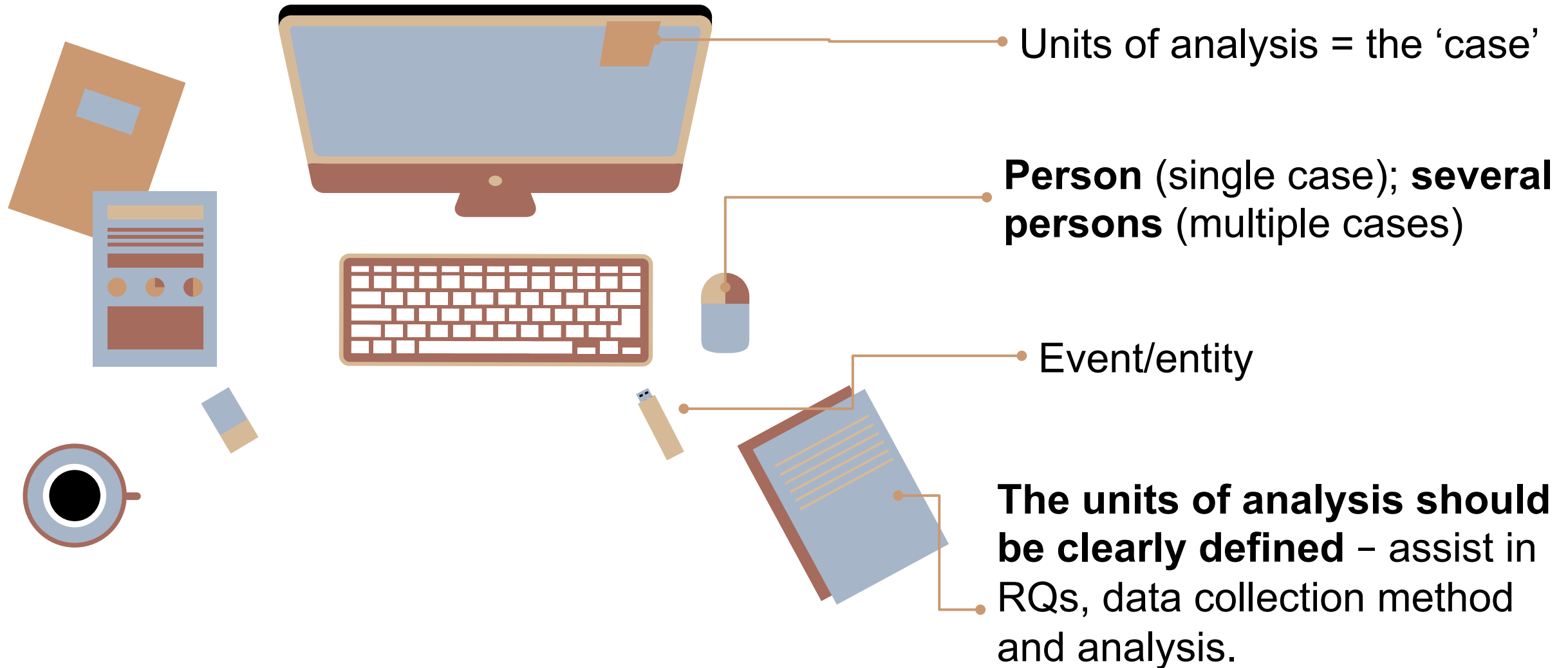
Relies on **multiple sources** of evidence (data converging in a triangulation fashion)

02

03

Benefits from **prior development of theoretical propositions** to guide data collection & analysis

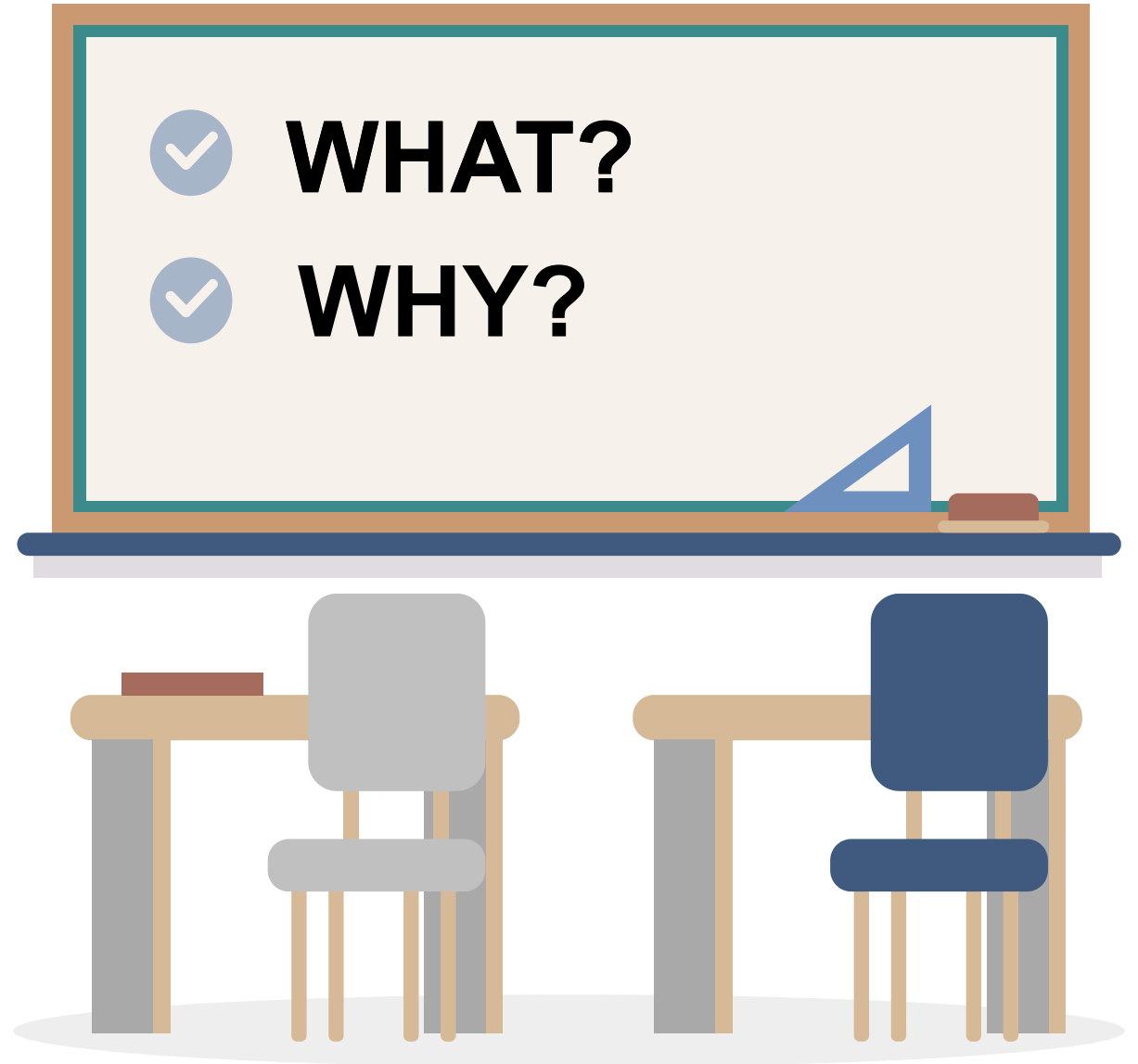




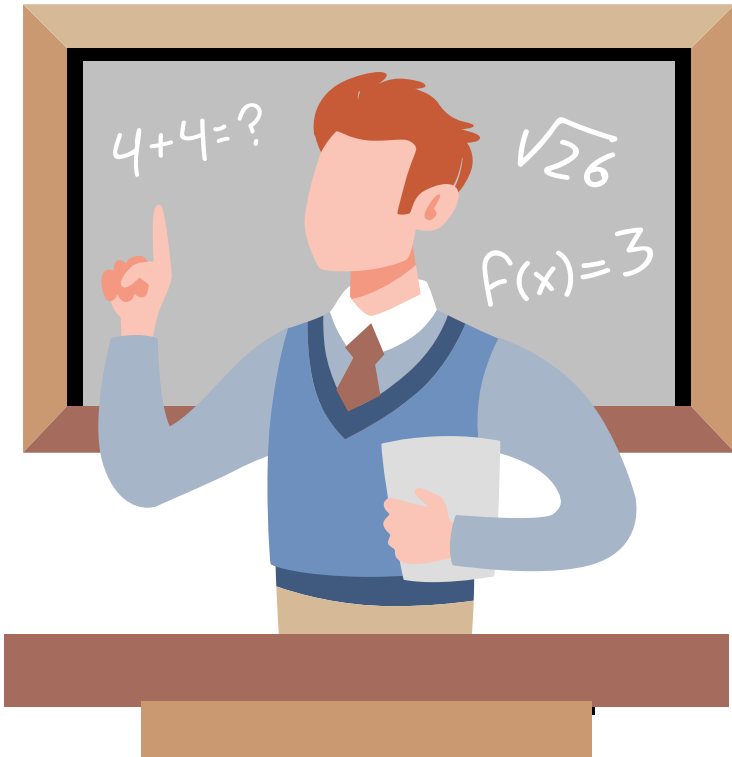
VARIOUS RESEARCH STRATEGIES

Strategy	Form of RQs	Control of Behavioural events	Focus on Contemporary events
Experiment	How? Why?	Yes	Yes
Survey	Who? What? Where? How many? How much?	No	Yes
Archival analysis	Who? What? Where? How many? How much?	No	Yes/No
History	How? Why?	No	No
Case study	How? Why?	No	Yes

Case Studies



CASE STUDIES AS INSTRUCTIONAL METHOD



21st c graduates

are prepared for jobs yet to be created

To be great problem solvers

so that they'll be ready for anything @ agile

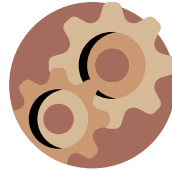
A learning model

that's **focused on reflection** during the problem-solving process

Students

observe, analyze, record, implement, conclude, summarize, or recommend

Case studies are **created and used as a tool for analysis and discussion.**



The case method is a participatory, **discussion-based way of learning** where students gain skills in critical thinking, communication, and group dynamics. It is **a type of problem-based learning.**

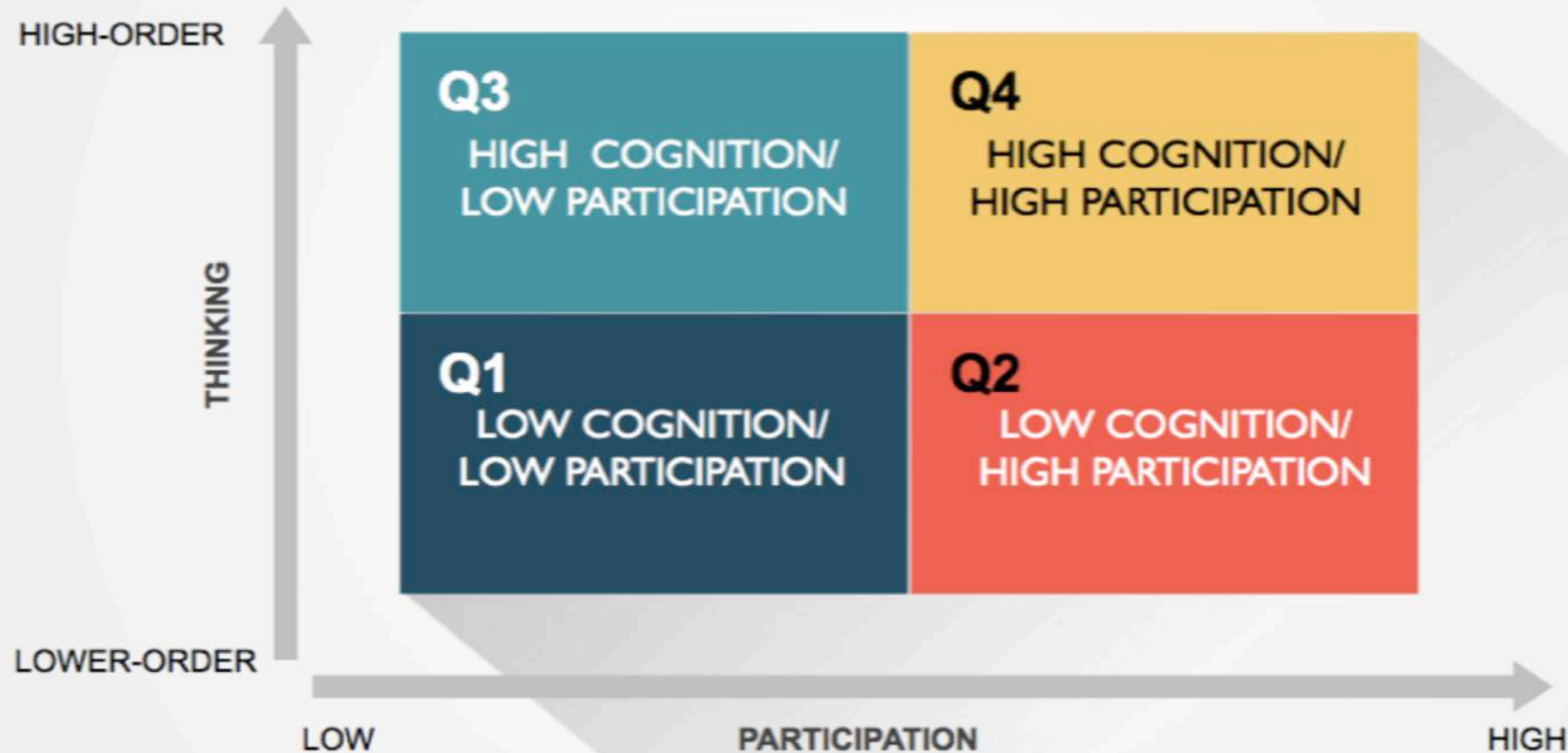


Case study is **a method of teaching using a case**, or story, with a hidden message, which students explore to make a decision or solve a problem, developing specific skills and knowledge through inquiry (Good & Brophy, 2008; Killen, 2009).

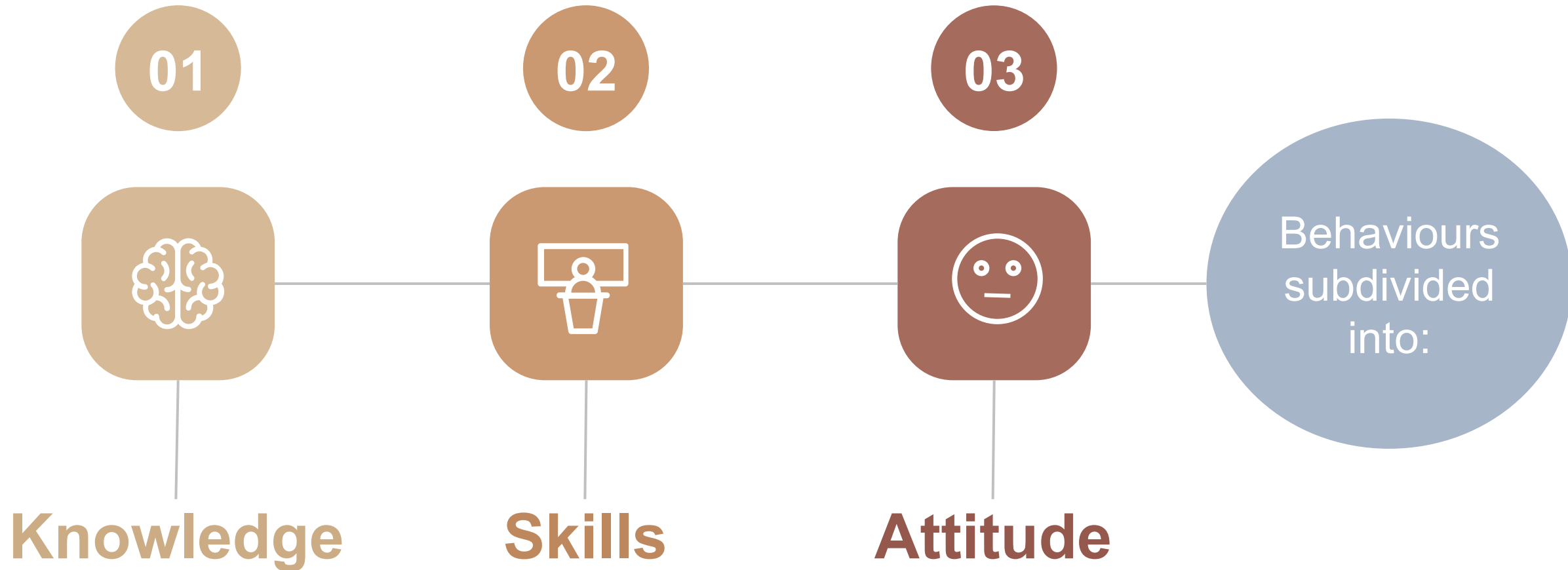


TPT Cognitive Engagement Model and Quadrant Analysis

(adapted from Himmele & Himmele, Total Participation Techniques)



Competency vs Proficiency



Skill

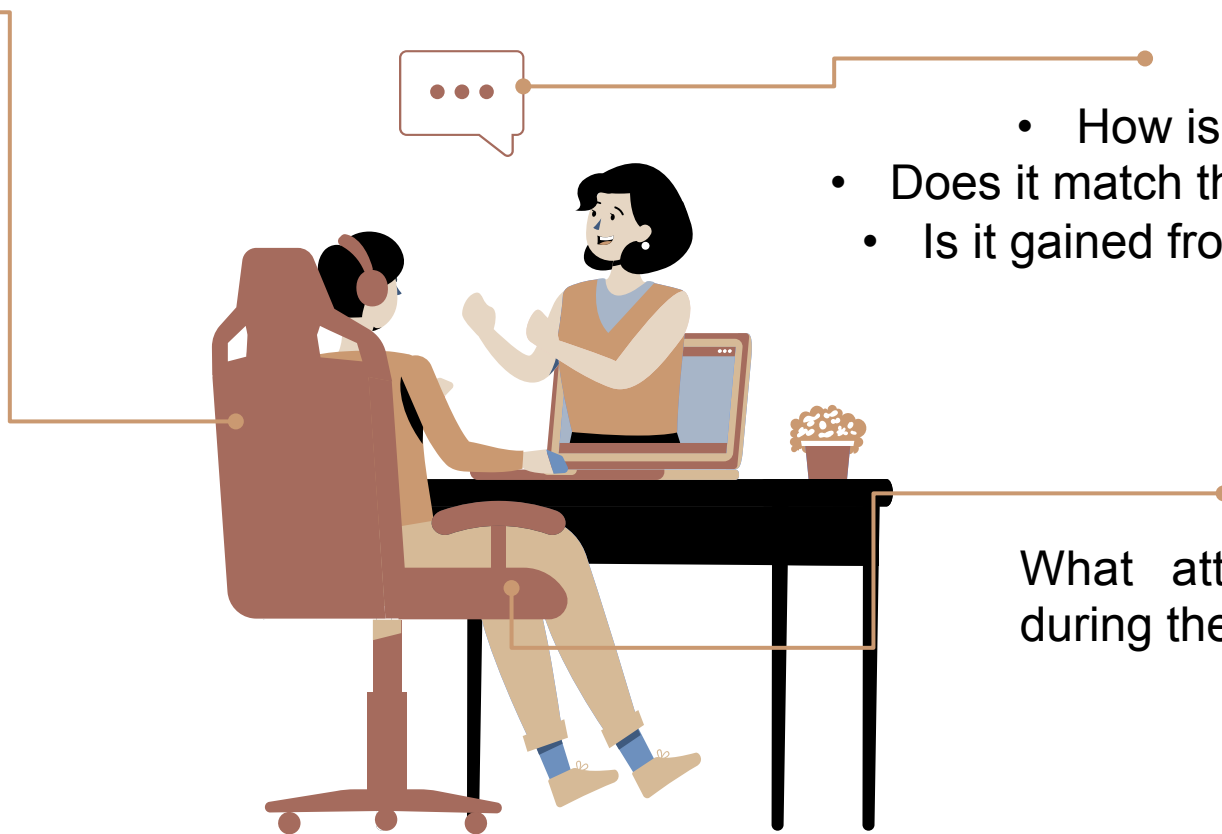
- How able is the person?
- How relevant are the learned experiences to the role?
- Are the displayed skills at right level?

Knowledge

- How is current level used?
- Does it match that needed for role?
- Is it gained from several sources?

Attitude

What attitude is displayed during the task?



Elements of Active Learning Environment



3 ESSENTIAL ASPECTS OF DESIGNING LEARNING ACTIVITY



Engage

Design appropriate learning activities that would engage students at various levels of cognitive domain of Bloom Taxonomy



Interact

Design appropriate learning activities that would encourage students to interact with their peers.



Action

Design appropriate learning activities that would allow the students to DO and CREATE tangible output



What Worked & What Didn't Work

Evidence-informed practice wins the day

John Hattie's meta-analysis

Hattie's 2018 updated list of factors related to student achievement: 252 influences and effect sizes (Cohen's d)

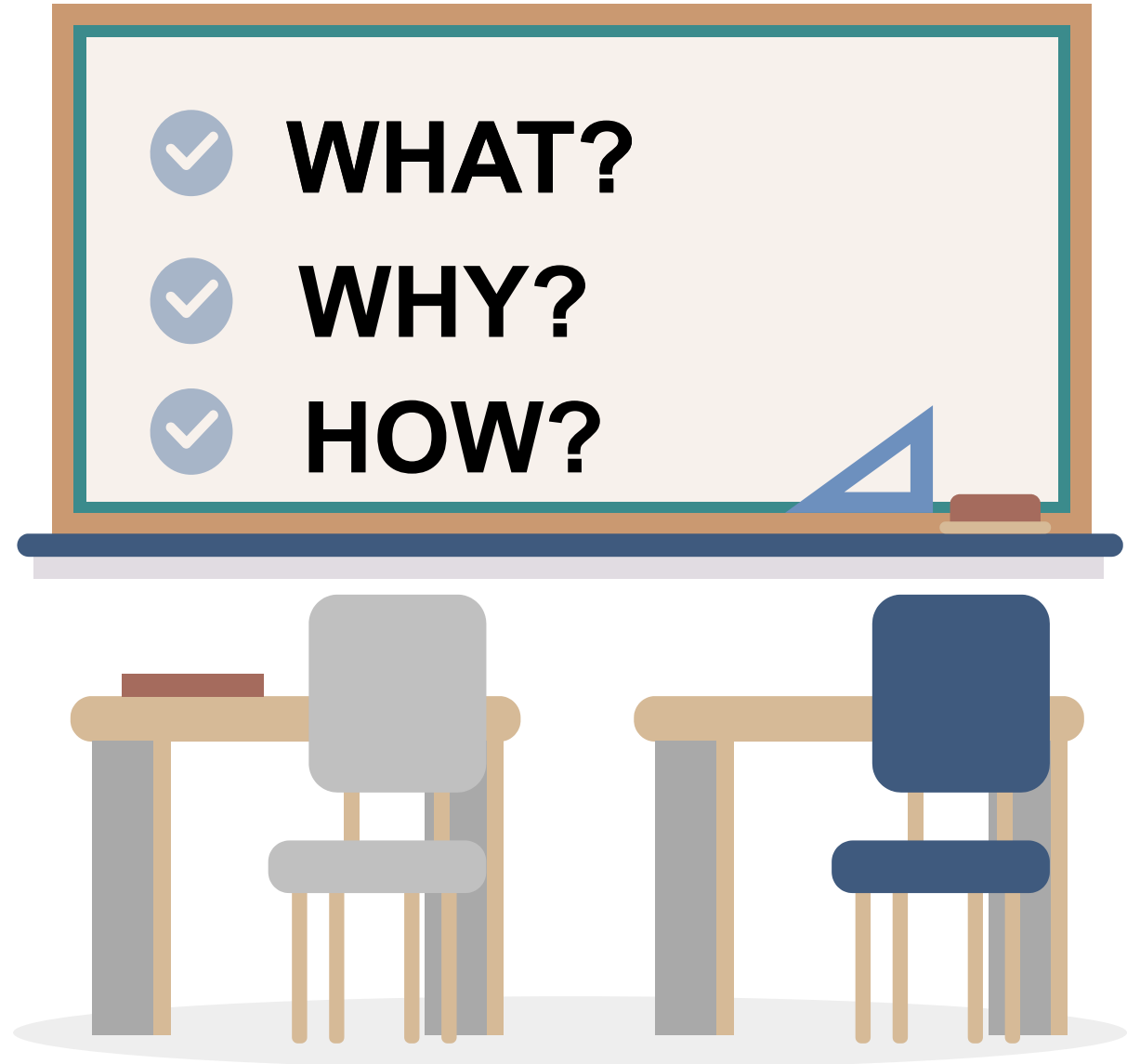
Source: J. Hattie (December 2017) visiblelearningplus.com
Diagram: S. Wilsch (2018) visible-learning.org



<https://bit.ly/hattiej>

Rank	Influence	Effect size d (Dec 2017)	Effect size d (Aug 2017)	Subdomain
1	Collective teacher efficacy	1.57	1.57	Leadership
2	Self-reported grades	1.33	1.33	Prior knowledge and background
3	Teacher estimates of achievement	1.29	1.62	Teacher attributes
4	Cognitive task analysis	1.29	1.29	Strategies emphasizing learning intentions
5	Response to intervention	1.29	1.29	Strategies emphasizing feedback
6	Piagetian programs	1.28	1.28	Prior knowledge and background
7	Jigsaw method	1.2	1.2	Teaching/instruction strategies
8	Conceptual change programs	0.99	0.99	Other curricula programs
9	Prior ability	0.94	0.94	Prior knowledge and background

Case Studies



The basics of case study

Situation

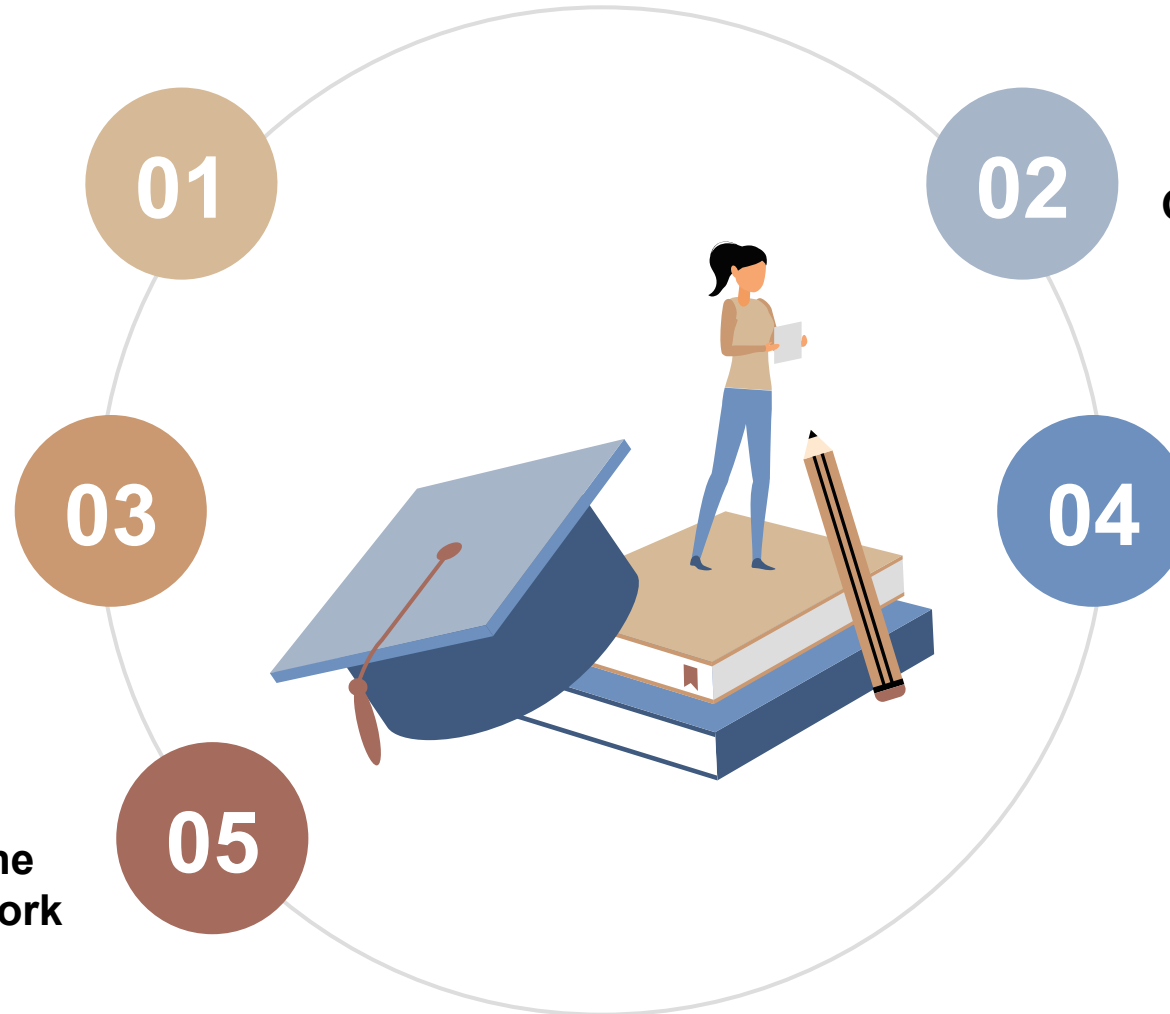
Choose the situation on which to write

Analyze

Analyze all of the elements surrounding the situation

Gather

Gather information on why the solution worked or did not work




Information

Gather as much information as possible about the situation

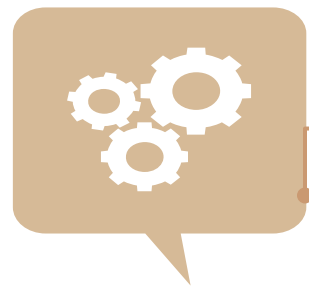
Solution

Determine the final solution implemented

- 
- ✓ **What is the issue?**
 - ✓ **What is the goal of the analysis?**
 - ✓ **What is the context of the problem?**
 - ✓ **What key facts should be considered?**
 - ✓ **What alternatives are available to the decision-maker?**
 - ✓ **What would you recommend — and why?**

Dunne, D. and Brooks, K. (2004) *Teaching with Cases* (Halifax, NS: Society for Teaching and Learning in Higher Education), ISBN 0-7703-8924-4





Identify a problem to investigate

Consider **accessibility and relevance** to students' lives. Keep it challenging and complex enough to yield multiple solutions.

01

Give context

Provide **relevant scaffold**; assist the learners to help them understand just enough about the problem to want to learn more.

02

03

Have a clear rubric

Align the task with what you **have taught** and/or intended learning outcomes to decide the rubrics.

Provide structures for presenting solutions

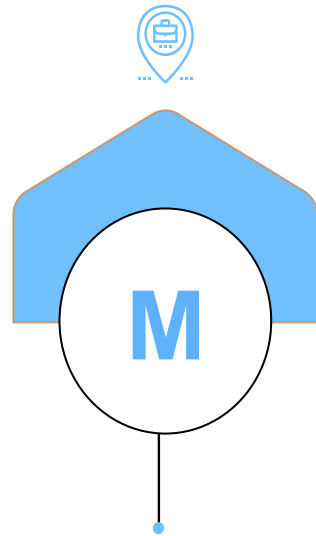
The amount of scaffolding you build in depends on your **students' skill level and development**.

04

*****A case study product can be something like several pieces of evidence of students collaborating to solve the case study, and ultimately presenting their solution with a detailed oral presentation or an essay.***



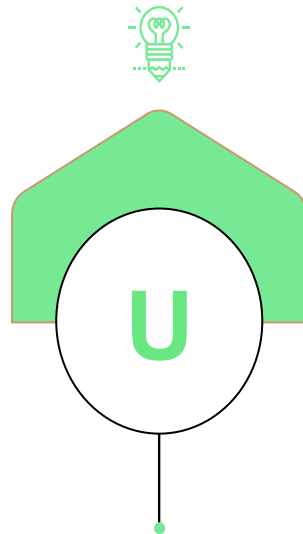
MUSIC MODEL OF ACADEMIC MOTIVATION (JONES,2009)



eMpowerment

Believe that they have some control over their own learning

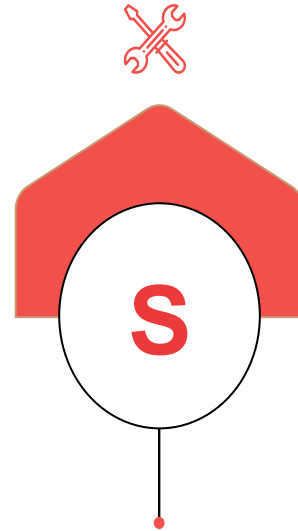
What choice do I have?



Usefulness

Understand why the content is relevant and valuable

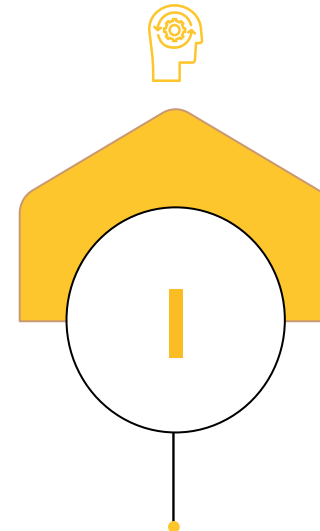
Why do I want to do it?



Success

Believe that they can succeed with effort (Competence Perception)

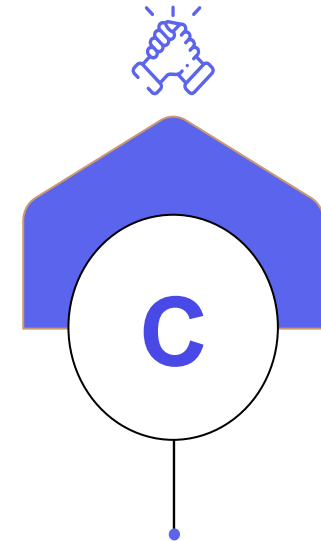
Can I do it?



Interest

Interested in what they are supposed to be learning.

Do I like it?



Caring

Believe that the instructor care about whether they meet the CLOs.

Social Presence/ Relatedness

STUDENTS MUST
MASLOW

BEFORE THEY CAN
BLOOM



MARKERSANDMINIONS.COM

Our children need to

MASLOW

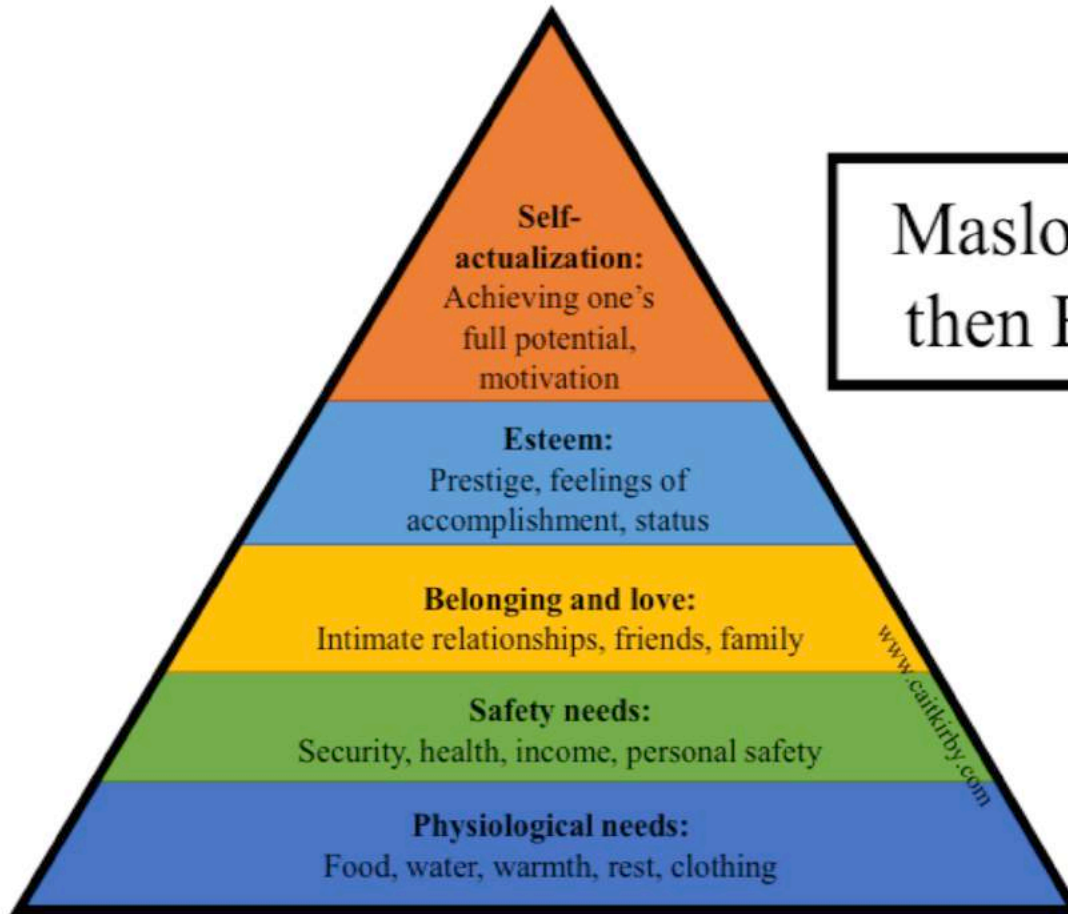


Before they can

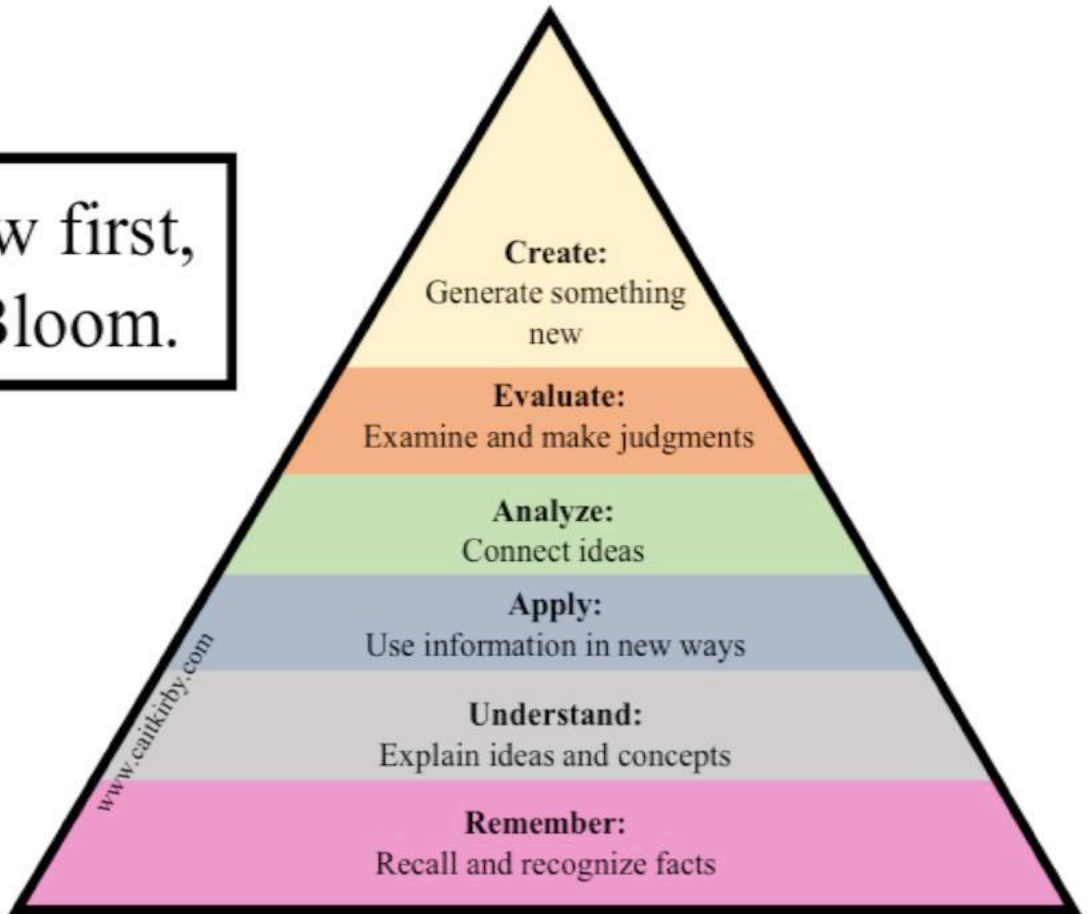
BLOOM



Maslow's hierarchy



Bloom's taxonomy



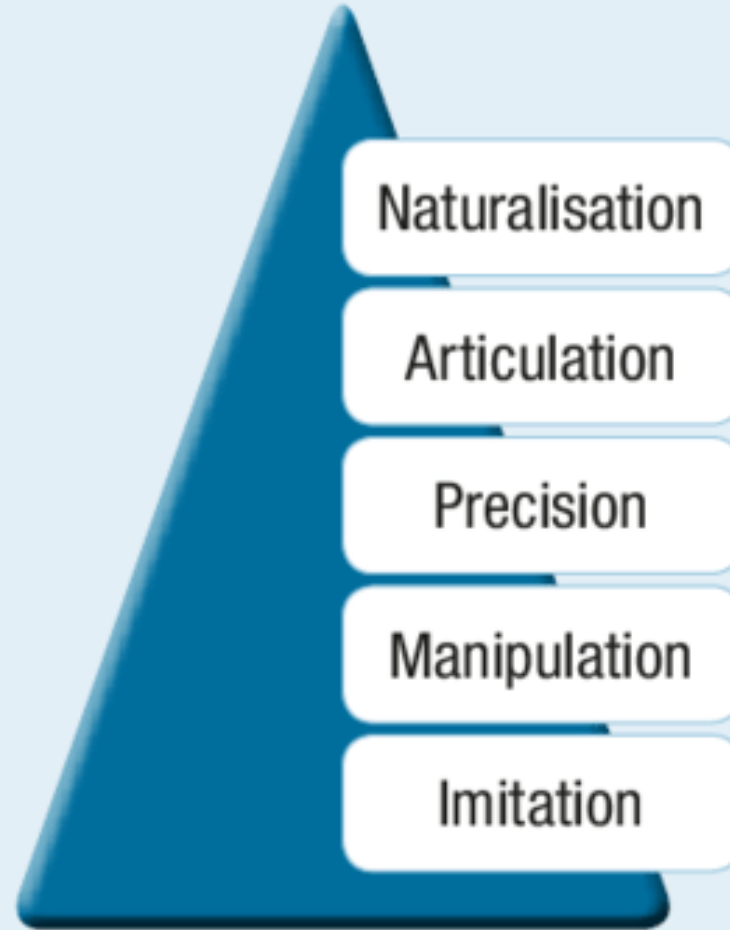
Maslow first,
then Bloom.



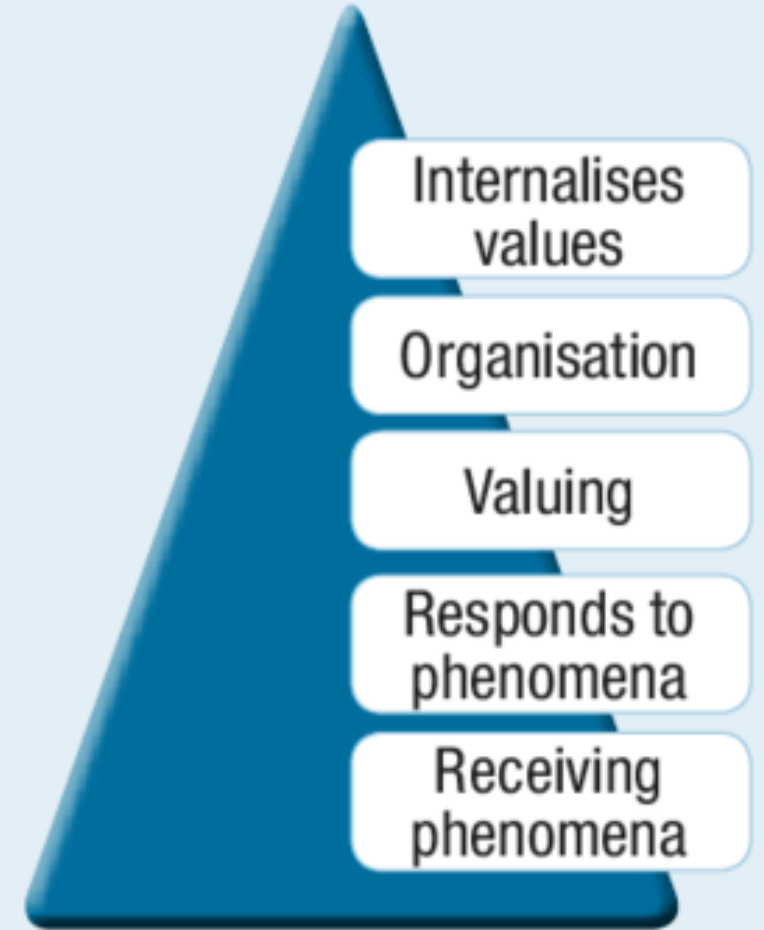
Assessing CASE STUDIES



Revised cognitive
dimension

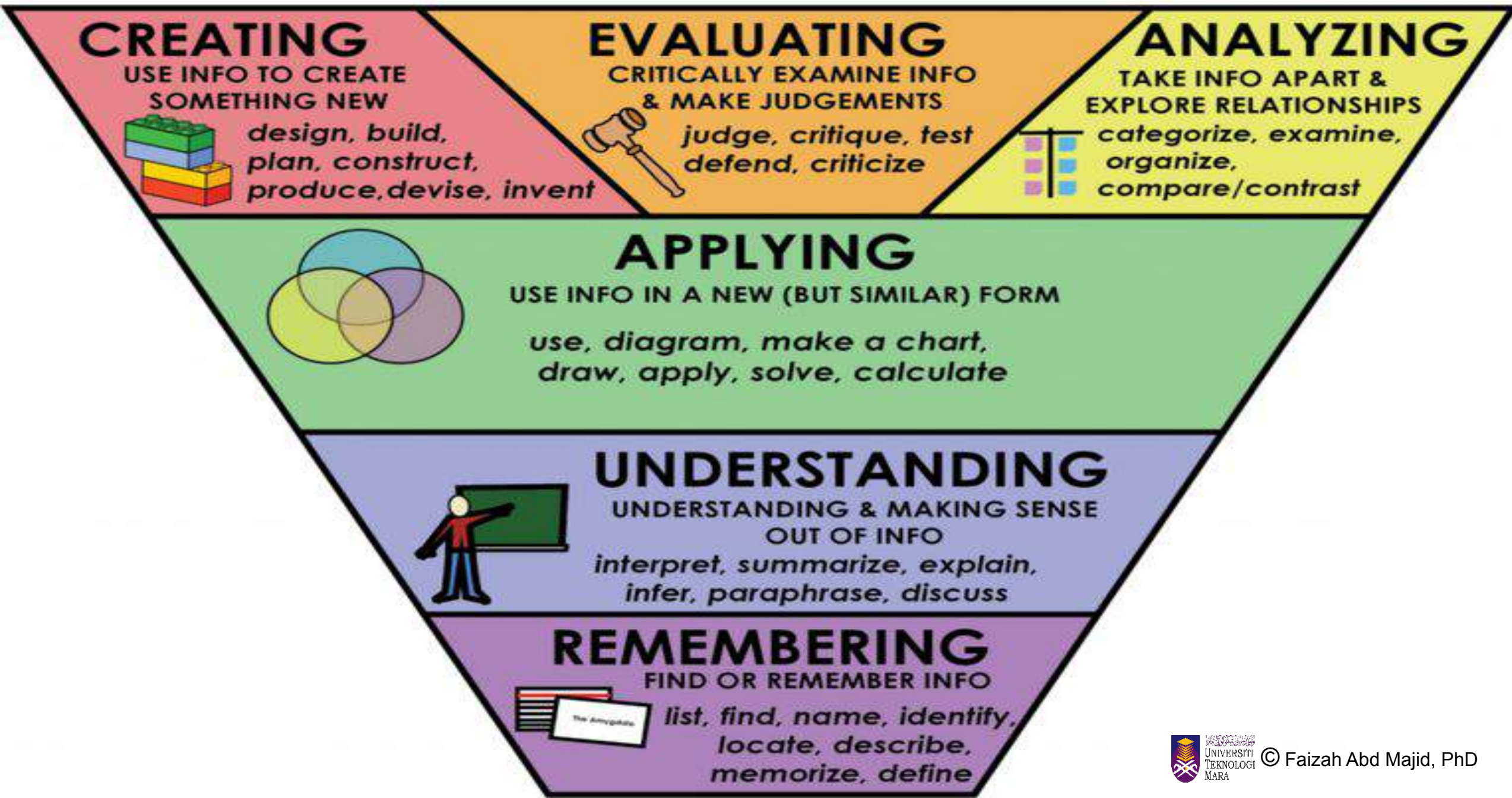


Psychomotor domain



Affective domain

BLOOM'S TAXONOMY



Naturalization

High level of performance achieved with actions becoming second nature.

Articulation

Several skills can be performed together in a harmonious way.

Precision

Performance becomes more exact, and action is more precise.

Manipulation

Actions performed through memorization or following directions.

Imitation

Learns by watching and imitating actions.



Acts consistently due to an internal belief,
Can articulate a philosophy or world-view,
Can break down complex situations and
respond accordingly based on values, develops
and lives by a code of personal behavior

Characterizing

Organizing

Values become systematic, can compare
and contrast values and choices,
begins to order and prioritize values,
chooses to commit to certain
values and behaviors

Motivated to invest, Chooses to behave in a
certain way frequently, Begins to identify
with a behavior and commit to it

Valuing

Responding

Willingly participating,
obedient, volunteers, finds
satisfaction in participating,
ready to respond

Willing to be aware of the
setting or situation, gives
attention by choice,
open to the
experience

Receiving/Attending

TABLE 1
Bloom's Taxonomy and Case Activities

Level	Definition	Illustrative verbs	Examples of case analysis tasks that could be assessed
Knowledge	Ability to recognize and recall previously learned facts.	Defines, labels, identifies, recalls, selects.	Identify issues in the external environment that affect the case situation.
Comprehension	Ability to explain the meaning of and make sense of the material.	Interprets, explains, discusses, gives examples.	Describe how the issues in the external environment might affect the firm in the case.
Application	Ability to select and apply knowledge in new situations.	Calculates, practices, resolves, relates.	Apply course concepts to the case to predict possible outcomes to current actions.
Analysis	Ability to break complex concepts into component parts to better understand the whole.	Distinguishes, deduces, discriminates, chooses, contrasts.	Categorize the problems identified in the case, based on severity and urgency.
Synthesis	Ability to put parts together to form a new plan or idea.	Combines, designs, composes, conceives.	Develop multiple courses of action available to the firm in the case.
Evaluation	Ability to judge the value of something in terms of internal and external criteria and standards.	Appraises, assesses, evaluates, judges, critiques.	Critique the multiple courses of action and recommend one, justifying why that course it the most appropriate.

Note. Sources: Bloom (1956), Walstad and Saunders (1998), and Zouaq, Nkambou, and Frassen (2007).

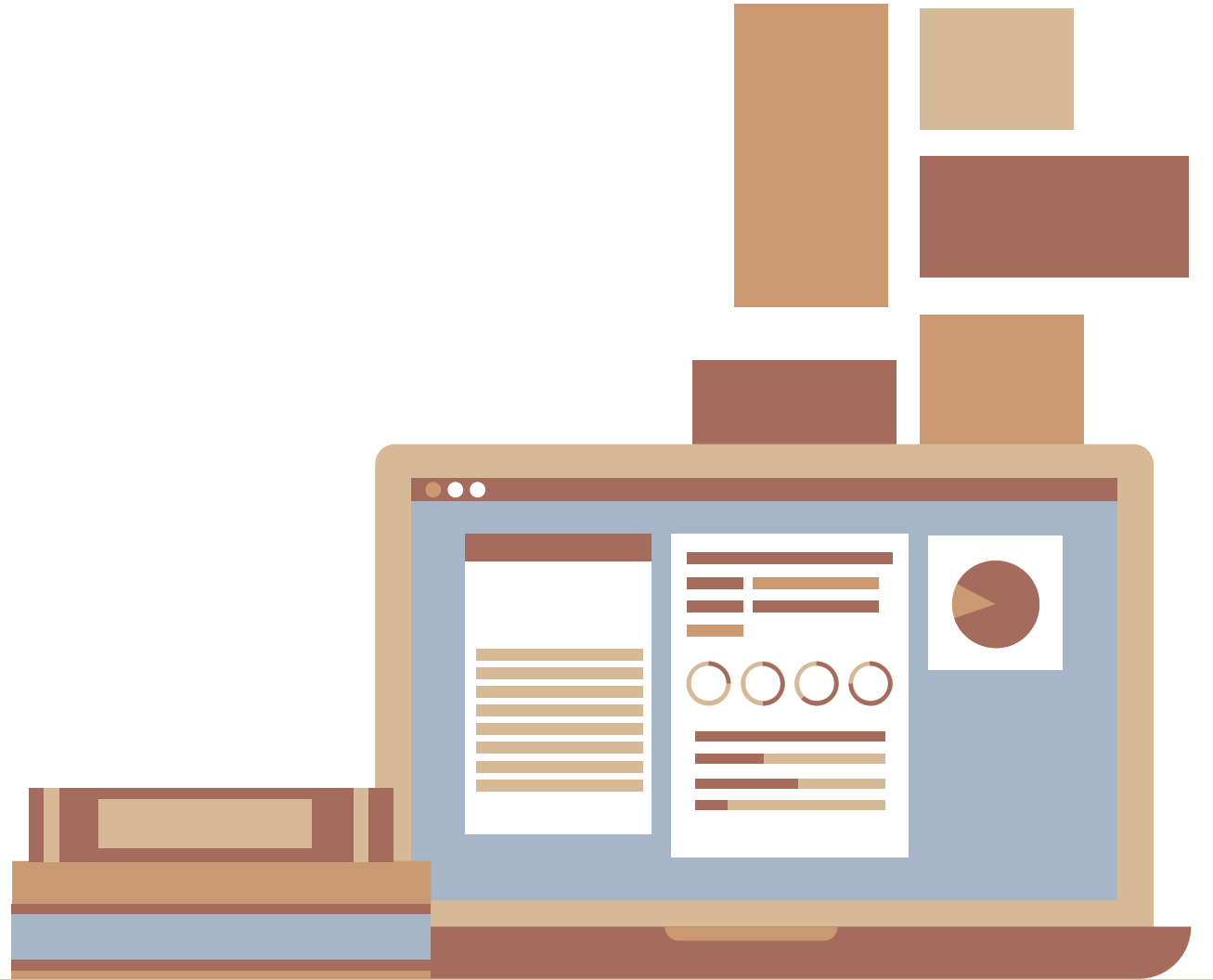
TABLE 3
Sample Objective and Associated Rubric

Subobjective	Component	Bloom's taxonomy level	Unacceptable (1)	Acceptable (3)	Excellent (5)
Integrate knowledge and skills to examine complex problems	1. Student identifies information appropriate for the analysis of the companies.	Knowledge	Shows little knowledge of facts about many of the areas of the analysis or has no references	Shows solid understanding of facts about the firms, cites at least 4 references	Shows thorough grasp of facts about the companies and offers more than the necessary knowledge about the companies and industries, has 8 or more references
	2. Student conducts a thorough analysis of the industry of the company.	Analysis	Misuses industry analysis model, develops conclusions without justification	Appropriately analyzes competitive forces in the industry environment and develops a reasonable conclusion based on that analysis	Shows strong understanding and analysis of industry factors affecting industry attractiveness, provides thorough, detailed analysis
Integrate knowledge and skills to diagnose complex problems	1. Student clearly states business problems of the company.	Knowledge	Weak and unfocused discussion of the problems of the company	Clear statement of problems/issues within the company	Develops a well-integrated statement of the complex issues of the company and demonstrates understanding of the situation
	2. Student differentiates between primary problem(s) and symptoms of the problem(s).	Comprehension	Describes problems as symptoms or outcomes rather than causal factors	Describes problems in terms of causal factors, not outcomes (e.g., poor employee training rather than high employee turnover)	Clearly links externally visible outcomes to internal or external causes to those problems
	3. Student categorizes the problems based on severity.	Analysis	States all the problems as if they were all equally important	Identifies high- and lesser priority issues as such	Identifies a range of problems and justifies the severity of the various problems
	4. Student justifies and supports the definition of the problem.	Evaluation	Does not use the outcomes of the analyses to justify the stated problems	Shows the relationship of problems to external threats and internal weaknesses	Integrates thorough knowledge about the firm with outcomes of the analyses and uses them to support the definition of the problems

Integrate knowledge and skills to evaluate solutions to complex problems	1. Student creates a thorough set of options appropriate for the business situation.	Synthesis	Identifies weak or infeasible alternatives with little attention to stated problems	Generates 2–3 feasible alternatives for resolving the key problems of the company	Develops 2–3 insightful alternatives for resolving the problems; offers specificity and originality
	2. Student identifies feasible alternatives and assesses them with respect to risks, benefits.	Evaluation	Neglects to identify important risks and benefits in implementing the alternative	Identifies some key implementation risks and benefits	Thoroughly describes possible risks and benefits of implementing the alternatives
Integrate knowledge and skills to recommend solutions to complex problems	1. Student appropriately applies analytical techniques.	Application	Is missing 2 or more of the required analyses	Has included the following analyses: macro-environment, industry, internal, corporate strategy	Includes additional analyses that provide deeper insights into the firm's performance and situation
	2. Student considers the usefulness and practicality of recommendations for the practicing manager.	Evaluation	Recommendation would be likely to be dismissed as impractical or not useful by the managers of the firm	Recommendation would be likely to be strongly considered by the managers of the firm, and would be possible to implement	Recommendation would be likely to be accepted by the managers of the firm, and would be likely to substantially improve the firm

Note. Initial objective: Students integrate core area skills in problem solving and decision making. Rewritten objective: Students integrate knowledge and skills effectively to examine, diagnose, evaluate, and recommend solutions to complex problems.

Sample Rubrics



Rubric for Case Studies - MSL Elizabethtown College

Criteria	Requirements	Weight	Score	Distinguished/ Excellent (4)	Proficient/Good (3)	Basic/Fair (2)	Non- Performance/Poor (0)
Identification of the main issues and/or problems.	3-5 issues and/or problems.	10%		Identifies and understands all the main issues in the case study.	Identifies and understands most of the main issues in the case study.	Identifies and understands some of the main issues in the case study.	Identifies and understands few of the main issues in the case study.
Literature research & review.	Majority (at least 60% or higher) of articles and/or references must be within last 10 years.	15%		Excellent research with clearly documented associations between problems or questions and key course concepts and good (3 or more) use of corroborating sources.	Good research and documented associations between problems or questions and key course concepts and some (2 or more) use of corroborating sources.	Limited research and associations between the problems or questions and key course concepts and little (1 or more) use of corroborating sources.	Incomplete research and associations between the problems or questions and key course concepts and no use of corroborating sources.
Analysis of the key issues.	All issues must be analyzed.	25%		Insightful and thorough analysis of all the key issues.	Insightful and thorough analysis of most of the key issues.	Insightful and thorough analysis of some of the key issues.	Incomplete analysis of the key issues.
Alternative solutions and/or options.	Provide method of comparison between alternatives.	20%		Alternatives cover all the key issues with method to evaluate all equally.	Alternatives cover most of the key issues with method to evaluate.	Alternatives cover some of the key issues with method to evaluate.	Incomplete analysis of alternatives with no evaluation method.
Observations and/or recommendations on effective solutions.	Include short-term and long-term recommendations; Included should be realistic time frames, designation of roles and responsibilities of all stakeholders and an appropriate evaluation program.	20%		Well-reasoned , logical, relevant observations and recommendations on effective solutions to most of the problems/issues.	Solid , well-thought out observations and recommendations on effective solutions to many of the problems/issues.	Shallow observations and recommendations on effective solutions to some of the problems/issues.	Superficial observations and recommendations on effective solutions to a few of the problems/issues.
Writing Skills/Professional Presentation.	Includes overall composition, structure, grammar, spelling, and punctuation.	10%		Writing is totally free of grammar and spelling errors. Clear, concise and creative presentation of ideas and properly referenced.	There are few spelling or grammatical errors. Most ideas are clearly presented and references are used.	There are several spelling or grammatical errors. Some ideas are clearly presented. References are sporadic or not used.	There are many spelling errors and grammatical mistakes. Ideas are hard to follow. References are not used.

Total Weight	100%
Total Assignment (Case Study) Points	
Case Study Final Score:	0

Criteria	Comments
Identification of the main issues and/or problems.	
Literature research & review.	
Analysis of the key issues.	
Alternative solutions and/or options.	
Observations and/or recommendations on effective solutions.	
Writing Skills	

Source: <https://etown.instructure.com>



CASE STUDY GRADING RUBRIC

NAME:

MATRIC NO.:

DATE:

TOPIC: The Nursing Care and Management of a Patient/Client with

Criteria	Excellent (16-20)	Good (11-15)	Satisfactory (6-10)	Poor (0-5)	Score	Remark
1 Introduction of case study	Demonstrates thorough and insightful knowledge of the pathophysiology and etiology / prevalence / incidence of the disease or disorder.	Demonstrates considerable knowledge of the pathophysiology and etiology / prevalence / incidence of the disease or disorder.	Demonstrates some knowledge of the pathophysiology and etiology / prevalence / incidence of the disease or disorder.	Demonstrates limited knowledge of the pathophysiology and etiology / prevalence / incidence of the disease or disorder.	/20	
2 Presentation of case	All components in the presentation of case study are thoughtfully addressed and supported with a thorough discussion of all key issues.	All components in the presentation of case study are addressed and generally supported with a discussion of key issues.	Most components in the presentation of case study are addressed and generally supported with a discussion of key issues.	Most components are inadequately addressed and/or not supported.	/20	
3 Understanding	Demonstrates a sophisticated understanding of the case.	Demonstrates an accomplished understanding of the case.	Demonstrates an acceptable understanding of the case.	Demonstrates an inadequate understanding of the case.	/20	

Criteria		Excellent (8-10)	Good (5-7)	Satisfactory (2-4)	Poor (0-1)	Score	Remark
4	Writing mechanics	Professionalism evident in spelling, grammar, punctuation, sentence structure and clarity of writing.	Minor mistakes in spelling, grammar, punctuation and sentence structure.	Several mistakes in spelling, grammar, punctuation and sentence structure.	Many spelling, punctuation, grammar and sentence structure errors.	/10	
5	APA guidelines	Uses APA guidelines accurately and consistently to cite sources.	Uses APA guidelines with minor violations to cite sources.	Reflects incomplete knowledge of APA guidelines.	Does not use APA guidelines.	/10	
TOTAL SCORE						/80	
%						___/___	

Comments: _____

Source: issuu.com/patmanikumara/docs/case_study_grading_rubric

Examiner's Signature

Name: _____

Evaluation Rubric: GROUP CASE STUDY

1. CONTENT

Names:

	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
Identification of the Main Issues/ Problems	Identifies & understands all of the main issues in the case study	Identifies and understands most of the main issues in the case study	Identifies and understands some of the issues in the case study	Identifies and understands few of the issues in case study
Analysis of the Issues	Insightful and thorough analysis of all the issues	Thorough analysis of most of the issues	Superficial analysis of some of the issues in the case	Incomplete analysis of the issues
Comments on effective solutions/strategies (The solution may be in the case already or proposed by you)	Well documented, reasoned and pedagogically appropriate comments on solutions, or proposals for solutions, to all issues in the case study	Appropriate, well thought out comments about solutions, or proposals for solutions, to most of the issues in the case study	Superficial and/or inappropriate solutions to some of the issues in the case study	Little or no action suggested, and/or inappropriate solutions to all of the issues in the case study
Links to Course Readings and Additional Research	Excellent research into the issues with clearly documented links to class (and/or outside) readings	Good research and documented links to the material read	Limited research and documented links to any readings	Incomplete research and links to any readings

2. PRESENTATION

	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
Delivery and Enthusiasm	Very clear and concise flow of ideas. Demonstrates passionate interest in the topic and engagement with the class.	Clear flow of ideas Demonstrates interest in topic and engagement with the class.	Most ideas flow but focus is lost at times Limited evidence of interest in and engagement with the topic	Hard to follow the flow of ideas. Lack of enthusiasm and interest.
Visuals	Visuals augmented and extended comprehension of the issues in unique ways	Use of visuals related to the material	Limited use of visuals loosely related to the material	No use of visuals.
Staging	Uses stage effects, such as props, costumes, sound effects, in a unique and dramatic manner that enhances the understanding of the issues in the case study	Uses stage effects, such as props, costumes, sound effects, in an effective manner to extend understanding of the issues in the case study	Limited use of stage effects, and/or used in a manner that did not enhance the understanding of the issues in the case study.	No use of stage effects
Involvement of the class: -Questions -Generating discussion -Activities	Excellent and salient discussion points that elucidated material to develop deep understanding Appropriate and imaginative activities used to extend understanding in a creative manner	Questions and discussion addressed important information that developed understanding Appropriate activities used to clarify understanding	Questions and discussion addressed surface features of the topic Limited use of activities to clarify understanding	Little or no attempt to engage the class in learning
Response to Class Queries	Excellent response to student comments and discussion with appropriate content supported by theory/research	Good response to class questions and discussion with some connection made to theory/research	Satisfactory response to class questions and discussion with limited reference to theory and research	Limited response to questions and discussion with no reference to theory/research

Source: <https://www.slideshare.net/practicalenglish/case-study-evaluation-rubric>

**MEANINGFUL
ENGAGING
LEARNING**



A (Analysis)

- Align content to outcomes
- Anticipate learner's needs
- Learning context and learning environment analysis
- Current advances in the field
- Community issues and challenges

D (Design and Deliver)

- Design connectedness to knowledge, people, environment and the Creator
- Design awareness to the world and workplace
- Deliver in context - contextual learning, real world
- Deliver within a respectful learning environment

A(Assess)

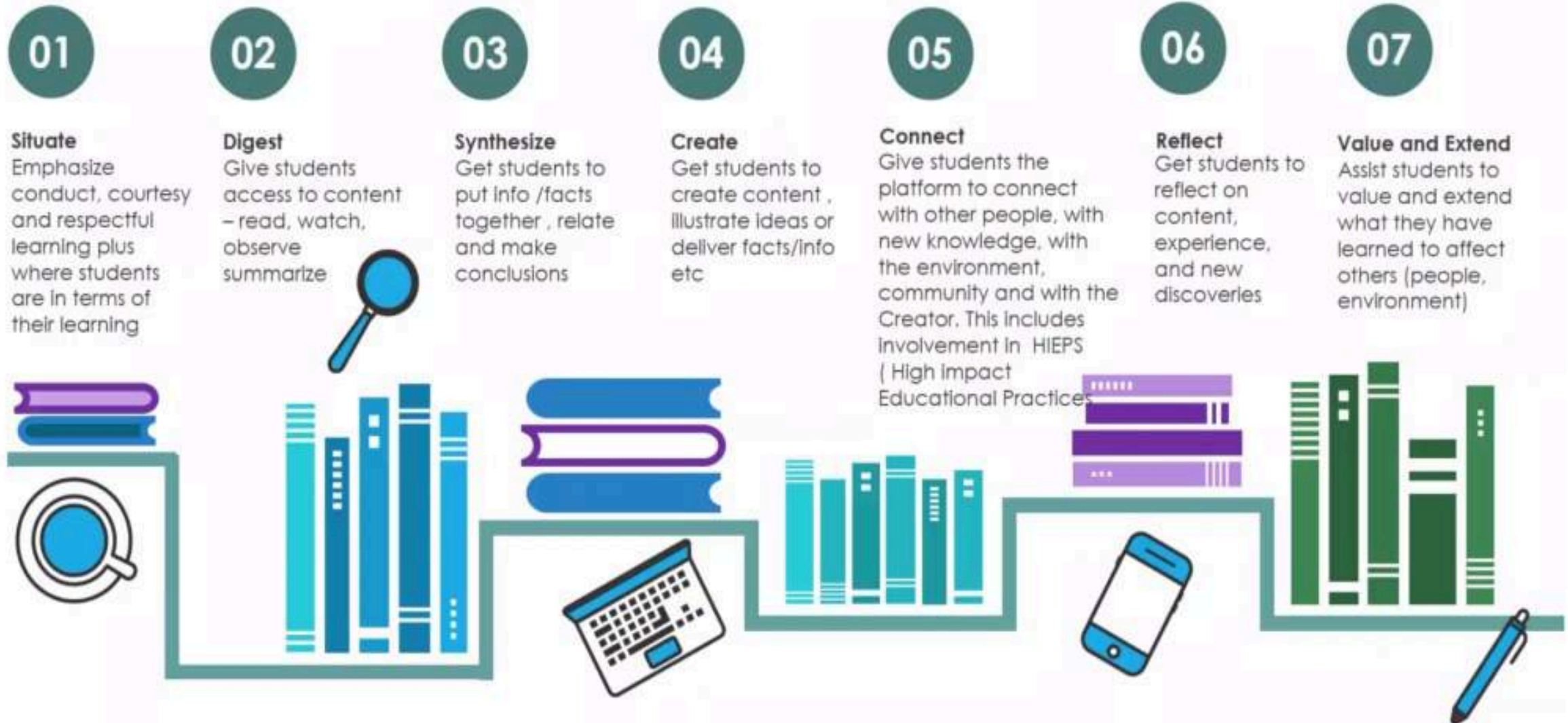
- Assess learning continuously with the purpose of improving learning
- Evaluate engagement, involvement and interaction with knowledge, people, and environment including respectfulness
- Assess essential transversal skills

B (Build in Belief)

- Embed reflection
- Espouse values
- Engender strong conviction
- Enhance faith

A.D.A.B Model for Designing Learning

Supporting the A.D.A.B Model



A Continuum of Engagement



Disrupting

- Distracting others
- Disrupting the learning

Avoiding

- Looking for ways to avoid work
- Off-task behaviour

Withdrawing

- Being distracted
- Physically separating from group

Participating

- Doing work
- Paying attention
- Responding to questions

Investing

- Asking questions
- Valuing the learning

Driving

- Setting goals
- Seeking feedback
- Self-assessment

Adapted from *The Distance Learning Playbook Grades K-12*
by Douglas Fisher, Nancy Frey & John Hattie, p. 104.

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THANK YOU !



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