COURSE 1 Facilitating the Development of 21st Century Skills for Southeast Asian Teachers

MODULE 2 FACILITATING 21ST CENTURY LEARNING
# Contents

What Is This Module About? ............................................................................ 1  
What Will You Learn? .......................................................................................... 2  
Flow of Instruction ................................................................................................ 4  
What Do You Already Know? ............................................................................. 6  
Feedback ................................................................................................................ 9  
How Do You Rate Yourself? ............................................................................... 10  

Lesson 1: The 21st Century Teacher as a Subject Matter Expert 13  

What Is This Lesson About? ................................................................................ 13  
What Will You Learn? .......................................................................................... 14  
Let’s Try This (Activity 1.1): Assessing Teacher Attitude .............................. 14  
Feedback .............................................................................................................. 16  
Let’s Read: Classification of Teacher Attitude .................................................. 16  
Let’s Think About This ........................................................................................ 17  
Let’s Study: Enthusiastic Teacher Behaviors .................................................. 17  
Let’s Try This (Activity 1.2) ................................................................................ 20  
Let’s Study: The Two Domains of Knowledge for Teaching .......................... 21  
Let’s Think About This ........................................................................................ 22  
Let’s Read: A. General Dimensions of Teacher Knowledge ............................ 22  
Let’s Try This (Activity 1.3) ................................................................................ 23  
Feedback .............................................................................................................. 25  
Let’s Study: B. Content-specific Dimensions of Teacher Knowledge ............ 25  
  Content Knowledge .......................................................................................... 25  
Let’s Think About This ........................................................................................ 26  
Let’s Read: Curricular Knowledge .................................................................... 26  
Let’s Try This (Activity 1.4) ................................................................................ 29  
Feedback .............................................................................................................. 29  
Let’s Study: Technological Pedagogical Content Knowledge .......................... 29  
Let’s Try This (Activity 1.5) ................................................................................ 31  
Feedback .............................................................................................................. 32  
Let’s Try This (Activity 1.6): Lifelong Learning ............................................. 33  
Feedback .............................................................................................................. 36  
Let’s Study: The Basics of Lifelong Learning ................................................. 37  
Let’s Think About This ........................................................................................ 40  
Let’s Try This (Activity 1.7) ................................................................................ 40  
Let’s Read: How to Design a Personal Lifelong Learning Plan ....................... 41
Lesson 2: The 21st Century Teacher as a Facilitator of Learning

What Is This Lesson About? ................................................................................. 55
What Will You Learn? ............................................................................................ 57
Let’s Think About This: What is Facilitative Teaching? .................................... 57
Let’s Read: Roles and Behaviors of Facilitative Teachers .................................. 58
Let’s Think About This......................................................................................... 61
Let’s Study: Teaching Styles................................................................................. 61
Let’s Try This (Activity 2.1): Teaching Style Self-Evaluation............................ 62
Let’s Read: Teaching Style Categories.................................................................. 65
Let’s Try This (Activity 2.2) ................................................................................ 67
Feedback ................................................................................................................ 68
Let’s Think About This: The All-Round, Flexible, and Adaptable Teacher ....... 69
Let’s Try This (Activity 2.3) ................................................................................ 69
Feedback................................................................................................................ 71
Let’s Read: Students‘ Learning Styles................................................................. 71
Let’s Think About This......................................................................................... 73
Let’s Try This (Activity 2.4) ................................................................................ 74
Let’s Study: Accommodating Students‘ Learning Styles................................. 75
Let’s Try This (Activity 2.5): Learning Styles Inventory..................................... 77
Let’s Read................................................................................................................. 80
Let’s Think About This......................................................................................... 81
Let’s Try This (Activity 2.6) ................................................................................ 82
Let’s Read: Active Learning................................................................................. 83
Let’s Study: Teaching Strategies that Elicit Active Learning............................ 84
Let’s Try This (Activity 2.7)................................................................................. 89
Feedback................................................................................................................ 90
Let’s Think About This......................................................................................... 91
Let’s Try This (Activity 2.8)................................................................................. 91
Let’s Study: Higher Order Thinking in the Classroom....................................... 93
Let’s Try This (Activity 2.9)................................................................................. 97
Feedback................................................................................................................ 98
Let’s Read: Integrating Higher Order Thinking in My Lessons......................... 98
Lesson 3: The 21st Century Teacher as a Classroom Manager

What Is This Lesson About?................................................................. 124
What Will You Learn?........................................................................ 125
Let’s Try This (Activity 3.1).............................................................. 126
Feedback.......................................................................................... 127
Let’s Study: Strategies for Promoting Students’ Participation
and Collaboration in Classroom Activities........................................ 128
A. Active Participation in Classroom Activities............................... 128
Let’s Think About This..................................................................... 130
Let’s Study...................................................................................... 131
Let’s Think About This..................................................................... 132
Let’s Read: Covert and Overt Engagement Strategies...................... 132
Feedback........................................................................................ 135
Let’s Try This (Activity 3.2).............................................................. 136
Let’s Think About This..................................................................... 136
Let’s Try This (Activity 3.3).............................................................. 137
Let’s Think About This..................................................................... 138
Let’s Study: B. Student Collaboration in Classroom Activities.......... 139
Let’s Think About This..................................................................... 140
Let’s Read: Collaborative Learning.................................................. 141
Let’s Think About This..................................................................... 142
Let’s Read: Group Work and Study Teams....................................... 143
Let’s Study: Challenges in Using Collaborative Learning
Strategies in the Classroom............................................................. 145
Let’s Think About This.......................................................................................... 146
Let’s Study............................................................................................................. 147
Let’s Try This (Activity 3.4): Interpersonal Communication Skills ............. 147
Feedback ............................................................................................................... 149
Let’s Read: Communicating with Students...................................................... 149
Let’s Try This (Activity 3.5): Evaluating My Communication Skills .......... 152
Feedback ............................................................................................................... 154
Let’s Think About This.......................................................................................... 155
Feedback ............................................................................................................... 155
Let’s Read: Elements of Clear and Accurate Classroom Communication... 156
Let’s Try This (Activity 3.6) ................................................................................ 159
Let’s Think About This.......................................................................................... 160
Let’s Study: Classroom Management Skills ..................................................... 160
Feedback ............................................................................................................... 161
Let’s Study: Classroom Management for Promoting a Conducive Learning Environment ................................................................. 162
A. Creating and Maintaining a Productive Classroom Environment ............. 162
Let’s Think About This.......................................................................................... 164
Feedback ............................................................................................................... 165
Let’s Study: B. Designing a Classroom Management Plan toward Promoting a Conducive Learning Environment ................................................................. 166
Let’s Read: Planning for Classroom Management............................................ 167
Let’s Try This (Activity 3.7)................................................................................ 169
My Classroom Management Plan ................................................................. 170
Feedback ............................................................................................................... 171
Let’s Remember .................................................................................................... 172
How Much Have You Learned From This Lesson? ........................................ 173
Feedback ............................................................................................................... 175
Let’s Sum Up ........................................................................................................ 176
How Much Have You Learned From This Module? ....................................... 177
Feedback ............................................................................................................... 182
How Do You Rate Yourself Now? ..................................................................... 182
Let’s Apply What You’ve Learned (Module Assignment)................................ 183
Key to Correction ................................................................................................. 186
Suggested Readings/Websites ......................................................................... 215
Glossary ............................................................................................................... 216
References ......................................................................................................... 221
Annex A: Classroom Management Plan ............................................................ 226
What Is This Module About?

In the previous module of this course, you have already learned that the educational content in today’s schools has undergone some form of reorientation and reorganization in terms of its aims, content, process, dimensions, and environment of learning. The purpose for this educational reform is to keep in step with the fundamental aim of 21st century education, which is to help a new generation of learners develop their full potentials in a rapidly-changing world.

In this 21st century, the approach to education is no longer focused on “learning-about” where students build stocks of knowledge and acquire some cognitive skills for use throughout their lives. The world today is continuously changing at an increasingly overwhelming rate. The skills learned today are likely to become outdated in a very short time. As such, professional and technical workers are constantly urged to keep abreast with new developments in their respective fields. In short, the emphasis is now on lifelong learning.

This evolving scenario globally has also “spilled over” into the educational arena. In wake of this, have you ever given a thought about your roles as a teacher in the 21st century? In the information technology age of today, teachers are expected to be computer literate and tech-savvy if they want to be at the cutting edge of education. However, this does not make their traditional roles as knowledge providers through face-to-face interactions out-dated. Rather, teachers are required to guide their students to confront the many challenges they face as they navigate their 21st century world. In other words, they have an additional role as mentors and facilitators who are responsible for keeping their students afloat as they cope with global, technological, social, and economic changes impacting on today’s schools.

These evolving roles of teachers may not seem so demanding if you have been trained in the 21st century. On the other hand, if you started your teaching career more than ten years ago, you may be feeling threatened or stressed by these new demands. Have you ever wondered how you will take these challenges? Worry no more. It is hoped that some of your concerns will be addressed in this GURO21 module, Facilitating 21st Century Learning. After you finish learning the three lessons in this module, rest assured that you will be able to apply the knowledge and skills thus required to effectively facilitate learning in your 21st century classroom.
As you engage in the activities designed to help you better understand the content, keep in mind Arthur Ward’s four categories of teachers: mediocre, good, superior, and great. You certainly do not want to be “the mediocre teacher who tells,” nor “the good teacher who explains.” In this 21st century, it is also not enough to aspire to be a “superior teacher who demonstrates”; you should set as your ultimate goal to be “the great teacher who inspires students.”

Are you ready to embark on this journey of exploring new dimensions in facilitating learning towards realizing your goal as an inspiring teacher? I wish you an enriching and productive learning experience.

What Will You Learn?

After completing this module, you are expected to be able to develop and enhance your facilitating skills to effectively play your role as a teacher in the 21st century.

Specifically, you should be able to:

- Develop a personal program for acquiring mastery of subject matter.
- Assess your facilitation skills as a 21st century teacher.
- Create a plan for effectively managing classroom activities.

There are three lessons in this module that will equip you with the necessary theoretical and working knowledge, and specific skills involved in facilitating 21st century learning.

Lesson 1, *The 21st Century Teacher as Subject Matter Expert*, will enable you to assess your attitude toward the subject matter you teach. You will also be introduced to the domains and components of knowledge for teaching. Based on what you have learned, you will then develop a personal program for life-long learning and acquiring mastery of subject matter.
Lesson 2, *The 21st Century Teacher as a Facilitator of Learning*, describes the characteristics of facilitative teaching. It also examines the various strategies that cater to students’ learning styles and elicit active learning. You will also learn how to integrate higher order thinking in your lessons, apply questioning and reacting skills in order to enhance the teaching-learning process in your classroom, and contextualize teaching to local situations.

Lesson 3, *The 21st Century Teacher as a Classroom Manager*, discusses strategies that promote your students’ participation and collaboration in classroom activities. It also describes how you can apply communication skills relevant to your students’ level. Using this acquired knowledge, you will create a classroom management plan to promote a conducive learning environment.

It is useful for you to know that each lesson can be completed in about 90 minutes. The whole module can thus be completed in about five hours, if you really concentrate on it. However, if you are doing this course on a part-time basis, and can afford to work only on one lesson per day, it may take about four days to a week.

Each lesson comprises activities for you to accomplish individually at your own time and pace. You may also discuss with your co-learners and Flexible Learning Tutor. These activities have been designed to help you judge and monitor your progress as you go through this course. Remember that you need to work diligently on the given self-assessment tests and activities to find out how much you have learned and how well you are progressing with your learning.
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Focus</th>
<th>Topics</th>
</tr>
</thead>
</table>
| 1. The 21st Century Teacher as a Subject Matter Expert | Explains how to assess a teacher’s attitude toward the subject matter he/she teaches.  
Describes two domains of knowledge for teaching.  
Examines four components of the general dimensions of teacher knowledge.  
Investigates four components of a teacher’s content knowledge.  
Discusses how to develop a personal program for lifelong learning and acquiring mastery of subject matter. | • Teacher Attitude toward the Subject Matter  
• The Two Domains of Knowledge for Teaching  
• The Basics of Lifelong Learning  
• How to Design a Personal Lifelong Learning Plan |
| 2. The 21st Century Teacher as a Facilitator of Learning | Describes characteristics of facilitative teaching.  
Examines various strategies that cater to students’ learning styles and elicit active learning.  
Explains how to integrate higher order thinking in classroom lessons. | • Teachers’ Teaching Styles  
• Characteristics of Facilitative Teaching  
• Students’ Learning Styles  
• Teaching Strategies that Elicit Active Learning  
• Higher Order Thinking in the Classroom |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Focus</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussed how to apply questioning and reacting skills in order to enhance the teaching-learning process in the classroom.</td>
<td>• Questioning and Reacting Skills in Classroom Instruction</td>
<td></td>
</tr>
<tr>
<td>Explains how to contextualize teaching to local situations.</td>
<td>• Contextualizing Teaching to Local Situations</td>
<td></td>
</tr>
<tr>
<td>3. The 21st Century Teacher as a Classroom Manager</td>
<td>Explains how to analyze strategies that promote students' participation and collaboration in classroom activities.</td>
<td>• Strategies for Promoting Students' Participation and Collaboration in Classroom Activities</td>
</tr>
<tr>
<td>Discusses how to evaluate a teacher's own strengths and areas for growth in communicating at students' level.</td>
<td>• Communicating with Students</td>
<td></td>
</tr>
<tr>
<td>Suggests how to create a classroom management plan toward creating a conducive learning environment.</td>
<td>• Classroom Management for Promoting a Conducive Learning Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Designing a Classroom Management Plan toward Promoting a Conducive Learning Environment</td>
</tr>
</tbody>
</table>
What Do You Already Know?

Before you begin to study the different aspects related to facilitating 21st century learning, it will be a good idea for you to find out how much you already know about the concepts that will be discussed in this module. Read the following questions and write the answers on the lines provided.

1. Why is it important for teachers to adopt a positive attitude toward the subject matter they teach?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

2. Briefly explain and give two examples for each of the four components related to knowledge of subject matter.
   (a) Content knowledge
       _______________________________________________________________
       _______________________________________________________________
       _______________________________________________________________
       Examples:_____________________________________________________
       _____________________________________________________________
       _____________________________________________________________

   (b) Curricular knowledge
       _______________________________________________________________
       _______________________________________________________________
       _______________________________________________________________
       Examples:_____________________________________________________
       _____________________________________________________________
       _____________________________________________________________

   (c) Pedagogical content knowledge
       _______________________________________________________________
       _______________________________________________________________
       _______________________________________________________________
       Examples:_____________________________________________________
       _____________________________________________________________
       _____________________________________________________________
(d) Technological pedagogical content knowledge

Examples:

3. What do you understand by lifelong learning?

4. What are the criteria for designing a lifelong learning personal plan?

5. Enumerate four teaching styles that are demonstrated by teachers in the instruction process.

6. If you aspire to become a facilitator of 21st century learning, what are some important characteristics you need to nurture?

7. How can teachers accommodate their students’ preferred learning style?
8. Explain two techniques for promoting active learning in your classroom.

_____________________________________________________________

_____________________________________________________________

9. What do you understand by higher order thinking skills in the context of Bloom’s Taxonomy and Revised Bloom’s Taxonomy?

_____________________________________________________________

_____________________________________________________________

10. Classify the following questions into two types: open- and close-ended by filling in the table with the corresponding type of question.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Open-ended or Close-ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Tell me more about the plot of the story.</td>
<td></td>
</tr>
<tr>
<td>ii. What is the distance between the Earth and the Sun?</td>
<td></td>
</tr>
<tr>
<td>iii. Can you explain Ning’s reaction to the news that she heard?</td>
<td></td>
</tr>
<tr>
<td>iv. How does this relate to our lesson?</td>
<td></td>
</tr>
<tr>
<td>v. Who are the main characters in the story?</td>
<td></td>
</tr>
</tbody>
</table>

11. Contextual learning focuses on five essential forms of learning: relating, experiencing, applying, cooperating, and transferring. How can you distinguish between these forms of learning?

_____________________________________________________________

_____________________________________________________________

12. In communicating with students, what aspects of effective communication should be considered by teachers? Give two examples for each aspect.

_____________________________________________________________

_____________________________________________________________
13. What are the elements of good classroom management?

_____________________________________________________________

_____________________________________________________________

_____________________________________________________________

14. Why is it important for teachers to create a classroom management plan?

_____________________________________________________________

_____________________________________________________________

_____________________________________________________________

Feedback

You may now compare your responses with those in the Key to Correction found on pages 186-190. Some of your answers may not be expressed in exactly the same words. However, as long as the ideas they express are similar, mark them as correct.

What is your score? How well did you do?

If you answered all the questions correctly, you are already very familiar with the contents of this module, which is about facilitating 21st century learning. However, it is recommended that you study the module to refresh your memory and learn some new concepts.

If you correctly answered at least 13 of the 14 questions correct, you have a good knowledge and understanding of the contents of the module. Nevertheless, you will need to further increase your knowledge by working through the lessons and activities in the module to make you a more effective facilitator in the teaching-learning process.

If you obtained 7 or less correct answers, you need to learn more about developing your facilitating skills in the 21st century classroom. Read and understand carefully all the topics discussed in the module, and try to complete all the suggested activities, as well as the reflection and self-assessment exercises.

Before you proceed to Lesson 1, evaluate your present level of competency as a teacher who aims to develop facilitating skills for 21st century learners. Please fill out the self-rating checklist on the following pages.
How Do You Rate Yourself?

SELF-RATING COMPETENCY CHECKLIST

**Directions:** The checklist below contains a list of competencies covered in this module. For each competency, there are four possible levels of mastery (Novice, Apprentice, Practitioner, Expert). You will use this matrix to rate your level of mastery of each competency prior to studying the module (PRE), and after you complete the module (POST). For each competency, place a check mark (p) under the appropriate “PRE” column which best describes your level of mastery prior to studying the lessons of the module. You will place a check mark (p) under the appropriate “POST” column when you have completed the module. Comparing your two self-ratings on the PRE and POST columns will tell you whether you have improved your competency level or not.

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>I cannot do this yet (Novice)</th>
<th>I am learning how to do this (Apprentice)</th>
<th>I can do this but I need to learn more and improve (Practitioner)</th>
<th>I can do this very well (Expert)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>1. Assess my attitude toward the subject matter I teach.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Categorize the two domains of knowledge for teaching.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Distinguish the four components of teacher knowledge.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Differentiate the four components of my content knowledge.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPETENCY</td>
<td>I cannot do this yet (Novice)</td>
<td>I am learning how to do this (Apprentice)</td>
<td>I can do this but I need to learn more and improve (Practitioner)</td>
<td>I can do this very well (Expert)</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>5.</td>
<td>Develop a personal program for lifelong learning and acquiring mastery of subject matter.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Describe the characteristics of facilitative teaching.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Examine various strategies that cater to my students’ learning styles.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Apply various strategies that cater to my students’ learning styles.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Integrate higher order thinking in my classroom lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Apply questioning and reacting skills in order to enhance the teaching-learning process in my classroom.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPETENCY</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>11. Contextualize teaching to local situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Promote active learning and reflective thinking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Evaluate my own strengths and areas for growth in communicating at my students’ level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Create a classroom management plan toward creating a conducive learning environment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How did you fare? Were you able to identify the competencies that you need to work on? Keep them in mind as you study the lessons in this module.

You may now proceed to Lesson 1.
What Is This Lesson About?

In this 21st century, human intellectual capital has come to be considered as the driving force behind political, social, and economic improvements of most countries in the world. In light of this, the intellectual potential of our schooling youth must be nurtured and developed. What they learn, how they learn it, and how often they refresh their knowledge and skills must be redefined. There is also an urgent need for capacity-building of the workforce in order to meet the increasing demands and challenges in today’s workplace.

In response to calls for action, stakeholders comprising educators, business leaders, and civic and community groups have consensually come to an agreement as to what constitutes the necessary knowledge, skills, and expertise necessary to prepare students to succeed in school, life, and on the job. The resulting emergent Framework For 21st Century Learning has outlined 21st century student outcomes into four key elements, namely: (i) Core subjects and 21st century themes (language arts, mathematics, science, global awareness, and financial literacy); (ii) Learning and innovation skills (creativity and innovation, critical thinking and problem-solving); (iii) ICT literacy (information, media and technology skills); and (iv) Life skills and career skills (initiative and self-direction).

In a relentless effort to obtain results that matter, a rigorous, world-class education that integrates mastery of core academic subjects and 21st century skills have to take center stage in today’s classrooms.
To help you achieve this needed emphasis in your classroom, this lesson will help you answer the following questions:

- What is my attitude towards the subject matter that I teach?
- How will I categorize the two domains of knowledge for teaching?
- How will I distinguish the four components of teacher knowledge?
- How will I differentiate the four components of my content knowledge?
- How will I develop a personal program to engage in lifelong learning and acquire mastery of subject matter?

As you study the scenarios presented in this lesson, you will probably find they are somewhat similar to the ones you often face in your classroom. This realization will enable you to better understand the basic principles and theories underlying each scenario.

**What Will You Learn?**

After studying this lesson, you should be able to:

- Assess your attitude toward the subject matter that you teach.
- Categorize the two domains of knowledge for teaching.
- Differentiate the four components of the general dimensions of teacher knowledge.
- Compare and contrast the four components of a teacher’s content knowledge.
- Develop a personal program for lifelong learning and acquire mastery of subject matter.

**Let’s Try This (Activity 1.1)**

Imagine this scenario in your school. During the first teachers’ meeting for the year in your school, Mr. Doshi, your principal, hands out the following checklist to you and your co-teachers. Read the instructions and accomplish the checklist.
Assessing Teacher Attitude*

Instructions: Place a check mark (✓) against the item that you perceive reflects your attitude towards the subject matter you teach. Put a cross mark (X) if the item does not apply to you. This is not a test, so be as honest as you can as you go through the items. The time allotted for you to complete this checklist is 15 minutes.

___1. I study, analyze, and modify my subject matter to suit the kinds of students in my classroom.

___2. I make necessary changes in the selection of teaching procedures implemented, subject matter taught, and the quality of student interactions.

___3. I have adequate knowledge and abilities to plan teaching strategies appropriate for a given set of students in the subject that I teach.

___4. I am concerned, and I desire that each student achieve optimally in the subject that I teach.

___5. I teach my lesson effectively with students who frequently misbehave or respond incorrectly in my classroom.

___6. I am open to new ideas and technology available in the curriculum of the subject I teach.

___7. I am enthusiastic about the subject matter I teach as well as the methods of teaching used.

___8. I am confident about the content for the subject I teach.

___9. I am committed towards good teaching and learning.

___10. I teach what should be taught and not what can be taught.

* Questionnaire adapted from Ediger (2002), Assessing Teacher Attitudes in Teaching Science, *Journal of Instructional Psychology*. Retrieved from: http://findarticles.com/p/articles/mi_m0FCG/is_1_29/ai_84667404/pg_2/?tag=content;coll1

After you have accomplished the checklist, count the number of check marks (✓) you made.
Feedback

How many check marks did you make? The more check marks you made, the greater is your positive attitude toward the subject matter that you teach. Review the items that you did not check and reflect on how you can convert your (X) marks into (√) marks. Why do you think it is so important for you to develop and sustain a positive attitude toward the subject matter you teach? Read on to find out.

Let’s Read

Classification of Teacher Attitude

How would you define the term “attitude”? According to social psychologists, an attitude is comprised of the outward and visible postures and human beliefs that determine what each of us will see, hear, think, and do.

In the context of the classroom, a teacher’s attitude toward the teaching process inevitably has a strong influence on how he/she views himself/herself, as well as the subject matter and the students he/she teaches. Ryan and Cooper (2008) maintain that a teacher’s attitude may be classified in relation to four (4) major factors in the teaching-learning process. These are:

(i) *Attitude toward self*. This refers to how we perceive and treat our own strengths and limitations and our needs and anxieties. If we see ourselves positively, we will be happier and more confident. This happiness and confidence will definitely be manifested in the way we handle our classes.

(ii) *Attitude toward students*. This refers to how we perceive and treat our students. Do we perceive inquisitive students as triggers for fun-filled learning or as threats and causes of classroom disruption? What are our beliefs about students with disabilities? How do we treat students of different gender and race?

(iii) *Attitude toward peers and students’ parents*. Do we see our colleagues as equal partners in the teaching profession? Do we collaborate with teachers rather than compete with them? Do we show acceptance and tolerance for those who are culturally and economically different?
(iv) *Attitude toward the subject matter*. This refers to our feelings about, and treatment of, what we are teaching. Are we enthusiastic about the subject or are we just forced by circumstance to teach the content assigned to us?

Attitudes have a direct influence on our behavior. They determine how we perceive ourselves and interact with others around us. This explains why your students are quick to “sense” your attitude toward the subject matter you teach and your attitude toward them.

**Let’s Think About This**

As you come to realize the importance of enthusiasm toward subject matter as a determinant for effective teaching, how can you convey your enthusiasm successfully to your students? Write your answers on the lines below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

**Let’s Study**

**Enthusiastic Teacher Behaviors**

Did you mention that you can show your enthusiasm through both positive verbal and nonverbal ways? In addition to this, below are other teacher behaviors that you can use to manifest and promote enthusiasm in your instruction.

**Enthusiastic Teacher Behaviors (Parson, 2001)**

- Vary your speaking voice by changing the pitch, tone, and volume of your voice. This helps to hold your students’ attention to you and your subject matter.

- Eyes mirror the excitement in your teaching. Sometimes open them wide, or raise your eyebrows. Look students directly in the eye as you deliver the content of your lesson. That way you listen with your eyes, as well as speak with them.
• Body language. Use gestures and motions as you teach your lesson. For example, clap your hands when your students have done well; give them signs of approval, such as ‘thumbs up’. Use facial expressions to show your excitement about what you are presenting in your lesson. Express your emotions; smile, show your happiness, your disappointment. Act as though you are deep in thought; display your joy, excitement, and amusement.

• Encouragement. Use encouraging words like, “Good try. Would you like to improve on your answer?” “You can do it. Try again.” Be liberal in your praises and prompts as you ask questions related to your content.

After reading the different forms of enthusiastic behavior, recall a lesson you have taught. Which of the enthusiastic teacher behaviors do you exhibit and how often do you exhibit such behaviors in teaching your subject matter? Write your answers on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Take note that enthusiasm, like a smile or laughter, is contagious! When you show enthusiasm in what you teach, your students will also show the same degree of enthusiasm. How does this happen? The following are the reasons that a positive attitude, coupled with teacher enthusiasm, results in more effective teaching and learning.

1. Students’ attention span is longer if a teacher is successful in sustaining their interest by her show of positive attitude and enthusiasm throughout the lesson. Eventually, student engagement in learning may result in increased student achievement.

2. Students, consciously or unconsciously, model the attitude that their teacher exhibits toward the content. This means that if enthusiastic teachers appear to have a positive attitude toward the content being
taught, students may model this attitude and concentrate more, think about the topic more, associate more positive feelings toward the subject, and consequently achieve more.

3. A teacher’s enthusiasm about the subject matter enhances student motivation, keeps them engaged and on-task, and helps them learn the lessons well.

4. The combination of a positive attitude and enthusiasm makes all the difference towards having a class that is more fun for both the teacher and the students.

You have just learned that as teachers, we not only teach with words, but also through our actions. As a role model to your students, you should inspire their learning by modelling expected attitudes and behaviors. Through your positive attitude and show of enthusiasm toward the subject you teach, you demonstrate to them that learning is a lifelong process that does not end in the confines of the classroom.

However, there may be times in your teaching career when you may be asked to teach a subject you would rather not. What would you do? Do you walk into class and teach the subject as best as you can? Or do you go into class and do a half-hearted effort? Of course, you’ll do your very best, and this would be possible if you could develop a positive attitude towards the particular subject you have to teach. Remember that an enthusiastic teacher liven up the classroom and makes learning stimulating for his students, while an unenthusiastic teacher creates a dull classroom that makes learning boring and mundane for students.

Developing a positive attitude and being enthusiastic about the subject that you teach are important teacher attributes as a facilitator of 21st century learning. As mentioned earlier, you need to be a subject matter expert in order to facilitate your students’ mastery of 21st century skills and content. In order to achieve this goal, you need to be able to know the different categories of teacher knowledge and how to make the best of each. The following section will discuss how you can do this.
Let’s Try This (Activity 1.2)

Read the story below depicting Colin and Leong, two novice teachers, engaged in a conversation in the staff room.

Colin: Teaching Grade Six Science has never been more challenging for me. Poonga and his friends really cause me stress.

Leong: Why? What happened, Colin?

Colin: Well, science was not my area of specialization in the University, but I’m really trying my best. Yesterday, I overheard Poonga tell a classmate that it would have been more fun if they had actually germinated bean sprouts instead of just listening to my lecture yesterday on the different stages of seed germination. What must I do?

Leong: Well, Colin. Poonga has a point there. Lecturing is not the only way to teach science. You have to know a variety of ways to teach your subject matter. Besides, you should also be aware of your teaching style as well as your students’ learning styles. Take these into consideration in order to teach effectively.

Colin: I guess you are right. (Sees a co-teacher, Mrs. Norehan, coming in the room.) Oh! Hello, Mrs. Norehan.

Mrs. Norehan: Hello there. Sorry, but I couldn’t help overhearing your conversation. Can I offer some suggestions?

Colin: Oh, yes. Please do.

Based on the given scenario, answer the following questions on the lines provided.

1. Although Colin has adopted a positive attitude toward the subject matter of which he is not an expert, it seems insufficient to make his teaching effective. What else must Colin do?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
2. Based on Leong’s suggestions, what two things does Colin need to know more about in order to teach effectively?
   a. __________________________________________________________
   b. __________________________________________________________

3. If you were Mrs. Norehan, what other suggestions would you offer to Colin for him to teach more effectively?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Read on to check your answers.

Let’s Study

The Two Domains of Knowledge for Teaching

From the illustrated conversation between the two novice teachers, it is clear that it is not enough for a teacher to exhibit a positive attitude toward the subject matter he teaches. It is also vital that a teacher like you should have a sound knowledge of the various aspects of teaching, such as those suggested by Leong in Activity 1.2. These are your knowledge of who your students are – their preferred ways of acquiring knowledge or their learning style, their aptitudes, interests, and so on. In addition to this, you will also need to have a repertoire of teaching methods, strategies, and techniques from which to select what is appropriate for your students as well as the content taught. For example, in the above scenario, demonstrating the various stages of seed germination will be more effective than mere content delivery using the lecture method.

On top of these, you will also need to know your own teaching beliefs, values, goals, and teaching style.

As you may have realized, teaching is indeed a complex task that requires teachers to possess different types of knowledge as they engage in their daily work in the classroom. Teacher knowledge falls under two domains (Shulman, 1986):

A. General Dimensions of Teacher Knowledge
B. Content-specific Dimensions of Teacher Knowledge
Are you excited to learn more about the types of knowledge that you need as a 21st century teacher? Continue reading and find out.

Let’s Think About This

Many educators would agree that knowledge of the subject matter, or content, is important for teaching. Yet, the concept of what this is and what it constitutes is not well understood by many.

From your own understanding, what role does knowledge of subject matter play in the instruction process? Write your ideas on the space provided and discuss them with your co-learners and Flexible Learning Tutor.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

You or your co-learners may have ideas about what content knowledge is and why it is important in teaching. To find out more about this topic, read the following section and take note of how the different types of knowledge will help you in facilitating learning in your classroom.

Let’s Read

Earlier, you were introduced to the two domains of teacher knowledge proposed by Shulman (1986). Can you recall what these are? You are right if you identified these as the general dimensions and content-specific dimensions of teacher knowledge. Let us now examine the first of these two domains.

A. General Dimensions of Teacher Knowledge

Shulman maintained that the general dimensions of teacher knowledge are comprised of four components:

1. General pedagogical knowledge. Pedagogy is “the performance of teaching together with the beliefs, theories, policies, and controversies that inform and shape it” (Hall, et al., 2008). Based on this definition, a teacher’s knowledge of pedagogy enables the teacher to understand that the act of teaching is not an isolated activity but is closely linked to other
concepts and factors. General pedagogical knowledge covers classroom management principles and strategies, lesson plan development and implementation, and student evaluation, among others.

2. Knowledge of students and their characteristics. This includes information on your students’ aptitudes, talents, learning styles, stages of development, readiness to learn new material, strategies in constructing new knowledge and developing habits of mind, as well as their dispositions towards learning.

3. Knowledge of educational contexts. This ranges from classroom settings, school administration, school district financing, community culture, to societal norms.

4. Knowledge of educational goals, aims, values, and philosophy. This determines a teacher’s behavior and is strongly connected to his/her own personal beliefs about teaching and learning, students, and what is worth knowing.

Did you notice that the general dimensions of teacher knowledge do not focus on the teacher’s knowledge of the specific subject area he/she teaches in school? This type of knowledge does not refer to one’s expertise in the subject matter of, for example, Science, or Mathematics, or Geography. Instead, it covers the basic elements in effective teaching, which are the theories and principles of teaching-learning.

Let’s Try This (Activity 1.3)

To reinforce your understanding of the general dimensions of teacher knowledge, read Lai Fong’s letter to her former teacher, Mrs. Nguyen, on the latter’s retirement day.

Dear Mrs. Nguyen,

I am one of your many students in high school who fondly remember you as our Grade Twelve class teacher. You showered us with love, care, and attention. We were particularly impressed by your passion and enthusiasm for teaching history, as well as your in-depth knowledge and mastery of Southeast Asian History. You helped us remember the dates and events leading to the end of the Second World War by weaving them into a story. Did you know that most of us used to look forward to your History lessons?
You had no favorites in class; you treated us all the same. You did not always call on those who raised their hands to answer your questions. Neither did you embarrass anyone who gave incorrect answers. Rather, you encouraged us to try again and again.

We all also knew that being a teacher trained in the 1970s, you were not so high technology-savvy. But still, we applaud you for your zest in using various instructional technologies within your reach in your lesson presentations. I was one of the quiet girls in the class who admired you from a distance. I never said it then, but thank you for everything. Congratulations on your retirement!

Sincerely,
Lai Fong

Using Lai Fong’s letter, cite Mrs. Nguyen’s different general dimensions knowledge under the following components.

1. General pedagogical knowledge:

2. Knowledge of students and their characteristics:

3. Knowledge of educational contexts:

4. Knowledge of educational goals, aims, values, and philosophy:
Facilitating 21st Century Learning

Feedback

Compare your answers with mine in the Key to Correction on page 190.

As teachers, we are encouraged to keep abreast of current trends in teaching and learning so that we can implement this new knowledge in our instruction. Based on feedback from our colleagues and students, we will know what works, what needs to be modified, and what needs to be discarded. Thus, the general dimensions of teacher knowledge are important and, in fact, complement the second domain of knowledge for teaching, that is, the content-specific dimension of teacher knowledge.

Let’s Study

Let us now continue with the lesson and read about the second domain of teacher knowledge.

B. Content-specific Dimensions of Teacher Knowledge

As the name suggests, content-specific dimensions of teacher knowledge focus on content. Shulman (1986) distinguished three components of content-specific knowledge, namely, content knowledge, curricular knowledge, and pedagogical content knowledge.

Content Knowledge (CK)

*Content knowledge* refers to a “deep” knowledge of the actual subject matter you teach. As such, it requires that the teacher goes beyond knowledge of the facts or concepts of the subject. It demands a thorough understanding of the structure of the subject matter comprising of the theories, principles, concepts, and applications of a particular discipline. In other words, it is inadequate if you only understand that the subject area is so; you must also understand why it is so.

To illustrate this, let us visit Ms. Monteiro’s science class where she is introducing a lesson about rocks to her fourth grade students.
Ms. Monteiro starts off the lesson by assembling a small collection of 10 different rocks that she has collected from the school grounds and her backyard. She puts each rock on a piece of paper labelled with a number from 1 to 10. She also provides magnifying lenses in case her students need to use them for a close-up examination of these rocks. Her students move around the room going from one specimen to another handling, lifting, touching, looking, and examining the rocks for their characteristics. She allocates 10 to 15 minutes for this activity, after which the students share what they have observed. She asks them to identify the different rocks by color, texture weight, size, and shine.

Pointing to a piece of marble and a piece of granite, Mukhtar asks, “Ms. Monteiro, why is this rock different from this other one?” Mun Wai joins in with another question as she points to a piece of rock salt, “How is it we can use this rock to season our food but not a piece of limestone?”

The given scenario shows how Ms. Monteiro skillfully weaved together in a single activity her instructional objectives of facilitating students’ knowledge about rocks and their understanding of the scientific process of making observations. However, her learning task for the lesson has stimulated her two students to think beyond identifying rocks. If you were Ms. Monteiro, would you be able to answer the two students’ questions? How could you make sure that you would be able to answer unexpected questions from your students?

Let’s Think About This

As a science teacher, Ms. Monteiro needs to be prepared and equipped with the content knowledge related to the topic she is teaching, such as the different types of rocks, rock location, and other properties. Although her students’ questions fall out of the instructional objectives of her planned lesson, she needs to provide the answers to the two questions asked by her highly inquisitive students, who are seeking more knowledge regarding the topic taught. If, on the other hand, she would refuse to attend to their questions, very likely, her students’ motivation to seek new knowledge in future lessons would be stifled.
In sum, you really need to fully understand and “overlearn” the subject matter that you teach in order to be able to analyze and express their components and potential uses to your students.

We will proceed to read about the other types of content-specific dimensions of teacher knowledge.

Let’s Read

Curricular Knowledge

As teachers, we often hear the word “curriculum.” But do you know what it really means?

While it is often thought of by teachers to denote the content of a particular subject or area of study, a curriculum actually encompasses all the educational experiences students go through in school (SEAMEO INNOTECH, 2009) or the total school program (Kelly, 2009).

Following this definition, curricular knowledge refers to a teacher’s understanding of the school’s learning programs that have been developed for the different curricular levels. The learning program encompasses the specific topics and subjects at any given level, the various instructional materials available, and the array of activities that would support the learning experiences. For example, if you are teaching mathematics in the elementary school, you are expected to know and follow the elementary school mathematics curriculum developed by your national government. You are also expected to be knowledgeable on how to enrich the curriculum so that it would fit the specific needs of your students.

Pedagogical Content Knowledge (PCK)

Remember our definition of pedagogy in the previous section? We said that it is “the performance of teaching together with the beliefs, theories, policies, and controversies that inform and shape it” (Hall, et al., 2008). Pedagogical content knowledge, on the other hand, is the blending of content and how it is taught as influenced by your beliefs as a teacher, your knowledge of theories, as well as the policies of the school covering how teaching may and may not be done. This also involves your knowledge
of how to make the subject matter easier to understand through the use of analogies, metaphors, graphics, and demonstrations, among other teaching techniques. It also includes your knowledge of what students bring with them into the learning situation, such as their conceptions and misconceptions, and prior knowledge and experiences.

To illustrate the concept of pedagogical content knowledge further, read the example below that briefly describes how Ms. Hidayah teaches a health education topic to her seventh grade students in a rural school.

Ms. Hidayah was facilitating the class discussion on the topic, “A Balanced Diet.” She was aware that most of her students came from poor families where the usual meal on the table was rice topped by some plain curry gravy. Due to poverty, these children were deprived of nutrients coming from vegetables, meat, fish, and fruits. She also knew that moringa, or horseradish, sweet potato, and other backyard vegetables grow in abundance in the community. Bananas also abound in the market and were available at cheap prices.

Ms. Hidayah started her lesson by showing her students a big bowl of white rice and some plain curry gravy that would usually constitute their daily meal. Then, she asked them to bring out samples of vegetables and fruits that grow in their community and to describe each in terms of taste, nutrient content, availability, and cost (she knew that people could get these for free). The discussion immediately became a happy, fun, and meaningful sharing of knowledge and experiences among her students. Even the students who were usually quiet confidently shared what they knew about vegetables and fruits in the community. Next, Ms. Hidayah presented the Food Pyramid Chart to them and asked them to find in the pyramid the vegetables and fruits they had brought. After discussing the food pyramid, the students stated the insights they got from all the discussions: that nutritious meals are important and that these are just within their reach. The students even came up with a project to grow vegetables and fruits in their own backyards or indoors for those who do not have a backyard space. Ms. Hidayah ended the class with a song she composed herself about food classes. The whole class sang along happily. Ms. Hidayah gave the big bowl of rice to her students to eat, in addition to what they have brought for lunch.
Let’s Try This (Activity 1.4)

As you read the above example, what aspects of pedagogical content knowledge are reflected in Ms. Hidayah’s lesson? Write your answers on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Feedback

Based on the example, Ms. Hidayah’s pedagogical content knowledge was demonstrated by her knowledge about food, nutrition, the food pyramid. This knowledge of content was effectively contextualized in the life experiences of her students. She drew out what her students already know about the vegetables and fruits in their community and used these as good examples of nutritious foods. This demonstrates Ms. Hidayah’s knowledge of how to facilitate learning using concrete, real-life examples. In addition, she used various teaching strategies and aids to cater to the preferred learning styles and multiple intelligences of her students: lecture and discussion, questioning, individual response-giving, chart, and song. Undoubtedly, these make learning content more comprehensible and fun.

However, since Shulman’s introduction and articulation of PCK into the educational arena in the 1980s, another new component of content knowledge emerged in 21st century classrooms. This will be discussed in the next section.

Let’s Study

Technological Pedagogical Content Knowledge

Advocates of technology in education name the new component of content knowledge as Technological Pedagogical Content Knowledge (TPCK). TPCK is said to be an inter-play of three crucial elements of learning environments, namely: content, pedagogy and technology as represented in the figure on the next page.
For us to fully understand what technological pedagogical content knowledge (TPCK) is, we need to define technology, technological content knowledge, and technological pedagogical knowledge.

Technology is the purposeful application of information in the design, production, and utilization of goods and services. In education, this may include the use of standard technologies such as books, chalk and blackboard, pen markers, whiteboard, and instructional game, among others. It also encompasses advanced technologies like computers, the internet, and digital video.

Technological Content Knowledge refers to knowledge about how technology may be used to provide new ways of teaching content (Niess, 2005). For example, digital animation makes it possible for students to conceptualize how electrons are shared between atoms when chemical compounds are formed.
Technological Pedagogical Knowledge is knowledge of the availability, elements and functions of various technologies for instruction, as well as knowledge of how classroom management and teaching can be enhanced as a consequence of using a particular technology. Some examples include online collaboration tools - e-mail, chats, and interactive Webquests may facilitate social learning for geographically separated learners.

To illustrate how teachers like you manifest technological pedagogical content knowledge (TPCK), do the following activity and answer the questions that follow.

**Let’s Try This (Activity 1.5)**

Read the following examples of teachers demonstrating TPCK.

---

**Mr. Pithayasan**

Mr. Pithayasan and his school head feel that, in addition to the usual whiteboard and overhead projectors available for use in instructional delivery, students should also have access to the “Information Superhighway.” After months of planning and consultation, his school head used money collected from approved fund-raising projects to install Internet connections in every classroom. Mr. Pithayasan accompanied his school head in negotiating with a big computer company, and was successful in obtaining a very favorable discount price for personal computers and computer laptops. The school head even managed to throw into the deal a short course – a hands-on workshop session in computer literacy for his academic staff. The emphasis was on the use of software tools, for example, word processing, PowerPoint Presentations and Excel spreadsheets.

**Mr. Mohan**

Mr. Mohan, a high school biology teacher, learns from Mr. Ling, the school district science coordinator, about a dissection simulation program that is commercially available. This software can be used to replace actual dissection of rabbits, which has been a common practice in previous eleventh-grade biology classes. Mr. Ling feels this will save Mr. Mohan’s students both time, money, and more importantly a moral dilemma, for the purchase of real, live rabbits that would need to be killed for experimentation purposes. Although Mr. Mohan opines that his students may not be able to learn as much about anatomy and dissection from a simulation as compared to a real rabbit, he agrees to a test of the software in some of his classes.
Mr. Varghese

Mr. Varghese has asked the class to set up a blog on the Internet. He knows his students enjoy writing virtual comments about posted photographs, lyrics of their favourite songs, and other activities. As the administrator of this blog, Mr. Varghese will post questions about the topic he has taught in class at least twice a week. His students are encouraged to respond to his questions through this blog. He also allows them to post their comments about his lessons and share reading materials. So far, Mr. Varghese is pleased with his students’ response to this blog. In fact, he is now contemplating the idea of setting up a synchronous chat group where he and his students can log in at a specific time to discuss a particular topic.

1. Did the three teachers possess and exhibit TPCK? What type of knowledge related to technology did each show? Explain your answer.

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

2. As you read about Mr. Varghese’s social science class blog, how does this particular technological pedagogical knowledge help to enhance content?

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

Now compare your answers with mine below.

Feedback

I’m sure that you believe all teachers possess technological pedagogical content knowledge. Their TPCK is demonstrated by their knowledge about computer technology and how this can be used to promote effective teaching and learning.
In the case of Mr. Varghese, you will probably have identified several academic benefits that blogging gives: it complements face-to-face classroom interaction; it promotes students’ reflection and thinking as they write comments on the blog about a topic they have learnt; it enables the students to conduct literature search to be able to post additional information and share with their friends; it allows mutual learning for the teacher and his students.

However, you have to bear in mind that there is no one specific pedagogical technological tool for one particular topic and subject. Neither is there one that is the best for every teacher, and every student. As mentioned earlier, teaching requires highly complex cognitive skills. It is pertinent that you keep abreast with the latest technological and pedagogical knowledge so that you are able to integrate and apply this to the subject matter you teach. As you acquire experience in teaching, you will be able to identify what pedagogies and technologies work or do not work for what kind of subject matter and student characteristics.

In light of this, one of the characteristics of the 21st century teacher is that of the learner; more specifically a lifelong learner. You will constantly and continually engage in learning in order to achieve the required technological and pedagogical knowledge as well as realize the goal of becoming a subject matter expert.

How will you operationalize this characteristic in your professional life? The following section on lifelong learning will provide some insights to help you achieve this.

**Let’s Try This (Activity 1.6)**

**Lifelong Learning**

In order to identify your perception towards lifelong learning, complete the checklist on the next page, adapted from a questionnaire developed by Law, Lee, Ong, & Cahyadi (2009).

**Instructions:** Place a check mark (✓) against the item that you think reflects your perception, concept, issues, and challenges about lifelong learning. Put a cross mark (X) mark if the item does not apply to you. This is not a test, so try to be as honest as you can in completing this checklist.
Part I

1. I think that learning is a lifelong process.
2. I feel that teachers should be given more exposure to new ways of learning.
3. I feel that I should continue learning even after I have completed my degree in teaching or post-graduate teaching diploma.
4. I experience the simple joy of learning something new every day.
5. I believe that teachers should continuously upgrade their teaching.
6. I feel teachers should take up computer learning courses to enhance their computer literacy and improve their job performance.
8. I believe learning should not be limited by one’s age.
9. I believe I am capable of acquiring new knowledge and skills to improve my professionalism in teaching.
10. I have already acquired enough knowledge as a teacher.
11. I am no longer interested to acquire new knowledge related to teaching as I have other priorities in life.

Part II

12. I think teachers need to be more knowledgeable than students in this technology era.
13. I am of the opinion that teachers should continuously upgrade the standard and quality of their teaching.
14. I feel a need to pursue new knowledge in order to keep abreast with the latest developments in the teaching profession.
15. I learn with an aim to increase my general and professional knowledge.
16. I want to improve my job skills through continuous learning.
17. I am determined to learn no matter what problems I may encounter in the process.
18. I am confident that continuous learning will increase my chance of a job promotion in the future.

19. I aim for a raise in salary upon completion of my post graduate degree or professional course.

20. I believe that there is not much potential for a raise in salary even though I possess extra academic or professional qualifications.

Part III

21. I believe in learning through experience.

22. I usually read to improve myself.

23. I learn through talking and mixing around with people.

24. I find the internet very useful for my learning.

25. I find that online discussion improves my learning.

26. I prefer studying on my own.

27. I learn a lot by listening to the radio and watching television.

28. I believe that learning means pursuing an academic degree from an institution of higher learning.

Part IV

29. Learning centers are far from where I live; this is one of my obstacles to learning.

30. I place great importance in moral and technical support from my superior and colleagues in my work place to encourage me to further my studies.

31. I do not want to engage in learning because I cannot find time to do it.

32. Financial commitment deters me from pursuing my post-graduate education.

33. Family commitment prevents me from furthering my studies.

34. The lack of resources where I live prevents me from continuing my studies.

35. Heavy workload hinders me from engaging in learning.

36. I think it is very stressful to start studying again after having taught for many years.
Go back to the previous checklist. Count the number of check marks (√) you obtained in Parts I to IV. Write your score for each Part in its corresponding space in the table below. Then, draw up a profile of your perception towards lifelong learning.

<table>
<thead>
<tr>
<th>Checklist</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I - General Perceptions Toward Lifelong Learning</td>
<td></td>
</tr>
<tr>
<td>Part II - Reasons For Participation In Lifelong Learning</td>
<td></td>
</tr>
<tr>
<td>Part III - Patterns of Lifelong Learning</td>
<td></td>
</tr>
<tr>
<td>Part IV - Obstacles Faced In Lifelong Learning</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Feedback**

How was your score for the individual parts of the checklist? How is your profile in relation to lifelong learning?

Let us now read how the score of each part is interpreted.

**Part I – General Perceptions toward Lifelong Learning**

The higher the score obtained for items 1-11, the more positive is your general perception toward lifelong learning. High scores indicate that you already realize the pressing need to carry on learning for both personal enrichment and continuous professional development. In addition, you are responding to global and societal changes in the political, educational, economical, and social arenas in this 21st century.

**For Part II – Reasons for Participation in Lifelong Learning**

The reasons enumerated in items 12-20 are related to your teaching philosophy, intrinsic motivation, and extrinsic motivation. Checked items reflect that you are aware of the significance of being more knowledgeable than your students in this new and demanding technological era. It also implies that you realize the importance of possessing good general and professional knowledge to enhance your confidence in the classroom with respect to new teaching skills for effective teaching and learning. Finally, your score for Part II also indicates that you believe that improved academic and professional learning may lead to financial benefits in the form of job promotion or salary raise.
Part III – Patterns of Lifelong Learning

Check marks for items 21-28 indicate that you are learning via the five patterns of lifelong learning: through your own experience, from the experience of others, online, formally, and informally. Out of these, adult learners’ experience is considered as the foundation and the most important resource for learning (Usher, Bryant & Johnson, in Law, 2009). Learners have their individual learning preferences, and that learning can take place through this myriad of learning channels. If you checked item 26, it indicates that you are a self-regulated learner who is proactive, aware of your strengths and weaknesses, and able to transform your cognitive qualities into academic accomplishments motivated by your individual learning goals.

Part IV – Obstacles Faced In Lifelong Learning

Checked items indicate that you have identified obstacles such as lack of facilities; lack of resources; lack of workplace support; problems with time management; heavy workload; and stress. When you are aware of such obstacles, you will then be better able to overcome them in order to engage more successfully in the lifelong learning program you are currently engaged in or will do in the future.

As you prepare yourself to read more about lifelong learning in the next part of the lesson, do keep in mind that lifelong learning is at the heart of the professional practice of all teachers, whether they are experienced or new to the profession.

Let’s Study

The Basics of Lifelong Learning

As subject matter experts, it is incumbent upon 21st century teachers who are currently in service to seek and discover ways to reinforce existing content and subject curricula. If we are to address society’s concerns to improve the quality of education, as well as nurture creative, energetic, innovative, and self-directed young people with the mental ability and motivation to continue as lifelong learners, then teachers must themselves be challenging, innovative, and lifelong learners (Coolahan in Helterbran, 2005).
Educational institutions within UNESCO have defined *lifelong learning* as the “acquisition of knowledge for academic purposes, job demands, as well as personal aspects of learning throughout one’s life.” This knowledge can be acquired by blending formal education and schooling with a medley of formal or informal learning enterprises after the schooling years. This definition synchronizes very well with the current global educational trend in which emphasis of learning has gradually shifted from the teacher to the students. As such, lifelong learning contexts are now structured around self-directed learning and student-centeredness.

In order for these new learning contexts to be successful, lifelong learners are expected to exhibit certain personality traits. These include:

1. love of learning for its own sake
2. readiness to learn different kinds of knowledge in different contexts
3. personal efficiency and self-esteem to manage new and old information
4. high level of intellectual curiosity to explore new teaching strategies
5. willingness to share ideas and work collaboratively with others
6. analytical, critical, and creative thinking
7. intrinsic motivation and self-direction

As you examine your own personality traits to see if they match those of lifelong learners, you need to be aware of one important thing: lifelong learning demands that you continually strive to acquire and absorb ongoing educational experiences and new knowledge in general and for the subject you teach in particular. It also requires you to adapt, adopt and modify your teaching strategies to make them relevant with the changing times. In other words, you need to stay current with the latest developments and new technologies in the educational arena. In the words of Sir Rabindranath Tagore (1996), “A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame.”

One way to engage in lifelong learning is for you to pursue a formal academic degree in a traditional “cement and brick” university campus. Alternatively, you can do the same through a new type of learning context, known as distance education or distance learning. With recent
technological advances, this mode of learning is slowly gaining popularity. The curriculum content is delivered to students who are not physically ‘on site’ in a traditional building or campus through the use of technology and instructional system designs. This simply means that the information source and the learners are separated by time and distance. GURO21 is an example of distance learning, also known as flexible learning, open learning, or e-learning.

Besides the formal approach in a lecture room, you can also engage in lifelong learning informally. For example, you sign up for short courses offered by professional bodies in a particular field or discipline of your interest. Or, you attend a two or three-day workshop, seminar, or conference to catch up on global changes, developments, and innovations in education. Alternatively, the informal activities such as monthly professional development sessions conducted in school allow teachers to meet up and share the latest developments in education and classroom best practices. Talks on motivation, health, leadership, class management, multimedia skills, and so on will certainly be a great contribution to teachers’ lifelong learning endeavours. Of course, a teacher like you can engage in informal self-directed learning and self-study to address your need for continuous self- plus professional development to stay abreast of rapidly changing learning contexts/needs of learners. Doing so will enable you to adapt and thrive and realize your full potentials.

If you notice, the terms “lifelong learning” and “lifelong learners” feature very commonly in the mission and goal statements of schools today. Lifelong learning allows teachers to grow personally and professionally and learn while they are teaching. In the last decade, educational reforms have been championing the cause of inculcating lifelong learning skills and attitudes in our students. Will this not be a lost cause if these same skills and attitudes are not instilled in our teachers?
Let’s Think About This

During a recent reunion dinner with your former college friends, the topic centered on the importance of 21st-century teachers as lifelong learners. What ideas would you have shared about this topic as well as your personal endeavours to pursue lifelong learning? Write your ideas on the space provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Share your responses with your co-learners and Flexible Learning Tutor.

If you recall, the checklist you completed on pages 34-37 and the content you have just learned have given you the opportunity to examine your lifelong learning quotient. You may be asking yourself questions such as, “Am I applying the new knowledge, skills, and competence acquired from my lifelong learning initiatives in my classroom?” “Am I endeavouring to make my subject matter interesting, applicable, and connected to real-life situations?” “How do I propose to engage in lifelong learning in the course of my teaching career?” As you ponder over these questions, read the next section to give you some ideas on how you can find the solutions to these issues.

Let’s Try This (Activity 1.7)

Read and reflect on Einstein’s quotation about learning below.

“Learning is not a product of schooling but the lifelong attempt to acquire it.”
~Albert Einstein (1879 - 1955) Physicist & Nobel Laureate~

Do you agree with Einstein’s belief about lifelong learning? Write your answer on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Share your responses with your co-learners and Flexible Learning Tutor.
Let’s Read

How to Design a Personal Lifelong Learning Plan

As you reflect on Einstein’s quote, I am sure you will agree with him that acquisition of learning may indeed take us a lifetime. You have already learned in the previous section that one of the ways you can acquire such learning is through formal learning in an educational institution, informal learning through courses, and non-formal learning through multimedia channels like the internet. Have you ever given a thought to designing your own personal lifelong learning plan? Or are you like most teachers who function on a “what they require for the present” plan and are thus satisfied if they have earned a university degree and are currently employed in a job that pays them a relatively good salary?

What is a personal lifelong learning plan? A lifelong learning plan is a written, well-thought of strategy to continuously gain, absorb, and build skills and knowledge and apply these throughout the life of an individual. As learning should be an essential and indivisible portion of our daily lives, it is necessary for you to develop your own plan to constantly acquire knowledge and skills that you can use for your everyday life.

The lifelong learning plan is sometimes called a learning contract. It differs from the typical contract like a housing loan contract in two respects. First, it exists between and binds the person who created it, and himself/herself. In this case, it is you yourself since there is no other second party involved. Second, you must be willing to adhere to what you have put into this plan, and at the same time, be conscious of changing situations that might require adjustments as the plan takes effect and new learning needs and priorities emerge.

Before you set out to write your personal lifelong learning plan, you will need to prepare yourself mentally, physically, and emotionally. Use the following considerations as guidelines to help you do so:

1. Make a personal commitment to lifelong learning and treat it like a lifetime journey.
2. Make this journey a fruitful one by continually learning something new all the time.
3. Maximize your resources. Utilize your time, energy and, perhaps, finances to the fullest.

4. Maximize your learning environments. Identify settings that are able to support and inspire you, both inside and outside your home. Besides the library, can the park, fast food outlets, coffee shops, or a shopping complex be just as stimulating for learning?

5. Know how you learn. Identify your learning patterns, such as when and how often you need a short break from learning. What is your learning style? How do you process information? Do you like reading aloud, or do you prefer silent reading instead? How do you find peer discussion?

6. Maximize your mental ability. Engage in analytical, critical, and creative thinking to train your mind to process, store, and retrieve the information it receives. Use frequent mental exercises such as brain gym to strengthen it as well as make it flexible.

7. Anchor on the power of words to form ideas. When you are engaged in a writing activity, such as an essay or article, regard it as a chance for you to express your ideas.

8. Enhance your retention of facts and ideas. Listen to a book on tape, re-write, and transfer the content to your long-term memory. Exhibit mastery by applying it to other daily life situations.

9. Be aware of and value individual differences with respect to communication styles and learning styles. This will facilitate your personal growth, open your mind, and develop your perceptual experiences.

10. Look after your physical and mental health as they influence your learning. Address health challenges, such as workplace stress, as soon you experience loss of appetite, sleeping difficulty, or prolonged anxiety.

11. Chart your lifelong learning course. In order to maximize your time, energy, and focus, it is recommended that you follow these steps:

(i) Select a learning theme for the year. For example: “By the end of the year, I will have mastered three classroom best practices.”
(ii) Subdivide your theme into several topics and include a time frame. For example, “January- April: Technological pedagogical approach, such as online forum. May-August: Classroom management, such as implementing a behavioral contract with students who misbehave. September-December: Authentic assessment, such as designing rubrics to grade student portfolios.”

(iii) Create a journal to jot down your ideas for the following year. For example: “Next year, I will do an action research to improve student participation in the classroom.”

(iv) Review every six months to decide what new ideas to work on in the next six months. For example: “Based on student feedback, students in other classes should be allowed access to view but not allowed to contribute toward the online forum discussion. This is to facilitate knowledge dissemination to other interested parties.”

The process of creating your personalized lifelong learning plan involves the following steps (European Society of Association Executives, 2007):

1. Identification of your existing knowledge, skills, competencies, and qualifications. What do you already have? What do you still need to acquire or further develop?

2. Identification of non-formal and informal learning activities and opportunities available. What learning activities are available?

3. Assessment of the suitability of said activities to your needs and interests. Will the available learning activities enable you to acquire or enhance the knowledge, skills, competencies, and qualifications that you need? Do the activities match your needs? Here you have to consider if resources (e.g., funding) are available for the learning activities.

4. Availment of suitable non-formal and informal learning activity/ies. Once you have assessed the learning activities and found them beneficial to you, it’s time to avail of them.

5. Self-evaluation of learning acquired. Were your learning expectations met by the activities?
The following questions may guide you further in assessing learning opportunities:

1. What kind of lifelong learning program is this plan for – a formal continuing education program or a self-directed learning activity?
2. What is the time frame for the selected program/activity?
3. Does this program/activity satisfy my personal needs? Professional needs?
4. What will be its impact on my professional practice? Student learning?
5. Will I have the support of the school administration?
6. What are some of the potential barriers when I undertake this learning activity and how can I overcome this?

Are you excited to try your hand at designing a personal lifelong learning plan? If so, then accomplish the next activity.

**Let’s Try This (Activity 1.8)**

Design your personal lifelong learning plan by filling out the table on the next page. Then, answer the questions that follow and share your plan with your co-learners and Tutor for feedback.
## My Lifelong Learning Plan

<table>
<thead>
<tr>
<th>Lifelong Learning Activity</th>
<th>Objective</th>
<th>Timeframe</th>
<th>Potential Barriers</th>
<th>Resources Needed</th>
<th>Possible Solutions</th>
</tr>
</thead>
</table>
Review the lifelong learning plan that you prepared, and then answer the following questions:

1. What did you feel while preparing your personal lifelong learning plan?

______________________________________________________________

______________________________________________________________

2. How will you ensure that you will be able to implement your lifelong learning plan?

______________________________________________________________

______________________________________________________________

3. What insights did you gain from this activity?

______________________________________________________________

______________________________________________________________

Discuss your responses with your co-learners and Flexible Learning Tutor.

**Feedback**

I hope that you have learned new insights from this activity about preparing a lifelong learning plan and strategies on how to implement it. Remember that no matter how well-crafted your personal lifelong learning plan is, it is not cast in stone. It needs to be sufficiently flexible to adapt to emerging learning needs as you progress in your personal and professional life. Thus, there will be times when you will see the need to revise your plan and make necessary adjustments as your learning needs and priorities change.

Congratulations! You have just completed *Lesson One* of this module. As you studied the topics and completed the activities, I hope you acquired the essential knowledge, skills, and competence to enhance your mastery of the subject matter that you teach. Your understanding of the different types of knowledge gained from this lesson, as well as your personal program for lifelong learning that you developed, will serve as a firm foundation as you study the succeeding lessons that focus on your role as a facilitator of learning and a classroom manager.
Let’s Remember

In this lesson, you learned that:

- A teacher’s attitude toward subject matter influences teaching competency, teacher personality, and student achievement.

- Teachers who respond positively toward their subject matter also exhibit enthusiasm in their teaching.

- Knowledge for teaching can be categorized into two domains: general dimensions of teacher knowledge, and content-specific dimensions.

- The general dimensions of teacher knowledge comprise four components: general pedagogical knowledge; knowledge of students and their characteristics; knowledge of educational contexts; and knowledge of educational goals, aims, values, and philosophy.

- Content-specific dimensions of teacher knowledge encompass four components, that is: i) content knowledge; ii) curricular knowledge; iii) pedagogical content knowledge; and iv) technological pedagogical content knowledge.

- Content knowledge refers to a teacher’s deep knowledge about the subject matter that he/she teaches, as well as its underlying theories, principles, concepts, and applications.

- Curricular knowledge refers to a teacher’s understanding of the school’s learning programs - the specific topics and subjects at any given level, the various instructional materials available, and the array of activities that would support the learning experiences.

- Pedagogical content knowledge refers to a teachers’ knowledge of how a particular subject-matter is best taught and learned.
• Technological pedagogical content knowledge refers to the knowledge and understanding of the interplay between content pedagogy and technology when using technology for instruction.

• The 21st century teacher can enhance his/her expertise in subject matter by being a learner himself/herself, as well as engaging in lifelong learning.

• Lifelong learning contexts include formal learning in an institution, professional development programs in informal settings, or self-directed learning in non-formal settings.

• Lifelong learning refers to voluntary and self-motivated learning to learn, manage, monitor, and assess one’s learning.

• The steps in designing a personal lifelong learning plan are:

  1. Identification of one’s existing knowledge, skills, competencies, and qualifications.
  2. Identification of gaps.
  3. Identification of non-formal and informal learning activities and opportunities available.
  4. Assessment of the suitability of said activities to one’s needs and interests.
  5. Availing of suitable non-formal and informal learning activities.
How Much Have You Learned From This Lesson?

Let us now examine how much you have learned after completing Lesson One.

1. Teacher Carol is a science major, but this year she is asked to teach history to third year secondary students. She had never been very interested in this subject when she was a student. How can she nurture a positive attitude towards history in order to make her lessons interesting for her students?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Read the following comment from a student: “There is nothing worse than sitting in a lesson knowing fully well that the teacher is dying to get rid of you and rush back to the staff room to have a cup of coffee” (Ryan & Cooper, 2008).

(a) What does the above comment say about the teacher’s attitude towards students and teaching?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(b) How will you address the student’s concern if you were the teacher?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
3. Read the scenario below and answer the questions that follow.

Mr. Somchai posed the following problem to his first graders: “Tasha had six jellybeans and Mikail had eight jellybeans. How many jellybeans did they have together?” As he watched his students solve simple addition and subtraction problems, listened to their descriptions, and later discussed with his colleagues what he had observed, Mr. Somchai began to learn a great deal about how his students solved these problems.

What insights has Mr. Somchai gained about essential teacher knowledge that he needs to teach?

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

4. Match the teacher knowledge components in column A with the description in column B by connecting them with a line.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular knowledge</td>
<td>A blend of content and pedagogy that includes an understanding of what makes the learning of specific topics easy or difficult.</td>
</tr>
<tr>
<td>Pedagogical knowledge</td>
<td>Knowledge of pedagogical techniques and about how technology and content are reciprocally related.</td>
</tr>
<tr>
<td>Pedagogical content knowledge</td>
<td>Programs and instructional materials that have been developed for teaching specific topics and subjects at any given level.</td>
</tr>
<tr>
<td>Technological pedagogical</td>
<td>Classroom management and organization principles and strategies, and lesson plan development and implementation.</td>
</tr>
<tr>
<td>content knowledge</td>
<td></td>
</tr>
</tbody>
</table>
5. Out of sheer desperation, Ms. Flora, a beginning teacher, confided in Mrs. Ling, the Senior Assistant. Read her laments below, and then answer the questions that follow:

“I tried to be their friend. I tolerated their jokes and mischief that sometimes disrupted much of my instruction time. When I wanted to get them settled down to seatwork, they become too distracted to sit down quietly. I started yelling at them. I knew I had to consider their feelings, but I really didn’t know what to do under the circumstances. I referred to my education textbooks, but they were not of much help.”

(a) Which of the following teacher knowledge does Ms. Flora need to know more about in order to address her problem?

i. Content knowledge

ii. Pedagogical knowledge

iii. Curricular knowledge

iv. Technological knowledge

(b) Based on the kind of teacher knowledge that Ms. Flora needs, suggest two ways by which she can address her problem in the classroom.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
6. Each item below describes a teaching strategy that a teacher uses in the classroom. On the cell opposite each item, write each strategy’s classification as a component of teacher knowledge for teaching.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Component of Teacher Knowledge for Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ms. Yu brought her biology class to the school garden to observe the different</td>
<td></td>
</tr>
<tr>
<td>kinds of plants growing there. She asked the class to take note of the similarities</td>
<td></td>
</tr>
<tr>
<td>and differences of the plant varieties. This way, the students effectively</td>
<td></td>
</tr>
<tr>
<td>learned the characteristics of plants. The effectiveness was evidenced in their</td>
<td></td>
</tr>
<tr>
<td>unit examination results.</td>
<td></td>
</tr>
<tr>
<td>2. Ms. Vasugi accommodates her students’ learning styles by ‘switching’ from</td>
<td></td>
</tr>
<tr>
<td>lecture to video clip presentation and hands-on activities. She acknowledges</td>
<td></td>
</tr>
<tr>
<td>students who give correct answers with words of praise and encourages those who</td>
<td></td>
</tr>
<tr>
<td>give wrong answers to try again.</td>
<td></td>
</tr>
<tr>
<td>3. Lately, Mr. Majeed has often been away from school for official duties. As</td>
<td></td>
</tr>
<tr>
<td>he does not want to miss more classes, he set up a virtual classroom in the form</td>
<td></td>
</tr>
<tr>
<td>of an online forum. He uploads his lessons on this forum, with questions included</td>
<td></td>
</tr>
<tr>
<td>at the end of the topic. His students then post their responses online.</td>
<td></td>
</tr>
</tbody>
</table>

7. Mr. Lingam signs up for a teacher competency course in order to be eligible for promotion to the next grade of the graduate teacher’s salary scale. Ms. Dong signs up for a 12-week educational research methods course sponsored by the National Institute of Educational Management because she wants to improve her knowledge and skills in research, particularly classroom research. Mrs. Kim attends a half-day workshop on developing test items for pencil-and-paper tests organized by the
district education office. Mr. Chiu is taking up a free online tutorial in the Internet on improving his communication skills. Which of the four teachers is engaging in lifelong learning? Give reasons for your answer.

8. Mrs. Amor arranged video conferencing sessions with her class to discuss reading assignments for the topic she taught. Besides this, she also encouraged them to post questions and resource materials in their online discussion forum.

(a) Identify the type of teacher knowledge that Mrs. Amor implemented in her lesson.

(b) How does this mode of instructional delivery differ from the traditional lecture method?

9. At a workshop session on “Effective Teachers,” Mrs. Huong, the invited speaker, asked the participants to reflect on the following questions:

• Am I instructing my students in a manner that reflects my role as a lifelong learner?
• Am I applying the new knowledge, skills, and competence acquired from my lifelong learning initiatives in my classroom?
• Am I endeavoring to make my subject matter interesting, applicable, and connected to real-life situations?

(a) What aspect of her course participants’ professional life is Mrs. Huong focusing on?
(b) What kind of reflection are the participants engaged in? What is its purpose?

___________________________________________________________

___________________________________________________________

___________________________________________________________

___________________________________________________________

___________________________________________________________

10. Ms. Eva, an excellent principal, was asked by a group of beginning teachers the secret to her successful climb up the professional ladder. She told them that she had developed a personal lifelong learning plan to guide her professional growth. Zeti, one of the teachers asked for guidelines to create such a plan. Briefly describe the guidelines that Ms. Eva might have shared with her beginning teachers.

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

Feedback

To check your answers, please turn to pages 191-196.

The total score is 21. If you have answered all the questions correctly, you already have adequate knowledge about the subject matter you teach and can thus be called a subject matter expert. If you obtained 19 points, it is still alright, except that you have to review the items you overlooked. If you managed to obtain 11 correct answers, I would suggest that you go back to all the sub-topics and discussions in this lesson. Then, try and think of the correct answers for the items that you missed.

When you have completed this lesson, you may then proceed to Lesson Two. This lesson describes your role as a facilitator of learning and all the different enabling sub-competencies that you need to acquire in order to carry out this role effectively. Are you excited to start? Let us proceed now to Lesson Two.
What Is This Lesson About?

In Lesson One, you learned how to further enhance your subject matter expertise by understanding the domains and components of essential teacher knowledge, as well as the importance of developing a personal program for lifelong learning. Here in Lesson Two, you will better understand your role as a facilitator of learning and learn about the steps of improving your facilitating skills in the 21st century classroom.

It has been more than a decade since we entered the new millennium, and the public sector as well as private organizations is still struggling to cope with the continual changes resulting from the global economy, consumer needs, multi-task workforce, and the technological revolution. Educational institutions, for example, have to handle stakeholders' concerns related to education and educational issues in this 21st century, such as: “How should education be designed to meet the needs of students in the 21st century world?” “How do we define ‘school,’ ‘curriculum,’ ‘teacher,’ and ‘learner’ in these present times?”

Curriculum reforms are in the offing for 21st century schools as they depart from the traditional teacher-centred, chalk-and-talk schooling of the past. Schools are slowly transforming into “nerve centers” where teachers, students, and the community are interconnected with one another and to the rest of the world via the World Wide Web. The availability and accessibility of new knowledge and ideas sharing redefine the concept of “knowledge,” “education,” and “an educated person.”
As the focus of the 21st century is on knowledge generation and utilization, educational reforms must be targeted towards an inquiry culture. Teachers must, therefore, discard their traditional role as transmitter of information to that of facilitator and orchestrator of learning. As you assume this new professional role, you need to be aware of your new tasks and responsibilities. Amongst them include preparing your students for life outside the classroom and inculcating intellectual curiosity in them, which is the hallmark of lifelong learning. In order to achieve these outcomes, you will need to be flexible and generate excitement in your teaching.

Having understood the scope of your role as facilitator of learning to 21st century students, how do you intend to operationalize it in your classroom? Although you already have your own action plan from Lesson One, you may add more activities to your plan using ideas presented in this lesson.

Basically, the following questions guide Lesson Two of this module:

- What are the characteristics of facilitative teaching?
- How will I use various teaching and learning strategies to cater to my students’ learning styles?
- How will I evaluate strategies that elicit active learning?
- How will I integrate higher order thinking in my lessons?
- How will I apply questioning and reacting skills in my classroom instruction?
- How will I contextualize teaching to local situations?

As you study the scenarios portrayed in this topic, you will find that they are similar to the ones you encounter in your classroom. I hope this will facilitate your understanding of the important concepts contained in this lesson.
What Will You Learn?

After studying this lesson, you should be able to:

- Describe the characteristics of facilitative teaching.
- Examine various strategies that cater to students’ learning styles.
- Evaluate strategies that elicit active learning.
- Integrate higher order thinking in your lessons.
- Apply questioning and reacting skills in classroom instruction.
- Contextualize teaching to local situations.

Let’s Think About This

What is Facilitative Teaching?

Have you noticed how your learners differ from one another? They come from diverse cultural backgrounds and they have a wide range of learning needs. Some may have challenging physical, mental, and social problems. Others may not be strongly motivated to learn. Learners also tend to vary significantly in the degree to which they are willing to engage in self-directed learning by comparison with learning under close teacher guidance. They also differ in how much they prefer to learn using a hands-on approach as opposed to learning through listening and reading. Correspondingly, some teachers may not possess the facilitation skills needed to deal with learners of diverse learning styles and preferences.

This scenario calls for teachers like you to learn more about and implement good teaching. Good teaching is now understood to involve a process of facilitating learning rather than being the simple transmission of knowledge from the teacher to the learner.

From your past teaching experience, have you engaged in facilitative teaching before? What comes to your mind when you hear the phrase “facilitative teaching”? What roles should you take as a facilitative teacher? Write your answers on the space below:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Perhaps you may have mentioned in your response that facilitative teaching is teaching that guides, instigates, and motivates students to learn. If you have done so, you are correct. In addition, facilitative teaching uses learner-centered, teaching-learning practices, instead of teacher-centered ones. As such, you, as teacher, are a facilitator rather than the sole source of learning. The facilitative teacher effectively implements appropriate instructional strategies and creates a positive learning environment in the classroom (Methodist University, 2010).

Let’s Read

Roles and Behaviors of Facilitative Teachers

You play a crucial role in facilitating the teaching-learning process. Below are the eight critical roles of a facilitative teacher (Smith & Blake, 2005).

Roles of a Facilitative Teacher

1. Provide a meaningful context for learning where lessons are framed by the context of the students’ life situations.

2. Encourage ‘hands-on’ and interactive approaches to learning activities to allow learners to think about and apply concepts learned.

3. Establish learning outcomes that are clear in their intent to achieve ‘work-readiness’ for learners.

4. Give learners the opportunity to collaborate and negotiate in determining their learning and assessment processes.

5. Understand learners as ‘co-producers’ of new knowledge and skills.

6. Recognize that the prior learning and life experiences of learners are valuable foundations for constructing new knowledge and skill sets.

7. Use flexible teaching approaches that address the different learning styles of students.

8. Value the social interactions involved with learning in groups.
The facilitative teacher functions enumerated can be effectively performed when you possess the following characteristics and practice the corresponding teacher behaviors (Methodist University, 2010).

**Characteristics and Behaviors of Facilitative Teachers**

1. **Teacher Characteristic: ATTENTIVE**  
   **Teacher Behaviors:**  
   • Maintains eye contact  
   • Listens actively  
   • Demonstrates awareness of verbal and nonverbal behaviors  
   • Monitors student activity  
   • Monitors progress and provides feedback for all students

2. **Teacher Characteristic: GENUINE**  
   **Teacher Behaviors:**  
   • Is honest in interpersonal relationships  
   • Displays a real concern and caring for the student

3. **Teacher Characteristic: UNDERSTANDING**  
   **Teacher Behaviors:**  
   • Demonstrates sensitivity and responsiveness to students’ personal ideas  
   • Demonstrates sensitivity and responsiveness to students’ needs  
   • Demonstrates sensitivity and responsiveness to students’ interests  
   • Demonstrates sensitivity and responsiveness to students’ feelings  
   • Demonstrates sensitivity and responsiveness to students’ diverse cultural backgrounds

4. **Teacher Characteristic: RESPECTFUL**  
   **Teacher Behaviors:**  
   • Values each student as being unique  
   • Shows a positive regard for each student  
   • Accepts student’s feelings  
   • Shows politeness to students, even when handling misbehavior.
5. Teacher Characteristic: KNOWLEDGEABLE

Teacher Behaviors:

Content-specific Dimensions of Teacher Knowledge

- Demonstrates current knowledge of subject matter
- Identifies concepts, facts, and/or skills basic to the content area(s)
- Utilizes outside resources pertaining to their field
- Follows clear, concise objectives
- Provides appropriate instructional opportunities adapted to diverse learners

General Dimensions of Teacher Knowledge

- Facilitates student learning through presentation of the content in clear and meaningful ways
- Utilizes a variety of strategies, including technology, to communicate subject matter
- Keeps students actively engaged
- Asks high level questions to elicit critical thinking, problem solving, and performance skills
- Accurately assesses and analyzes student learning

6. Teacher Characteristic: COMMUNICATIVE

Teacher Behaviors:

- Interacts positively with students including active listening
- Speaks and writes articulately using the language of instruction
- Integrates multiple technological approaches
- Provides clear and precise directions that students can easily understand
- Recognizes and builds upon teachable moments
Let’s Think About This

Do you already demonstrate the qualities and behaviors of facilitative teachers? If yes, what results do you see in terms of student learning and your feeling of fulfilment? If no, can you see the potential effects of having the said qualities and behaviors in student learning and your feeling of fulfilment? Write a brief reflection about this in the space provided.

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Let’s Study

Teaching Styles

Do you know that your teaching behaviors are influenced by your teaching styles? A teaching style is the way in which teaching tasks are chosen and carried out (Mohanna, Chambers & Wall, 2008). Some teachers choose to have more teacher-focused activities such as giving lectures and minimizing independent work. Others prefer to draw out information from their students after engaging them in group activities. Teaching styles determine the effectiveness of teachers in promoting learning, enhancing positive attitudes about learning, and improving self-esteem. They are determined by teachers’ personal characteristics, experiences, and knowledge of the teaching-learning process and teaching philosophies.

Do you want to know your own teaching styles? The next activity will help you find out.
Let’s Try This (Activity 2.1)

What is your dominant teaching style? Accomplish the following Teaching Style Self-Evaluation to find out.

Teaching Style Self-Evaluation
[Adapted and used with permission from Jennifer Stein (2001)]

This assessment will help you determine your teaching style. Answer the following questions by encircling the letter of the statement that best corresponds to your answer. You are allowed to choose only one answer for each question.

1. What do you think of your teaching style?
   a. It may lead to inflexibility for managing the concerns of students.
   b. It may cause students to feel inadequate when they can’t emulate your example.
   c. It works well for most students but is very time-consuming.
   d. It may leave students feeling anxious about their ability to meet your expectations.

2. Which of the following do you like to use when evaluating student-learning?
   a. teacher-made tests
   b. student self-assessment tests
   c. performance-based criteria
   d. problem-solving and critical thinking

3. When planning lessons, what do you prefer to have?
   a. whole class lessons
   b. role-playing
   c. peer-tutoring
   d. brainstorming

4. When you teach, your instructional time predominantly involves -
   a. lectures
   b. demonstrations
   c. films/videos
   d. class discussion/brainstorming
5. You believe in teaching by -
   a. being the source of information
   b. personal example and modelling behavior
   c. emphasizing student-teacher interactions
   d. being a resource person as needed by the student

6. One of your goals is to have your student -
   a. work within the learning plan
   b. observe and emulate what was observed
   c. work independently and under his/her own initiative, while you provide as much support and encouragement as possible.
   d. able to work in an autonomous manner while you serve as a resource person available upon request.

7. One advantage of your teaching style is that it -
   a. focuses on clear expectations
   b. emphasizes direct observation
   c. allows students personal flexibility
   d. helps students see themselves as independent learners

8. Assignments given to students are usually based on -
   a. your personal preferences or on course materials you define as relevant and important for students to learn
   b. a sequence of steps leading to mastery of accepted method (steps) for performing a task or skill
   c. a student portfolio or learning log which has a self-assessment component
   d. problem-solving based on research of course material

9. Your teaching style develops a rhythm which contains -
   a. Four steps: content selection, presentation/reception, reflection, application
   b. Three steps: selection, skill development, mastery performance
   c. Five steps: creating awareness, collecting data, choosing innovation, implementing a plan, reviewing results
   d. More steps: ranging from posing and reflecting on a problem, skill development exercises to interim evaluation, learner responses, and development of solutions
What is your dominant teaching style?

Count the number of times you circled each letter and write the frequency counts on the table below. For example, if you answered “A” in four of the nine questions in the list, write “4” under the second column that corresponds to Teaching Style A. Each letter corresponds to a teaching style. A is for the *formal authority* teaching style, B is for the *demonstrator* or *personal model* teaching style, C is for *facilitator* teaching style, and D is for the *delegator* teaching style.

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>Frequency Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Formal Authority)</td>
<td></td>
</tr>
<tr>
<td>B (Demonstrator or Personal Model)</td>
<td></td>
</tr>
<tr>
<td>C (Facilitator)</td>
<td></td>
</tr>
<tr>
<td>D (Delegator)</td>
<td></td>
</tr>
</tbody>
</table>

If you have A’s as the most circled answer, you have a *formal authority* teaching style. Review the A items in the checklist. What does it mean to have a formal authority teaching style? Write your answer on the space below.

_________________________________________________________________
_________________________________________________________________

Do you have most circle marks on B? Then, you are practicing a *demonstrator* or *personal model* teaching style. Read the B items in the checklist again. What does it mean to have a demonstrator or personal model teaching style?

_________________________________________________________________
_________________________________________________________________

Are your circle marks mostly on C? Then, your teaching style is that of a *facilitator*. Read the C items in the checklist again. Any idea about what a facilitator teaching style is? Write your answer below.

_________________________________________________________________
_________________________________________________________________

Did you score highest on D? Then, you are a *delegator* in terms of teaching style. Review the D items in the checklist. What is the delegator teaching style?

_________________________________________________________________
_________________________________________________________________
Look again at the frequency counts in your table. Do you have two or three items that have equally high counts? If yes, then you are adapting a mix in some elements of other styles. Is it possible for a teacher to be using two or more teaching styles? Continue reading to find out.

Let’s Read

Teaching Style Categories

As you have learned in the previous activity, there are four teaching style categories: formal authority, demonstrator, facilitator, and delegator. Let us get to know more about each one based on the work of Stein, Steeves, & Mitsuhashi (2001).

Formal Authority

Teachers who have a formal authority teaching style tend to focus on content. This style is generally teacher-centered, where the teacher feels responsible for providing and controlling the flow of the content and the student is expected to receive the content.

One type of statement made by an instructor with this teaching style is “I am the flashlight for my students; I illuminate the content and materials so that my students can see the importance of the material and appreciate the discipline.” Teachers with this teaching style are not so much concerned with building relationships with their students or enabling students to form relationships with other students. This type of teacher doesn’t usually require much student participation in class. This teaching style is often called the “sage on the stage” model.

Demonstrator or Personal Model

Teachers who have a demonstrator or personal model teaching style tend to run teacher-centered classes with emphasis on demonstration and modelling. This type of teacher acts as a role model by demonstrating skills and processes and then as a coach/guide in helping students develop and apply these skills and knowledge; thus, the teacher is called a “guide by the side.”
A teacher with this type of teaching style might comment: “I show my students how to do a task properly or work through a problem and then I’ll help them master the task or problem solution. It’s important that my students can solve similar problems independently by using and adapting demonstrated methods.” Instructors with this teaching style are interested in encouraging student participation and adapting their presentation to include various learning styles. Students are expected to take some responsibility for learning what they need to know and for asking for help when they don’t understand something.

**Facilitator**

Teachers who have a facilitator model teaching style tend to focus on activities. This teaching style emphasizes student-centered learning and there is much more responsibility placed on the students to take the initiative for meeting the demands of various learning tasks.

This type of teaching style works best for students who are comfortable with independent learning and who can actively participate and collaborate with other students.

Teachers typically design group activities that necessitate active learning, student-to-student collaboration, and problem solving. This type of teacher, who is also a “guide on the side” like the demonstrator, will often try to design learning situations and activities that require student processing and application of course content in creative and original ways.

**Delegator**

Teachers who have a delegator teaching style tend to place much control and responsibility for learning on individuals or groups of students. This type of teacher, who is also a “guide on the side,” will often give students a choice in designing and implementing their own complex learning projects and will act in a consultative role.

Students are often asked to work independently or in groups and must be able to maintain motivation and focus for complex projects. Students working in this type of setting learn more than just course specific topics as they also must be able to work effectively in group situations and manage various interpersonal roles.
Let’s Try This (Activity 2.2)

School Head Mr. Bian observed four teachers in his school teaching the same science topic in their respective classrooms. Read Mr. Bian’s report and reflect on the teaching styles of the four teachers.

**Teacher Kanchana**

Teacher Kanchana adopts the direct instruction approach for his lesson on the “Human Heart.” His teaching strategy is completely content-based. He uses the “chalk and talk” method for drawing his students’ attention to his lesson. He makes them memorize and repeat back the important facts. He gives exercises that comprise all fact-based items consisting of multiple-choice, matching, and fill-in-the-blanks. He sits at his table after he has finished teaching his lesson.

**Teacher Ani**

Teacher Ani shows her students a video clip of how the human heart works. She then proceeds to have them form small groups and study the different parts of a human heart model. Each group then gives a short report on how the blood circulates in the heart using the model.

**Teacher Gunawan**

Teacher Gunawan presents his topic about the human heart using PowerPoint slides. He then asks them to share their personal experience of a family member or relative who is suffering from hypertension. He explores with them the causes and effects of this increasingly common illness in one’s middle and late adulthood, and how early detection can be done in the home using a portable electronic blood pressure gauge.

**Teacher Sarah**

Teacher Sarah explains about changes in heart rate that occur after a physical activity such as running, skipping, climbing several flights of steps, or walking. As part of a learning task, she asks the class to predict changes to their heart rate when they become angry or excited, and to predict the consequences if they are always angry with others. She stands at the end of the classroom and watches as the students organize themselves in a circle. One of them volunteers to facilitate the discussion, while another offers to be the note-taker. The class brainstorm effective anger management strategies, followed by a class presentation.
Let us now try and match the characteristics for each of the four teaching styles with those demonstrated by the four teachers. Fill in the table below with the teaching style and characteristics of these four teachers.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teaching Style</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanchana</td>
<td>Formal Authority (Teacher Kanchana)</td>
<td></td>
</tr>
<tr>
<td>Ani</td>
<td>Demonstrator (Teacher Ani)</td>
<td></td>
</tr>
<tr>
<td>Gunawan</td>
<td>Facilitative (Teacher Gunawan)</td>
<td></td>
</tr>
<tr>
<td>Sarah</td>
<td>Delegator (Teacher Sarah)</td>
<td></td>
</tr>
</tbody>
</table>

Which of the four teachers best reflect your own classroom teaching style?

Discuss your response and reflections with your co-learners and Flexible Learning Tutor. You may also compare your responses with mine below.

**Feedback**

Do you see yourself as Teacher Kanchana, who demonstrates the formal authority teaching style? Perhaps, like Teacher Ani, you also show a demonstrator or personal model teaching style. In some instances, you may have adopted a facilitative teaching style like Teacher Gunawan’s, or a delegator teaching style, like Teacher Sarah’s.

You may have also realized that the four teaching styles, as exemplified by Teachers Kanchana, Ani, Gunawan, and Sarah, are situated on a continuum ranging from teacher-centred to learner-centred, as represented in the following figure.

**Teaching Styles on a Continuum**

![Teaching Styles Continuum](image)

At the left extreme of the continuum is the most teacher-centred teaching style (formal authority). At the extreme right is the most student-centred teaching style (delegator). Therefore, if we move from left to right in this continuum, you will probably place Teacher Kanchana (formal authority teaching style), followed by Teacher Ani (demonstrator or personal model teaching style), and Teacher Gunawan (facilitative teaching style), and lastly, Teacher Sarah (delegator teaching style).
Let’s Think About This

The All-Round, Flexible, and Adaptable Teacher

Given the four teaching style categories, is it possible for a teacher to be using two or more teaching styles? The answer is YES. Such a teacher is called the “All-Round, Flexible, and Adaptable Teacher.” Mohanna, Chambers, & Wall (2008) describe this teacher as one who “can use lots of different skills, can teach both peers and juniors, and is very aware of the whole environment in relation to teaching and the learners.”

The all-round, flexible, and adaptable teacher is an effective teacher who can adapt to any of the four teaching styles depending on the subject matter and other variables. Are you an all-round, flexible, and adaptable teacher? If yes, congratulations! If not, it is hoped that this module enables you to learn and appreciate the different teaching styles and adopt two or more for your teaching repertoire.

Let’s Try This (Activity 2.3)

In the process of organizing opportunities and guiding students to seek, validate, and assimilate knowledge, it is important that you know who your learners are: their aptitudes, talents, learning styles, stage of development, and their readiness to learn new material. If you recall, this constitutes one of the components of the general dimensions of teacher knowledge, which is knowledge of students and student characteristics.

The activity that follows will center on the various teaching and learning strategies that cater to the students’ learning styles.

Lu-Ann, a student teacher, and her classmates observed student behavior in the classroom in Seri Mawar Elementary School. Read about Lu-Ann’s journal entry at the end of her observation.
Student Mike listens attentively when the teachers teach in the classroom. Sometimes, he asks permission from them to record their lectures. He also likes to ask questions and discuss issues based on the topics taught. However, he says he prefers to listen to his recorded notes as they enable him to remember the important facts more easily.

Student Ana spends time jotting down short notes as the teacher teaches in class. She goes home and ‘keys in’ these notes into her computer laptop. Besides this, she makes short notes of important facts and reads them in between classes, or while she is waiting for her mother to take her home from school.

Student Sia participates very actively when the teacher asks for volunteers to role play a particular situation in class. Her favorite subject is physical education where she is able to move around instead of sitting still for an hour at her desk. She asks a lot of questions when the class goes on field trips as she is always eager to learn new knowledge.

1. Based on Lu-Ann’s observation notes, how will you describe these three students’ ways of learning new information? Do they learn in the same manner?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. With which of the three students do you have similar preferred ways of learning?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. Why do you prefer such ways of learning?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Share your answers with your co-learners and Flexible Learning Tutor.
Feedback

You must have also noticed differences in the way students learn in your classroom. Like the students in the aforementioned scenarios, learners exhibit a variety of ways to learn. Even you, as a teacher, have a preferred way of learning.

Learning styles vary from student to student. It is important for you to learn about them so that you can suit your teaching style to the unique needs of each individual student in your class.

Read on and find out more about this topic.

Let’s Read

Students’ Learning Styles

Educators and teachers are constantly searching for ways to enhance their teaching so that students can learn effectively and efficiently. This is evidenced from the various learning theories developed over the last few decades that focus on students’ preferred learning style. The personality theories assert the influence of an individual’s personality on his/her preferences to the acquisition and integration of information, for example: Myers-Briggs Type Indicator. The information processing theories, on the other hand, emphasize the intellectual approach to assimilating information, for example: Kolb’s Learning Styles. In comparison, social learning theories define how students’ interaction in the classroom affects their preferred learning styles, for example: Reichmann and Grasha’s Learning Styles. Finally, multi-dimensional and instructional theories emphasize individual environmental preferences for learning, for example: Dunn & Dunn’s Learning Style Model and Gardner’s Multiple Intelligences.

Have you heard the term “learning style” before? In general, “learning style” refers to the unique way in which each learner receives and processes new information through his/her senses. The terms that are frequently used with learning styles are learning preferences, learning modalities, and perceptual styles.
Basically, there are three learning styles on the basis of our five senses: visual, auditory, and kinaesthetic (VAK). These three may be further broken down into the following six learning styles (Sonbuchner, 2008).

<table>
<thead>
<tr>
<th>Visual</th>
<th>Auditory</th>
<th>Kinaesthetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Listening</td>
<td>Visualizing</td>
</tr>
<tr>
<td>Writing</td>
<td>Speaking</td>
<td>Manipulating</td>
</tr>
</tbody>
</table>

The table below summarizes the characteristics of students based on these learning styles.

**The Three Learning Styles and Student Characteristics**

<table>
<thead>
<tr>
<th>Visual</th>
<th>Auditory (Aural)</th>
<th>Kinaesthetic/Tactile</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Process information most effectively when information is seen and/or presented in written language format</td>
<td>• Process information most effectively when information is spoken or heard</td>
<td>• Process information actively through touch and other physical means</td>
</tr>
<tr>
<td>• Depictions include charts, graphs, flow charts, and other graphic organizers</td>
<td>• Respond well to lectures and discussions</td>
<td>• Like to gesture when speaking</td>
</tr>
<tr>
<td>• Think in pictures</td>
<td>• Like to talk</td>
<td>• Tend to be poor listeners</td>
</tr>
<tr>
<td>• Have vivid imaginations</td>
<td>• Enjoy music and drama</td>
<td>• Lose interest in long speeches</td>
</tr>
<tr>
<td>• Benefit from teachers who use the blackboard to highlight important points or provide outlines of lesson topics</td>
<td>• Recall information by ‘hearing’ the way information is told to them</td>
<td>• Are connected to real situations through experience, or simulation</td>
</tr>
<tr>
<td>• Recall information by remembering them with their “mind’s eye”</td>
<td>• Are excellent listeners</td>
<td>• Usually do not perform well in school</td>
</tr>
</tbody>
</table>

In general, we all learn through all the three modalities described above. However, we each have a preference or tendency toward a particular modality. We may also have certain strengths and weaknesses in a certain
modality. This is because the preference or tendency toward a specific learning style is inborn. As we grow and mature in age, factors such as culture, experience, environment, and development influence can change our preferred learning style. Some of us may even have an equal inclination for more than one learning style, better known as a multimodal style.

Let’s Think About This

After you have studied the three basic learning styles in the previous section, try and identify what type of a learner you are by answering the following questions. Write your answers on the lines provided.

1. What is your preferred learning style?

2. Try and remember your schooling days, and recall the class activities that you enjoyed most. Did your preferred class activities change as you completed your elementary/primary and proceeded to high school/secondary education? Why? Why not?

3. What is your current preferred learning style?

4. Based on your answers to the previous questions, can you identify what kind of a learner you are? Write a short reflection on this question on the lines provided below.

Share your answers and reflection with your co-learners and Flexible Learning Tutor.

Now that you have learned about the different learning styles, have you considered how you will take this into account when you facilitate teaching in your classroom? You may be interested to know how you can do this by
reading the discussion in the next section.

Let’s Try This (Activity 2.4)

Read the two critical incidents below and answer the questions that follow.

Critical Incident 1

In a seventh grade classroom, Mr. Nathan teaches about the French Revolution using textbook references and lecturing to his students the major events leading to this historical outbreak. He writes important facts on the blackboard and generates a concept map of the lesson for his students.

In order to find out if they remember the important dates, Mr. Nathan gives them a pop quiz. They check and mark their friend’s answers. He then shows them a video clip of the French Revolution. Each student writes a review of what they have seen. At the end of the unit, he hands out an evaluation worksheet containing multiple choice questions and fill-in-the-blanks items.

Critical Incident 2

In another seventh grade French History class, Ms. Habsah begins the topic by showing a short video clip of The French Revolution that ends with the song La Vie En Rose. The class write a summary of what they have seen.

Ms. Habsah proceeds to teach about the events leading to the French Revolution, focusing on the storming of the Bastille using PowerPoint slides. She then asks them, individually, to create a timeline for the major events of the French Revolution based on her lesson.

Ms. Habsah hands out a written assignment in the form of a project. The students are required to keep a portfolio of popular music, costumes, and dances from that period; create a sketch of key figures such as King Louis XVI, and Mary Shelley, the author of the monster Frankenstein, with a biography included. They also have to write a play enacting the “Storming of the Bastille.” Ms. Habsah provides a rubric containing the performance criteria for each activity.

Imagine you are a teacher in the same school who has been assigned to mentor the two novice teachers in the critical incidents.
1. What comments will you give regarding the teaching strategies used?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. In your opinion, do Mr. Nathan and Ms. Habsah give enough attention to their students’ learning styles? If they do, to what extent is this demonstrated in their respective lesson? If not, what further improvements can be made?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Share your answers with your co-learners and Flexible Learning Tutor.

As you think of the answers you will offer to Mr. Nathan and Ms. Habsah, perhaps you will be able to elicit some ideas from the next topic discussion that will focus on examining various strategies that cater to students’ learning styles.

**Let’s Study**

**Accommodating Students’ Learning Styles**

One of the key indicators of effective facilitative teaching is the teacher’s awareness and knowledge of his/her students’ preferred learning styles. This prior knowledge is very important for the teacher to plan his/her teaching using appropriate instructional strategies so that the students will engage themselves fully in the learning tasks and activities. In other words, the teacher is implementing a learner-based instruction.

If you are planning to implement this kind of instruction in your classroom, you need to follow the basic steps presented on the next page.

1. Diagnose the individual learning styles of each student. In the next section, you will find a learning style inventory that you may ask your students to answer.
2. Based on the findings of your diagnosis, prepare a profile of the class preferences to determine the number of students who are visual, auditory, or kinaesthetic.

3. Finally, using this profile, assess your current teaching methods and strategies to decide if they are relevant or if they need to be modified. If they need to be modified, three general teaching techniques are recommended:

   i. Use alternative activities to replace or add on to existing ones in order to increase opportunities to use different learning styles. For example: a lecture followed by hands-on activities.

   ii. Give assignments that require students to develop skills using different learning styles. For example: students read and write a critique of empirical findings for a research study on a unit topic, prepare a video-clip, and write a script for a unit topic, and so on.

   iii. Include a project-based learning activity in a subject curriculum to enable students to demonstrate different learning styles. For example: students conduct an interview based on an issue related to a unit topic, transcribe the data, and make conclusions. They also make observations in different contexts, such as the classroom and student’s home, and write and interpret their field notes. They then prepare a written report upon completion of their project.

In general, you are encouraged to present easy concepts in a different style from what is used for more difficult concepts. For whole class instruction, however, it is recommended that you utilize all the different learning styles in order to cater to the preferred styles of all your students. For example: if you are teaching a unit of a novel in your literature class, you can use the following teaching strategies: individual silent reading; reading aloud to other students; acting out a number of scenes; and completing a timeline of events on a bulletin board. By using these strategies, you are helping students maximize their understanding of what is being taught, resulting in full comprehension.

Let’s Try This (Activity 2.5)

Below is a learning styles inventory. Before you ask your students to
accomplish it, try it out to find out your own learning style.

**Learning Styles Inventory**  
*Adapted from Learning Styles Inventory by Wyman in Shalaway (1998)*

**Instructions:**
To find out what learning style you prefer, encircle the numbers corresponding to statements you agree with.

1. I prefer to listen to a book on audio tape rather than read it.
2. When putting something together, I always read directions first.
3. I prefer reading to hearing a lecture.
4. When I am alone, I usually have music playing or I hum or sing.
5. I like playing sports more than reading books.
6. I can always tell directions like north or south no matter where I am.
7. I love to write letters or in a journal.
8. When I talk, I like to say things like “I hear you,” “That sounds good,” or “That rings a bell.”
9. My room, desk, car, or house is usually disorganized.
10. I love working with my hands and building or making things.
11. I know most of the words of the songs I listen to.
12. When others are talking, I usually create images in my mind of what they are saying.
13. I like sports and I think I am a pretty good athlete.
14. It’s easy for me to talk for long periods of time on the phone with friends.
15. Without music, life isn’t any fun.
16. I am very uncomfortable with social groups and do not usually strike up a conversation with almost anyone.
17. When looking at objects on paper, I can easily tell if they are the same no matter which way they are turned.
18. I usually say things like “I feel I need to get a hand on it” or “Get a grip.”
19. When I recall an experience, I usually see a picture of it in my
When I recall an experience, I mostly hear sounds and talk to myself about it.

When I recall an experience, I remember mostly how I felt about it.

I like music more than art.

I often doodle when I am on the phone or in a meeting.

I prefer to act things out rather than write a report on them.

I like reading more than listening to stories.

I usually speak slowly.

I like talking better then writing.

My handwriting is not usually neat.

I generally use a finger to point when I read.

I can multiply and add quickly in my head.

I like spelling and I think I am a good speller.

I get very distracted if someone talks to me while the television is on.

I like to write down instructions that people give me.

I can easily remember what people say.

I learn best by doing.

It’s hard for me to stay still very long.

**Scoring to Determine Your Own Learning Style**

Get your total score using the following guide to determine your learning style.

**Visual statements:** 2, 3, 6, 7, 12, 17, 19, 23, 25, 30, 31, and 33

**Auditory statements:** 1, 4, 8, 11, 14, 15, 16, 20, 22, 27, 32, and 34

**Kinaesthetic statements:** 5, 9, 10, 13, 18, 21, 24, 26, 28, 29, 35, and 36

Fill in the table below. For example, if you encircled statement 1, place a check mark (√) in row 1 under the Auditory column because according to the guide above, statement 1 is an auditory statement. Do the same for all statements in the checklist.
To get your percentage score, add the number of check marks in each column. Divide this by the total number of check marks in all three columns. For example, if you got a score of 12 for the Visual column and your total number of check marks is 30, divide 12 by 30 to get 0.4. Multiply
This number by **100** to get your percentage score, that is, $0.4 \times 100 = 40\%$.

Your percentage score for each style indicates your relative preferred learning style/s. Compare your scores for each column. What is/are your predominant learning style/s based on the test? Some people have very strong preferences, even to the extent that they have little or no preference in one or two of the styles. Other people have more evenly-balanced preferences, with no particularly strong style. The point is simply to try to understand as much as you can about yourself and your strengths (your preferred style or styles), and then make best use of learning methods which suit your strengths (your preferred style or styles).

**Let’s Read**

Now that you know more about your own learning styles, it’s time to determine your students’ learning styles. Prepare copies of this inventory and ask your students to accomplish it with your guidance. The better students know the way they learn best, the greater their chances of performing well in school. And, the more you understand your students’ learning styles, the better you can adapt your instructions to accommodate as much learning preferences as possible. You can prepare lesson plans using teaching styles and techniques that would cover as many learning styles as possible.

Below are some more teaching strategies that you can use to cater to your students’ learning styles:

For **Visual Learners**, use the following strategies:

- Visual presentations: movies, pictures, illustrations, videos, and models
- Graphic representations: charts, graphs, diagrams, graphic organizers
- Art activities: drawing, doodling, cartoon work, coloring
- Computer graphics software; and so on
- Journal-keeping, diaries, logs
- Word games such as Scrabble, word puzzles
- Writing activities/assignments such as story-writing, plays, poetry, article reviews, and critique
• Reading and referencing activities/assignment such as research articles, science fiction, non-fiction; and so on

For **Auditory Learners**, use the following strategies:

• Audio tape presentations using music, natural sounds
• Lectures, tutorial, small group work, paired work, discussion, buzz groups; and so on

For **Kinaesthetic/Tactile Learners**, use the following strategies:

• Physical activities such as role-play, dance, drama, movement, relaxation exercises
• Hands-on activities such as projects, experiments, demonstrations, field trips, nature walks
• Manipulatives, and science materials

The list of recommended teaching strategies is, however, not exhaustive. There are many strategies to accommodate the different learning styles of your students. Careful planning during the lesson design process will help ensure that you are doing your best to give quality instruction and valuable student experiences in the classroom.

**Let’s Think About This**

Review some of the teaching strategies that you have used to teach a topic in your subject area over the last few days. Then, answer the following questions and write your answers on the lines below.

1. How have these strategies accommodated the different learning styles of your students?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. How do you propose to improve on your current classroom practice?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Let’s Try This (Activity 2.6)

By now, you would have probably realized the importance of catering to your students’ learning styles as an effective way of getting them actively involved in their learning. Would you like to know more about how to keep your students actively involved in the learning process? If so, read on and learn more about active learning.

Read the following critical incident and then answer the succeeding questions.

**Critical Incident**

Mrs. Papu is going to teach the topic, “Pollination,” to her eighth graders in the computer laboratory. At the start of the 60-minute lesson, she distributes a piece of paper with three equal columns. There are three small icons at the top of each column: a book to symbolize important facts learned; a light bulb to signify new ideas generated; a question mark to indicate questions they have during the lesson. She gives them an example: “In the book column, write one important fact you just learned.” The students are free to complete any of the three columns at any time during the lesson.

During the remaining 20 minutes of the lesson, Mrs. Papu assigns half the class to paired work where they share their individual responses in the three columns with each other. She assigns the other half of the class to browse the internet from the desktop computers in the room. They are to search relevant websites for additional information on various types of pollination. After ten minutes, the groups exchange their learning tasks.

Based on the given scenario, answer the following questions. Write your answers on the space provided.

1. Enumerate the various types of learning activities that Mrs. Papu has planned and conducted for her students in her science lesson.
2. Do you think the types of activities Mrs. Papu has planned will keep her students actively involved in the learning process? Give reasons for your answer.

Read on to find out how well you answered the questions.

Let’s Read

**Active Learning**

Yes, you probably determined that Mrs. Papu’s students are engaging in active learning. As the term denotes, active learning is involving students directly and actively in the learning process itself. This means that they are engaged in doing something besides listening to a lecture and taking notes to help them learn. In active learning, students may be involved in talking and listening to one another, or writing, reading, and reflecting individually. In the case of Mrs. Papu’s students, the learning activities they engaged in were: writing their feedback in the three columns (i.e., important facts, new ideas, and questions), sharing their responses in pairs, and using information technology by surfing the internet for extra information related to what they have learned. These learning activities ensured student involvement and promoted active learning.

You may already be promoting this kind of learning in your classroom. If so, then that is good! Reflect on your own teaching practices in the classroom. How have you promoted active learning among your students? Write your ideas on the space below and share them with your co-learners and Flexible Learning Tutor.
Please read on to enhance your knowledge on active learning. If you are still in doubt about the appropriate instructional strategies that will facilitate active learning, you should take this opportunity to learn more about them in the discussion below.

**Let’s Study**

**Teaching Strategies that Elicit Active Learning**

In most educational institutions and school classrooms, the traditional lecture seems to be a predominant method used by teachers in disseminating content knowledge. However, in the last ten years, there has been an increasing awareness of the need for more active learning in the classroom rather than passive learning that results from listening to the teacher’s lecture.

Research findings reveal that active student involvement in the instructional process correlates significantly with student knowledge retention and achievement. Nevertheless, it was not the intention of researchers to advocate for the abandonment of the lecture method - rather, it should be supplemented by other strategies such as good questioning, discussions, experimentation, group work, and other activities that would enable the students to construct their own knowledge.

Do you remember our definition of active learning? SEAMEO INNOTECH (2010) also refers to it as “dynamic teaching and learning, which engages learners as active participants in the teaching-learning process. The teacher and the students learn by doing, performing, and reflecting on insights gained from specific activities such as fun games, simulations, role play, introspection, and the like. Active learning facilitates an engaging process of reflection for the purpose of developing or enhancing skills and competencies.” This implies that instead of making students sit and listen passively to a lesson or view a film or read a book or an article without the benefit of activities that will enable the processing of information, teachers need to involve students in doing things, extracting lessons from the activities, and thinking about what they are doing.
The underlying assumptions of active learning are:

- **Learning is inherently an active process.** From your classroom experience, you may have noticed that student involvement in the learning process vary by levels, ranging from “passive” (e.g., total inattentiveness) to “moderately active” (e.g., occasionally paying attention when you ask a question) to “very active” (e.g., listening attentively, asking and responding to questions, and taking notes).

- **Different people learn in different ways.** This also applies to students who have their preferred learning styles, as we have learned in the earlier section. Empirical data show that when students are passive receivers or observers of knowledge, they are likely to lose as much as 50 percent substantive content within a few months. On the other hand, long-term mastery is more likely to occur when learning is active and meaningful.

How can you, then, incorporate active learning in the classroom? Some instructional strategies and techniques that can engage students in active learning include the following:

1. **Pause (“Wait”) time**
   Pausing several times for a few minutes each during a lecture allows students to refine their notes and learn significantly more information.

2. **Class discussion**
   This gives students opportunities to express themselves verbally thus improving the quality of their thinking. It enhances learning when they talk to themselves and to others, besides promoting higher order thinking such as critical thinking, creative thinking, and problem-solving.

3. **Feedback lecture**
   Two mini-lectures separated by a small group study session that is designed around a study guide.

4. **Guided lecture**
Students listen to a 20-to-30-minute presentation without taking down any notes. This is followed by a five-minute writing activity about what they remember. They then sit in small groups clarifying and elaborating what they have learned for the rest of the class time.

5. **Visual-based instruction**

The use of visual tools such as pictorials, movies, video clips can provide a central point for other interactive techniques such as class discussion, small group discussion, and paired work.

6. **In-class writing**

Writing is an active process that demands a high level of cognitive engagement or involvement. It also allows students to take one step backwards from their thinking so that they can reassess, refine, or rediscover their thoughts objectively.

7. **The “One-Minute Paper”**

A highly effective technique for checking student progress, both in understanding the material and in reacting to course material. Ask students to take out a blank sheet of paper, pose a specific or open-ended question, and give them a few minute(s) to respond.

For example: “How does Goleman define ‘emotional intelligence’?”; “What is ‘teaching philosophy’?”; “What was the main point of today’s class material?” This tells you whether your students perceive the material in the same way as you do.

8. **Muddiest (or Clearest) Point**

A variation of the one-minute paper, where you give students a slightly longer time period to answer the question. At the end of the lesson, ask questions such as, “What was the ‘muddiest point’ in today’s lecture?” or, “What (if anything) did you find unclear about the concept of ‘self-esteem’?”

9. **Affective Response**

This is similar to the above exercises, but here you ask students to report their reactions to some facet of the course material - i.e., to provide an emotional or valuative response to the material, where appropriate. For example, you might show students a picture of young children working in the farm and ask them what they think
of the picture. By having several views and ideas on the table, you can help students see the material in its context and to explore their own beliefs.

10. Daily Journal

This combines the advantages of the above three techniques, and allows for more in-depth discussion of, or reaction to, the course material. You may set aside class time for students to complete their journal entries or assign this as homework.

The only disadvantage of this approach is that the feedback will not be as “instant” as with the one-minute paper. However, you may ask more thought-provoking questions, such as, “Do you think that young children having to work in the farm to help augment family income is right? Explain your answer.” Or you might have students find and discuss reports of scientific studies in popular media on topics relevant to the course material, such as global warming, the ozone layer, and so forth.

11. Reading Quiz

The reading quiz can also be used as an effective measure of student comprehension of the readings. Furthermore, by asking the same sorts of questions on several reading quizzes, you will give students guidance as to what to look for when reading assigned text.

If you ask questions like, “What were the names of the dwarfs in the story Snow White and the Seven Dwarfs?” you are telling the student that it is the details that count. On the other hand, questions like, “How would you have liked the ending of the story?” put emphasis on higher order thinking.

If your goal is to instruct, carefully choose questions that will both identify who has read the material (for your sake) and identify what is important in the reading (for their sake).

12. Clarification Pauses
Throughout a lecture, particularly after stating an important point or defining a key concept, stop, and let it sink in. After waiting a few minutes ask if anyone needs to have it clarified. You can also circulate around the room during these pauses to look at student notes, answer questions, and so on. Students who never ask questions in front of the whole class will ask them during a clarification pause as you move about the room.

13. Response to a demonstration or other teacher-centered activity

Ask students to write a paragraph that begins with: “I was surprised that ...”; “I learned that ...”; “I wonder about ....” This allows them to reflect on what they actually got out of your presentation. It also helps them realize that the activity was designed for more than just entertainment.

Because most of these techniques are aimed at individual students, they can very easily be used without interrupting the flow of the class. These exercises are particularly useful in providing the teacher with feedback concerning student understanding and retention of material.

Some of these techniques (numbers 9 and 10, in particular) are especially designed to encourage students’ exploration of their own attitudes and values but all are designed to increase retention of material presented in lectures and texts.

So, what do you think about this list of strategies and techniques? I hope you found it a rich menu of alternatives to traditional lecture presentation of subject matter that you can add to your existing repertoire of instructional skills to promote active learning in your classroom.

Let’s Try This (Activity 2.7)

Read the following critical incident and answer the questions that follow the story.
Critical Incident

Ms. Arminda teaches sixth grade social studies. She is trying out new strategies to motivate and engage her students in the lesson, particularly active learning strategies. She decided to use a visual-based instruction to teach a 30-minute lesson on “Tornados.”

She was excited to try this strategy because she had learned from a professional development meeting she recently attended that active learning not only improves students’ understanding and retention of information, develops higher order cognitive skills such as problem solving and critical thinking, but it also leads to increased teacher satisfaction.

She started by showing the students a 10-minute video on tornados and the damage they bring to a community. She then proceeded to ask them to identify the causes of tornados, if and how they could be prevented; whether the students could identify with the characters in the video; and whether they have had personal experiences similar to those depicted.

However, at the end of the lesson, she was disappointed because she discovered that she was far from satisfied! Her students seemed excited at first when they watched the video, but they barely participated in the discussion.

After her class, Ms. Arminda sought the advice of her teaching supervisor. She narrated how she conducted her lesson and asked her opinion on why she didn’t get the results that she expected.

1. What could have gone wrong in Ms. Arminda’s class? If you were her teaching supervisor, what advice would you have given her? Write your response on the space below.

2. Do you think a video-based lesson is appropriate for Ms. Arminda to successfully carry out a 30-minute lesson? If not, what will be a more appropriate alternative active learning strategy?
3. Select from among the list of active learning strategies, other than the one used by Ms. Arminda, that you think is appropriate to use in a topic that you are currently teaching. Give reasons to support your answer. What are the reasons for your choice? Use the lines provided to write your answer.

Discuss your responses with your co-learners and Flexible Learning Tutor. You may also compare your answers with mine below.

**Feedback**

While the use of visual tools, such as movies or video clips, provides a focal point for other interactive techniques (e.g., class or small group discussions,) not all learning situations lend themselves well to visual-based instruction. Perhaps, most of Ms. Arminda’s students have never experienced tornados in their areas. This could have been the reason why, after watching the video, they were not able to participate much in the discussion. For active learning strategy to work, it is best to draw upon the students’ personal experiences and then engage them in learning through talking, writing, reading, reflecting, or questioning.

Visual-based instruction, like any other active learning strategies, is not without its challenges. When used with a topic that is outside the students’ field of experience or inadequate time allocation, like the 30-minute lesson on “Tornados,” Ms. Arminda may have grappled with issues like disinterested students, time constraint, and other aspects of classroom management. The bottom line is when adding active learning to your toolbox of teaching strategies, you need to know “what will work,” “what is likely to work,” and “what will not work.” You need to practice “trial and error” in order to implement active learning successfully.
Let’s Think About This

So far, you have learned various strategies that cater to students’ learning styles, as well as those that elicit active learning in your classroom. Another important pedagogical aspect that you have to make important consideration for as a facilitator of learning in the 21st century classroom, is integrating higher order thinking in your lessons. This competency is fully discussed in the GURO21 Module, Developing Higher Order Thinking Skills (HOTS) in Learners, but it is also a good idea for us to cover important aspects of it in this lesson.

Are you familiar with HOTS and how it is integrated in the teaching process? Write your ideas about HOTS in the space below.
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Share your ideas with your co-learners and Flexible Learning Tutor and learn more about HOTS in the following pages.

Let’s Try This (Activity 2.8)

Ms. Mira, a new English teacher, is teaching the story of Goldilocks and the Three Bears to her third grade class. She has recently observed her mentor’s way of encouraging students to use higher order thinking to process stories that they read in class. Read how Ms. Mira presented the story to her students and the questions that she asked them. Then, answer the questions that follow.

After narrating the story, Goldilocks and the Three Bears, Ms. Mira asked her students the following questions:

• Describe where Goldilocks lived.
• Summarize what the Goldilocks story was about.
• Construct a theory as to why Goldilocks went into the house.
• Differentiate between Goldilocks’ reactions and how you would have reacted in each story event.
• Assess whether you think this incident really happened to Goldilocks.
• Compose a song, skit, poem, or rap to convey the Goldilocks story in a new form.

Based on the above scenario, answer the questions below:

1. What kind of thinking is required of the students in order to answer the six questions given by Ms. Mira?

2. Do all the questions require the same level of cognitive thinking and processing? Why? Why not?

3. Which questions are recall questions that only need straightforward answers from the story? Give reasons for your answer.

4. Which questions encourage Ms. Mira’s students to think beyond the information obtained from the story? Give reasons for your answer.
Compare your answers with mine in the Key to Correction on page 196-197.

In order to help you better answer these questions, you should proceed to read the following discussion about Bloom’s Taxonomy.

**Let’s Study**

**Higher Order Thinking in the Classroom**

Have you conducted your class in such a way that, like Ms. Mira, you ask questions that require students to merely recall knowledge or information? For example, her first question in the previous activity (“Describe where Goldilocks lived.”) was a simple recall question and did not need much thinking. The last three questions, on the other hand, required the students to provide information beyond what was given in the story. These questions needed a higher level of thinking from them. For example, the question, “Assess whether you think this incident really happened to Goldilocks.” required the students to analyze the story and provide an answer that is not explicitly mentioned in the story.

Thinking is a conscious act that we all engage in for most part of our daily lives, and it requires specific skills. In the context of learning, thinking skills lie at the core of the instructional process. They are fundamental in making certain learning possible as well as in executing certain tasks in our daily lives. However, learning can also occur without much thinking such as rote learning or passive learning.

In this 21st century, the emphasis is on the promotion of learning with thinking. For this to happen, you, the facilitator of learning, will have to “sharpen” your students’ thinking skills.

Let us now look at how thinking skills are categorized using a framework known as the Revised Bloom’s Taxonomy (RBT) (Krathwohl, 2002). Are you familiar with Bloom’s Taxonomy? If so, you will recognize that the
RBT is simply an updated version of Bloom’s Taxonomy. Can you tell the changes in the “original” and “revised” Bloom’s Taxonomy?

<table>
<thead>
<tr>
<th>Bloom’s Taxonomy (Old)</th>
<th>Revised Bloom’s Taxonomy (New)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>Evaluating</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Analyzing</td>
</tr>
<tr>
<td>Analysis</td>
<td>Applying</td>
</tr>
<tr>
<td>Application</td>
<td>Understanding</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Remembering</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
</tbody>
</table>

The Revised Bloom’s Taxonomy categorizes thinking into six different levels: creating, evaluating, analyzing, applying, understanding, and remembering. Did you notice the repositioning for the last two categories in the old and the new versions? In the RBT, evaluating precedes creating as it is assumed that before we can create something, we will need to evaluate it. Besides, creating is a very complex task that demands us to either put individual parts together in a different manner, or form an entirely new product.

The table on the next page describes the thinking skills associated with each of the six categories of thinking in the cognitive domain.
### Revised Bloom’s Taxonomy of Thinking Levels and Thinking Skills Involved

<table>
<thead>
<tr>
<th>Levels of Thinking</th>
<th>Thinking Skills Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating</td>
<td>• Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.</td>
</tr>
<tr>
<td>Evaluating</td>
<td>• Making judgments based on criteria and standards through checking and critiquing.</td>
</tr>
<tr>
<td>Analyzing</td>
<td>• Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.</td>
</tr>
<tr>
<td>Applying</td>
<td>• Carrying out or using a procedure through executing or implementing.</td>
</tr>
<tr>
<td>Understanding</td>
<td>• Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.</td>
</tr>
<tr>
<td>Remembering</td>
<td>• Retrieving, recognizing, and recalling relevant knowledge from long-term memory.</td>
</tr>
</tbody>
</table>

It is important for you to remember that as you move up the taxonomy, the thinking skills proceed from lower order thinking skills (LOTS) to higher order thinking skills (HOTS). Therefore, when we refer to HOTS, we are concentrating on the top three levels of Bloom’s Revised Taxonomy, that is, analyzing, evaluating, and creating.

In order to help you identify action verbs that you may use in preparing your lesson objectives, framing your class discussion questions, and constructing learning assessment items, you will find the following levels of thinking and their respective lists of action words useful.
Remembering

<table>
<thead>
<tr>
<th>collect</th>
<th>describe</th>
<th>identify</th>
<th>list</th>
<th>show</th>
</tr>
</thead>
<tbody>
<tr>
<td>tell</td>
<td>tabulate</td>
<td>define</td>
<td>examine</td>
<td>label</td>
</tr>
<tr>
<td>name</td>
<td>retell</td>
<td>state</td>
<td>quote</td>
<td>enumerate</td>
</tr>
<tr>
<td>match</td>
<td>read</td>
<td>record</td>
<td>reproduce</td>
<td>copy</td>
</tr>
<tr>
<td>select</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Example:* Describe the capital of Malaysia.

Understanding

<table>
<thead>
<tr>
<th>associate</th>
<th>compare</th>
<th>trace</th>
<th>extend</th>
<th>interpret</th>
</tr>
</thead>
<tbody>
<tr>
<td>predict</td>
<td>differentiate</td>
<td>contrast</td>
<td>describe</td>
<td>discuss</td>
</tr>
<tr>
<td>estimate</td>
<td>group</td>
<td>summarize</td>
<td>order</td>
<td>cite</td>
</tr>
<tr>
<td>convert</td>
<td>explain</td>
<td>paraphrase</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Examples:* Interpret the following quote from Ralph Waldo Emerson: “What lies behind us and what lies before us are small matters compared to what lies within us.”

Applying

<table>
<thead>
<tr>
<th>apply</th>
<th>produce</th>
<th>determine</th>
<th>compute</th>
<th>discover</th>
</tr>
</thead>
<tbody>
<tr>
<td>demonstrate</td>
<td>classify</td>
<td>report</td>
<td>develop</td>
<td>collect</td>
</tr>
<tr>
<td>show</td>
<td>calculate</td>
<td>change</td>
<td>teach</td>
<td>establish</td>
</tr>
<tr>
<td>administer</td>
<td>experiment</td>
<td>complete</td>
<td>illustrate</td>
<td>transfer</td>
</tr>
<tr>
<td>construct</td>
<td>articulate</td>
<td>relate</td>
<td>solve</td>
<td>solve</td>
</tr>
<tr>
<td>modify</td>
<td>act</td>
<td>chart</td>
<td>prepare</td>
<td>use</td>
</tr>
</tbody>
</table>

*Example:* Take note of the definition of a federal form of government. Illustrate by giving examples of what changes will happen to the Philippines if it shifts to a federal form of government.

Analyzing

<table>
<thead>
<tr>
<th>analyze</th>
<th>appraise</th>
<th>explain</th>
<th>organize</th>
<th>discriminate</th>
</tr>
</thead>
<tbody>
<tr>
<td>separate</td>
<td>calculate</td>
<td>categorize</td>
<td>choose</td>
<td>order</td>
</tr>
<tr>
<td>investigate</td>
<td>achieve</td>
<td>compare</td>
<td>contrast</td>
<td>distinguish</td>
</tr>
<tr>
<td>criticize</td>
<td>question</td>
<td>deduce</td>
<td>differentiate</td>
<td>examine</td>
</tr>
</tbody>
</table>

*Example:* Analyze why the conflict between the Palestinians and the Israelis continues to this day. Explain what could be the motives of each party.
Facilitating 21st Century Learning

Evaluating

<table>
<thead>
<tr>
<th>assess</th>
<th>test</th>
<th>grade</th>
<th>appraise</th>
<th>reframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>compare</td>
<td>discriminate</td>
<td>judge</td>
<td>criticize</td>
<td>support</td>
</tr>
<tr>
<td>decide</td>
<td>convince</td>
<td>justify</td>
<td>defend</td>
<td>explain</td>
</tr>
<tr>
<td>measure</td>
<td>conclude</td>
<td>summarize</td>
<td>persuade</td>
<td>rank</td>
</tr>
</tbody>
</table>

Example: Is non-formal education a good alternative to formal schooling? Why or why not?

Creating

<table>
<thead>
<tr>
<th>analyze</th>
<th>infer</th>
<th>compare</th>
<th>breakdown</th>
<th>illustrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>arrange</td>
<td>discriminate</td>
<td>contrast</td>
<td>order</td>
<td>outline</td>
</tr>
<tr>
<td>connect</td>
<td>separate</td>
<td>explain</td>
<td>correlate</td>
<td>prioritize</td>
</tr>
<tr>
<td>divide</td>
<td>classify</td>
<td>point out</td>
<td>focus</td>
<td>subdivide</td>
</tr>
</tbody>
</table>

Example: Compose an article to be submitted to the editor of your community newspaper on your and your fellow students’ views on a certain issue (e.g., climate change).

Using these action verbs, you can formulate questions that can easily move your students to recall more than simple knowledge level facts that only require the skill of remembering.

Let’s Try This (Activity 2.9)

Now that you have learned about the Revised Bloom’s Taxonomy of thinking levels, try working on the following exercise for you to evaluate how well you learned it. Recall our discussion of the story Goldilocks and the Three Bears by Ms. Mira’s class on page 91. Using your knowledge of the Revised Bloom’s Taxonomy, try to categorize the questions in the first column as to the levels of thinking they require of the student.

<table>
<thead>
<tr>
<th>Question</th>
<th>Level of Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe where Goldilocks lived.</td>
<td></td>
</tr>
<tr>
<td>2. Summarize what the story was about.</td>
<td></td>
</tr>
<tr>
<td>3. Construct a theory as to why Goldilocks went into the house.</td>
<td></td>
</tr>
<tr>
<td>4. Differentiate between how Goldilocks reacted and how you would react in each story event.</td>
<td></td>
</tr>
<tr>
<td>5. Assess whether you think this incident really happened to Goldilocks.</td>
<td></td>
</tr>
<tr>
<td>6. Compose a song, skit, poem, or rap to convey the Goldilocks story in a new form.</td>
<td></td>
</tr>
</tbody>
</table>
Feedback

Compare your answers with the *Key to Correction* on page 197. How did you fare? Did you get all the answers correct? If yes, congratulations! If not, you should consider revisiting what you have just learned about the thinking taxonomy. Based on what has been discussed, you will agree that higher order thinking is not about the regurgitation of information learned; neither is it about rote learning or simple recall of facts and figures. It is about engaging students at the highest levels of thinking to promote stimulating learning environments for them to become generators of new ideas, analyzers of information, and creators of new knowledge. How do you plan to do this? Have you thought about how to integrate HOTS in your lessons? The following discussion may help you gain some insights.

Let’s Read

**Integrating Higher Order Thinking in My Lessons**

Promoting higher order thinking entails teaching and facilitating methodologies that would create a climate for analyzing, creating, and evaluating.

From your experience, can you think of some methods and techniques that can foster higher order thinking in the classroom? Write your ideas on the lines below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Check if the methods and techniques you wrote indeed promote HOTS by reading some of the instructional elements that foster HOTS according to Anthony and Manzo (1995).

**Instructional Elements to Foster Higher Order Thinking Skills**

- Remember to ask for it; that is, for discovery, invention, and artistic/literary creation.
- Treat curiosity and new ideas with enthusiasm; these can often lead to the most valuable “teachable moments.”
Exposing students to new twists on old patterns and invite looking at old patterns from new angles.

Constructively critique new ideas because they almost always require some fine-tuning.

Reset expectations to the fact that there will be many more “misses” than “hits” when trying to achieve workable new ideas.

Learn to invite contrary, or opposing ideas; new possibilities are often discovered in this way and existing thoughts, patterns, and beliefs can be tested and strengthened.

The authors also recommended some strategies for integrating higher order thinking in the instruction process:

**Strategies for Integrating Higher Order Thinking in the Instruction Process**

1. **Using questions that invite higher-order thinking.**
   Examples of questions for teaching reading literacy include the following:

   **Question:** “How is this story like another you have read?”
   (This question encourages students to make connections and see analogies.)

   **Question:** “Does this story make you aware of any problems that need attention?”
   (This question requires students to see themselves as active participants in problem identification and problem-solving.)

   **Question:** “What does this story mean to you?” ; “How might it affect others?”
   (These two questions give students an opportunity to express their own interests. They also consider and understand emphatically the views of others, as well as the consequences to them.)

   **Question:** “Is there anything wrong with this solution?” ; “How else might this problem be solved?”
   (These two questions determine successful critical analysis.)
**Question:** “What more needs to be known or done to understand or do this better?”

(This question provides opportunities for creative problem-solving that invites thinking “out-of-the-box.”)

**Question:** “What is a contrary way of seeing this?”

(This question enables students to examine issues from multiple points of view to help them clarify their thoughts.)

2. **Head-on Approaches to Teaching Higher-Order Thinking.**

Six examples of head-on approaches are presented below:

- **Thinking Thursdays** – You have to think about allocating a specific day of the week or amount of time on a regular basis to attempt the following five direct approaches to teaching critical and creative thinking.

- **Word Creation** - Some variations include:
  
  (i) Ask the students to think of a ‘nonsense’ word like “squallizmotex.” They then give the definition for it.
  
  (ii) Say this to the students: “If dried grapes are called raisins, and dried beef is called beef jerky, what would you call these items if they were dried: lemons, pineapple, watermelon, chicken?”

  Note: You can either come up with other variations for Word Creation, or ask the students to do so. The latter is a better option.

- **Unusual Uses** – Have students try to think of as many unusual uses as they can for common objects such as bricks, used toys, old tennis balls, soda bottles, and so on.

- **Circumstances and Consequences** – Have students complete the following questions:

  What would happen if...

  - school was on weekends and not during the week?
  - water stuck like glue?
  - gravity took a day off?
  - there were no colors?
• **Product Improvements** – Have students think of answers to the following questions:
  - “How could school desks be improved?”
  - “How could living room furniture be improved to provide better storage and even exercise while watching television?”
  - “How can we better equip book-carrying bags to handle lunches and other needs that you can think of?”

• **Systems and Social Improvements** – Ask students questions such as the following:
  - “How can schools be made more fun without compromising on learning?”
  - “How can society contribute to increased student achievement?”

Such questions can lead to a good deal of higher-level discussion and good give-and-take views from the students.

As you can see, the head-on approaches promote critical thinking, creative thinking, and constructive thinking. These three types of thinking move up the hierarchy of intellectual thinking in a sequential manner. First, your students critically analyze the knowledge, information, and situation given. They then creatively consider possible options, and finally construct or design a new product, decision, or direction.

**Let’s Try This (Activity 2.10)**

Imagine that you are teaching about “Butterflies” to fourth graders. Think of a class activity that integrates higher order thinking. Write your ideas on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Compare your answers with mine on the next page.
Feedback

Here are four sample lesson activities for teaching about “Butterflies.”
Divide students into groups of four for each activity.

1. Butterflies are flying insects. Ask the group to imitate a butterfly flying about in a garden full of colorful flowers, stopping occasionally to sip nectar from a flower. Follow up by asking them to make a list of 8-20 other insects that fly.

2. Butterflies hatch on their own on plants. Let the group role play the life history of a butterfly: egg, caterpillar, chrysalis, and butterfly. Follow up by asking them, “What does a butterfly dream about when it is in the chrysalis stage?” Have each group member draw a picture of the chrysalis and its dream and present it to the class.

3. Caterpillars have six legs. Ask the group to do a caterpillar walk/dance around the class, inviting other students in the class to join in to form a giant caterpillar. Have them compose an action song as they move around the class. Follow up by asking them to design and draw three pairs of socks or shoes for them to wear.

4. Butterflies taste with their feet. Have the group members demonstrate how this is done. Follow up by asking the group to write a poem about this feeding habit.

Let’s Try This (Activity 2.11)

You have just learned how to integrate higher order thinking in your lessons using questions that require your students to analyze, evaluate, and create. In order to master this facilitative skill, you need to use it consistently in your instruction. To help you integrate HOTS in the teaching and learning process in your classroom, you may refer to Course 2 of GURO21, which presents ways to help you develop HOTS in your life as a teacher, as well as in your students.

Another equally important facilitative skill is the effective use of questions and reactions in your teaching. Join me in the activity that follows for you to learn more about questioning and reacting skills. Read the situationer on the next page and then answer the questions.
During a teacher professional development talk on “Effective Questioning,” Mr. Paneer, the invited speaker, shows the following quotation on the wall. The quotation reads: “We learn by asking questions. We learn better by asking better questions. We learn more by having opportunities to ask more questions” (Morgan & Saxton, 1991).

Mr. Paneer then asks the participants the following questions. Pretend you are one of the teachers attending this talk. Write your answers on the lines provided.

1. What message is being conveyed by the quotation?
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________

2. Why is it important for us to learn how to ask questions?
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________

3. How can teachers create opportunities for students to ask questions?
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________

4. How can teachers improve their questioning and reacting skills?
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________

Share your responses with your co-learners and Flexible Learning Tutor. Read on to see how equipped you are as regards effective questioning and reacting skills in classroom instruction.
Let’s Read

Questioning and Reacting Skills in Classroom Instruction

Since ancient times, oral questioning has been employed by the great teachers to heighten their teachings, stimulate thinking, and evoke emotion among their audiences. The most renowned of them, Socrates, was famous for his Socratic questioning, which consists of six types of questions to challenge the accuracy and completeness of thinking in order to achieve an ultimate goal.

A review of literature on questioning contains useful information for teachers, especially those teaching in 21st century classrooms. From Morgan and Saxton’s quotation on page 103, it is obvious that questioning skills is a critical skill for every teacher. In fact, educational researchers claim that teachers spend 50% or more of their instruction time posing questions to their students. Another significant finding is that improving teacher questioning and reacting skills could subsequently raise student achievement. It was found that teachers ask as many as 300-400 questions per day but, sad to say, most of the questions are of the lower order categories, as you have known earlier from the Revised Bloom’s Taxonomy of educational objectives.

Another noteworthy finding is that most teachers’ questions are answered in a very short time, sometimes less than a second, but more often than not, by the teacher himself.

Other pitfalls that teachers often fall into include the following:

- Asking too many closed questions that require only one-word answers (a “Yes” or “No” answer)
- Asking too many short-answer, recall-based questions
- Assuming full control of the instruction process so that students do not have opportunities to initiate questions or provide feedback
- Focusing on a small number of students and not involving the whole class
- Not giving students time to reflect.
In sum, effective questioning encourages students to ask as well as to “receive” questions. It should, rightfully, involve all students and engage them in thinking. It also encourages students to listen and respond to each other as well as to the teacher. Towards this, you will find the following guidelines for effective questioning and reacting techniques helpful (Changing Minds.org, 2010).

**Guidelines for Effective Questioning and Reacting Techniques**

1. **Planning for questioning and reacting**
   - Plan to use questions that are focus-specific, rather than general and vague.
     Vague question: “What are the best fiction books?”
     Focus specific: “What are the best fiction stories for girls between the ages of six and eight?”
     (This question makes it clear what the starting point is and what the goal is.)
   - Use Bloom’s Taxonomy or Revised Bloom’s Taxonomy to ensure that the questions you are asking range from lower to higher order. This will demand more than recall of knowledge or show of understanding from your students.
   - Ensure that you maintain a balance between asking and telling.

2. **Asking open-ended questions**
   - Try to ask more open-ended questions (more than one-answer question).
   - Do not have one single ‘correct’ answer in your head that your students have to give.
   - Allow students to elaborate on their answers by asking them to “Explain,” “Why,” “Tell us more,” and so on. This will give students more challenge, encourage them to speak out more, and get them to think about the question in greater depth.
   - Encourage students to initiate their own questions.
• Ask one question at a time instead of a cluster of questions. The latter leaves students confused as to which to respond to. For example: “Why are you saying that?”; “What exactly does this mean?”; “How does this relate to what we have been talking about?”; “What do we already know about this?”; “Can you give me an example?”; “Can you rephrase that, please?”

• Pitch questions according to students’ capability and cognitive ability. For example: When you are asking a cognitively-challenged 10-year-old for his personal details, use simple questions such as: “What is your father’s job?”; “Where do you live?”; “How do you come to school?”; “What do you do during the weekends?”

However, when asking another 10-year-old who is an above average student the same, phrase your questions in a slightly different manner such as: “What are some interesting things about yourself and your family that you would like to share with me?”

3. Treat questions seriously

• Observe ‘wait time’ after asking a question. This will give your students time to think before they respond. For lower order questions, you may increase ‘wait time’ to three seconds. Allocating ‘wait time’ to 10 seconds for higher order questions improves the number and quality of answers.

• If, after the stipulated time allocated and there are no responses to questions, react by using one of the following options. You should withhold from giving the answers right away:
  o Rephrase the question, or
  o Ask students which part of the question they find difficult, or
  o Ask a simpler, but related question.

• During instruction time, stop for questions or comments when necessary. In order to stimulate an intellectual exchange of ideas, you should not wait until the end of a 30-minute or 60-minute period before asking, “Are there any questions?” By that time, your students are already getting ready to pack up and rushing off to their next class.
- At intermediate intervals during a lesson, ask questions such as, “What have you understood so far?”; “What do you see as the most important points discussed in the last 20 minutes?”; “What question is foremost in your mind?”; “What is your opinion (about some controversial issue)?” Besides giving oral answers, you should try asking some of them to read out their responses. This practice trains them to listen, process information, and organize their thoughts, instead of just copying down your lecture notes.

- Enhance reacting skills by using the following options interchangeably:
  - Invite comments and elaborations, or
  - Safeguard against allowing a minority of students to monopolize asking questions and giving responses, or
  - Remain silent for a few minutes to convey the impression of expecting responses, or
  - If comments are not forthcoming, paraphrase the initial response to restate, remind, and clarify, before again inviting for comments.

- Permit students to reference answers to more complex questions, individually or collaboratively

- Encourage students to find answers to their own questions

- Treat student answers with respect and give students credit for attempting.

Based on the above discussion, it is clear that verbal questioning and reacting skills feature very importantly in the instruction process. If teachers have so far been using questioning to check on students’ class work and homework, follow up and summarize lessons, and assess students’ learning, it is time that they now realize what verbal questioning can do: motivate students to pay attention in class and learn, promote their thinking skills, energize them to inquire and explore independently, and enhance their knowledge base.
Let’s Try This (Activity 2.12)

The next time you go into class to teach a unit topic of your subject, try this evaluation exercise to check and assess your current questioning and reacting skills using the grid below. You can also use this same grid for subsequent lessons so that you can observe if your practice has improved, and make useful comparisons across lessons.

You will need to use a tape or video recorder to record a whole-class 10-minute question-and-answer session of a lesson you teach. When you play back the tape, use the grid below and place a tally mark (■) in the Sample Lesson column for the corresponding questioning activity.

<table>
<thead>
<tr>
<th>Questioning Activity</th>
<th>Number of occurrences in 10-minute session (Sample Lesson 1)</th>
<th>Number of occurrences in 10-minute session (Sample Lesson 2)</th>
<th>Number of occurrences in 10-minute session (Sample Lesson 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed – factual information and comprehension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open – prompting more than one answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time for reflection before answer required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further prompts to elicit extended answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for students to explain why they have offered that response</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for students to confer before answering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher initiates, students respond, teacher provides feedback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students initiate their own questions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share your findings with your co-learners and Flexible Learning Tutor.
Let’s Think About This

So how did you fare in the previous exercise? Are you satisfied with your achievement for the eight questioning activities enumerated? How was your score for the subsequent lessons? Did it show any significant improvement? Congratulations on your remarkable performance.

On the other hand, if your accomplishment did not meet your expectations, do not despair. You can still go back and review the guidelines given about effective questioning and reacting skills and techniques. After that, work on the above assessment exercise again. Hopefully, you will be able to see improvement in your questioning skills.

Let’s Try This (Activity 2.13)

Contextual Teaching and Learning

So far we have learned about strategies that you can use to cater to your students’ learning styles, elicit active learning in your classroom, integrate higher order thinking in your lessons, apply questioning and reacting skills in your classroom instruction. There is still one more pedagogical aspect that you need to give important consideration in your lessons, that is, how to contextualize teaching in local situations. Do you know how it is to contextualize teaching and learning in local situations?

Contextual teaching and learning (CTL) is the process of “relating subject matter content to real world situations and motivating students to make connections between knowledge and its applications to their lives as family members, citizens, and workers and engage in the hard work that learning requires” (TeachNET, 2001).

Let us know more about it by joining Ms. Tranh in her experience on a one-day workshop on “Classroom Best Practices.”

During one of the sessions, Ms. Tranh and the rest of the participants were asked to complete a checklist, “Are You Teaching Contextually?” (Texas Collaborative for Teaching Excellence, 2010). They were told to put a check mark (√) on items that reflected their current practice related to contextual teaching.
Imagine you were at the same workshop as Ms. Tranh. Complete the checklist found below. Then, refer to the *Scoring Key* that follows to know what your scores mean.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Are You Teaching Contextually?</strong></td>
<td></td>
</tr>
<tr>
<td>____1. Are new concepts presented in real-life (outside the classroom) situations and experiences that are familiar to the student?</td>
<td></td>
</tr>
<tr>
<td>____2. Are concepts in examples and student exercises presented in the context of their use?</td>
<td></td>
</tr>
<tr>
<td>____3. Are new concepts presented in the context of what the student already knows?</td>
<td></td>
</tr>
<tr>
<td>____4. Do examples and student exercises include many real, believable problem-solving situations that students can recognize as being important to their current or possible future lives?</td>
<td></td>
</tr>
<tr>
<td>____5. Do examples and student exercises cultivate an attitude that says, “I need to learn this”?</td>
<td></td>
</tr>
<tr>
<td>____6. Do students gather and analyze their own data as they are guided in discovery of the important concepts?</td>
<td></td>
</tr>
<tr>
<td>____7. Are opportunities presented for students to gather and analyze their own data for enrichment and extension?</td>
<td></td>
</tr>
<tr>
<td>____8. Do lessons and activities encourage the student to apply concepts and information in useful contexts, projecting the student into imagined futures (e.g., possible careers) and unfamiliar locations (e.g., workplaces)?</td>
<td></td>
</tr>
<tr>
<td>____9. Are students expected to participate regularly in interactive groups where sharing, communicating, and responding to the important concepts and decision-making occur?</td>
<td></td>
</tr>
<tr>
<td>____10. Do lessons, exercises, and labs improve students’ written and oral communication skills in addition to mathematical reasoning and achievement?</td>
<td></td>
</tr>
</tbody>
</table>
**Scoring Key:**

A perfect score of ten check marks (✓) for all the ten items indicates that you have a very good knowledge of contextual learning. You also possess the necessary contextual learning skills to apply them in your instruction. You can be considered an expert in contextualization of instruction in the classroom.

A score from six to nine check marks (✓) indicates that you have good knowledge and skills about contextual learning. There is still room for improvement with respect to contextualizing your lessons in the classroom.

A score of five check marks (✓) or less indicates that you have very little knowledge and skills about contextual learning. You need to spend more time acquiring the necessary knowledge and skills to apply the principles of contextual learning in your instruction.

**Feedback**

How many check marks (✓) did you obtain? Are you satisfied with your score? If not, how can you further improve the way you contextualize your teaching to local situations? What is the best way to convey the many concepts for the subject that you teach so that all your students can use and retain that information? How can you inter-relate all the individual lessons to ensure your students’ understanding? How can you address your students’ enquiries with respect to the reason for, the meaning of, and the relevance of what they study? Write your reflections to these questions on the lines given below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

The score you obtained in Activity 2.13 is a useful indicator of the various kinds of challenges that you face in your classroom each day. Perhaps one of the ways to overcome these challenges is to give due consideration to some of the contextual teaching and learning strategies discussed in the section which follows.
Let’s Read

Strategies in Contextualizing Teaching and Learning to Local Situations

Globally and in recent years, educators and education researchers have been challenged to re-examine existing knowledge of how students learn, how teachers teach, and find strategies to produce higher student achievement in the classroom. As they embark on their studies, they are trying to find answers to questions such as: “What is the best way for teachers to impart the concepts of a particular subject to ensure that all students are able to use and retain what they have learned?” “How can students best understand and interconnect individual lessons so as to derive meaning from them?” “How can teachers communicate effectively with students who question the relevance of what they learn?”

Evolving research findings have created new pedagogies in our present day 21st century classrooms. One such pedagogy that 21st century facilitators of learning consider as highly effective is contextual teaching and learning (CTL), sometimes defined by theorists as “scientific constructivism.”

What are the underlying principles of CTL? Read some of these principles as outlined below (Texas Collaborative for Teaching Excellence, 2010):

• Learning occurs when students process new information in such a way as to establish a connection to their own existing frame of reference (their own inner world of memory, experience, and response). For example, you are teaching the topic “velocity” in your science class. Instead of teaching students how to solve velocity problems, you can ask them to experiment with paper airplanes, measure heights and distances, and then produce a graph. They can then discuss the graphs and make predictions. When they are able to make connections with some aspects of their lives, learning is more likely to occur.

• The human mind naturally seeks meaning in context, or the environment where the person is located. This search for meaning occurs through searching for relationships that make sense and are meaningful. For example, in addition to the airplane experiment,
you take your students for a field trip to the local bus or train or cab stations. They can calculate and make comparisons of velocity when they travel the same distance using the three different modes of transportation.

• Learning must be designed in such a way that students can carry out activities and solve problems that are characteristic of such tasks in real situations in daily life. For example, as an alternative to the field trip, you can have your students do group activity to enact the topic of “velocity.” Each group drops a number of objects from the same distance and measure the time taken for each object to fall to the ground. They then calculate the velocity for each object. At the end of the group activity, the students share their new learning experiences.

Using the above principles, curricula and instruction should be designed and structured to encompass the five essential ways of using CTL, namely: Relating, Experiencing, Applying, Cooperating, and Transferring to comprise the acronym REACT [Center for Occupational Research and Development (CORD), 2010]. We will now briefly examine each of these forms.

(i) Relating – Linking the concept to be learned with something the student already knows. For example: When teaching about “houses,” ask students to name different kinds of houses that they see around them such as terrace houses, semi-detached houses, bungalows, flats, apartments, condominiums, and so on. Students’ attention is focused to everyday sights, events, and conditions. When they are able to relate to these everyday situations, new information is better absorbed.

(ii) Experiencing – Hands-on activities and teacher explanation allow students to discover new knowledge. For example: When teaching about parts of a house, assign students a small group project such as making a model house complete with roof, walls, floor, rooms, and mini-furniture. Learning takes place far more quickly when students are given opportunities to manipulate equipment and materials as well as to do referencing to obtain the relevant information to complete the given project.
(iii) **Applying** - Students apply their knowledge to real-world situations. For example: Ask students to name house-related professions. Their list could include: architect, interior decorator, bricklayer, floor tiler, electrician, sanitation worker, and so on. This allows students to project into an imagined future or into an unfamiliar workplace.

(iv) **Cooperating** - Students solve problems as a team to reinforce knowledge and develop cooperating skills. For example: In small groups, ask students to discuss ways to safeguard their houses from fire, floods, break-ins, termite destruction, and so on. The collaborative experience and practice that is nurtured in the classroom not only assists them to learn new material; it also helps them in the workplace where employees who are team players, information sharers, and effective communicators are a valuable asset to the organization.

(v) **Transferring** - Students take what they have learned and apply it to new situations and contexts. For example: Ask students to engage in problem-solving a situation where sink holes appear in the living room, water marks on the bathroom ceiling, clogged drains, and so on. This is similar to relating as it calls upon the familiar. Students will thus become more confident in their problem-solving skills and abilities when they go out into the world of work later on in their lives.

We have just learned that CTL helps students relate subject matter to real-life situations thus motivating them to make the necessary links between knowledge and its applications to their respective roles in the family, community, and society. How can this concept be translated into contextual teaching and learning strategies? Some of these strategies that will be discussed below include problem-based; using multiple contexts; drawing upon student diversity; supporting self-regulated learning; using interdependent learning groups; and employing authentic assessment (TeachNET, 2010).
Problem-based

A lesson that utilizes contextual teaching and learning can start with a simulated or real problem that is drawn from your students’ experience and related to their family, school, classroom, or community. They are required to use critical thinking skills to address the problem or issue concerned. Alternatively, they may fall back on multiple content areas to solve the problem.

For example, when teaching about the topic, “Managing Conflict,” you can ask your students to relate conflict-related experiences with their peers, parents, siblings, and friends. They then review how countries solve racial conflicts in their history classes; read about the different modes for managing interpersonal conflict in social psychology books; or hold a discussion forum during a language class to discuss ways of managing conflict.

Using multiple contexts

You probably would have read from situated knowledge that knowledge should not be differentiated from the physical or social contexts in which it exists. Thus “how” and “where” your students acquire and create knowledge is crucial if learning is to take place. Contextual teaching and learning is enhanced when you introduce different contexts for them to acquire different skills. For example, for the topic on “Managing Conflict,” students learn that interpersonal conflict is unavoidable when we interact with other people. Hence, we will encounter people whose ideas, beliefs, values, opinions, and perceptions are in conflict with ours in the family, classroom, school, community, and so on.

Drawing upon student diversity

As you may have observed, the student population in our schools has become more diverse. Inevitably, this increase in student diversity sprouts differences in values, social mores, social norms, and perspectives. On a positive note, these differences can be the catalyst that can enrich contextual teaching and learning. For example, when you divide students into groups for teamwork activities, distribute them equally based on cognitive ability, ethnicity, family background, and so on. Teamwork and group learning activities respect cultural and personal diversities, widen perspectives, and promote interpersonal skills.
Supporting self-regulated learning

Emphasize to your students that they are to become lifelong learners who have the ability to discover, analyze, and use information independently. For this to happen, they need knowledge and skills in information-processing and problem-solving. The strategies you select for contextual teaching and learning must allow for trial and error, and reflection. As a teacher, you also need to provide technical and moral support as your students move from dependent to independent learning. For example, the simulated activity or problem you introduce in your classroom should affirm the components of self-regulated learning, that is, self-appraisal (students analyze their own learning styles, evaluate their own understanding, and monitor their learning); self-management (students manage their time and resources wisely to achieve goals, and use “failure” constructively); and sustained motivation (students blend their skill and will with self-directed actions, and self-perception of ability to accomplish the task).

Using interdependent learning groups

When you use learning groups, your students will be influenced by, as well as contribute to, the knowledge, beliefs, and values of the other group members. Your role is to act as a coach, facilitator, and mentor. Examples of learning groups that you can form in your contextual teaching and learning classroom are peer tutors, peer coaches, and buddy support groups for mutual knowledge-sharing, goal focussing, and collaborative teaching and learning.

Employing authentic assessment

The aim of contextual teaching and learning is to build students’ knowledge and skills in meaningful ways through their involvement in real life or authentic contexts. Learning assessment should synchronize with predetermined instructional aims, objectives, goals and outcomes. Hence, rather than the traditional standardized pencil-and-paper tests, authentic assessment is used. This form of assessment demonstrates that learning has taken place, blends into the instructional process, provides students with opportunities and direction for improvement, keeps track of student progress, and informs teaching practices used in the classroom. Examples of authentic assessment include the use of a learning portfolio (a collection of a student’s work); project (students work in groups to create a project that...
may involve multimedia, oral and written presentations, and a display); experiment (students illustrate a procedure, perform the necessary steps to complete a task, and document the results of the actions); writing samples (individual students produce a narrative, expository, persuasive, or reference paper); and so on.

In most schools and classrooms, most of the strategies just discussed are being used by teachers to promote inquiry, enhance critical thinking, creative problem-solving, and other higher order thinking skills. More and more teachers have come to realize the role that CTL plays in helping students acquire 21st century skills.

**Let’s Think About This**

You have been approached by Mr. Taufik, a first-year teacher in your school, about how to use contextual teaching and learning to conduct a lesson on “recycling” in a sixth grade Environmental Science class. Using the REACT (Relating, Experiencing, Applying, Cooperating and Transferring) approach of implementing CTL, write down the ideas that you shared with Mr. Taufik on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

**Feedback**

Compare your answers with mine in the *Key to Correction* on pages 197-198. Do bear in mind that your ideas may not be worded exactly as mine. As long as the ideas are similar, your answers are correct. How did you fare? Are you confident of using the REACT ways of teaching contextually in your classroom? Good. If not, do go back to the precious section discussing CTL and REACT and revise your answers accordingly.

In sum, you have just learned that in a CTL environment, students discover meaningful connections between abstract concepts and practical applications in the real world context. The internalization of such concepts takes place through discovery, reinforcement, and interrelationships.
On this basis, teamwork is a predominant feature of contextual teaching and learning in multiple contexts such as the classroom, science laboratory, music room, life skills workshops, in the playing field, or even under a tree. For this reason, teacher educators and teachers are called to design learning environments that integrate different forms and type of experiences to accomplish the desired student learning outcomes.

As a facilitator of 21st century learning, are you ready to respond to this call for action? If so, join the race now.

Congratulations! You have successfully completed Lesson Two of this module that equipped you with the competencies needed to facilitate your students’ 21st century learning.

Let’s Remember

In this lesson, you learned that:

- The four types of teaching styles are assertive, suggestive, collaborative, and facilitative and situated on a continuum ranging from teacher-centred to learner-centred.

- The characteristics of a facilitative teacher is divided into two domains: (i) cognitive domain (content knowledge, and pedagogical knowledge), and (ii) affective domain (attentive, communicative, understanding, genuine, and respectful).

- The four common learning styles are: visual, aural, reading/writing, and kinaesthetic/tactile.

- Active learning is any activity that involves students in doing things and thinking about what they are doing.

- Bloom’s Taxonomy categorizes thinking into six levels in ascending order, that is, knowledge, comprehension, application, analysis, synthesis, and evaluation. The categorization for Revised Bloom’s Taxonomy’s is: remembering, understanding, applying, analyzing, evaluating, and creating.
• Improving teacher questioning and reacting skills enhances student achievement and attainment.

• Teachers should use both open-ended and close-ended questions in their teaching.

• Contextualized teaching promotes learning for use in the outside world of the school and classroom.

• Contextual learning strategies encompass five essential forms of learning, that is, reacting, experiencing, applying, cooperating, and transferring.

How Much Have You Learned From This Lesson?

Let us now examine how much you have learned after completing Lesson Two.

1. Ms. Alana demonstrates the following teaching behaviors in her instruction:
   • She allows her students to make decisions in solving a learning task.
   • She maintains the role of an observer when her students engage in group work.
   • She creates opportunities for her students to express their feelings.

What is the teaching style characterized by the above teaching behaviors?

a. Collaborative
b. Assertive
c. Suggestive
d. Facilitative
2. Mr. Almeida has assigned his students to write an essay explaining the impact of the use of the atomic bomb during World War II. Which cognitive level of the Revised Bloom’s Taxonomy is best illustrated by this assignment?
   a. Analysis
   b. Application
   c. Comprehension
   d. Knowledge

3. Mr. Ananda is teaching about air transport. He asks his students to name jobs related to the airline industry. Based on the REACT forms of learning in contextual teaching and learning, which of the following corresponds to Mr. Ananda’s learning task?
   a. Relating
   b. Experiencing
   c. Applying
   d. Cooperating

4. In order to find out more about the learning styles of four students who seem to lag behind in your class, you asked them to write down how they study their lessons. Below are the learning strategies said students wrote. How would you classify each student in terms of their dominant learning styles? Write your answer on the corresponding space provided.

<table>
<thead>
<tr>
<th>Student</th>
<th>Learning Strategies</th>
<th>Dominant Learning Style</th>
</tr>
</thead>
</table>
| A       | I repeatedly write out important information.  
         | I read notes silently.  
         | I use statements to organize diagrams.  
         | I rewrite ideas and principles in words. |
| B       | I attend lectures and tutorials.  
         | I discuss topics with my teacher and other students.  
         | I make a summary of notes, put them on tape, and listen to them. | |
| C       | I read aloud from textbooks and notes.  
         | I listen to audio-taped notes while doing exercises.  
         | I learn better through field trips, exhibits, collectibles, and hands-on examples. |
5. At intermediate intervals during her Social Science class, Mr. Nuruddin stops and asks questions such as “What have you understood of the lesson, so far?” , “What do you perceive as important facts that I have discussed in the last 10 minutes?” What are some possible reasons that Mr. Nuruddin asks questions like those?

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

6. Mrs. Contessa, a new teacher, invited you to visit her class for feedback. You found her dishing out questions mainly answerable by a Yes or a No. What professional advice can you offer Mrs. Contessa to improve her questioning skills in the classroom?

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

7. In the staffroom, one day, Mr. Kusomo, a novice teacher, walks up to Mrs. Ngu, a senior teacher and asks her two questions:
   (a) What is active learning?
   (b) How can students become actively involved with subject content?

   If you were Mrs. Ngu, how would you answer Mr. Kusomo’s questions?

______________________________________________________________
______________________________________________________________
______________________________________________________________
8. After attending a one-day course on Higher Order Thinking Skills, Ms. Thanh is asked by two other teachers about the Revised Bloom’s Taxonomy and how higher order thinking can be integrated in teaching. What would be Ms. Thanh’s answer?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

9. After a science lesson, Ms. Bong walks out of the classroom looking rather upset. She meets Mr. Budin in the corridor and tells him that her students made a comment that her questions are too easy. If you were Mr. Budin, what advice would you give Ms. Bong?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

10. Contextual teaching and learning (CTL) helps students to relate subject matter to real-life situations. Enumerate and explain the CTL strategies that you can apply in your class.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Feedback

To check your answers, please turn to pages 199-204.

If you correctly answered all the ten questions, congratulations! It means that you clearly know how to carry out your role as a facilitator of 21st-century learning.

If you got seven to nine correct answers, you are still doing alright; just review the item/s you missed. If you managed to obtain six or less correct answers, you need to go back to all the lesson topics and discussions once more. Then write out the correct answers for the items you missed.

Now that you have already acquired the knowledge, skills, attitudes, and values needed to effectively facilitate your students’ learning, you may now proceed to Lesson Three in which you will examine in greater detail how you will play your role as a manager in your 21st century classroom. You will learn effective communication skills to enable you to interact with your students at their level. In addition, you will also design a classroom management plan to promote a conducive learning environment.
What Is This Lesson About?

In the first two lessons you have learned about your emerging roles in the 21st century as a subject matter expert, as well as a facilitator of learning. There is yet another equally important role for you - that of a classroom manager who is responsible for providing a conducive learning environment for 21st century teaching and learning.

What does this role entail? What does it mean to manage the classroom? As you will agree, classroom management is the primary task of a teacher, and a very difficult one, too. Ask any student teacher or beginning teacher about this, and you can be sure most of them will tell you the problems they face regarding classroom management.

The traditional view of classroom management focused on creating and implementing classroom rules and procedures to control students’ behavior. The newer perspective, however, emphasizes students’ engagement in learning through active participation and teamwork in learning tasks and activities. Another crucial element is the importance of nurturing teacher-student relationships through effective communication.

In educational circles, it is commonly said that good classroom management is always taken for granted until it is missing. When teachers manage classrooms effectively, instruction runs smoothly and students are actively engaged in learning. In contrast, if teachers manage their classrooms poorly, instruction becomes chaotic and learning is compromised. In short, effective classroom management maximizes children’s learning opportunities.
Similarly, the term “learning environment,” in our 21st century schools does not need to be confined to a place and space, such as a school, a classroom, a library, or a laboratory - it can be virtual, online, and remote. In our present day terminology, “learning environments” mean contexts that promote interaction and a sense of community that enable formal and informal learning. These contexts do not only refer to physical spaces and technological systems, but also to the way they support human relationships that feature significantly in enabling the multiple and interrelated learning needs of the whole child.

This lesson will help you answer the following questions:

- What are the strategies that promote students’ participation and collaboration in classroom activities?
- How will I evaluate my own strengths and areas of growth in communicating at my students’ level?
- How will I create a classroom management plan toward promoting a conducive learning environment?

As you read the scenarios described in this lesson, there is a likelihood you will find them similar to the ones you encounter in your classroom. Do not be unduly concerned as this similarity will help you better understand the principles underlying the key concepts related to this topic.

**What Will You Learn?**

After studying this lesson, you should be able to:

- Analyze strategies that promote students’ participation and collaboration in classroom activities.
- Evaluate your own strengths and areas for growth in communicating at your students’ level.
- Create a classroom management plan toward promoting a conducive learning environment.
As you explore various aspects of managing the classroom, you will realize the importance of consultation and collaboration with your colleagues to help you improve your classroom managerial skills. We will begin our study of effective classroom management by examining some strategies that promote students’ participation and collaboration in classroom activities.

Let’s Try This (Activity 3.1)

Increasingly, information technology seems to be occupying a significant place in our students’ lives. Cognizant of this, teachers are incorporating technologies such as e-mail discussion into their learning tasks. Read about Mrs. Premala, an English teacher in a tenth grade classroom, who is using this technological tool in her writing classroom. The snippet below is an e-mail that she has posted to her students.

My dear students,

Here is the case for your argumentative writing task. You may initiate your discussion via e-mail. Remember to copy or “cc” your e-mail messages to me. The timeline for this exercise is one week from today.

Case:
In the last few weeks, there has been a heated debate about the issue of “English Language” in the “Letters To The Editor” column in English dailies. Some readers opine that mathematics and science in all local public schools should be taught in the English Language to produce students who are at par with their global counterparts. However, certain quarters disagree and call for a public poll to be conducted on this issue. The editor of one of the national tabloids is calling for readers’ opinions. Suppose you are writing for the readers’ opinion column. Take one of the positions above, and give him your opinion.

Guidelines:
1. Begin by developing a paragraph to include the topic sentence, supporting sentences, and a concluding sentence.
2. Discuss the writing task in No. 1 with a partner, and then in groups of four. Find your own partner and group members.
3. Develop one complete paragraph as an example for your partner and group members to review.
Enjoy your discussion. I am looking forward to reading your responses.

Best wishes,
Mrs. Premala

Reflect on what you have read and answer the following questions.

1. By sending the learning task to her students via e-mail, what kind of a learning environment is Mrs. Premala fostering – teacher-centered or student-centered? Give reasons for your answer.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. What type of student interaction does the learning task require?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Feedback

In accomplishing the previous activity, you probably realized that by incorporating the writing process, pair work activity, and small group discussion in her learning task, Mrs. Premala fostered a collaborative learning environment in her classroom. By posting the assigned task online and requiring her students to initiate their discussion via e-mail, she did not only enhance their computer literacy and writing skills, but also promoted student communication, participation, and collaboration. In accomplishing these tasks, they are likely to venture into new and unexplored territories of knowledge and experiences. Read on to find out more about other teaching strategies besides what Mrs. Premala used, which may have the same, if not better, educational benefits for your students.
Let’s Study

Strategies for Promoting Students’ Participation and Collaboration in Classroom Activities

Students learn by doing, making, writing, designing, creating, and solving problems. If your students sit in class passively, it certainly dampens their motivation and stifles their curiosity. Therefore, you need to pose questions. Try not to tell them something when you can actually ask them. Encourage your students to work in small groups to suggest approaches to a problem or to guess the results of an experiment. In other words, make them actively involved or engaged in the instruction process.

In the following discussion, you will explore some useful strategies for enhancing student learning through the following student behaviors:

A. Active Participation in Classroom Activities

B. Student Collaboration in Classroom Activities

To start off, you will examine how you can promote active participation among your students in classroom activities.

A. Active Participation in Classroom Activities

Have you ever “caught” some of your students not paying attention in your class? Having private conversations? Sending text messages? We all know too well that if students are not engaged by what is going on during instruction, they will definitely do something else that interests them.

Getting all your students focused, eager, and on-task at the beginning of class is indeed a challenging task. It is natural for students who are “required” to sit through a long routine, such as a lesson presentation, to take time off at one point or other of the lesson.

However, it is important that you succeed in capturing and sustaining your students’ focus throughout the lesson so that your teaching will “run” smoothly without any disruptions. Students’ lack of engagement is sometimes known as “dead time” as it hinders their learning. The downside is that it is contagious and will make those students who are on task to ask,
“Why should I be paying attention when some of my friends are not?”
Active learning and listening, which translates to active student participation in classroom activities, is the entire opposite of “dead time.” Interestingly, students can be grouped into four levels of student engagement or participation in class:

- Level 1: fully active learners
- Level 2: responsible students
- Level 3: halfhearted workers
- Level 4: work-avoiders

As a teacher, you must be aware that students face challenges if a lesson is entirely teacher-centred. However, you might also experience difficulty with project-learning tasks, especially when the students are not familiar with this strategy that requires them to be independent self-learners. How can you, then, ensure that you can resolve the “dead time” issue and turn your students into active participants in your classroom?

An important step is to accumulate a repertoire of activities that allow your students to learn by exploiting their multiple intelligences beyond the traditional listening and recalling exercises. Some examples are physical activities that allow your students to let loose repressed energy; reflective activities that promote introspection or private thinking; and small-group activities that enhance interpersonal communication.

Try the eight ways to energize your students at the beginning of class and re-energize them midway of the lesson when attention wanes (De Frondeville, 2009). The first four are as follows:

1. **Start Class with a Mind Warm-Up**

   In small groups of three, ask the students to work together quietly and raise their hands when they think they have found all the mistakes embedded in material on the board. When the first team announces they have got the answer, allocate extra time for teams to show with their fingers -- together on the count of three -- the number of mistakes they find in the work. The team that finds the most describes their answers until another team disagrees politely or until they have all completed the activity.
2. **Use Movement to Get Kids Focused**
   
   Ask all students to stand behind their desks and join in simple choreographed physical movement, e.g., hand clapping to a mathematics formula, foot stomping with hand clapping, and finger snapping and hand clapping.

3. **Teach Students How to Collaborate Before Expecting Success**
   
   Give students prior training in project-based tasks. One way is to give each group a pair of scissors, two sheets of paper, ten paper clips, and a 10-inch piece of tape, and ask them to build the tallest free-standing tower in 20 minutes. Have half of the groups build towers with the given materials, while the other half stand around them in a circular “fishbowl” as silent observers.

   Debrief afterwards, and train the observers to give a positive comment before a critical one: “I liked that they ... , but I wonder if they could have also ....” Switch the observers with the tower builders and see if they can do better, then debrief again.

4. **Use Quickwrites When you Want Quiet Time and Student Reflection**
   
   When interest is waning in your presentations, or you want to settle students down after a noisy teamwork activity, ask them to do a quickwrite, or short journal-writing assignment. Give prompts, “What was most interesting about ...?” “Summarize what you have heard.”

---

**Let’s Think About This**

What are your thoughts regarding the first four strategies for promoting students’ participation and collaboration that you have just learned? Do you think that you can now apply them to your classroom teaching? Why or why not?

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________
Let’s Study

Are you now ready to continue learning the rest of the strategies in promoting students’ participation and collaboration in classroom activities? Then, proceed.

5. Use a Fairness Cup to Keep Students Thinking

Write each student’s name on a Popsicle stick and put the sticks in a cup. To keep students on their toes, pull a random stick to choose someone to speak or answer a question.

Important: When you begin using your fairness cup, prepare a range of questions, some of which all your students can successfully answer. This strategy allows the bottom third of your class to get involved and answer questions without being put on the spot.

6. Use Signaling to Allow Everyone to Answer Your Question

Regularly ask questions to which everyone must prepare at least one answer -- letting them know you expect an answer. Then wait for all students to signal they are ready.

For example: To review a presentation, ask the question, “How many key points of this presentation are you prepared to describe?”

When you ask questions that allow for multiple answers or explanations, you are differentiating instruction; all your students are expected to come up with at least one answer, although some may come up with more.

7. Use Minimal-Supervision Tasks to Squeeze Dead Time Out of Regular Routines

Tasks that require minimal supervision come in handy when passing out papers, working with a small group of students, handling an unforeseen interruption, addressing students who did not do their homework, or providing work to those who have finished an assignment before others. Ask students to pair up and quiz each other on vocabulary words from a review sheet, summarize a reading passage, read the day’s assignment ahead of time, or create and study vocabulary words or other content.
8. Mix up Your Teaching Styles

To keep students involved and on their toes, try to move from teacher-centred learning to student-centered active learning, and vice versa.

For example: Introduce a presentation by having students pair up, talk to each other about their prior knowledge of the presentation, and generate a list of four questions for which they will want to know the answers. Make quick rounds to remind all students to stay on task.

Let's Think About This

What do you think are the advantages of these strategies? What are the disadvantages? How can you overcome these? Write your answers on the space below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Let's Read

Covert and Overt Engagement Strategies

Do you know about covert and overt engagement strategies? If yes, well and good. If not, it’s about time you do because experts in education recommend that teachers use both covert and overt active engagement strategies to establish and develop professional links with their students and help them enhance their intrinsic motivation to succeed. Student engagement in their own learning helps reduce the occurrence of behavior problems in the classroom.

The table on the next page summarizes the defining characteristics of covert and overt active engagement strategies:
## Characteristics of Covert and Overt Engagement Strategies

<table>
<thead>
<tr>
<th>Covert engagement strategies</th>
<th>Overt engagement strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not observable, but have the ability to make students accountable for their learning</td>
<td>• Both observable and measurable by the classroom teacher</td>
</tr>
<tr>
<td>• Students engage in various thinking processes, such as: imagining, thinking, picturing, remembering, visualizing, reflecting, pondering, or even creating a mind movie</td>
<td>• Can be used as an informal formative assessment as it provides the teacher with immediate feedback about the students’ comprehension of a lesson taught</td>
</tr>
<tr>
<td>• Essential for any given lesson as they provide time for students to think about the teacher’s questions before they are engaged in an overt activity</td>
<td></td>
</tr>
</tbody>
</table>

Can you distinguish activities that involve covert engagement strategies from those that involve overt strategies? Study the activities that follow and identify covert engagement strategies and overt engagement strategies.

### 1. Brain Drain

This is an activity that includes both overt and covert active participation. Teachers can use this strategy to informally evaluate students’ understanding before, during, and/or after a unit of study.

• Provide students with a short story to read and then ask them to reflect on what they learned from the story.

• Conduct this activity called think-mix-pair-share. First tell them to move around the classroom for a few seconds. When you call “pair,” students pair up and share three new facts they learned from the story. You then repeat the process several times.

• After your students have mixed and shared a couple of times, have them “drain their brain” of facts they learned from the story. You can do this by asking them to list the facts on paper in a limited amount of time.
Upon completion of this activity, you will find that all your students' comprehension of the story will improve. Your students have been given the opportunity to organize their thoughts, facts, and ideas before performing an assessment.

What covert engagement strategies are used in the activity? Write your answers on the lines.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

What are the overt strategies used?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

2. Find the Question

This active participation strategy is one way of checking for student understanding, as well as getting students involved and excited about their learning! Follow the steps explained below.

• Ask your students to read the given short story.
• You prepare a list of questions and answers.
• Each sheet of paper has an answer on top with a number and on the bottom of the paper is a question with a letter.
• Have your students write the number of answers in the game on a piece of paper before beginning to play. They will use this paper to record their matches of answers and questions.
• Post the pages on the walls in the classroom or outdoors, where appropriate.
• Tell your students that to play the game, they are to go to a page, look at the answer on top, and search for the corresponding question. When they have found the question, they place the letter of the question next to the number of the answer.
• The game is over for your student when he or she has a letter next to every number. You can quickly check for accuracy.
• This game can be played individually or in pairs. If working with a partner, the two of them must stay together while playing.
Facilitating 21st Century Learning

What covert engagement strategies are used in *Find the Question*?

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

What are the overt strategies used?

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Feedback

Were you able to identify the covert and overt engagement strategies? Compare your answers with mine below:

<table>
<thead>
<tr>
<th>Brain Drain</th>
<th>Covert Engagement Strategies</th>
<th>Overt Engagement Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The students reflected on what they learned from the story.</td>
<td>• The students read the story.</td>
</tr>
<tr>
<td></td>
<td>• The students “drained their brain” or thought really hard about the facts they learned</td>
<td>• The students shared three new facts they learned from the story.</td>
</tr>
<tr>
<td></td>
<td>from the story.</td>
<td>• The students listed the facts they learned on a paper within a limited period of time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Find the Question</th>
<th>Covert Engagement Strategies</th>
<th>Overt Engagement Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The students understand the story while reading.</td>
<td>• The students read a story.</td>
</tr>
<tr>
<td></td>
<td>• The students think of the answers and questions combination.</td>
<td>• The students write the number of answers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The students search for questions corresponding to the answer.</td>
</tr>
</tbody>
</table>

If you were able to correctly distinguish between covert and overt strategies, you have done well! In your classroom lessons, it would be best if you integrated both covert and overt strategies, as you would be able to make your students accountable and responsible for their own learning. Besides, it also provides you with an informal assessment of your students’ understanding with respect to what you have taught.
Let’s Try This (Activity 3.2)

You have just been introduced to different classroom activities that will engage your students in active participation in the classroom. Based on a unit for the subject you teach, use one of these student engagement activities in your classroom, and then answer the following questions:

1. What student engagement activity did you use?  
   ________________________________________________________________  
   ________________________________________________________________  
   ________________________________________________________________

2. Ask your students for their feedback. Was it effective in getting your students actively involved?  
   ________________________________________________________________  
   ________________________________________________________________  
   ________________________________________________________________

Share your answers with your co-learners and Flexible Learning Tutor.

Let’s Think About This

You will probably agree that building a collection of varied active learning activities that encourage student engagement is a great educational advantage. At the least, you will never feel helpless when you find your students off-track and wandering off into the “dead time” zone. In fact, you can be assured that once your students become acquainted with these activities, they will be looking forward to them in your classroom. You can use them not only at the beginning of the lesson to captivate your students’ attention, but also at any other time during the lesson to draw their focus back to what you are teaching.

Now that you have studied how you can enhance student learning through their active participation in classroom activities, you might be interested to find out how you can also promote their collaboration in the learning tasks you assign them. If so, read the next section to gain insights on how you can achieve this.
Let’s Try This (Activity 3.3)

Imagine that you are a student in each of the three classroom situations below.

**Situation 1**

Mr. Suresh announces to your class, “Let us find out which of you can learn the most in this week’s class on global warming. The three students with the highest scores on Friday’s short test will be given free tickets to the Search concert.” It is common knowledge to everyone in your class that Search is the latest most popular local musical group. You would give your last money to hear them perform but, unfortunately, the concert tickets have been sold out since last year.

**Situation 2**

Ms. Edith starts her lesson in this manner: “Let me see whether each of you can learn all about global warming this week. If you can get a score of at least 90 percent on this Friday’s short test, then you will be given a free ticket to the Search concert.”

**Situation 3**

Mrs. Adilah introduces her lesson with this statement: “Today we will begin to study about global warming. Let us see how many students can get scores of 90 percent or even higher on Friday’s short test. I would like you to work in groups of four to help one another better learn the material. If all the four members of a group score at least 90 percent on the test, then that group will get free tickets to the Search concert.”

Reflect on the classroom strategy employed by each of the three teachers, Mr. Suresh, Ms. Edith, and Mrs. Adilah. Which of the teaching strategies used might have succeeded in motivating you to work hard to get the free ticket to the Search concert? Why? Write your answers on the space provided.

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Share your reflections with your co-learners and Flexible Learning Tutor.
Let’s Think About This

As you read about the three classroom situations in Activity 3.3, you must have realized that in the first two classrooms, you would have to work independently in order to meet the criteria for a free ticket. Let us analyze each of the three classroom situations.

If you are a weak student in Mr. Suresh’s class, you will not make much effort as you know you stand a very slim chance of securing one of the three free concert tickets offered.

If you are an average student in Ms. Edith’s class, you might double up your effort and see if you can make the 90 percent score to be rewarded with the free concert tickets out for grabs.

If you are in Mrs. Adilah’s class, you realize that your going to the concert is largely a concerted effort among the four of you in the group. If you and your group are really keen on going to the concert, all four of you will work hard individually and collectively to help one another. This kind of learning, known as collaborative learning, is different from individual learning that is found in Mr. Suresh’s and Ms. Edith’s classroom.

In your class, have you experienced engaging students in collaborative learning? How did your students react to this way of learning? Share your experiences using this teaching strategy in the space provided below. Also, you may discuss your answer with your co-learners and Flexible Learning Tutor.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

In the following discussion, you will read more about this type of learning that contributes to a higher success rate in student learning and achievement. As the saying goes, “Two heads are better than one.”
Let’s Study

B. Student Collaboration in Classroom Activities

In the previous section, you learned that students learn best when they are actively involved in the instruction process, or what is commonly termed as active participation. This is in line with the reconceptualization of learning in the 21st century from a linear process of individual knowledge acquisition to a socially-enabled developmental process. If learning is believed to be a social process, then collaborative learning fits aptly into this redefinition as it is a social process that affirms your students’ development of capabilities to learn interdependently with their peers, rather than dependently on their teacher. The teacher’s role shifts from being a dispenser of knowledge to that of an architect and facilitator of learning experiences.

Based on your experience, how are collaborative learning activities staged? Write your answers on the lines below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

There are several options to choose from depending on the size of the problem or project concerned:

• **Instant** – Requires student collaboration within the time allocation for the lesson. For example: Students engage in paired activity to write out the conclusion for a science experiment they have done, or a demonstration shown by the science teacher

• **Medium-scale** – Requires several days to several weeks duration. For example: Students work in small groups on an assignment that requires material referencing, oral presentation, and written report submission.
• **Big-scale** – Requires a semester-long duration. For example: Students collaborate to produce a term or position paper that may involve preparing a proposal, field work, data analysis, oral presentation of findings, and final report submission.

**Let’s Think About This**

Collaborative learning activities can take two forms. Conventionally, students meet physically in their small groups according to a fixed schedule or at random intervals to work at, or collaboratively give an oral report of the learning task in progress. Alternatively, students can “meet virtually” to post individual work online, discuss and give feedback through mediating technologies via the Web. If you recall, Mrs. Premala chose the second option for her argumentative writing task where she had her students form virtual pairs and small groups of four. Each of the collaborative e-mail discussions was also made visible to other student pairs and groups as they were posted on the Web. This knowledge and awareness of peer examining and reviewing their work is likely to motivate many students to commit themselves more diligently to task responsibilities.

Perhaps you would take a few moments to reflect on how you have been using collaborative groups for a unit topic in your classroom. Write your reflections on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Based on your classroom experience with collaborative groups, how has it helped to develop your students’ potential for learning? Share your ideas below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Now compare your ideas with what research findings reveal about collaboration.
Collaborative Learning

Collaborative learning acts as an enabler of student learning as evidenced from empirical studies. Regardless of subject matter, students who are exposed to collaborative learning activities in the classroom were found to learn more effectively and retain the information learned much longer when compared with other instructional strategies. In addition, they were reported to be more satisfied with their learning.

If you review literature related to collaborative groups, you will find that it is known by various names, such as cooperative learning, collective learning, learning communities, peer teaching, peer learning, reciprocal learning, team learning, study circles, study groups, and work groups. If you examine each of these terms, you will find there is a slight distinction among them. However, they all have one common feature, that is, the group members work collaboratively to complete a specific task, such as, writing a report, carrying out a project or preparing a position paper, or solving a problem.

Basically there are four essential elements in the collaborative learning approach:

1. Collaborative learning is based on the idea that learning is a naturally social process where the participants talk among themselves. For example, students turn to a classmate sitting beside them or form groups of four and spend ten minutes discussing possible answers for a problem you posed regarding the topic taught. It is through this dialogue that learning takes place. This social exchange stimulates a variety of activities including exploration, clarification, shared interpretation, revelation of differences of perception and interpretation, illustration, expression of doubt, explanation through verbal and nonverbal cues, and so on.

2. Collaborative learning regards knowledge as the common property of a group where facilitators and participants are engaged in a mutual search for understanding. This search has the potential to unravel intellectual and social synergy of the concerned parties. For example: Your students form groups to discuss the feasibility of having a roofed walkway...
constructed from the school building to the canteen situated on another part of the school grounds, with you as the facilitator. This issue of the school canteen affects both parties who will collaborate and synergize their ideas to find mutually satisfying possible solutions.

3. Collaborative learning shifts the locus of authority from the traditional teacher to the dynamic learning community, in this context, the classroom. The final result of this stimulating interdependence is a more autonomous, articulate, and socially and intellectually mature learning community. For example: Students form study teams for a whole semester or schooling year to work on a big project such as proposing a pre-school annexed to their school. Besides fostering collaborative skills, this project, which involves field work for data collection, also promotes communication skills with relevant interested parties such as parents and the local community, education officials, and so on. Ultimately, this leads to an enhancement of learning experiences.

4. Collaborative learning fosters a learning culture characterized by critical openness, and a ready forum for exchange of ideas and different perspectives. Through this exchange, individuals grow as they rediscover themselves. For example: In the earlier project where students survey public opinion regarding an annex preschool, they may be exposed to critique that will require them to revisit and perhaps review their proposal. This feedback ultimately contributes towards the improvement of the proposed project.

Let’s Think About This

As you read about these four essential elements, you may ask how you can operationalize collaborative learning in your classroom. Before reading further, you might like to share your experiences by writing your ideas on the space below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Now read on to find out how your ideas compare with the discussion that follows.
Let’s Read

Group Work and Study Teams

In this section, you will focus on two types of classroom activities: *Group Work* and *Study Teams*.

**Group Work**

Generally, group work can be divided into two, that is, informal learning groups and formal learning groups.

*Informal learning groups* refer to unplanned, temporary grouping of students within a single class session. These groupings can be initiated by asking students to face their seatmate and spend a few minutes discussing a question you have asked. Alternatively, you can ask your students to form groups of three to five to solve a problem. If you recall, Mrs. Adilah, in the activity on page 137, used this type of learning group to motivate her students to “earn” limited free tickets to a popular musical concert.

*Formal learning groups* are teams founded to complete a specific task, commonly known as a project. The group may have to do a laboratory experiment, conduct a survey or other kinds of field work, write a report or term paper, and so on. They are given a time frame to accomplish the learning task assigned to them in a single class session or over a duration of several weeks. They have to stay together as a group to complete the task before submission for the project to be graded. If you remember, Mrs. Premala, in the activity on pages 126-127, used this kind of learning group in her e-mail discussion to foster her students’ communication, participation, and collaboration.

In implementing formal learning groups, you can choose from various approaches that include the conventional topic-based approach and the contemporary problem-based approach.
Facilitating 21st Century Learning

Topic-based approach

If you are using this approach, you will decide on topics for your students to work on as a small group collaboratively. Take for example, your students select the topic, “Aging Population,” from a list of topics you have prepared for a social studies class. They then proceed to distribute the task of collecting information among themselves. Individually, they might search from printed media such as textbooks and reference books or browse the internet. Based on the information gathered, the group, as a whole, produces displays and slide presentations highlighting important issues and implications related to the aging population. They may also finally write up a cumulative report, and submit their work in the form of a portfolio for grading. The group work or project is then very highly “topic-based” and the information-seeking process is primarily content collation.

Problem-based approach

In comparison, when using the problem-based approach, you will usually pose a real world problem as the starting point of the project. You might present a common scenario of an old woman staying alone and trying to cope with a multitude of challenges related to health care, emotional and social issues, ethics, and so on. This scenario may be presented in the form of a video clip or text format.

Study Teams

Study teams are sometimes referred to as long-term groups that exist for the duration of a semester. The members of such a team do not change during that duration and each member is primarily responsible for providing the others with motivation and encouragement in accomplishing subject requirements and assignments. Study teams are also known as buddy support groups, peer coaches, peer tutors, and so on. Study team members are mindful of each other’s attendance in class, and will inform absent members of lessons taught and assignments given. This kind of moral and technical support rendered goes a long way in enhancing the collaborative spirit of the team members.
Let’s Study

Challenges in Using Collaborative Learning Strategies in the Classroom

Reflect on the first time that you used collaborative learning strategies with your classes. How did it go? I’m pretty sure that the task may have seemed daunting for several reasons. Perhaps you may have worried about losing time in class. It is quite common that it takes a while to develop collaborative activities and integrate them into your main topic.

Teachers are often apprehensive that there will not be enough time to develop activities, time to teach group dynamics, time to implement collaborative learning activities, time in class for students to work on small group projects.

Also, in any collaborative learning activity, there will always be “slackers,” students who are content in being non-productive members of a group. That is why group size should always be considered in deciding whether this collaborative strategy would contribute to more effective learning in your classroom or not.

The following table, which compares the advantages and disadvantages of small and large group sizes, might help you decide which of your lessons would benefit from the collaborative approach and which would not.

### Advantages and Disadvantages of Small and Large Group Sizes In Collaborative Learning

<table>
<thead>
<tr>
<th>Advantages of Large Groups</th>
<th>Advantages of Small Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More ideas generated</td>
<td>• More opportunity for each person to contribute</td>
</tr>
<tr>
<td>• Greater diversity of ideas</td>
<td>• More equal participation likely</td>
</tr>
<tr>
<td>• More people to complete the job</td>
<td>• Less time required in decision-making</td>
</tr>
<tr>
<td>• More opportunity for members to “connect” with others</td>
<td>• Easier to meet due to fewer schedule considerations</td>
</tr>
<tr>
<td>• Greater variety of skills available</td>
<td></td>
</tr>
</tbody>
</table>
Facilitating 21st Century Learning

Disadvantages of Large Groups

- Greater opportunity for conflict among members
- More time required in decision-making
- More opportunities for sub-groups to form
- Greater demands on the leader
- More difficulty achieving consensus
- More opportunities for anonymity

Disadvantages of Small Groups

- Fewer skills available
- Conflict can be detrimental with few members to rely on to complete the project
- Greater time and performance demands on each person
- Retention of group members is important based on the demands of the project

Source: http://www.texascollaborative.org/Collaborative_Learning_Module.htm#secto3

You may not be aware of it, but your students may also have some apprehensions when you do collaborative work in the classroom. Collaborative learning may make introverted students apprehensive because it requires them to communicate verbally with you and with their peers. They cannot remain passive or disengaged. On the other hand, it has been observed that some students who are academically competitive and self-motivated may resent collaborative learning at first. This is because they may fear that they will do all of the work and other group members will simply ride on their achievements.

Let’s Think About This

As a teacher, how do you overcome the challenges of integrating collaborative strategies in your classroom? Write your ideas on the space below and discuss them with your co-learners, co-teachers, and Flexible Learning Tutor.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

How did your discussion on the challenges of integrating collaborative
strategies go? Have you learned new insights from your co-learners, co-teachers, and Tutor about ways to hurdle the challenges posed by collaborative learning? Perhaps you may have mentioned that one way to overcome these challenges is to ask your more experienced colleagues to serve as “collaborative learning mentors.” Find out what has worked for them. Ask them how they located or created resources for use in collaborative settings. Observe them in the classroom using collaborative strategies.

Read on to find out more about how you can be successful in integrating collaborative learning in your classroom.

**Let’s Study**

For collaborative learning to be successful, you need to give important consideration to the following elements: the learning task; a group of students with project-developing abilities; substantive assistance and guidance from a more able peer or you, as the facilitator; and scheduled time for the members to interact.

If you are new at collaborative learning, it will be easier if you start off with informal learning groups and then gradually progress to formal learning groups in your classroom. Study teams are good to set up when you have a big class where students can gain educational benefits by meeting outside of class to study together, review subject matter, complete assignments, prepare for tests and examinations, and assist one another with problems they face in the classroom.

**Let’s Try This (Activity 3.4)**

**Interpersonal Communication Skills**

You have just completed studying one aspect of your role as the manager in your 21\textsuperscript{st} century classroom by examining how you can employ effective strategies to promote student participation and collaboration in classroom activities. When you use these strategies, inevitably, you will need to communicate to your students the “why” and the “how” of a particular strategy. It is important for you to realize that communication is not only confined to verbal cues or speaking to your students. In the next section,
you will learn about some important aspects of effective interpersonal communication.

The following snippet is about Mr. Budiarto, who is on his first week of internship at a rural school with a large population of students at-risk of dropping out. Read what happened in his morning English class.

“Class, will you all just keep quiet and get back to your seats. You are going to learn something new these four weeks. You understand what I am telling you? I will be transforming this class into a writing workshop.”

The students stared blankly at their new teacher. What was he trying to do here? Most of them could not even write more than five lines when they were given an essay by their class teacher the week before! They were also not very happy with the way Mr. Budiarto was talking to them; he sounded as if he was giving orders to an army of soldiers!

Ramon winked mischievously at Petra sitting two desks away. Mona stood up and straightened her uniform before sitting down again. Lim was engrossed in a pencil drum solo. With a stony glare and raising his voice, Mr. Budiarto said, “Hey, listen here, you guys! I want all four of you to stop this nonsense at once! You are going to do something different that you have never done before.”

The four of them sat up immediately. But the moment Mr. Budiarto turned his back to write on the board, he heard his students talking noisily and some were even laughing. Just as he faced them to confront them, the bell rang. He then marched out of the class angrily and went to consult his supervising teacher.

Pretend that you are Mr. Budiarto’s supervising teacher. How will you help him? How can he improve the way he communicates with his students? Write your answers on the lines below.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

In your case, what challenges in communicating with your students have
you faced as a teacher? How did you overcome these challenges?

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Share your responses with your co-learners and Flexible Learning Tutor.

**Feedback**

From the snippet, it is clear that Mr. Budiarto was not communicating effectively with his students. As a matter of fact, he demonstrated poor interpersonal communication skills. He seemed to be issuing orders instead of informing them how he intended to facilitate their learning. Besides this, his eye communication and tone of voice were not very encouraging at drawing students’ attention.

If you are interested to learn how Mr. Budiarto can improve his communication skills so that he is relating to his students at their level, then read on.

**Let’s Read**

**Communicating with Students**

Managing your classroom effectively requires good communication skills. How do you define communication skills? Communication skills consist of an individual’s ability to use language (receptive) and express (expressive) information (Hargie, 2006). As such, it is an important key in promoting good teacher-student relationship. Once you have established a good relationship with your students, their motivation to be in your classroom and to participate in the learning activities increases. How will you be able to communicate well with your students and thereby contribute to their success in school? Below are some tips on how best you can communicate and interact with your students (Ramsey, 2009).

Let us now refresh our basic communication skills as they relate to communicating with our students in the classroom. As you probably know, interpersonal communication can be divided into three aspects, that is, verbal (speaking) skills, listening skills, and nonverbal communication.
1. Strengthen your verbal skills

Enhancing your verbal skills will benefit both you and your students in the instruction process. Strategies include:

- Speak with your class and students at their level of comprehension. This means you need to do straight talk and use plain language. Avoid using euphemism and technical terms that could intimidate them.
- Emphasize key words or rephrase them to promote better understanding. “Let me see, did I hear you say....?”; “Do you mean...?”
- Check for understanding. When giving verbal instructions, it is recommended that you do this: look around to make sure the students are following what you are saying. In Activity 3.6, Budiarto did ask his students if they understood what he was saying. Moreover, he did not wait for their answer.
- Vary the tone of your voice as talking in a monotonous voice is boring and may send some of your students to sleep. However, it is not advisable to raise your voice as Budiarto did. Undoubtedly, this attracts your students’ attention, but it conveys your annoyance, too. You may raise your voice 1-2 octaves higher, but don’t scream. After you have emphasized your point, lower your voice back to normal and continue talking.

2. Enhance your listening skills

Effective listening is also another critical element in the instruction process. Active listening skills can be strengthened in the following ways:

- Maintain good eye contact and lean forward slightly when speaking with your students. When you do this, you are signalling to them that they are important to you and you are ready to listen to them.
- Try to paraphrase or state in your own words what the other person just said, “Let me see, did I hear you say....?”; “Do you mean...?”
- Synthesize what your students say as well as the feelings they have expressed by using sentence stems like, “Let’s check and see what you have been saying so far....”
• Give quick, honest, clear, and informative feedback so that your students know whether you understand what they are trying to tell you.

• Observe and listen more than you speak. Constantly remind yourself that you have been endowed with two eyes, two ears, and one mouth; so be doubly quick to see, observe, and listen before you speak.

3. Use nonverbal communication skills

Nonverbal communication, also known as body language, is one way your students can read you. You can communicate your feelings and other messages to your students through non-verbal cues and gestures, and your students can do the same. Non-verbal communication skills can be effectively demonstrated in the following ways:

• Use a variety of positive facial expressions and hand gestures that will help students better understand important concepts. For example:
  - Frowning to show disapproval is effective just as shrugging your shoulders and hand gesture to ask, “May I know what you are busy with?”
  - A smile with eye contact indicates that they can put their trust in you.
  - Putting your index finger to your mouth will send a signal for your students to be quiet.
  - Hold up your hand if you wish to “stop” your students from talking or doing something they are not supposed to be doing.

• Use silence. When you ask questions, don’t rush to provide answers or fill in the silence. If you are ready to start your lesson but the classroom is still very noisy, stand still and stare at any object in the room. Wait patiently and calmly, but do not fold your arms as this indicates a negative stance and may make them defensive instead.

• Touch is a powerful tool of communication.
- A gentle pat on a student’s shoulder as you say consoling words to him on the recent demise of his parent can add warmth to the communication.
- Putting your hand gently on the shoulder of an inattentive student will often draw his attention back to what you are saying.

Are there other ways of communicating effectively that you have used in the past and are not included in the list? Write those down on the space below and share them with your co-learners and Flexible Learning Tutor.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Let’s Try This (Activity 3.5)

Now you probably realize that one of your most important tasks as a teacher is effective communication with your students. Much of this communication will take place in class verbally through speaking and listening, but the nonverbal cues that you demonstrate to your students convey significant messages about your feelings and your mood. A combination of verbal skills, listening skills, and non-verbal communication is needed to communicate effectively with students at their level. Effective communication improves your classroom management and creates a positive and conducive learning environment for your students.

Are you interested to assess your strengths as well as identify areas for growth in communicating at your students’ level? If so, then accomplish the following self-report inventory adapted from Santrock (2008).
### Evaluating My Communication Skills

**Instructions:**

Read each of the 20 statements below. Rate them on a scale of 1 (*very much unlike me*) to 4 (*very much like me*) by placing a check mark (✓) in the column corresponding to the item.

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know the characteristics of being a good speaker in class and with students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I do not tend to dominate conversations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I talk “with” my students, not “to” them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I don’t criticize my students very much.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I don’t talk down to my students or put them down.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I don’t moralize when I talk with my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I am good at giving my full attention to my students when they are talking with me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I maintain eye contact when I talk with my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I smile a lot when I interact with my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I know the value of silence in communication and how to practice it effectively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. When giving verbal instructions, I always look around to check if my students are following what I am saying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I constantly remind myself to use appropriate “I” messages when I talk with or give instructions to my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I avoid speaking monotonously and try to vary the tone of my voice throughout the lesson.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I give immediate honest and constructive feedback to my students’ enquiries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I paraphrase what my students say to check my perception and understanding.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I use appropriate touch gestures to gain my students’ attention to what I am saying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. My students know what I mean when I nod or shake my head during a lesson.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>18. I use silence to allow my students to think of the answers to my questions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I respect the personal space of my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I use non-threatening “stares” to gain my students’ attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After you have completed the self-report inventory, go through all the twenty items once again to make sure you have checked (√) all the items in their corresponding columns. Next identify the items you have checked (√) a 3 or 4, and those with a 1 or 2.

**Feedback**

Review your self-report inventory ratings. What items did you check (√) 1 or 2, and 3 or 4? The items that you checked (√) – a 3 or a 4 – indicate your strengths in the respective aspects of communication. Congratulations! On the other hand, the items that you checked (√) – a 1 or 2 – indicate areas of growth that you need to work on. Do not despair.

How did you fare? If you obtained all correct answers for the item categorization, Congratulations. If not, read this section again to reinforce your understanding of communicating with your students. Take the self-report inventory a second time. Hopefully, you would have been able to improve on your scores.

Reflect on some strategies for further improving your communication strategies in these areas. Write down your thoughts in your reflection journal with suggestions for concrete actions to work on.
Let’s Think About This

As a facilitator of learning, you certainly communicate the lessons you prepared to your students. But how well have you been doing this? Before we proceed to our discussion, reflect on your past lesson presentation experiences, and then answer the following questions:

1. What facial expressions and bodily gestures communicate that your students understand what you are saying?

______________________________________________________________

______________________________________________________________

2. How do you know when they are confused?

______________________________________________________________

______________________________________________________________

______________________________________________________________

3. What do you do to ensure that your students understand the lesson you are communicating to them?

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

Feedback

I’m sure that your answers are similar to mine. We know that more often than not, students nod when they understand instructions and what we are saying, their faces light up when they are interested, and their faces turn blank or they even frown, when they do not understand or when they are disinterested. We should consider ourselves lucky when they go beyond these nonverbal expressions and speak their minds out using words.

As teachers and facilitators of learning, we definitely want to ensure that we are able to clearly communicate the lesson to our students. Being able to recognize and interpret your students’ behaviors is a valuable tool for teachers like you in monitoring how clearly and accurately you are communicating with them. Would you like to know the criteria for clear and accurate communication with students? Then, read on.
Let’s Read

Elements of Clear and Accurate Classroom Communication

According to Danielson (2007), clear and accurate communication has four elements. These elements are as follows:

1. **Expectations for learning.** The lesson objectives should be clear to the students. The teacher should communicate clearly to the students what they will be learning, why they need to learn it, and how they will achieve the lesson objectives. There are many techniques that teachers can use in communicating the lesson objectives to the students. One simple way of doing this is by writing the lesson objectives on the board and discussing this with the students.

2. **Clarity of directions and procedures.** Information on what to do in independent work or group work should be clear. If not, the students will be lost, confused, and will be engaged in the wrong activity. Clear directions may be oral, written, or a combination of the two. Students can refer to written clear directions whenever they need to.

3. **Explanations of content.** You play a crucial role in helping your students understand the contents of the lesson. How you present content to the students has enormous bearing on their understanding. Many teachers find the use of analogies, stories, examples, metaphors, visual representation, and discussions useful in explaining concepts clearly. As you will remember, this element is also fully covered under Pedagogical Content Knowledge in Lesson One.

4. **Use of oral and written language.** The language you use in communicating the lesson to your students needs to be appropriate to the age and backgrounds of your students. Remember what you learned in Lesson One about General Dimensions of Teacher Knowledge? The information you have about your students’ characteristics and your educational contexts will enable you think about the language that you would be most appropriate for them.
How will you know how well you are doing in terms of these communication elements? Below is a performance rubric developed by Danielson (2007) that you might find useful.

<table>
<thead>
<tr>
<th>Element</th>
<th>Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>Expectations for learning</td>
<td>Teacher’s purpose in a lesson or unit is unclear to students.</td>
</tr>
<tr>
<td>Directions and procedures</td>
<td>Teacher’s directions and procedures are confusing to students.</td>
</tr>
<tr>
<td>Explanations of content</td>
<td>Teacher’s explanation of the content is unclear or confusing or use inappropriate language.</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Use of oral and written language</td>
<td>Teacher’s spoken language is inaudible, or written language is illegible. Spoken or written language contains errors of grammar or syntax, vocabulary may be inappropriate, vague, or used incorrectly, leaving students confused.</td>
</tr>
</tbody>
</table>
Let’s Try This (Activity 3.6)

Let’s use the performance rubric developed by Danielson (2007) to find out how well you and one of your colleagues in school communicate your lessons to your students. Follow the instructions below:

1. Share your learning on the four elements of classroom communication with one of your co-teachers.
2. Discuss this classroom communication performance rubric with a co-teacher to ensure that you both understand what the criteria in the rubric mean.
3. Ask this co-teacher to visit you in one of your classes and, using the performance rubric, rate you on how well you communicate your lesson to your class.
4. After your class, ask your co-teacher to show you your classroom communication performance rating. Ask him/her to explain to you the ratings that you received.
5. After this dialogue, reflect on your co-teacher’s comments and think of ways to enhance the good points and improve on the areas for improvement.
6. Now, return the favor to your co-teacher by offering to observe him/her in his/her class using the classroom communication performance rubric. If he/she agrees, it will be a good opportunity for you to learn more about classroom communication through his/her example.
7. On the space below, write a brief reflection on what you learned from this activity.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Share your reflection with your co-learners and Flexible Learning Tutor.
Let’s Think About This

Evaluating yourself using the self-report inventory and the classroom communication performance rubric are good ways of finding out about your communication skills in the classroom. They enabled you to identify your own strengths and areas of growth in classroom communication. If you are successful in finding ways to communicate effectively with your students, you have already won half the battle of facilitating their learning. Now, the next section will enable you to focus on several aspects of class management that are also crucial to successful teaching and learning.

Let’s Study

Classroom Management Skills

Consider these four classroom examples:

Mr. Argus’s class is a calm, orderly one. The students are at their seats working independently, and all of them are fully engaged in their assigned tasks. Once in a while, some of them come up to consult with Mr. Argus, who is seated at his table in front of the class. They seek clarification about something they do not quite understand or ask for feedback about a small unit of the task that they have completed. Mr. Argus confers with them attentively and answers their questions.

Mrs. Solomon’s class is noisy and chaotic. A handful of her students are engrossed in their work, but most of them are busy doing other non-academic activities. Meera is busy sending text messages behind her history textbook propped up on her desk, Mark is doodling on a page of his history notebook, and several students are absorbed playing games on their computer laptops.

Ms. Chan’s class is as noisy as Mrs. Solomon’s. However, instead of sending text messages, drawing aimlessly or playing computer games, students are deliberating on the pros and cons of “Nuclear Warfare.” After fifteen minutes of heated discussion, Ms. Chan stops them, asks a few of them to list out the various points raised on the whiteboard, and then explains to them that there is no single correct solution to the issue.
Mr. Kulwant believes that his students need to be informed of classroom rules and procedures if he is to manage his class effectively. They mutually draw up a list of rules for every conceivable event that can potentially happen in class. Read the sample given below:

- Be at your seat before the teacher comes into class.
- Be attentive and responsive during lessons.
- Raise your hand if you wish to speak or ask a question.
- Never leave your seat without asking for permission.
- Give other students a chance to voice their opinions and ideas.

Mr. Kulwant punishes his students for “violation” of each of these classroom rules and procedures. The result is that his students are a conforming, obedient and quiet, though somewhat anxious lot. Mr. Kulwant discovers, to his amazement, that they are not learning as much as they should or achieving their potential.

Based on the given classroom examples, which of the four teachers can be categorized as an effective classroom manager? Explain how you arrived at your conclusion on the space provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Share your responses with your co-learners and Flexible Learning Tutor.

Feedback

Let us review the four classroom scenarios just presented. Which of the two classrooms are quiet and orderly, and which two are active and noisy? Yes, Mr. Argus’s and Mr. Kulwant’s classrooms belong to the first category, while Mrs. Solomon’s and Ms. Chan’s are in the second category. However, as you can see, activity and noise levels are not good indicators for quantifying student learning in the classroom. Obviously, Mr. Argus’s students are learning in his quiet and orderly classroom, and so are Ms. Chan’s in her
seemingly “unruly” classroom. Sadly, none of Mrs. Solomon’s students is learning in the chaotic battleground of her classroom, or Mr. Kulwant’s in the apparent harmonious but dictatorial atmosphere of his classroom.

Strangely, how can this happen? To help you find the answer to this question, read the following section that discusses how you can manage your classroom to produce a conducive learning environment.

Let’s Study

Classroom Management for Promoting a Conducive Learning Environment

At a glance, classroom management can be understood as creating and maintaining a classroom environment that is conducive to learning and achievement. Certainly, as you have seen earlier, this has little to do with the noise and activity level of the classroom. On the contrary, you will agree that it has everything to do with how much students are learning and achieving in that classroom.

The discussion that follows will examine classroom management from two aspects:

A. Creating and Maintaining a Productive Classroom Environment
B. Designing a Classroom Management Plan for Promoting a Conducive Learning Environment

Let us now proceed to study the first aspect.

A. Creating and Maintaining a Productive Classroom Environment

From the activity that you have just accomplished, you are probably thinking about these questions: What constitutes a well-managed classroom? What kind of class management skills must you equip yourself with in order to create a productive learning environment than enhances student learning and achievement?

Universally, it is an accepted concept that a well-managed classroom is one in which students are consistently engaged in productive learning activities. It is also believed that it is one in which students’ behaviors rarely, if not hardly, interfere with the achievement of predetermined learning objectives and outcomes.
In their endeavour to create and maintain a conducive learning environment, 21st century teachers, like all teachers before them, will typically use the following strategies:

- Arrange classrooms in such a way that the physical layout promotes teacher-student interactions, minimizes occurrence of distractions, and enables surveying the entire class for possible signs of boredom, confusion, conflict, and frustrations.

- Create a classroom atmosphere, commonly known as the psychological environment that communicates acceptance and respect of, and caring about your students. It also means establishing a non-threatening climate that creates a sense of esprit de corps among them thus making them feel they belong in that classroom. Indirectly, this increases their level of intrinsic motivation to learn.

- Determine reasonable limits for student behavior that not only provides a productive learning environment, but also promotes student socialization and nurturance of socially accepted behaviors in the outside world. This involves formulating a set of classroom rules and regulations democratically with clear and effective logistical consequences. These must be displayed and reviewed intermittently to keep them current and relevant with the classroom situation.

- Plan and implement classroom activities that promote on-task behavior. If you remember, in Lesson Two, you learned about various active learning and higher order thinking strategies to keep your students busy and engaged. Adopt those that are appropriate to your student academic level and, perhaps, adapt and modify others to make them relevant in your classroom.

- Monitor and supervise students closely to keep track of what they are doing, commonly known as “withitness.” If you are a “with-it” teacher, you are in the know of your student activities; you know what and when misbehaviors occur.

- Adapt, adopt, and modify instructional strategies where appropriate. You need to know what strategies work and engage students actively in your lesson, and what causes them to misbehave as they are disinterested or bored. Continue using the ones that capture students’ interest and excitement, and do something about the other ineffective ones.
These are but some of the many strategies that are useful for establishing a conducive learning environment. You may have other strategies that have worked for you in your classroom and which you might like to share. Write them on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Let’s Think About This

As you know, different teachers have different strategies that they use to create a good classroom atmosphere when they enter their classes for the first time. Read the case of Mr. Joko, a new teacher and former student, who reported for work as a beginning teacher in your school.

Critical Incident

On the first day of school, Mr. Joko told you how pleased he was to be posted back to his hometown, and how excited he was to be teaching many of his old schoolmates’ children. He spent the week getting to know them and how their parents were getting on in their careers. He wanted to establish a close rapport with them. To his dismay, by the end of the first week, he realized that he and his students had failed to achieve anything of an academic nature.

On the first day of his second week, Mr. Joko decided to change his approach. He began his first class by enumerating the learning outcomes. As he proceeded to the content he was going to teach, to his amazement, he found many of them getting restless, bored, and fidgety. His seemingly good rapport was insufficient to make them sit down and pay attention to his lesson. They were moving from one seat to another, e-mailing one another on their computer laptops, and engaging in other non-academic tasks. Mr. Joko did not know what had gone wrong. He has come to seek your professional advice.
Based on what you have learned in the context of effective classroom management, how would you advise Mr. Joko? Why do you think was he facing problems bringing his class to order? What critical principles of effective classroom management had he “violated”? Given that he had set out on the wrong foot, what should he do to remedy the situation?

Write your reflections on the space provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Feedback

As we analyze the above case together, compare your answers with mine:

Admittedly, establishing rapport is a useful and important strategy that is commonly used by a teacher entering the class for the first time. Rapport is defined as “an especially harmonious or sympathetic connection.” Establishing rapport means creating emotional connections between teacher and student and between student and subject matter. This seems simple, but social psychologists profess that rapport is difficult to conceptualize and even harder to operationalize in the classroom as evidenced in the case of Mr. Joko.

• Thus, if we, like Mr. Joko, aim to establish rapport with our students, it is definitely not a consequence of any single act. Rather, rapport is more likely the effect of consistently doing the right things in the classroom. Mr. Joko could have done the following to help him develop rapport with his students: On the first day of class, extend a warm and friendly invitation to students to join the “community of learning” in the classroom.

• Warmth and friendliness should be maintained all throughout the school year, whether inside or outside our classroom, and regardless of the myriad problems that may develop during the year.
The case of Mr. Joko exemplifies Gordon’s (1999) quotation: “[Teacher education] training doesn’t mean anything until teachers get in the classroom. It’s like swimming – you can never really know what it’s like just by reading about it.”

Truly, the test of new teachers is the ability to successfully meet challenges related to classroom management and disruptive student behavior. The curricula of your pedagogy class during teacher education training program contains all the ABC’s of classroom management. Unless you are able to translate all this theoretical knowledge into practical skills when you come face to face with your students in the classroom, teaching becomes a daunting task. On a more positive note, as you learn from your experiences over the years, you will find this task less intimidating but more exciting! In fact, most veteran teachers have a fair share of classroom discipline stories about how they survived and the lessons they learned.

A common theme in classroom management literature is the significance of a personal classroom management plan. This plan serves as a useful companion to help you navigate the stormy waters of a sea of new faces at the beginning of a new academic school year. As the saying goes, “If you fail to plan, you plan to fail.” In the discussion that follows, you will learn how to create this wonderful companion.

Let’s Study

B. Designing a Classroom Management Plan for Promoting A Conducive Learning Environment

Typically, teachers are apprehensive of a new academic year regardless of whether they are experienced teachers or beginning teachers like Mr. Joko, whose case we reviewed in the earlier section. They are fully aware of how important it is for them to start out on the right foot during the first few days in grounding student expectations and developing appropriate procedures to align with their expectations, and creating a conducive learning environment in the classroom.

Many of us may be like Mr. Joko who was really very enthusiastic to establish rapport with his students. Like him, we may have failed to give our priorities to start the first week of school planning how we would prefer our students to behave during lessons, how they would engage in
learning tasks and activities, and how they would contribute to a productive classroom environment. Before teachers prepare lesson plans and other instructional materials to teach a new class, they should give some thought to designing a classroom management plan.

Educational psychologists liken designing an effective classroom management plan to building a model airplane. Each part of the plane, be it the cockpit, wing, or rudder, has its own function and place that will ultimately make the plane take off and fly. Just like the airplane, a comprehensive classroom management plan fitted with all the essential components will go well with your students.

Possibly, you have some experience developing your own personalized classroom management plan. Would you like to share your ideas of such a plan? Write them down on the lines provided.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Examine how your classroom management plan compares with the one discussed below.

**Let’s Read**

**Planning for Classroom Management**

The first and most important step in designing your personalized classroom management plan is to construct a framework upon which to develop it. By referring to this framework as you write out your plan, you are assured that all the important components are included to produce the final product that is effective, formative, and positive for your students.

The sample framework that follows consists of six components with some leading questions for you to ponder and provide corresponding answers to. However, you have the option of adding other components as deemed relevant to your classroom context.
## Classroom Management Plan Framework

<table>
<thead>
<tr>
<th>Component</th>
<th>Leading Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules and Procedures</td>
<td>• What rules and procedures will my students and I jointly create and agree upon that will be adhered to consistently throughout the year?</td>
</tr>
<tr>
<td></td>
<td>• Will the classroom rules and procedures be verbally told or posted at the beginning of the year?</td>
</tr>
<tr>
<td>Physical Arrangement of Classroom</td>
<td>• Where are my students and I placed in the classroom?</td>
</tr>
<tr>
<td></td>
<td>• When will the seating positions and physical arrangement of the class be revised? At mid-semester? End of semester? Once a year?</td>
</tr>
<tr>
<td>Misbehavior Interventions</td>
<td>• What are some constructive interventions for managing misbehavior in the classroom?</td>
</tr>
<tr>
<td></td>
<td>• How can I be creative with my interventions?</td>
</tr>
<tr>
<td></td>
<td>• How can I maximize teachable moments with positive interventions to distract off-task behavior?</td>
</tr>
<tr>
<td>Classroom Safety</td>
<td>• Why is classroom safety important?</td>
</tr>
<tr>
<td></td>
<td>• Who should take responsibility for classroom safety?</td>
</tr>
<tr>
<td></td>
<td>• How will I handle emergencies in the classroom?</td>
</tr>
<tr>
<td></td>
<td>• Do I have the contact numbers to call, in the event of an emergency?</td>
</tr>
<tr>
<td>Student Celebration</td>
<td>• How will I give recognition to my students’ academic, social, and behavioral efforts in maintaining an effective learning environment?</td>
</tr>
<tr>
<td>Philosophical statement</td>
<td>Reflect on your philosophical beliefs and answer the following questions:</td>
</tr>
<tr>
<td></td>
<td>• What are my beliefs about managing my life, my family, my class, or a life situation?</td>
</tr>
<tr>
<td></td>
<td>• Have I the will and courage to design a comprehensive and practical plan?</td>
</tr>
<tr>
<td></td>
<td>• How should my students behave in my classroom?</td>
</tr>
<tr>
<td></td>
<td>• How will I handle and inform student misbehavior or off-task behavior in my classroom?</td>
</tr>
</tbody>
</table>
In order to make your plan more comprehensive, you may also include the following documents:

- **Course/subject objectives**: Contains the curriculum and learning outcomes for the course or subject that you teach, and the skills your students are expected to develop over a semester or a school academic year.

- **Assessment calendar**: Shows all the important dates such as tests, quizzes, assignment due dates, and examination dates for the subject over the entire academic year. Public state holidays, school breaks, and holidays should also be marked or highlighted.

- **Student information**: Contains all the personal details of your students and should be completed during the first week of the school semester or term. One very important information is the contact numbers of your students’ parents, which you will use to inform parents in the event of an emergency or a notable achievement.

Again, like the contents of your classroom management plan, you also have the option of adding other documents that you think fit to complement the plan you have prepared. Having learned how to create a personalized classroom management plan, perhaps you might like to try your hand at designing one or modifying the plan you shared earlier in this section.

**Let’s Try This (Activity 3.7)**

Using the template on the next page, design your own personal classroom management plan for the subject and class you teach. Include the components discussed, that is, your philosophical statement, classroom rules and procedures, classroom physical arrangement, misbehavior interventions, classroom safety, and student celebration.
MY CLASSROOM MANAGEMENT PLAN

Philosophical Statement

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Rules and Procedures

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Classroom Arrangement

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Misbehavior Interventions

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Classroom Safety

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Student Celebration

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Feedback

You may now compare your personalized classroom management plan with the classroom management plan presented in Annex A on pages 225-227.

How did you fare? Your answers may not be worded in exactly the same manner, but as long as the ideas are the same, these are considered correct. Congratulations! However, if your management plan does not meet your expectations or fails to meet the criteria recommended in the previous section, review the parts you made mistakes in, and then re-attempt to design your personalized classroom management plan.

Now that you have successfully created a personal classroom management plan that meets your expectations, are you excited to implement it? I am sure your students will react positively to it. Have you also thought of sharing your new professional “artefact” with your colleagues, especially those teaching the same subject? The more you share, the more ideas you will have to further improve your initial plan and produce one that is effective for your students. One final thought: Do remember that the way we design our classroom management plan can make our school year with our students a heaven or a hell; a joy or a torture; terrific or punishing.

This lesson just walked you through being a classroom manager in your 21st century classroom. This lesson completes your study for this module. With the knowledge, skills, and values you have thus gained in being a subject matter expert, a facilitator of learning, and a classroom manager, you can now look forward to being a more effective facilitator of 21st century learning in your classroom.
Let’s Remember

In this lesson, you learned that:

- Student learning can be enhanced through two student behaviors: active participation, and collaboration in classroom activities.
- Basic communication skills encompass three aspects, namely, verbal (speaking) skills, listening skills, and nonverbal communication.

1. Speak with your class at their level of comprehension.
2. Emphasize key words or rephrase them to promote better understanding. “Let me see, did I hear you say....?”; “Do you mean...?”
3. Check for understanding.
4. Vary the tone of your voice as talking in a monotonous voice is boring and may send some of your students to sleep.
5. Maintain good eye contact and lean forward slightly when speaking with your students.
6. Synthesize what your students say as well as the feelings they have expressed.
7. Give quick, honest, clear, and informative feedback so that your students know whether you understand what they are trying to tell you.
8. See and listen twice more than you speak. Constantly remind yourself that you have been endowed with two eyes, two ears, and only one mouth.

- Creating and maintaining a conducive learning environment encompass the following aspects: physical arrangement of the classroom, psychological environment of the classroom, classroom rules and regulations, “withitness,” and appropriate instructional strategies.

- A classroom management plan toward promoting a conducive learning environment consists of six components: a philosophical statement, rules and regulations, physical arrangement of the classroom, misbehavior interventions, classroom safety, and student celebration.

- A comprehensive classroom management plan can include additional documents such as course/subject objectives, assessment calendar, and student information.
How Much Have You Learned From This Lesson?

To assess how much you have learned from this lesson, try and answer the following questions. Encircle the letter of the correct answer for Questions 1 - 2. Write your answers in the lines provided for Questions 3 - 9.

1. Ms. Suzie and Mr. Bala are discussing the best way to engage their students’ interest in Southeast Asian history. Which of the following best exemplifies active listening?

   As Ms. Suzie speaks about the importance of integrating digital technology into their subject, Mr. Bala
   a. Interrupts by arguing that the existing technology is more useful and cost saving.
   b. Stifles a yawn while maintaining eye contact.
   c. Nods his head occasionally, but is planning mentally how to rebut Ms. Suzie’s opinion.
   d. Leans forward, nods his head, and waits until Ms. Suzie finishes speaking before rebutting her opinion.

2. Mrs. Perumal likes to use small-group work in her lessons. She arranges her students’ desks in small circles or clusters. What is the problem with this arrangement when Mrs. Perumal gives whole-class presentations?

   a. Mrs. Perumal will be unable to see all her students.
   b. The classroom will become very congested.
   c. She will not be able to move around.
   d. Some students will have to turn their chairs to see her.

3. Ms. Apsara asks you how she can sustain her students’ active participation throughout her lesson. What guidelines will you give her?

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
4. Teacher Stella is very impatient with her students in class. She rarely remains silent enough for her students to think reflectively before giving an answer. How can she use silence to improve her listening skills?

_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
_______________________________________________________________

5. Mr. Benjie observes that halfway through his lesson, his students’ attention starts to wane. How can he re-energize them so that they will be attentive again?

_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
_______________________________________________________________

6. Active listening is an important element in classroom communication. How can a teacher improve his active listening skills with his students?

_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
_______________________________________________________________

7. Teacher Lau is interested to use the collaborative learning approach in his classroom. Discuss the four essential elements he has to consider before he can engage his students in collaborative activities.

_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
_______________________________________________________________

8. Mr. Sagar, a novice teacher, asked you what a classroom manager is. How would you explain the concept to him?

_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
_______________________________________________________________
9. Teacher Tina, a first year teacher in Maju Jaya High School, is asked by her Senior Assistant (Academic) to design her personal classroom management plan. She is unsure of the format and comes to consult you. How would you assist Teacher Tina in her task?

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

Feedback

Compare your answers with those found in the *Key to Correction* on pages 205-208.

If you answered all the nine questions correctly, you have truly acquired all the knowledge and skills necessary to manage your 21st century classroom.

If you got six to eight answers correct, you are still doing alright. You will just need to go over the items that you missed to review them.

If you only have five or less correct answers, read the lesson again and then go back to the questions that you missed and provide the correct answers.

Congratulations! You have just learned more about how you can manage your classroom effectively through this lesson. Equipped with knowledge, skills, and attitudes on how to effectively engage your students in the learning process, how to promote collaborative behaviors among your students, and how to communicate effectively with them, you cannot fail in managing your classroom more effectively for better student performance. The key is for you to apply all the concepts consistently so that they become second nature to you.

We shall now proceed to the final stage of the Module, that is, the summary of key concepts, the post-test, and the Module Assignment.
Let’s Sum Up

This module has guided you through three lessons that will help you better facilitate learning in the 21st century.

Lesson 1 introduced to you the 21st century teacher as a subject matter expert. It also allowed you to assess your attitude toward the subject matter you teach. The lesson also explained the domains and components of knowledge for teaching and also demonstrated how you can develop your own personal program for lifelong learning and acquisition of mastery of subject matter.

Lesson 2 described the 21st century teacher as a facilitator of learning. It also examined strategies that cater to students’ learning style and elicit active learning. The lesson explained how you can integrate higher order thinking and use questioning and reacting skills in your instruction, as well as contextualize teaching to local situations.

In Lesson 3, you learned about the 21st century teacher as a classroom manager. It also provided ideas on how you can promote your students’ participation and collaboration in classroom activities. The lesson explained how you can use effective communication skills in the classroom. It also provided guidelines on how to create a classroom management plan to promote a conducive learning environment.

The lessons in this module provided you with the knowledge and skills you need to help you facilitate 21st century learning.
How Much Have You Learned From This Module?

Would you like to find out how much you have learned from this module on Facilitating 21st Century Learning? Try and complete the following module post-test. Encircle the letter of the correct answer for Questions 1 - 4.

1. Ms. Mila, who has just been teaching for six months, is frequently absent from work. On days that she is present, she just follows the lesson plan she prepared and does not take interest in curious questions posed by her students. She uses teaching strategies that do not require much preparation and she does not want to try good teaching practices shared by her school head and colleagues.

Which of the following areas does Ms. Mila need to work on the most at this point to become an effective teacher?

a. Classroom management and communication skills.
b. Commitment and enthusiasm

c. Technology and diversity
d. Subject matter knowledge and competence

2. Mrs. Bella spends a considerable amount of time writing lesson plans and developing appropriate teaching strategies for the topic she is teaching to accommodate her students’ interests and learning styles. Which professional skill is she demonstrating?

a. Curricular knowledge
b. Pedagogical knowledge
c. Pedagogical content knowledge
d. Content knowledge

3. The school administration in Mrs. Carlos’s school puts great importance on lifelong learning. As a result, Mrs. Carlos and many of her colleagues have enrolled for an online post-graduate course with a local university.

What is the type of lifelong learning that Mrs. Carlos and her colleagues are currently engaged in to pursue their post-graduate studies?

a. Formal learning
b. Informal learning
c. Non-formal learning
d. Collaborative learning
4. Ms. Kelly is teaching a unit on the American Civil War. She begins by playing the American National Anthem and then distributes a brief outline of what the lesson will cover. She lectures from carefully prepared visual presentations. Periodically, she asks questions to make sure her students are attending to the material. She calls on the first student who raises his hand. If he is unable to answer immediately, she gives the answer herself so that the lesson will go on smoothly.

How can Ms. Kelly improve her questioning and reacting skills in the classroom?

a. Allow her students more time to answer questions.

b. Ask recall questions about the lesson to check how well the students remember the facts of the lesson.

c. Be more spontaneous in her class presentations.

d. Use a variety of visual aids in her lecture.

5. Ms. Janz, an outstanding teacher awardee for the high performance of her students in the national achievement examination, was asked about her “secret” why her students performed very well academically. She responded by saying, “I love working with my kids and I am really satisfied when I look at them at the end of the year and discover the wonderful individuals they have become. I guess they do good in class because they can see that I love teaching them and they want to reciprocate by studying well.”

Do you think Ms. Janz’s show of enthusiasm and positive attitude towards teaching and her students contributed to her students’ high academic performance? Explain your answer.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Facilitating 21st Century Learning
6. Mr. Osman reads the following story to his class.

A woodcutter went into the jungle and found many sturdy trees; some were more than a century old. The woodcutter said to the oldest tree, “You must be the king of the jungle. I have a little request here. The handle of my axe is broken. Would you allow me to cut down a young tree so that I can make a new handle? Just a small tree will do.”

The old tree was touched by his good manners, so it shook the leaves vigorously to show consent. The woodcutter felled a young tree, made a new handle, and put it on his axe. After that, the woodcutter started chopping down the bigger trees in the jungle. He cut the wood into logs ready for sale. The old tree saw the death of his friends and thought remorsefully, “If I had not sacrificed that little tree, we might still be safe now.”

(a) Below are some questions Mr. Osman asked his students. On the space provided, write “H” if the question or statement reflects HOTS and “N” if it does not.

___ 1. What did the woodcutter find in the jungle?
___ 2. How old were some of the trees?
___ 3. Why did the woodcutter talk in a polite manner to the oldest tree?
___ 4. If you were the old tree, would you have granted the woodcutter his request? Why? Why not?
___ 5. Why was the old tree remorseful of his action?
___ 6. What is the moral of the story?

(b) Suggest two HOTS activities that will be useful for Mr. Osman to integrate into his teaching. Briefly describe how these activities can be carried out.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
7. Ms. Karamjit wants her fifth-grade students to understand the purpose of blubber in marine animals. She sets up an experiment for her students using ice-water in a pail, latex gloves, and fish oil in bags. First, she asks a boy from the class to put his gloved hands in the pail of ice water until he is unable to keep them there any longer. Another student timed how long he had kept his hands submerged. Next, Ms. Karamjit asked the boy to put his gloved hands in a bag of fish oil for a few minutes and then submerge his hands again in the pail of ice water. Another student timed how long he is able to keep his hands in the pail of ice water the second time around. Ms. Karamjit repeated the process with three more students from the class. The students concluded that all student-volunteers were able to keep their hands submerged in ice water much longer after they submerged their hands in fish oil.

Identify and assess the appropriateness of the teaching strategy used by Ms. Karamjit to teach this topic.

8. Read the letter from student Siew Tin to Ms. Williams, her 8th grade science teacher.

Dear Ms. Williams,

I know our science class is sometimes rowdy and negative, but we really appreciate you. You always manage a smile on your face even when we sometimes drive you up the wall. When Pat lost her dad to cancer, you were there to comfort her with your kind words of sympathy and a motherly hug. That shows you really care about us. If you hadn’t been there for me with your words of encouragement, when I myself experienced my own loss, I wouldn’t have been able to pick up the broken pieces and gone on with life. I’ll miss you next year. Hope to see you around.

Warm regards,

Siew Tin
(a) Identify the different kinds of communication skills demonstrated by Ms. Williams, as gleaned from the letter’s content.

(b) Why is it important for teachers to nurture effective communication skills?

9. Read the following scenarios.

Mrs. Tan has numerous activities during her lesson, most of which require transitional time between activities for students to move around the classroom and form small group discussion.

Mr. Eugene informs his students that they need to complete a significant amount of seatwork during the class, which will be collected at the end of the session.

Ms. Latifah plans academic tasks of different levels of difficulty, which keep her students constantly engaged and working together to arrive at solutions.

(a) Which teacher is more likely to experience classroom management problems? Why?

(b) Suggest how this teacher can improve his/her classroom management skills.
10. On the first day of the new academic year, Teacher Gerry is determined to create a conducive learning environment for his students. Discuss how he can achieve this.

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

Feedback

In order to check how well you have performed in the Module post-test, compare your answers with those in the Key to Correction on pages 209-214. If you answered all the questions correctly, then you have a clear understanding of how to facilitate learning in the 21st Century.

If you answered nine out of ten questions correctly, you still have difficulty understanding concepts and need to review the parts you missed.

If you got five or fewer correct answers, you need to review the whole module before proceeding to the next page.

Congratulations! You have done well in completing this module, Facilitating 21st Century Learning. I am confident you have gained many insights from studying the module readings and activities.

How Do You Rate Yourself Now?

For a final review of how much you have learned from this module, I would like to invite you to return to the Self-Rating Competency Checklist on pages 12-14 to check to what extent you have achieved your goals and learning outcomes. Go through the list of competencies again and place another check mark (✓) in the appropriate “Post” column that best describes your level of mastery of each competency at this time. Compare your competency level before and after studying the module and reflect on how much you have learned.

I wish you all the best as you endeavor in your professional task of facilitating learning in the 21st century!
Let’s Apply What You’ve Learned

(Module Assignment)

The assignment for Module 2 will have three parts: (1) Video-documentation of the Teaching Demonstration and the accomplished 21st Century Classroom Facilitating Skills Questionnaire; (2) Professional Development Plan (PDP); and (3) Classroom Management Plan (CMP) that will be submitted as one file to your FLT via the iFLEX.

Part 1 - Enhancing 21st Century Classroom Facilitation Skills
(40% of the Overall Grade for Module 2 Assignment)

As an upcoming GURO21 course graduate, you are excited to showcase “good teaching” skills. As discussed in the GURO21 Course Module, “good teaching is now understood to involve a process of facilitating learning rather than being the simple transmission of knowledge from the teacher to the learner.”

In this regard, you are expected to perform the following:

1. Conduct a teaching demonstration (or Teaching Demo) for a maximum of 20 minutes to cover a content area/lesson that you are very familiar with;
2. Record your teaching demo and feature your classroom and learners;
3. Upload the recording of your teaching demo in either YouTube or the other video sharing site/s and provide the URL link; and
4. Finally, assess your teaching demo by accomplishing the “21st Century Classroom Facilitating Skills” Questionnaire (Table 2.1)

Table 2.1: 21st Century Classroom Facilitation Skills Questionnaire

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Observations</th>
<th>Strengths</th>
<th>Areas for Improvement</th>
<th>Action Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitation Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation of Students’ Learning Styles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of Learning environment that is conducive for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher order thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contextual learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning and reacting skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part 2 – Professional Development Plan
(30% of the Overall Grade for Module 2 Assignment)

• Identify specific competency (i.e. Knowledge or Skill or Attitude or Values) gaps or challenges that will enable you to become a “Good Teacher” and prepare a Professional Development Plan (PDP);
• The PDP is a compilation of SMART (Specific, Measurable, Attainable, Results-oriented, Time-bound) professional interventions that you will either join or implement for a period of two (2) years. The identified professional interventions are expected to respond to the gaps or challenges that prevents you from becoming a “Good Teacher”;

The PDP includes the (Component 1) accomplished and School Head-approved PDP Matrix (Table 2.1) and (Component 2) a 500-word essay that provides a detailed description of each of the identified professional interventions;

Below is a guide in the accomplishment of the PDP Matrix:

• Column (1) Required Competencies: Identify the specific competency (i.e. Knowledge or Skill or Attitude or Value) that you need to improve (i.e. gaps or challenges) or further enhance;
• Column (2) Type and Specific Professional Intervention: Using Table 2.2 as guide, identify the Professional Intervention (i.e. Training or Education or Development) and the learning activity/s that you will need to respond to your identified need/s;
• Column (3) Significance of the Activities: Identify the reason/s for the identification of the intervention and its importance;
• Column (4) Requirements: Identify what resources you need to accomplish your self-learning activity/s;
• Column (5) Barriers/Challenges: Identify what can be the possible barriers or constraints which may prevent you from undertaking each of the identified intervention and identify possible solutions/action.
• Component 2: Essay descriptions of the identified Professional Interventions for each identified competency gaps. On a separate sheet that provides the rationale (in 300-500 words) for the interventions.
Table 2.1: PDP Matrix

<table>
<thead>
<tr>
<th>Required Competencies (1)</th>
<th>Type &amp; Specific Professional Intervention (2)</th>
<th>Significance of the activities (3)</th>
<th>Requirements (4)</th>
<th>Potential Barriers and Solutions (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2: Interventions to Address Learning Needs using the 70-20-10 Model

<table>
<thead>
<tr>
<th>Type of Intervention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Training</td>
<td>• Short-term learning intervention</td>
</tr>
<tr>
<td></td>
<td>• To improve match between job requirement and individual knowledge, skills and attitudes</td>
</tr>
<tr>
<td></td>
<td>• After training, the individual is able to apply learning immediately</td>
</tr>
<tr>
<td>Employee Education</td>
<td>• Intermediate-term learning intervention</td>
</tr>
<tr>
<td></td>
<td>• Helps the individual qualify for advancement and thus achieve their future career goals</td>
</tr>
<tr>
<td></td>
<td>• Often associated with career development</td>
</tr>
<tr>
<td>Employee Development</td>
<td>• Long-term intervention</td>
</tr>
<tr>
<td></td>
<td>• Focuses on stimulating new ideas or insights through planned learning</td>
</tr>
<tr>
<td></td>
<td>Examples: Participating in specialized programs or Giving short-term assignment to stimulate insights or Job Rotation or Coaching</td>
</tr>
</tbody>
</table>

Source: Learning Sessions on Staff Development by Ms. Maribel Aglipay, Principal Partner of the Philippine Society of Training and Development

Part 3: Classroom Management Plan

(30% of the Overall Grade for Module 2 Assignment)

1. With your PDP as guide and in consultation with your class/school stakeholders, develop a Classroom Management Plan (CMP).
2. In developing your CMP, be guided by the following
   • Your teaching style and strategies
   • Planned classroom activities
   • Classroom layout that you believe will maximize learner/student participation
3. You may also include visual representations of the layout of your classroom (Note: should you decide to adopt or copy an existing Classroom Layout, make sure you acknowledge its source)
4. Prepare a reflection on the insights and challenges while preparing your CMP and its relevance in your other role as a “Classroom Manager” to your 21st century students.
5. Submit your CMP to your School Head for further improvement and approval/signature.
1. Why is it important for teachers to adopt a positive attitude toward the subject matter they teach?

It is important for teachers to adopt a positive attitude toward the subject matter they teach for the following reasons:

(i) Teaching competency for the subject will be enhanced.

(ii) Student achievement of more competent teachers is significantly higher than less competent teachers.

(iii) Teachers with a positive attitude exhibit enthusiasm toward the subject they teach, thus livening the class and making learning stimulating for their students.

2. Briefly explain and give two examples for each of the four components related to knowledge of subject matter.

(i) Content knowledge – deep knowledge of subject matter.

   Examples: concepts, theories, principles of a particular subject

(ii) Curricular knowledge – all the programs developed at different levels that enable teachers to teach different subjects and instructional materials available.

   Examples: curriculum for different grade levels, resource materials for different subjects

(iii) Pedagogical content knowledge - blend of content and pedagogy of how to make subject matter more accessible and comprehensible.

   Examples: use of analogies, metaphors, graphics, and demonstrations to teach a specific topic in a subject

(iv) Technological pedagogical content knowledge – pedagogical techniques that use technologies to teach content.

   Examples: PowerPoint presentations, online forums, blogs
3. **What do you understand by lifelong learning?**

   Lifelong learning is the acquisition of knowledge for academic purposes, job demands, and personal aspects of learning throughout one’s life. It is voluntary and self-motivated learning whereby the individual recognizes his learning strategies, manages, monitors, and assesses his learning.

4. **What are the criteria for designing a lifelong learning personal plan?**

   The criteria for designing a lifelong learning personal plan include: personal responsibility, commitment, learning context, relevance to and impact on professional practice, opportunities for reflective and collegial dialogue, systems support, and potential barriers.

5. **Enumerate four teaching styles that are demonstrated by teachers in the instruction process.**

   (i) **Assertive** – show students how to solve problems, tell students what they know, directly tell students the answers, point out students’ mistakes
   (ii) **Suggestive** – use personal experience to help students solve problems, suggest possible answers, summarize student discussion
   (iii) **Collaborative** – listen to students’ experiences, explore students’ understanding, facilitate student’s ideas
   (iv) **Facilitative** – allow students to do most of the discussion, facilitate students’ expression of feelings, allow students to make their own decisions

6. **If you aspire to become a facilitator of 21st century learning, what are some important characteristics you need to nurture?**

   Some important characteristics that I need to nurture to become a facilitator of 21st century learning are:
   
   (i) **Knowledgeable about content**: knowledge of subject matter, be informed of current best practices
   (ii) **Knowledgeable about pedagogy**: uses a variety of teaching strategies, actively engages students in learning
(iii) Attentive: listens intently, observes students’ nonverbal behavior
(iv) Genuine show of concern for students; exhibit caring attitude towards students
(v) Understanding: empathize with students cultural diversity, responsive to students’ feelings and needs
(vi) Communicative: demonstrate effective interpersonal skills, provide positive feedback for all students
(vii) Respectful: values student uniqueness, accepting students’ feelings

7. How can teachers accommodate their students’ preferred learning style?

Teachers can accommodate their students’ preferred learning style in the following ways:
(i) Do a diagnosis of individual learning styles using different types of learning style inventories.
(ii) Use alternative activities to replace or add to existing ones to increase opportunities for students to use different learning styles.
(iii) Give assignments that require students to use different learning styles such as multi-dimensional activities contained in a package.

8. Explain two techniques for promoting active learning in your classroom.

Some techniques for promoting active learning in your classroom are:
(i) The One Minute Paper – students respond to a given question
(ii) Muddiest (or Clearest) Point – students write about the “most unclear” part of the lesson
(iii) Affective Response - students write about their reactions to the lesson
(iv) Daily Journal – combination of (i) to (iii)

9. What do you understand by higher order thinking skills in the context of Bloom’s Taxonomy and Revised Bloom’s Taxonomy?

Higher order thinking skills in the context of Bloom’s Taxonomy and the Revised Bloom’s Taxonomy refers to six levels of thinking in ascending levels of mental activity:
- Bloom’s Taxonomy: knowledge, comprehension, application, analysis, synthesis, and evaluation
- Revised Bloom’s Revised Taxonomy: remembering, understand-
10. Classify the following questions into two types: open- and close-ended by filling in the table with the corresponding type of question.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Open-ended or Close-ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Tell me more about the plot of the story.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>ii. What is the distance between the Earth and the Sun?</td>
<td>Close-ended</td>
</tr>
<tr>
<td>iii. Can you explain Ning’s reaction to the news that she heard?</td>
<td>Open-ended</td>
</tr>
<tr>
<td>iv. How does this relate to our lesson?</td>
<td>Open-ended</td>
</tr>
<tr>
<td>v. Who are the main characters in the story?</td>
<td>Close-ended</td>
</tr>
</tbody>
</table>

11. Contextual learning focuses on five essential forms of learning: relating, experiencing, applying, cooperating, and transferring. How do you distinguish these forms of learning?

Contextual learning focuses on five essential forms of learning: relating, experiencing, applying, cooperating, and transferring.

(i) Relating – linking concept with something students already know
(ii) Experiencing – hands-on activities and teacher explanation to allow students to acquire new knowledge
(iii) Applying – apply knowledge acquired to real-life situations
(iv) Cooperating – students solve problems as a team to reinforce knowledge and develop cooperating skills
(v) Transferring – students apply what they have learned to new situations and contexts

12. In communicating with students, what aspects of effective communication should be considered by teachers? Give two examples for each aspect.

In communicating with students, the three aspects of effective communication that should be considered by teachers are:

(i) Verbal (speaking) skills – e.g., speak with, and not to students, check for understanding, vary tone of voice
(ii) Listening skills – e.g., paraphrase, synthesize, give honest feedback
(iii) Nonverbal communication (body language) – e.g., facial expressions,
13. **What are the elements of good classroom management?**

The elements of good classroom management are:

(i) Physical layout of classroom
(ii) Psychological environment of classroom
(iii) Rules and procedures
(iv) Teacher “withitness”

14. **Why is it important for teachers to create a classroom management plan?**

It is important for teachers to create a classroom management plan for the following reasons:

(i) A guide for teachers to manage their classrooms effectively
(ii) A frame of reference for students regarding the do’s and don’ts in the classroom

**Lesson 1: The 21st Century Teacher As A Subject Matter Expert**

*Let’s Try This (Activity 1.3) pages 23-25*

Using Lai Fong’s letter, cite Mrs. Nguyen’s different general dimensions knowledge under the following components.

Examples of the different types of pedagogical knowledge mentioned in Lai Fong’s note to Mrs. Nguyen are the following:

(i) General pedagogical knowledge: e.g., good classroom management by giving students equal opportunities to participate, encouraging students to try again when they fail to give correct answers, making students raise their hands if they wish to answer a question

(ii) Knowledge of students and their characteristics: e.g., able to differentiate between high and low achievers, able to sustain students’ interest for learning with appropriate teaching strategy

(iii) Knowledge of educational contexts: e.g., creating a conducive learning environment for teaching and learning

(iv) Knowledge of educational goals, aims, values, and philosophy:
Facilitating 21st Century Learning

e.g., believe that all students should be treated equally, irrespective of high or low achievers

How Much Have You Learned From This Lesson? pages 49-54

1. Teacher Carol is a science major, but this year she is asked to teach history to third year secondary students. She has never been very interested in this subject when she was in school. How can she nurture a positive attitude towards history in order to make her lessons interesting for her students?

Teacher Carol can nurture a positive attitude towards history in order to make her lessons interesting for her students by using the following ways:

(i) Acquire adequate knowledge about the subject matter
(ii) Be open to new ideas and technology available to teach history
(iii) Recognize, understand, and manage her personal beliefs about the subject
(iv) Relate history to educational goals, aims, values, and philosophy
(v) Be concerned about and desiring that each student attain a high achievement in history.

2. Read the following comment from a student: “There is nothing worse than sitting in a lesson knowing fully well that the teacher is dying to get rid of you and rush back to the staff room to have a cup of coffee” (Ryan & Cooper, 2008).

(a) What does the above comment say about the teacher’s attitude towards students and teaching?

The educational issue in the student’s comment is related to the teacher’s enthusiasm towards teaching and his/her students. The students in the situation feel that their teacher is not at all interested in teaching them.

(b) How will you address the student’s concern if you were the teacher? You may try the following solutions to show your students that you are interested in teaching them.

(i) Encourage your students to give feedback on your teaching methodology and behavior towards them.
Facilitating 21st Century Learning

(ii) Attend professional development courses in order to update yourself on the latest practices in the subject.

(iii) Get actively involved in department meetings and discussions on how to improve the curriculum of the subject you teach.

(iv) Work in collaboration with other teachers teaching the same subject so that you can exchange ideas on teaching strategies, classroom management, and student assessment.

3. What insights has Mr. Somchai gained about essential teacher knowledge that he needs to teach?

Mr. Somchai realizes that to be an effective teacher, he must have general pedagogical knowledge as well as content knowledge. Pedagogical knowledge refers to knowledge of: how his first graders construct knowledge and acquire learning skills; how to engage his students in their classroom tasks; teaching and learning theories; and teaching strategies. Content knowledge refers to his knowledge of the subject matter he teaches, that is, first grade mathematics.

4. Match the teacher knowledge components in column A with the description in column B by connecting them with a line.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular knowledge</td>
<td>A blend of content and pedagogy that includes an understanding of what makes the learning of specific topics easy or difficult.</td>
</tr>
<tr>
<td>Pedagogical knowledge</td>
<td>Knowledge of pedagogical techniques and about how technology and content are reciprocally related.</td>
</tr>
<tr>
<td>Pedagogical content knowledge</td>
<td>Programs and instructional materials that have been developed for teaching specific topics and subjects at any given level.</td>
</tr>
</tbody>
</table>
5. (a) Which of the following teacher knowledge does Ms. Flora need to know more about in order to address her problem?

In the context of teacher knowledge, the problem faced by Ms. Flora is related to pedagogical knowledge.

(b) Based on the kind of teacher knowledge that Ms. Flora needs, suggest two ways by which she can address her problem in the classroom.

Ms. Flora can manage her problem in the following ways:
(i) Consult with her subject panel head or senior teachers who are experienced in classroom management;
(ii) Discuss the problem of student inappropriate behavior with teachers who teach the same class to elicit their ideas on class control and discipline.

6. Each item below describes a teaching strategy that a teacher uses in the classroom. On the cell opposite each item, write each strategy’s classification as a component of teacher knowledge for teaching.

The corresponding component of teacher knowledge for teaching for the description of a teaching strategy.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Component of Teacher Knowledge for Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Ms. Yu brought her biology class to the school garden to observe the different kinds of plants growing there. She asked them to class take note of the similarities and differences of the plant varieties. This way, the students effectively learned the characteristics of plants. The effectiveness was evidenced in their unit examination results. **Pedagogical content knowledge** because the teaching strategy shows Ms. Yu’s knowledge of the topic she was teaching and how to effectively teach it.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Component of Teacher Knowledge for Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ms. Vasugi accommodates her students’ learning styles by ‘switching’ from lecture to video clip presentation and hands-on activities. She acknowledges students who give correct answers with words of praise and encourages those who give wrong answers to try again.</td>
<td><strong>Pedagogical Knowledge</strong> because the teaching strategy reflects Ms. Vasugi’s application of her knowledge of students’ characteristics, learning styles, and motivation to promote learning.</td>
</tr>
<tr>
<td>3. Lately, Mr. Majeed has often been away from school for official duties. As he does not want to miss more classes, he set up a virtual classroom in the form of an online forum. He uploads his lessons on this forum, with questions included at the end of the topic. His students then post their responses online.</td>
<td><strong>Technological Pedagogical Content Knowledge (TPCK)</strong> because Mr. Majeed manifested knowledge about technology and how it can promote effective learning and teaching.</td>
</tr>
</tbody>
</table>

7. Which of the four teachers is engaging in lifelong learning? Give reasons for your answer.

Ms. Dong and Mrs. Kim are engaging in lifelong learning. According to the definition, lifelong learning denotes voluntary and self-motivated
learning. Some of the personality traits attributed to lifelong learning are a love for learning, and a high level of intellectual curiosity to explore new knowledge related to one’s field. In comparison, Mr. Lingam is just fulfilling a professional requirement to a higher salary scale.

8. (a) Identify the type of teacher knowledge that Mrs. Amor implemented in her lesson.

Mrs. Amor is implementing technological pedagogical content knowledge in her discussion of reading assignments for the topic she has taught.

(b) How does this mode of instructional delivery differ from the traditional lecture method?

This mode of instructional delivery differs from the traditional lecture method in the following ways: It:

(i) engages students in active learning
(ii) enhances their computer literacy skills
(iii) fosters student and teacher interaction

9. (a) What aspect of her course participants’ professional life is Mrs. Huong focusing on?

Mrs. Huong is focusing on her workshop participants’ lifelong learning. She is giving them the opportunity to examine their lifelong learning quotient. Based on the answers they obtain, they can then decide whether they need to increase their participation in additional lifelong learning programs in the future.

(b) What kind of reflection are the participants engaged in? What is its purpose?

The participants are engaged in reflective dialogue, which is an opportunity for them to do self-examination on their practice.

10. Briefly describe the guidelines that Ms. Eva might have shared with her beginning teachers.

The guidelines that Ms. Eva will share with her teachers regarding designing a personal lifelong learning plan are:

• Make a personal commitment to lifelong learning. Make it a fruitful lifetime journey by learning something new intermittently.
• Maximize your resources such as time, energy and, perhaps, finances to the fullest.

• Maximize your learning environments. Identify settings that are able to support and inspire you, both inside and outside your home.

• Know how you learn, for example: learning patterns and learning style.

• Maximize your mental ability. Engage in analytical, critical, and creative thinking. Use frequent mental exercises such as brain gym to strengthen your mind.

• Engage in writing activities to generate ideas and express them.

• Enhance your retention of facts and ideas. Exhibit mastery by applying what you learn to daily life situations.

• Be aware of and value individual differences with respect to communication styles and learning styles to facilitate personal growth, open your mind, and develop your perceptual experiences.

• Look after your physical and mental health. Address health challenges, such as workplace stress, as soon you experience the symptoms.

• Chart your lifelong learning course. Follow these steps:
  (i) Select a learning theme for the year.
  (ii) Subdivide your theme into several topics and include a time frame.
  (iii) Create a journal to jot down your ideas for the following year.
  (iv) Review every six months to decide what new ideas to work on in the next six months.

Lesson 2: The 21st Century Teacher as a Facilitator Of Learning

Let’s Try This (Activity 2.8) pages 91-93

1. What kind of thinking is required of the students in order to answer the six questions given by Ms. Mira?

   The questions required both lower order and higher order thinking.

2. Do all the questions require the same level of cognitive thinking and processing?
Why? Why not?

No. The first three questions require lower thinking skills, while the last three require higher thinking skills.

3. Which questions are recall questions that only need straightforward answers from the story? Give reasons for your answer.

The first question, “Describe where Goldilocks lived,” requires a direct answer. The students need simple memory recall to answer this question.

4. Which questions encourage Ms. Mira’s students to think beyond the information obtained from the story? Give reasons for your answer.

The last three questions require the students to provide information beyond what was given in the story. These questions need higher cognitive levels of thinking. For example, the students are asked to compose a song, a skit, or a poem to convey the story in a new form. This would require them to be creative and connect what they have learned to come up with a new “product” (e.g., song/skit/poem).

Let’s Try This (Activity 2.9)  page 97

<table>
<thead>
<tr>
<th>Question</th>
<th>Level of Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe where Goldilocks lived.</td>
<td>Remembering</td>
</tr>
<tr>
<td>2. Summarize what the Goldilocks story was about.</td>
<td>Understanding</td>
</tr>
<tr>
<td>3. Construct a theory as to why Goldilocks went into the house.</td>
<td>Applying</td>
</tr>
<tr>
<td>4. Differentiate between how Goldilocks reacted and how you would react in each story event.</td>
<td>Analyzing</td>
</tr>
<tr>
<td>5. Assess whether you think this incident really happened to Goldilocks.</td>
<td>Evaluating</td>
</tr>
<tr>
<td>6. Compose a song, skit, poem, or rap to convey the Goldilocks story in a new form.</td>
<td>Creating</td>
</tr>
</tbody>
</table>

Let’s Think About This  page 117

Teaching “Recycling” to six graders in an Environmental Science classroom using the REACT contextual teaching and learning strategy:
(i) Relating – Linking the concept to be learned with something the student already knows. For example: When teaching about “Recycling,” ask students to name different ways of recycling objects they see around their homes, classroom, school, community, such as paper, glass containers, plastic bottles, aluminum cans, old batteries, old mobile phones, electronic rubbish, computer equipment, and so on. Students’ attention is focused on common things they see in their everyday lives. When they are able to relate to these everyday situations, new information is better absorbed.

(ii) Experiencing – Hands-on activities and teacher explanation allow students to discover new knowledge. For example: When teaching about “Recycling,” assign students a small group project such as organizing a school recycling campaign. Learning appears to “take” far more quickly when students are given opportunities to talk about the content (What to recycle? How to recycle? Why recycling is important? Recycling Etiquette, and so on) as well as to do referencing for relevant information to conduct the campaign.

(iii) Applying – Students apply their knowledge to real-world situations. For example: Ask students to encourage their family members to recycle waste products and rubbish at home, and go around the neighborhood spreading the “Recycling” message.

(iv) Cooperating – Students solve problems as a team to reinforce knowledge and develop cooperating skills. For example: After forming small groups, ask students to discuss ways to promote self and public awareness regarding the slogan, “Reduce, Reuse, Recycle.” The collaborative experience and practice that is nurtured in the classroom not only assists them to learn new material, but it also helps them in their homes and community and later in their workplace.
(v) Transferring- Students take what they have learned and apply it to new situations and contexts. For example: Ask students to engage in the problem-solving of a situation where rubbish bins are filled with organic waste, paper, plastics, glass bottles, printer cartridges, or show them a picture of dumpsites filled with asbestos, aluminium, discarded furniture, cardboard boxes, styrofoam, children’s old bicycles, and so on. Students will thus become more confident in their problem-solving skills and abilities when they go out into the world of work later.

**How Much Have You Learned From This Lesson?** pages 119 - 122

1. Ms. Alana demonstrates the following teaching behaviors in her instruction:
   - She allows her students to make decisions in solving a learning task.
   - She maintains the role of an observer when her students engage in group work.
   - She creates opportunities for her students to express their feelings.

   **What is the teaching style characterized by the above teaching behaviors?**

   a. **Collaborative**
      
      This is not the best answer. When a teacher adopts a collaborative teaching style, he listens to his students’ experiences, encourages them to explore their ideas, and discusses the pros and cons of different problem-solving strategies with them.

   b. **Assertive**
      
      This is not the best answer. A teacher who assumes an assertive teaching style delivers knowledge to his students, asks them to answer his questions, and tells them what to do when they are wrong.

   c. **Suggestive**
      
      This is not the best answer. When a teacher assumes a suggestive
teaching style, he uses his own experiences to help his students in problem-solving, gives his own suggestions to solve problems, and summarizes the discussion with his students.

d. **Facilitative**
   This is the best answer. A teacher who adopts the facilitative teaching style allows his students to do most of the discussion, plays the role of observer in group discussions, and lets his students determine their learning direction.

2. **Mr. Almeida has assigned his students to write an essay explaining the impact of the use of the atomic bomb during World War II. Which cognitive level of Bloom’s Revised Taxonomy is best illustrated by this assignment?**

   a. **Analysis**
      This is the best answer. Students are required to analyze the events leading to the end of World War II, and what impact the use of the atomic bomb had on Japan and the countries that came under the Japanese Occupation for a short time.

   b. **Application**
      This is not the best answer. Students are not required to apply any of the principles or concepts they have learned to answer the question.

   c. **Comprehension**
      This is not the best answer. The question does not require to merely comprehend the facts related to World War II.

   d. **Knowledge**
      This is not the best answer. The question requires more than just knowledge about World War II.

3. **Mr. Ananda is teaching about air transport. He asks his students to name jobs related to the airline industry. Based on the REACT forms of learning in contextual teaching and learning, which of the following corresponds to Mr. Ananda’s learning task?**
a. **Relating**

This is not the best answer. Mr. Ananda is not asking his students to just give examples of air transport systems that they are familiar with based on everyday experience.

b. **Experiencing**

This is not the best answer. Mr. Ananda’s question does not engage his students in any hands-on activities to discover new knowledge.

c. **Applying**

This is the best answer. Mr. Ananda’s question requires the students to think about or project into the unfamiliar workplace of the airline industry, and, based on this, come up with jobs they imagine would be necessary to support airline activities.

d. **Cooperating**

This is not the best answer. Mr. Ananda’s students are not required to solve problems as a group to develop their cooperating skills.

4. In order to find out more about the learning styles of four students who seem to lag behind in your class, you asked them to write down how they study their lessons. Below are the learning strategies said students wrote. How would you classify each student in terms of their dominant learning styles? Write your answer on the corresponding space provided.

| Student A | Learning style:  
|---|---|
| - I repeatedly write out important information.  
- I read notes silently.  
- I use statements to organize diagrams.  
- I rewrite ideas and principles in words. | Reading/Writing |

| Student B | Learning style:  
|---|---|
| - I attend lectures and tutorials.  
- I discuss topics with my teacher and other students.  
- I make a summary of notes, put them on tape, and listen to them. | Aural |
Student C • I read aloud from textbooks and notes.
• I listen to audio-taped notes while doing exercises.
• I learn better through field trips, exhibits, collectibles, and hands-on examples.

| Learning style: Kinaesthetic/Tactile |

Student D • I replace words with symbols.
• I translate concepts into pictures and diagrams.
• I underline or highlight notes or textbooks.
• I practice converting visuals into words.

| Learning style: Visual |

5. At intermediate intervals during her Social Science class, Mr. Nuruddin stops and asks questions such as “What have you understood of the lesson, so far?” “What do you perceive as important facts that I have discussed in the last 10 minutes?” What are some possible reasons that Mr. Nuruddin asks questions like those?

Some possible reasons for Mr. Nuruddin’s questions are: He wants to:
(a) Train his students to listen, process information, and organize their thoughts
(b) Engage his students in thinking as he is teaching the content
(c) Enhance his questioning skills in the classroom

6. Mrs. Contessa, a new teacher, invited you to visit her class for feedback. You found her dishing out questions mainly answerable by a Yes or a No. What professional advice can you offer Mrs. Contessa to improve her questioning skills in the classroom?

Mrs. Contessa can enhance her reacting skills in the classroom in the following ways:
(a) Ask her students to give comments during her teaching
(b) Invite students to elaborate on other students’ answers
(c) Use silence to convey the impression of expecting responses

7. (a) What is active learning?

Active learning refers to the substantial amount of mental energy and high level of psychological involvement in the learning process. Students are significantly involved in doing tasks and thinking about what they are doing.
(b) How can students become actively involved with subject content?

Students can become actively involved with subject content in the following ways:

(i) writing (e.g. writing an essay, report, critique),

(ii) speaking (e.g. articulating and justifying their ideas about an issue, discussing solutions to a problem in small groups), and

(iii) using information technology (such as accessing information on the internet, word processing, using e-mail).

8. After attending a one-day course on Higher Order Thinking Skills, Ms. Thanh is asked by two other teachers about the Revised Bloom’s Taxonomy and how higher order thinking can be integrated in teaching. What would be Ms. Thanh’s answer?

(a) The Revised Bloom’s Taxonomy is a classification of thinking into six cognitive levels, in ascending order of level of thinking from lower order to higher order. The lowest three levels are: remembering, understanding, and applying. The highest three levels are: analyzing, evaluating, and creating.

(b) Higher order thinking can be integrated in teaching when teachers use teaching strategies, ask questions, and engage students in learning activities that develop beyond students’ cognitive skills of remembering, understanding, and applying to include analyzing, evaluating, and creating.

9. After a science lesson, Ms. Bong walks out of the classroom looking rather upset. She meets Mr. Budin in the corridor and tells him that her students made a comment that her questions are too easy. If you were Mr. Budin, what advice would you give Ms. Bong?

Ms. Bong could be facing some of the following problems related to her questioning skills:

(a) Asking too many close-ended questions that only require one-word answers, such as “Yes” or “No”
(b) Asking too many short answer questions or questions that require students to know and remember facts

(c) Not providing opportunities for students to initiate questions or give feedback

(d) Focusing only on a small number of students instead of involving the whole class

(e) Calling on students before posing the question

(f) Asking a cluster of questions instead of one question at a time.

10. **Contextual teaching and learning (CTL) helps students relate subject matter to real-life situations. Enumerate and explain the CTL strategies that you can apply in your class.**

The contextual teaching and learning strategies that may be applied in class are as follows:

(a) **Problem-based**
   Begin with a simulated or real problem drawn from students’ experience where they are expected to use critical thinking skills to address the problem or issue concerned.

(b) **Use multiple contexts**
   Introduce different contexts for students to acquire different skills such as family, classroom, school, community and so on.

(c) **Draw upon student diversity**
   Utilize student diversity as the catalyst to enrich contextual teaching and learning. Use teamwork and group learning activities to respect cultural and personal diversities, widen perspectives, and promote interpersonal skills.

(d) **Support self-regulated learning**
   Emphasize to your students that they are to become lifelong learners who must have knowledge and skills in information-processing and problem-solving. Provide technical and moral support as your students move from dependent to independent learning.

(e) **Use interdependent learning groups**
   Learning groups encourage your students to contribute to the
knowledge, beliefs, and values of the other group members. Your role is to act as a coach, facilitator, and mentor.

(f) Employ authentic assessment
Use authentic assessment instead of traditional pencil-and-paper tests to assess if learning has taken place, blends into the instructional process, provides students with opportunities and direction for improvement, keeps track of student progress, and informs teaching practices used in the classroom.

Lesson 3: The 21st Century Teacher as a Classroom Manager

How Much Have You Learned From This Lesson? pages 173-175

1. Ms. Suzie and Mr. Bala are discussing the best way to engage their students’ interest in Southeast Asian history. Which of the following best exemplifies active listening?

   As Ms. Suzie speaks about the importance of integrating digital technology into their subject, Mr. Bala

   a. Interrupts by arguing that the existing technology is more useful and cost saving.

      This is not the best answer. By interrupting before Ms. Suzie has finished talking indicates that Mr. Bala is not engaged in active listening.

   b. Stifles a yawn whilst maintaining eye contact.

      This is not the best answer. Yawning indicates that Mr. Bala is probably bored and is not listening attentively to Ms. Suzie.

   c. Nods his head occasionally, but is planning mentally how to rebut Ms. Suzie’s opinion.

      This is not the best answer. Although Mr. Bala nods his head, he is not really listening as he is thinking how to disagree with Ms. Suzie.

   d. Leans forward, nods his head, and waits until Ms. Suzie finishes speaking before rebutting her opinion.

      This is the best answer. Leaning forward, nodding his head, and waiting until Ms. Suzie has finished talking are indicators of active listening.

2. Mrs. Perumal likes to use small-group work in her lessons. She arranges her
students’ desks in small circles or clusters. What is the problem with this arrangement when Mrs. Perumal gives whole-class presentations?

a. Mrs. Perumal will be unable to see all her students.

This is not the best answer. She will have no problem as she is standing in front of the class during whole-class presentations.

b. The classroom will become very congested.

This is not the best answer. All the students will be seated at their desks listening to Mrs. Perumal during whole-class presentations.

c. She will not be able to move around.

This is not the best answer. Mrs. Perumal will still be able to move around as the seating arrangements have not changed even though she has changed from small group work to whole-class presentations.

d. Some students will have to turn their chairs to see her.

This is the best answer. When students are seated in small circles, some of them will not be facing Mrs Perumal. In order to see her, these students will have to turn their chairs. In doing so, they may distract other students and interrupt the lesson.

3. Ms. Apsara asks you how she can sustain her students’ active participation throughout her lesson. What guidelines will you give her?

In order to sustain her students’ active participation in the class, it is important for Ms. Apsara to use a variety of learning activities ranging from general purpose to content-specific that will cater to her students multiple intelligences. In this way, her students stay focused and on-task throughout her lesson. For example, students get out of their seats and engage in physical activities to re-energise themselves, engage in reflection to think critically about an issue that has occurred, or involve themselves in small-group work to foster collaboration learning.

4. Teacher Stella is very impatient with her students in class. She rarely remains
Facilitating 21st Century Learning

silent enough for her students to think reflectively before giving an answer. How can she use silence to improve her listening skills?

By being silent, Stella can improve her listening skills because she will be able to:

(i) Observe her students’ eyes, facial expressions, posture, and gestures for communication

(ii) Think about what her students are communicating

(iii) Consider what the most appropriate response is.

5. Mr. Benjie observes that halfway through his lesson, his students’ attention starts to wane. How can he re-energize them so that they will be attentive again?

Mr. Benjie can re-energise his students so that they will be attentive again using the following strategies:

(a) Use quickwrites: Ask students to write about what was most interesting about the lesson or summarize the lesson thus far.

(b) Use a fairness cup: pull out a popsicle stick containing a student’s name and ask him to speak or answer a question

(c) Use signalling: ask students to prepare answers to a question and signal when they are ready to answer

(d) Use a repertoire of teaching skills: move from teacher-centred to student-centred to keep students alert

6. Active listening is an important element in classroom communication. How can a teacher improve his/her active listening skills with his/her students?

A teacher can improve his/her active listening skills with his students in the following ways:

(a) Maintain good eye contact and leaning forward slightly when speaking to his students

(b) Paraphrase what a student says, for example: “Did I hear you say this?”; “Do you mean...?”

(c) Use sentence stems to synthesize what a student says, for example: “Can we check what you have been saying so far?”

(d) Give honest and immediate feedback to enable students to know if what they say has been understood.
7. *Teacher Lau is interested to use the collaborative learning approach in his classroom. Discuss the four essential elements he has to consider before he can engage his students in collaborative activities.*

The four essential elements that Teacher Lau has to consider before he can engage his students in collaborative activities are:

(a) Plan activities that provide his students opportunities to interact among themselves, for example: discussions

(b) Plan learning tasks that involve students in mutually searching for understanding, for example: project work

(c) Plan strategies that shift the focus of authority from the teacher to the students, for example: students lead a discussion with the teacher as facilitator

(d) Plan learning platforms for students to exchange ideas and give their opinions from different perspectives, for example: class forum, open discussion

8. *Mr. Sagar, a novice teacher, asked you what a classroom manager is. How would you explain the concept to him?*

The phrase, “The teacher as a classroom manager,” means that the teacher is likened to a manager in his classroom. He/She manages discipline in the classroom by having a set of rules and regulations that is jointly established; he/she maintains students’ behavior so as not to disrupt learning in the classroom; and he/she manages the classroom environment so that it is conducive to learning.

9. *Teacher Tina, a first year teacher in Maju Jaya High School, is asked by her Senior Assistant (Academic) to design her personal classroom management plan. She is unsure of the format and comes to consult you. How would you assist Teacher Tina in her task?*

Teacher Tina can use the following format to design her personal classroom management plan:

(a) Write her philosophical statement – include her beliefs about managing her life, her class, her students, learning, and so on

(b) Rules and procedures – what rules and procedures she and her students will create together; how the established rules and procedures will be presented
(c) Classroom arrangement – include the physical arrangement of the teacher’s table, students desk and chair, other classroom furniture, location of classroom resources like reference materials, and so on

(d) Misbehavior interventions – include strategies to handle and manage student misbehavior

(e) Classroom safety – explain why classroom safety is important and how to handle emergencies

(f) Student celebration – include how student success will be given recognition

_How Much Have You Learned From This Module?_ pages 177-182

1. Ms. Mila, who has just been teaching for six months, is frequently absent from work. On days that she is present, she just follows the lesson plan she prepared and does not take interest in curious questions posed by her students. She uses teaching strategies that do not require much preparation and she does not want to try good teaching practices shared by her school head and colleagues.

Which of the following areas does Ms. Mila need to work on the most at this point to become an effective teacher?

a. **Classroom management and communication skills.**

   This is not the best answer. Classroom management is related to establishing and maintaining an environment in which learning can occur. Communication skills are skills in speaking, listening, and tuning in to students’ nonverbal communication.

b. **Commitment and enthusiasm**

   **This is the best answer.** Commitment and enthusiasm toward subject matter are important attributes of a positive attitude, and these are no longer manifested in Ms. Mila’s present behavior in class.

c. **Technology and diversity**

   This is not the best answer. Technology is the use of books, chalk and
blackboard, or internet, digital video and so on in teaching. Diversity refers to students from different cultural backgrounds.

d. **Subject matter knowledge and competence**
   This is not the best answer. Subject matter knowledge and competence includes knowing about and being able to organize facts, terms, and concepts, ways of thinking, beliefs about a discipline, and so on.

2. *Mrs. Bella spends a considerable amount of time writing lesson plans and developing appropriate teaching strategies for the topic she is teaching to accommodate her students’ interests and learning styles. Which professional skill is she demonstrating?*

   a. **Curricular knowledge**
      This is not the best answer. It refers to programs or course of study developed and offered at federal, state, or district level that enables teachers to teach subjects at a given level as well as instructional materials available.

   b. **Pedagogical knowledge**
      This is not the best answer. It refers to knowledge about classroom management principles and strategies, lesson plan development and implementation, and student evaluation.

   c. **Pedagogical content knowledge**
      This is the best answer. It is the blending of content and pedagogy to teach a particular topic using analogies, demonstrations, and so on.

   d. **Content knowledge**
      This is not the best answer. It refers to in-depth knowledge of the subject matter that is related to the theories, principles, and concepts of a particular discipline.

3. *The school administration in Mrs. Carlos’s school puts great importance on lifelong learning. As a result, Mrs. Carlos and many of her colleagues have enrolled for an online post-graduate course with a local university. What is the type of lifelong learning that Mrs. Carlos and her colleagues are currently engaged in to pursue their post-graduate studies?*
a. **Formal learning**

This is the best answer. Enrolment in a tertiary institution, where one is required to complete a course of study in pursuit of an academic degree, is an example of formal learning.

b. **Informal learning**

This is not the best answer. Enrolment for a post-graduate degree takes a longer duration than informal learning, which usually involves less structured learning activities such as attending a talk by a guest speaker, watching a video documentary, or listening to a radio discussion.

c. **Non-formal learning**

This is not the best answer. Post-graduate studies are conducted in a formal, school-like setting, such as a university or college, and follow a set curriculum with scheduled tasks, assignments, and other formal assessment procedures leading to a tertiary level certification.

d. **Collaborative learning**

This is not the best answer. Each of them is pursuing a post-graduate degree on an individual basis.

4. **Ms. Kelly is teaching a unit on the American Civil War. She begins by playing the American National Anthem and then distributes a brief outline of what the lesson will cover. She lectures from carefully prepared visual presentations. Periodically, she asks questions to make sure her students are attending to the material. She calls on the first student who raises his hand. If he is unable to answer immediately, she gives the answer herself so that the lesson will go on smoothly.**

**How can Ms. Kelly improve her questioning and reacting skills in the classroom?**

a. **Allow her students more time to answer questions**

This is the best answer. She has to practice “wait time” in her class in order to give her students time to think of the correct answer.

b. **Ask recall questions about the lesson to check how well the students remember the facts of the lesson.**
This is not the best answer. Simple recall questions do not require higher level cognitive skills from the students.

c. *Be more spontaneous in her class presentations*

This is not the best answer. Teaching a lesson entails careful planning including what questions to ask, when to ask, and how questions are sufficient for the students concerned.

d. *Use a variety of visual aids in her lecture.*

This is not the best answer. Visual aids are not the issue in this teaching situation but the questioning techniques used by Ms. Kelly.

5. *Ms. Janz, an outstanding teacher awardee for the high performance of her students in the national achievement examination, was asked about her “secret” why her students performed very well academically. She responded by saying, “I love working with my kids and I am really satisfied when I look at them at the end of the year and discover the wonderful individuals they have become. I guess they do good in class because they can see that I love teaching them and they want to reciprocate by studying well.”*

Do you think Ms. Janz’s show of enthusiasm and positive attitude towards teaching and her students contributed to her students’ high academic performance? Explain your answer.

Ms. Janz’s show of enthusiasm can be due to her adoption of three attitudes:

(a) She allows for mistakes and views them as part of her professional growth as a teacher. She reflects on days when her lesson fails to achieve learning outcomes and days when class management is excellent. She keeps these reflections in a journal.

(b) She creates a support system among other teachers who teach the same subject. They sit and discuss curriculum issues, classroom best practices, and new assessment techniques. They establish mentor-learner groups, peer-tutoring groups, and professional discussion groups.

(c) She looks for opportunities for in-service courses, workshops and seminars to update her pedagogical knowledge and strengthen her skills in teaching strategies.
6. (a) Identifying HOTS (H) and non-HOTS (N) questions:

N 1. What did the woodcutter find in the jungle?
N 2. How old were some of the trees?
H 3. Why did the woodcutter talk in a polite manner to the oldest tree?
H 4. If you were the old tree, would you have granted the woodcutter his request? Why? Why not?
N 5. Why was the old tree remorseful of his action?
H 6. What is the moral of the story?

(b) Suggest two HOTS activities that will be useful for Mr. Osman to integrate into his teaching. Briefly describe how these activities can be carried out.

Two HOTS activities for Mr. Osman to integrate into his teaching are: (Any two)

(i) Word Creation - Ask the students to think of a ‘nonsense’ word like “squallizmotex,” and give a definition for it; form as many three-letter words from it.

(ii) Unusual Uses – Ask students to try to think of as many unusual uses as they can for common objects such as used socks, old umbrellas, empty Coke cans.

(iii) Circumstances and consequences: Ask students to complete questions such as, “What would happen if ...
- you win the lottery tomorrow?
- the sun did not shine tomorrow?”

7. Identify and assess the appropriateness of the teaching strategy used by Ms. Karamjit to teach the topic of blubber on marine animals.

Ms. Karamjit provided opportunities for her students to be involved in active learning through their participation and collaboration in the experiment. This teaching strategy is appropriate for the topic that requires students to understand the purpose of blubber in animals. If Ms. Karamjit had used the lecture method, her students would have just sat passively and acquired theoretical knowledge, which would not have been easily comprehensible. When learning is active and meaningful, it facilitates their understanding of the facts and promotes long-term mastery of the content.

8. (a) Identify the different kinds of communication skills demonstrated
by Ms. Williams, as gleaned from the letter’s content.

The different kinds of communication skills demonstrated by Ms. Williams:

(i) Verbal skills – kind words of sympathy to Pat when her father passed away, giving words of encouragement to Siew Tin in her hour of need

(ii) Nonverbal skills – a smile on her face to convey understanding of the students’ behaviors

(b) Why is it important for teachers to nurture effective communication skills?

It is important for teachers to nurture effective communication skills because:

(i) Students will imitate the effective communication skills of their teachers and become effective communicators themselves.

(ii) It produces a conducive learning environment.

(iii) It facilitates effective classroom management.

9. (a) Which teacher is more likely to experience classroom management problems? Why?

Mrs. Tan is most likely to experience classroom management problems. She is saturating her students with tasks that will sap their mental energy. Students need to take a break in between activities.

(b) Suggest how this teacher can improve his/her classroom management
Mrs. Tan can improve her classroom management skills by:

(i) Minimizing transitions from one activity to another to reduce the occurrence of disruptive behavior.

(ii) Plan differentiated academic tasks that are relevant to students’ ability level.

(iii) Establish classroom rules and procedures and inform students of the consequences of their misbehavior.

10. On the first day of the new academic year, Teacher Gerry is determined to create a conducive learning environment for his students. Discuss how he can achieve this.

Teacher Gerry can create a conducive learning environment for his students using the following strategies:

(a) Set up his classroom so that the physical arrangement promotes teacher-student/student-student interactions and minimizes distraction to learning.

(b) Create a psychological environment that communicates a non-threatening atmosphere and a sense of belonging.

(c) Establish a set of rules and procedures democratically with clear logical consequences to set the limits for student behavior.

(d) Plan and implement learning tasks that foster on-task behavior and keep students actively engaged in learning.

Suggested Readings and Websites

Educational Leadership, Volume 67, No 1.


Marcus, S.R. *A Rose by Any Other Name: Educator, Instructor, Facilitator, What Are You?*. Available at http://www.isatt.org/ISATT-papers/
ISATT-papers/Marcus_ARosebyAnyOtherName.pdf.


**Glossary**

*Academic tasks* - the work students must accomplish, including the content covered and the mental operations required

*Accountable* - making teachers and students responsible for their teaching and learning

*Active learning* - learning characterized by high levels of student participation in authentic tasks and classroom activities

*Active listening* - a form of communication in which an individual fully attends to a message and responds to both the intellectual and emotional content of the message

*Advance organizer* - teaching activities and techniques that establish a framework and orient students to the material before it is presented

*Affective domain* - the learning domain that focuses on attitudes, values, and the development of students’ personal and emotional growth

*Assessment* - the process of systematically gathering information for the purpose of making decisions about learning and teaching

*Attention* - the process of consciously focusing on a stimulus

*Authentic tasks* - tasks that have some connection to real-life problems the students face outside the classroom

*Basic interpersonal communication skills* - a level of language proficiency that allows students to interact conversationally with others

*Brainstorming* - generating ideas without stopping to evaluate them

*Caring* - an individual’s ability to empathize with, and invest in the develop-
Facilitating 21st Century Learning

Characteristics (sometimes called attributes or features) - a concept’s defining elements

Checklist - a written description of dimensions that must be present in an acceptable performance of an activity

Classroom climate - the feelings evoked by the classroom environment. In a healthy climate, teacher and classroom characteristics promote students’ feelings of safety and security, together with a sense of success, challenge, and understanding

Classroom management - teachers’ strategies that create and maintain an orderly learning environment

Close-ended questions - questions that can normally be answered with a “Yes” or “No,” or a specific simple piece of information

Cognitive domain - the learning domain that focuses on the thinking processes involved in learning different forms of knowledge

Competence - the ability to function effectively in the environment

Concept - a general category of ideas, objects, people, or experiences whose members share certain properties

Consequences - outcomes that occur after a behavior and influences future behaviors

Content knowledge - knowledge of subject matter and its organizing structures that are to be learned and taught

Context - the physical or emotional aspect associated with an event

Cooperative learning - an instructional strategy where students work in small groups (typically 2-5) of mixed-ability so that everyone can participate in a clearly assigned task. Rewards are given on the basis of the success of the group.

Creativity - the ability to think about something in novel and unusual ways and come up with unique solutions to problems

Critical thinking - evaluating conclusions by logically and systematically examining the problem, the evidence, and the solution


Curricular knowledge - programs and instructional materials that have been developed and are available for teaching specific topics and subjects at any given level

Digital native - a person who was born during or after the general introduction of digital technology, and through interacting with digital technology (e.g., computers, the Internet, mobile phones) from an early age, has a greater understanding of its concepts

Discussion - an instructional strategy designed to stimulate thinking; help students reconstruct understanding by challenging attitudes and beliefs; and develop interpersonal and social skills

Esprit de corps - a feeling of togetherness that is created as result of a teacher’s enthusiasm and level of concern for the students

Empathy - the ability to experience the same emotion someone else is feeling

Evaluation - the process of making decisions on the basis of measurements

Formative assessment - upgraded testing used before or during instruction to aid planning and diagnosis, provide feedback to students, and monitor their growth

Four Pillars of Education - the four domains of learning – learning to know, learning to do, learning to be, and learning to live together - that form the underlying basis for reorganizing educational content in 21st century education

Framework for 21st Century Learning - student outcomes comprise four key elements: core subjects and 21st century themes; learning and innovation skills; ICT literacy; and life skills and career skills

General pedagogical knowledge - broad principles and strategies of classroom management and organization, lesson plan development and implementation, and student evaluation that appear to transcend individual topics or subject matter areas

Goal - what an individual strives to accomplish

Group discussion - conversation in which the teacher does not have the dominant role; students pose and answer their own questions

Humanistic psychology (humanism) - a view that puts emphasis on students’ capacity for personal growth, freedom to choose their destiny,
and positive qualities

*Information processing* - the human mind’s activity of taking in, storing, and using information

*Instructional objectives* - clear statement of what students are intended to learn through instruction

*Intrinsic motivation* - motivation associated with activities that are their own reward

*Learning* - process through which experience causes permanent change in knowledge or behavior

*Learning styles* - students’ personal approaches to learning, problem-solving, and processing information

*Lifelong learning* - all learning activities carried by teachers both formally (pursuing an undergraduate or post-graduate degree) and informally (learning for self-enrichment and to better prepare oneself to face life’s challenges)

*Logical consequences* - results that consistently follow certain behavior, and explained in advance and agreed upon by the students

*Moral reasoning* - the thinking process involved in judgements about questions of right and wrong

*Motivation* - an internal state that arouses, directs, and sustains behavior toward a goal

*Nonverbal communication* - unspoken messages communicated through tone of voice and body language

*Open-ended questions* - questions for which a variety of answers are acceptable

*Pedagogical content knowledge* - special amalgam of content and pedagogy that includes an understanding of what makes the learning of specific topics easy or difficult

*Perception* - the process people use to attach meaning to stimuli

*Procedures* - prescribed steps for the routines students follow in their daily learning activities
**Problem-based learning** - learning that emphasizes authentic problems like those that occur in daily life

**Productive learning environment** - a classroom or school environment that is orderly and focuses on learning

**Project-based learning** - students work on real, meaningful problems and create tangible products

**Real-world tasks** - a learning activity that develops understanding that would be used outside the classroom

**Reflection** - the process of conducting a critical self-examination

**Rote memorization** - remembering information by repetition without necessarily understanding the meaning of the information

**Rules** - statements specifying expected and forbidden behaviors: do’s and don’ts

**Seat work** - independent classroom work

**Self-regulation** - process of activating and sustaining thoughts, behaviors, and emotions in order to accomplish goals

**Stem** - the question part of a multiple-choice item

**Stimulus** - an event or object that activates behavior

**Strategies** - plans for accomplishing specific learning goals

**Student characteristics** - student aptitudes, talents, learning styles, stage of development, and readiness to learn new material

**Taxonomy** - classification system

**Technology knowledge** - knowledge about standard or traditional technologies (chalk and blackboard) and advanced technologies (internet and digital video)

**Technological content knowledge** - knowledge about how technology and content are reciprocally related

**Technological pedagogical knowledge** - knowledge about the availability, elements, and functions of various technologies for instruction, as well as knowledge of how classroom management and teaching can be en-
hanced as a result of using a particular technology

**Technological pedagogical content knowledge** - knowledge of pedagogical techniques that use technologies to teach content. An inter-play of three elements, namely content, pedagogy, and technology

**Wait-time** - the period of silence, both before and after calling on a student, during which the student has time to think about and construct an answer

“**Withitness**” - a teacher’s awareness of everything happening in a classroom at all times and the communication of this awareness verbally and nonverbally

**References**

**Books and Journals**


Keller, J. (nd). *Teachers as Lifelong Learners: Designing a Theory for Professional Development* [Online].

Lily Law, Julia Lee, Ong Mei Yen, & Cahyadi, V. *Lifelong Learning: The Perceptions Among Teachers of Mukah, a Malaysian Coastal District* [Online].


**Websites**


Contextual Teaching and Learning: Preparing Students for the New


facultymedicine.med.arizona.edu/.../teaching_styles.ppt


Annex A

Sample Classroom Management Plan

Philosophical Statement

I want to teach my students how to live this life on Earth and to prepare them for the struggles and strife they will face in their lifetime. By the end of the year, I want my students to have a good grasp of the “eternal truth,” knowing the difference between right and wrong. I am the leader, not the authoritarian of the class. I want to help them meet their needs and I feel that if the students feel they can trust me enough to come to me, then I can be there to help them. I believe in being fair, quick, and consistent in discipline procedures. I also believe that misbehavior should be addressed with the teacher, student, and parents and the consequences to misbehaving should be reasonable, enforced in a fair, constant manner, and taken care of immediately.

Rules and Procedures

I believe that discipline problems should be handled in the classroom, unless it is a very serious offense that should be handled in the office. I expect my students to act with utmost respect towards one another, myself, and the classroom. When students come to my classroom they should be ready and willing to learn. This means that they have come prepared with the required supplies, completed homework assignments, and seated in their desks when the bell rings, indicating the start of my lesson. Active participation during class discussion is a key component of my grading scale.

I will have the class constitution (student expectations, rules, and consequences) posted on a wall in the classroom. When I do have to enforce consequences, I will stay positive and consistent. I will use supportive language that is neither derogatory nor condescending.

Classroom Arrangement

I will arrange desks in a way that allows for easy movement in between them, so I can have easy access to each student. I generally do not like to stay in one spot while I am teaching; rather, I like to walk around, and so the placement of the desks should give me the freedom to do just that.
This kind of desk arrangement is also ideal for group work at certain times during the semester. My desk will be positioned in the corner of the room for mostly administrative tasks, such as taking attendance or grading. This will also be the location of my computer, lesson plans, attendance sheets, and organization of other miscellaneous paperwork.

I will have shelves/cabinets in the back of the classroom for storing learning resources that the students will need, such as dictionaries, atlases, books pertaining to a particular historical event or unit, construction paper, markers, colored pencils, and other craft items.

My walls will be adorned with bright posters of famous individuals, events, and places as well as maps, flags, and occasional historic quote. These visual-aids will also help engage the students in discussions that will challenge ideas and let the class learn from each other as we learn particular topics throughout the year.

**Misbehavior Interventions**

If there is a consistent misbehavior problem, I will initially ask the student to talk to me after class. We will not only discuss the student’s performance in class, both the good and not-so-good. I will convey to the student the reasons why his/her behavior is interfering with the class and see if we can work out a solution to the problem. This is all preceded by a warning, and the student may have to change his/her seat during class.

If the student does not change his/her behavior, then parent involvement may have to be required. I do not believe in throwing a student out of the classroom unless he/she is harmful to others or to me in the class.

If a student is having some trouble completing his/her homework or not doing well on tests, I will set up a conference with that student. Once we have written out a plan of action, I will send it home with the student for his/her parent’s signature.

**Classroom Safety**

My ultimate goal is to establish and maintain a classroom atmosphere that is positive as well as supportive so that students feel safe and welcome. In terms of creating a safe environment for all to learn, I want to create one with positive student-teacher relationships. In diverse classrooms
where many students come from different backgrounds, my classroom environment will be one where students feel they are being treated fairly. I do not want to label students or assume their academic ability based on the way they look or act. This will ultimately be a classroom where we celebrate differences and learn from each other.

**Student Celebration**

When students show marked improvement or attain excellent results in tests or examinations, special mention will be made during the weekly school assembly. I believe this will serve to motivate them further toward better academic performance.

In order to give recognition to students who are well-behaved or show improvement in their behavior, I will give them rewards. I will have one jar full of marbles and one empty jar. I will move a marble into the empty jar each time a student does something good. If the students are able to fill up the empty jar with marbles, the whole class will receive a reward.

**Source**

(Retrieved from [http://pwp.franklincollege.edu/bahlbrand/General_Methods_-_Classroom_Management_Plan%5B1%5D.pdf](http://pwp.franklincollege.edu/bahlbrand/General_Methods_-_Classroom_Management_Plan%5B1%5D.pdf))