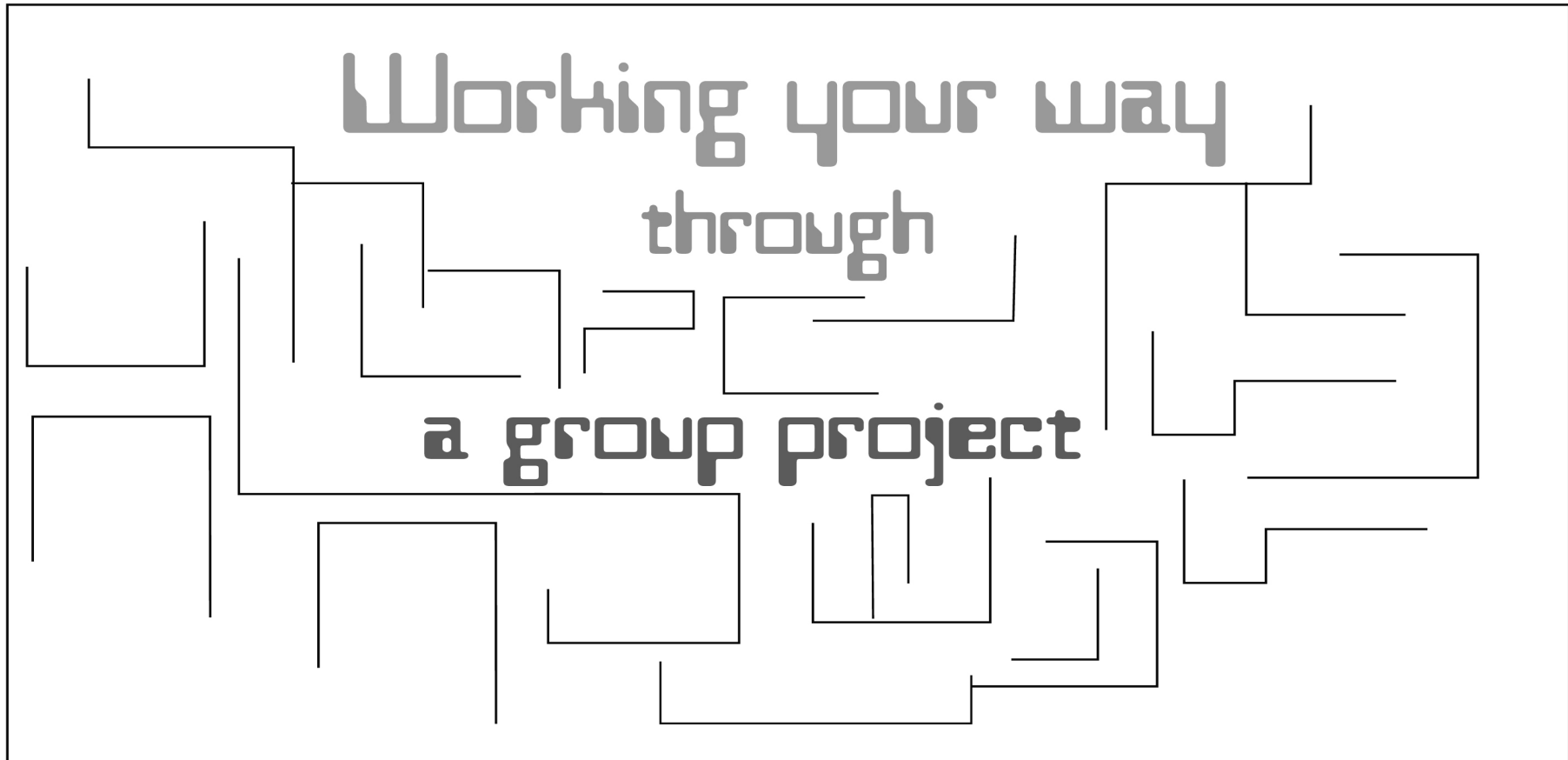


Name : \_\_\_\_\_  
Student ID : \_\_\_\_\_  
Year : \_\_\_\_\_  
Male/ Female : \_\_\_\_\_

## Learning to learn



Fion L. C. Man  
Angela S. P. Ho

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**About the 'Learning to Learn' study guide series**

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**The 'Learning to Learn' study guide series:**

- Getting the most out of your university
- For the success of your study
- Working your way through a group project

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# This Group Project Kit will help you to ...

<i>Work in a Group</i>	<i>Work on a Project</i>
<i>You will be shown how to work effectively in a group</i>	<i>You will be shown how to work effectively through the important stages in a project</i>
<p>Build an effective group</p> <p>Communicate among members</p> <p>Make a group decision</p> <p>Handle disagreement</p> <p>Become leader in a group</p>	Analyze the project question
	Look for relevant references
	Suggest methods
	Select the best method
	Manage the project progress
	Present the results

*~~~~~Section A: Frequently Asked Questions~~~~~*



## *Frequently Asked Questions*

Questions	Suggestions	See also
<p><b><u>Team Building</u></b></p> <p>1. Can't we do something to stop members from not performing their responsibilities in the group?</p>	<ul style="list-style-type: none"> <li>• Hold a group meeting to handle the issue</li> <li>• Set ground rules about penalties for not performing one's responsibilities</li> <li>• List each member's responsibilities in detail</li> <li>• Assign the responsibilities equally according to each member's strengths, weaknesses, and the amount of workload</li> </ul> <p><b><u>Desirable Outcomes:</u></b> Clarified responsibilities and enhanced commitment to carry out those responsibilities</p>	p. 9 & 10
<p><b><u>Communication</u></b></p> <p>2. How could we make him/her turn in work on time without messing up the whole situation?</p>	<ul style="list-style-type: none"> <li>• Focus on the issue, no personal attack</li> <li>• Try to understand his/her problem</li> <li>• As a group give help or suggestion to resolve his/her problem</li> <li>• Make him/her understand the damage he/she is doing to the group project</li> <li>• Make him/her understand that the group's success is his/her success</li> <li>• Negotiate with him/her on how the work could be got done.</li> </ul> <p><b><u>Desirable Outcome:</u></b> Improved mutual trust</p>	p. 11

## *~~~~~Frequently Asked Questions~~~~~*

Question	Suggestion	See also
<p><b><u>Decision Making</u></b></p> <p>3. How can we do a better job in making an effective decision so that we won't go on and on without any fruitful conclusion?</p>	<ul style="list-style-type: none"> <li>• Make decisions based on relevant information rather than “feelings”</li> <li>• Think about how the decision is to be carried out</li> <li>• Make sure that any decision reached can solve the problem; otherwise, make another decision</li> <li>• Ensure that what has been decided is agreed upon by those who are going to carry out</li> </ul> <p><b><u>Desirable Outcome:</u></b> Full support from members on the decision</p>	p. 12
<p><b><u>Interpersonal Conflict</u></b></p> <p>4. How can I work with someone who always insists on his/her opinions?</p>	<ul style="list-style-type: none"> <li>• Show that you are trying to understand his/her thoughts and approaches to doing things</li> <li>• Let him/her understand your thoughts and approaches as well</li> <li>• Get both sides to agree that the benefit of the project is of top priority; any personal interests or conflicts should come next.</li> <li>• Put aside unimportant arguments</li> <li>• Try to resolve disagreements wisely</li> <li>• Find out things in common within the disagreement in order to get compromise</li> <li>• When a solution is found, get both sides to agree to follow it</li> </ul> <p><b><u>Desirable Outcomes:</u></b> Better understanding and improved collaboration</p>	p.13

## *~~~~~Frequently Asked Questions~~~~~*

Question	Suggestion	See also
<p><b><u>Leadership</u></b></p> <p>5. How can we learn better in group work so that we won't just divide up the work without knowing about what others are doing?</p>	<ul style="list-style-type: none"> <li>• Instead of asking each member to work on one part of the project individually, ask each member to <u>act as a leader</u> for his part</li> <li>• As a leader, he/she should               <ul style="list-style-type: none"> <li>➤ Make sure that others understand his/her task</li> <li>➤ Share with other members the information he/she has collected</li> <li>➤ Ask for different viewpoints from members</li> </ul> </li> </ul> <p><b><u>Desirable Outcomes:</u></b> Better leadership skills and collaborative learning</p>	<p>p. 14</p>
<p><b><u>Planning a Project</u></b></p> <p>6. How do we handle a group project that seems completely unfamiliar to us?</p>	<ul style="list-style-type: none"> <li>• Try to understand the question as much as you can in a group</li> <li>• Find out which part of the question is causing difficulties</li> <li>• Look into the concepts which are related to those problematic areas</li> <li>• Use those areas that you do understand to help you understand those areas that you have problems with</li> <li>• Check that your way of handling the project is correct by:               <ul style="list-style-type: none"> <li>➤ Looking up similar work in professional journals or reference books</li> <li>➤ Getting advice from your supervisor or other people knowledge in this area</li> <li>➤ Getting advice from senior students or graduates</li> </ul> </li> </ul> <p><b><u>Desirable Outcome:</u></b> Better problem-solving skills</p>	<p>p. 19-32</p>

## *Frequently Asked Questions*

Question	Suggestion	See also
<p><b><u>Doing a Project</u></b></p> <p>7. What can be done when we are behind the schedule?</p>	<ul style="list-style-type: none"> <li>• Involve everybody to review the situation to find out whether it is a problem of poor time planning or a problem of poor project management</li> <li>• If the original time planning is problematic, involve the group to re-allocate time to each part and draw up a more realistic plan</li> <li>• If the original time planning is good enough, then make everybody in the group understand that they have to stick to the amount of time assigned to each part</li> <li>• The group, particularly the leader, has to find better ways of managing the progress</li> <li>• In order to avoid falling behind schedule, the group should establish the habit of frequently adjusting the workflow plan by comparing the actual time used with the time allocated for each task</li> </ul> <p><b><u>Desirable Outcome:</u></b> The project progress is kept on track</p>	p. 33-42
<p><b><u>Presentation</u></b></p> <p>8. How can we handle questions raised by the audience during our presentation?</p>	<ul style="list-style-type: none"> <li>• Know your topic well</li> <li>• Brainstorm some possible questions that may be brought up by the audience and try to work out some possible answers before the presentation</li> <li>• Clarify the question with the audience if it is unclear (e.g. Do you mean....?)</li> <li>• Think about whether the question is related to the presented topic</li> <li>• Invite opinions from the audience</li> </ul> <p><b><u>Desirable Outcome:</u></b> Better understanding of the project by the audience</p>	p. 45-61

*Section B: Working in a Group*

## *Working in a Group*

### 1

#### Building an effective group

As a member of an effective group, *you should*



- understand and agree with the common goals of the group
- understand that success of the group is shared among group members
- be willing to share responsibilities and contribute to the group work
- be willing to help each other

*How would an effective group be built?*



Things to do	Tips	Reasons
1. Form a group	If allowed, make up a group of 3 or 5	✓ Relatively easy to get everybody's involvement
	Group of 4 is not good	✓ Likely to subdivide into 2 pairs leading to formation of subgroups that may tear the group into parts
	More than 5 is disastrous	✓ Difficult to get group agreement with large group size
	Group with someone that you have never worked before	Enable you to: Develop relationship with other classmates ✓ Expose yourself with more diverse viewpoints, especially in decision making process ✓ Voice out opinions with no fear of hurting the feeling of buddies in a group

# *Working in a Group*

## 1

### Building an effective group



Things to do	Tips	Reasons
2. Setting ground rules  <u>Examples:</u> <ul style="list-style-type: none"> <li>• Be on time in each meeting</li> <li>• All members share in team work</li> <li>• Offer suggestions rather than criticisms</li> </ul>	It is important that the group members agreed on the following:  <u>What</u> ground rules are necessary?  <u>Why</u> ground rules are important?  <u>When</u> ground rules are applied?  <u>How</u> ground rules are carried out?	✓ Help group members to understand how they should behave in order that the group could work best
3. Defining responsibilities  <u>Examples:</u> <ul style="list-style-type: none"> <li>• The leader has to make sure that ground rules are enforced</li> <li>• The recorder has to record ideas in discussions</li> </ul>	Assignment of responsibilities should be based on skills and expertise of members	
4. Managing process  <u>Examples:</u> <ul style="list-style-type: none"> <li>• How well is each group member doing his/her role?</li> <li>• How well is the interpersonal relationship?</li> <li>• How well is the group working together as a whole?</li> </ul>	You will find it very helpful to review the group process regularly, e.g. every two week or every month  All group members should participate in the review	✓ Help the group to find out problems together before it is too late.

## *Working in a Group*

### 2

#### Communicating with group members



Think of the **importance of effective communication**. It can help you to:

- understand each other's needs
- maintain good relationships
- share opinions and expertise
- minimize interpersonal conflicts
- keep everything going in the right direction



How well are you doing in communicating with others?

	<u>Lowest</u>				<u>Highest</u>
(a) <u>Feel free to speak up</u> your ideas or feelings.	1	2	3	4	5
(b) Present your ideas in a <u>simple and organized way</u> .	1	2	3	4	5
(c) Use <u>words</u> which people can <u>easily understand</u> .	1	2	3	4	5
(d) Check the <u>feedback from your audience</u> to make sure that they understand you (e.g. asking questions, observing body language).	1	2	3	4	5
(e) <u>Know your audience</u> well (e.g. interests, backgrounds, personalities).	1	2	3	4	5
(f) Listen to others' opinions <u>without prejudice or negative feelings</u> .	1	2	3	4	5
(g) Try to <u>understand other people's situation</u> .	1	2	3	4	5
(h) <u>Focus on issues</u> and try your best to avoid personal attacks.	1	2	3	4	5

**My scores are low for these statements: \_\_\_\_\_ . I need to IMPROVE!!!**



# *Working in a Group*

## 3

### Making Group Decisions



When making a decision for a group project, it is VERY IMPORTANT to involve everybody. It can enable you to:

- fully utilize the expertise and wisdom in the group
- arrive at a better solution
- get support from the group members



***How well is your group doing in making group decisions?***

	<u>Lowest</u>			<u>Highest</u>	
(a) <u>Encourage</u> group members to <u>suggest</u> as many solutions as possible.	1	2	3	4	5
(b) Make sure that <u>everyone understands</u> alternative solutions.	1	2	3	4	5
(c) Allow members to point out the <u>advantages and disadvantages</u> of each alternative solution.	1	2	3	4	5
(d) <u>Avoid</u> taking a majority vote <u>without having considered</u> all the alternatives in detail.	1	2	3	4	5
(e) <u>Avoid</u> making a <u>quick decision</u> because of time constraints.	1	2	3	4	5
(f) <u>Avoid</u> having <u>dominant speakers</u> or “smart guys” make decisions at all times.	1	2	3	4	5
(g) <u>Involve all members</u> in the decision-making process.	1	2	3	4	5
(h) Ensure that the final decision <u>satisfies everyone</u> .	1	2	3	4	5

**Our scores are low for these statements: \_\_\_\_\_ . We need to IMPROVE!!!**

## *Working in a Group*

### 4

#### Handling Disagreements



**Conflict and disagreement** should **not be ignored** in a group. It has to be resolved properly. Otherwise, it can:

- affect the group's progress
- ruin the relationships among members
- create barriers to good solutions and creative ideas



***How well is your group doing in handling disagreements?***

	<u>Lowest</u>				<u>Highest</u>
(a) Try to <u>find out the causes</u> of the conflict: e.g. clashes between personal and team goals, work procedures, interpersonal relationships.	1	2	3	4	5
(b) <u>Consider</u> each other's <u>viewpoints</u> .	1	2	3	4	5
(c) <u>Voice</u> your feelings and viewpoints towards the issue.	1	2	3	4	5
(d) <u>Be careful</u> what you <u>say</u> and how you <u>react</u> in relation to the disagreement.	1	2	3	4	5
(e) Make use of <u>humor</u> to ease tension.	1	2	3	4	5
(f) Look for <u>alternative ways</u> of doing the project that can avoid the disagreement.	1	2	3	4	5
(g) Make sure that <u>everybody is satisfied</u> with the final solution.	1	2	3	4	5
(h) <u>Repair the damage</u> the disagreement made on group relationships and the project.	1	2	3	4	5

**Our scores are low for these statements: \_\_\_\_\_ . We need to IMPROVE!!!**

# *Working in a Group*

## 5

### Becoming a Leader in a Group



In your project group, each member has his/her expertise and should be allowed to take the lead when there is a problem that needs his/her specialties. Therefore, leadership should be **shared by members**. Shared leadership enables the group to:

- develop the leadership skills of members
- have somebody who has the appropriate expertise to guide difficult decisions
- enhance members' sense of responsibilities and accomplishments



***How well are you doing as a leader in a project group?***

	<u>Lowest</u>			<u>Highest</u>	
(a) <u>Not afraid</u> of being a leader.	1	2	3	4	5
(b) <u>Willing to take up the responsibilities</u> of a leader in the area where you are more knowledgeable.	1	2	3	4	5
(c) <u>Determined</u> to act as a good leader for the assigned task.	1	2	3	4	5
(d) Able to <u>see the direction</u> and to point it out to group members.	1	2	3	4	5
(e) Able to <u>stimulate others</u> to think and contribute ideas in a meeting.	1	2	3	4	5
(f) <u>Willing to listen</u> to members instead of speaking yourself for most of the time.	1	2	3	4	5
(g) Able to <u>consider the feelings</u> of members during group discussions.	1	2	3	4	5
(h) Able to <u>summarize</u> the points to guide the group to <u>make a decision at the appropriate time</u> .	1	2	3	4	5

**My scores are low for these statements: \_\_\_\_\_ . I need to IMPROVE!!!**

## Basic elements of effective group work

<i>5Rs</i>	
<i>Responsibility</i>	<i>Contribute as much as you can</i>
	<i>Complete the work assigned to you</i>
<i>Reliance</i>	<p><i>Help each other to:</i></p> <ul style="list-style-type: none"> <li>• <i>Learn from the project</i></li> <li>• <i>Complete the project</i></li> </ul>
<i>Relationship</i>	<p><i>Encourage each other to</i></p> <ul style="list-style-type: none"> <li>• <i>Share information</i></li> <li>• <i>Exchange viewpoints</i></li> <li>• <i>Discuss learning strategies</i></li> <li>• <i>Form good partnerships</i></li> </ul>
	<i>Show acceptance to different personalities</i>
<i>Respect</i>	<p><i>Be sensitive to each other's</i></p> <ul style="list-style-type: none"> <li>• <i>Needs</i></li> <li>• <i>Feelings</i></li> <li>• <i>Positions</i></li> </ul>
	<i>Be devoted to the project</i>
<i>Reflection</i>	<p><i>Be aware of:</i></p> <ul style="list-style-type: none"> <li>• <i>How much progress the group has made</i></li> <li>• <i>How much you have contributed to the group</i></li> <li>• <i>How well you have communicated with the members</i></li> <li>• <i>How well the project has been done</i></li> </ul>

## *Working in a Group*

### Self-evaluation: How well have we done?



#### Group-work Skills

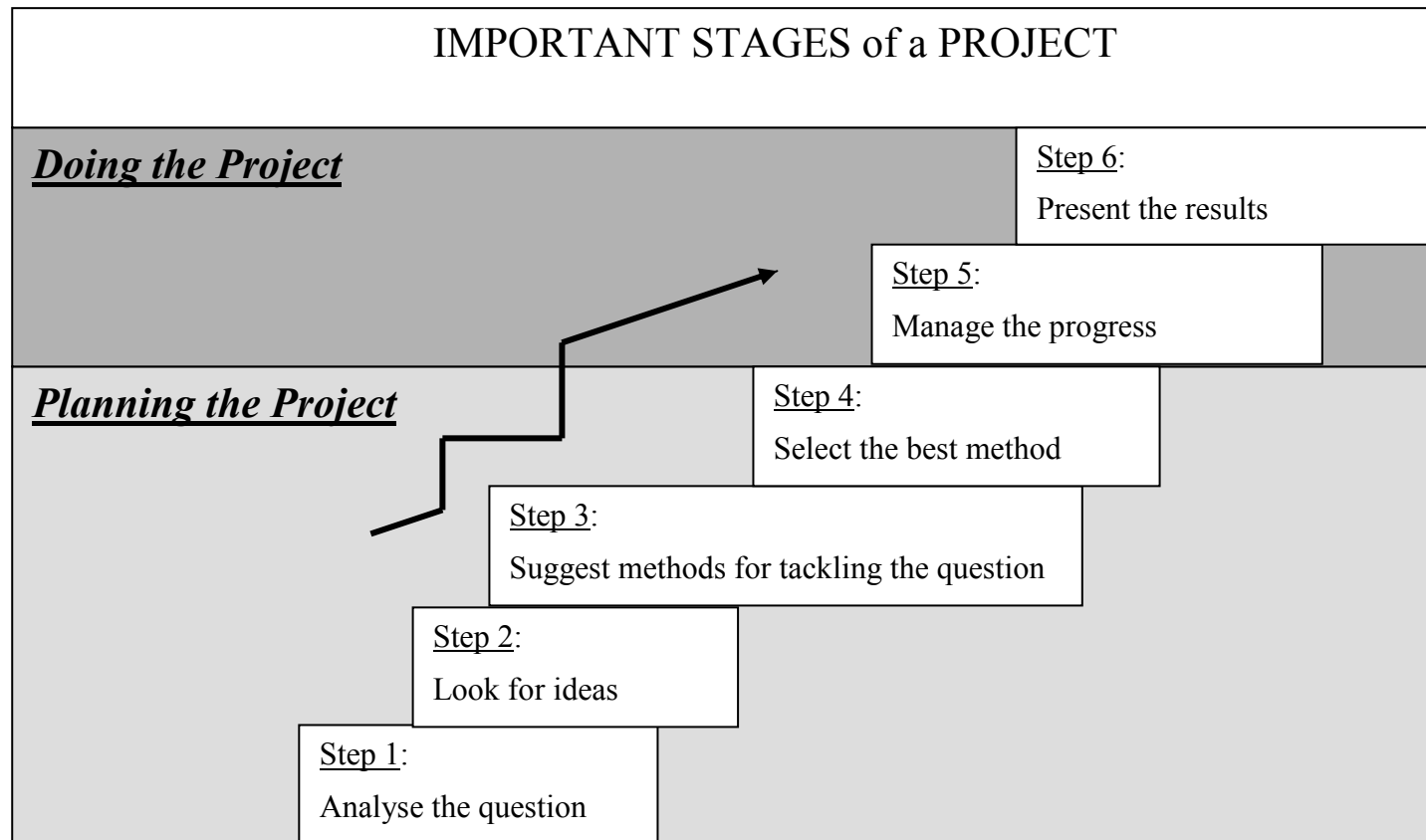
*Be honest to yourself and circle the number that best reflects how well you have done.*

	<b><i>Working as a Group</i></b>	<u>Lowest</u>				<u>Highest</u>
1	We tried to include members with different expertise in the group instead of getting together with friends.	1	2	3	4	5
2	Ground rules were discussed and agreed by all members.	1	2	3	4	5
3	Group members tried to maintain good group culture by applying the ground rules.	1	2	3	4	5
4	We tried hard to clarify the goals of our group for doing the project.	1	2	3	4	5
5	Responsibilities allocated to members were fair in terms of workload.	1	2	3	4	5
6	Our group fully utilized the members' differences, strengths, and competence.	1	2	3	4	5
7	Communication among group members was open and non-defensive.	1	2	3	4	5
8	Group members respected different opinions and tried hard to handle disagreements reasonably.	1	2	3	4	5
9	Decision making was based on the common interest of our group.	1	2	3	4	5
10	Task leaders and members were able to fulfill their roles and work together productively.	1	2	3	4	5
11	Our group reviewed how well we were working as a team from time to time.	1	2	3	4	5
	<b><i>Working as a Member in the Group</i></b>	<u>Lowest</u>				<u>Highest</u>
12	I always felt myself to be part of the group.	1	2	3	4	5
13	I fully understood the project goals and was committed to achieving them.	1	2	3	4	5
14	I was clear about what I was expected to do in the group.	1	2	3	4	5
15	I was cooperative in following the ground rules.	1	2	3	4	5
16	I was able to communicate my ideas clearly to other group members.	1	2	3	4	5
17	I felt I was accepted by the group members.	1	2	3	4	5
18	I could accept others' opinions and personalities.	1	2	3	4	5
19	I respected the group decisions and tried my best to carry them out.	1	2	3	4	5
20	I was able to take up the responsibility as a leader in my own area of responsibility.	1	2	3	4	5

*~~~~Section C: Working on a Project~~~~*

## *Working on a Project*

Successful project work requires careful planning and organization. The following model will help you in carrying out your project. The model divides the project into two stages: planning the project and doing the project.



# *Working on a Project*

## 1

### Analyzing the question

#### Planning a Project



Project questions are usually long and complicated. If you do not understand very clearly what you are required to do, you may go in the wrong direction. We shall show you four methods which may help to clarify the meaning of the question.



<u>Do the following in your group</u>	<u>Tips: Method 1: Analyze the wordings</u>
<ul style="list-style-type: none"> <li>☞ Discuss among yourself and make sure that <b><u>all of you understand</u></b> the question <b><u>in the same way</u></b>.</li> <li>☞ Write down <b>your group's interpretation</b> of what you are required to do.</li> </ul>	<p><i>Analyze the wordings of the question</i></p> <ul style="list-style-type: none"> <li>• Circle the <u>action verbs</u> e.g. explain, discuss, contrast, list, illustrate, etc.</li> <li>• Underline the <u>object</u> of the action verb e.g. <u>Design</u> an <u>automatic vending machine</u> for people to buy cards for payphones and public transportation</li> <li>• Highlight the <u>key information</u> that gives instructions or possible hints to solutions e.g. <u>Design</u> an <u>automatic vending machine</u> for people to buy cards for payphones and public transportation</li> </ul>



# *Working on a Project*

1

## Analyzing the question

Planning a Project



<u>Do the following in your group</u>	<u>Tips: Method 2: Organize the information</u>
<p>☞ Now <b>highlight</b> and <b>analyse the key information</b> in your project question.</p>	<p><i>Organize the information</i></p> <ul style="list-style-type: none"> <li>Organize the information that you have highlighted in the question. Take a look at the following example:</li> </ul> <div style="text-align: center; margin: 10px 0;"> </div> <ul style="list-style-type: none"> <li>Then think about the relationship between:                     <ol style="list-style-type: none"> <li>Each piece of the highlighted information, and</li> <li>The expected answer and the highlighted information</li> </ol> </li> </ul>

# *Working on a Project*

## 1

### Analyzing the question

Planning a Project



#### Do the following in your group

☞ Write down **your statements** here:

#### Tips: Method 3: Re-state the question

*Use the Statement-Restatement Technique*

- Rewrite the question in your own statements
- Avoid making your statements:
  - ☞ too broad because they may over generalize the question or
  - ☞ too narrow because they may overlook certain aspects of the question
- Revise the statement if anyone in your group:
  - ☞ does not agree with the interpretation
  - ☞ does not understand the interpretation
  - ☞ does have other ways of interpretation
- Repeat the process until everybody is happy with the final statement

# Working on a Project

1

## Analyzing the question

Planning a Project



<u>Do the following in your group</u>	<u>Tips: Method 4: Present the question graphically</u>
<p>☞ Try to present <b>your project question graphically</b> here:</p>	<p><i>Present the question in a diagram, flow chart, etc.</i></p> <p><u>Example:</u></p> <p>Compare East and West in terms of general trends in religion, philosophy, their relationship to nature, and their relationship to their fellow man.</p> <div style="text-align: center; margin: 20px 0;"> </div> <p><u>Key</u></p> <p> <span style="display: inline-block; width: 10px; height: 10px; background-color: pink; border: 1px solid black; margin-right: 5px;"></span> Similar  <span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Difference         </p> <p><u>Steps:</u></p> <ol style="list-style-type: none"> <li>(1) Identify the important parts/concepts in the question</li> <li>(2) Think about the relationships between the different parts/concepts</li> <li>(3) Draw a diagram to show the relationships between the different parts/concepts</li> </ol>

## *Working on a Project*

### 2

#### Looking for relevant references

##### Planning a Project



You need to find a methodology to solve the problem of your project. Here you need to use the knowledge that you have learned. Therefore, looking for relevant theories and examples is an important step.



<u>Do the following in your group</u>	<u>Tips: Consult relevant theories</u>
<p>☞ <b>List all the theories and methodologies</b> that may be <b>relevant</b> to the question</p> <p>☞ <b>Explain</b> to each other in what way the theories and methodologies are relevant to the question</p>	<p>You should aim to find out as many useful theories, and methodologies as possible.</p> <p><i>Think about:</i></p> <p>(a) <b>All</b> the <b>subjects</b> that you have learned before</p> <p>(b) <b>All</b> the <b>theories</b> and methodologies which are:</p> <ul style="list-style-type: none"> <li>• Definitely related to the question</li> <li>• Only marginally related to the question</li> <li>• Not quite sure whether it is related to the question or not</li> </ul>

# *Working on a Project*

## 2

### Looking for relevant references

Planning a Project



#### Do the following in your group

- ☞ **Discuss** whether or not the **solutions to similar problems** can be used in this question.
- ☞ **Record** below information about the **useful solutions**

#### Tips: Consult similar problems

Compare the project question to similar problems which you have done before:

- What are the differences between them?
- What are the similarities between them?
- Will the solution to similar problems be useful for this project?

Try not to follow the solutions to similar problems when you tackle the project question. Use your creativity to generate a better solution or some other possible solutions

## *Working on a Project*

### 3

#### Planning a Project

### Suggesting methods for tackling the question



There are usually more than one possible methods for doing the project. Therefore you should keep an open mind and try your best to suggest as many different methods as possible.



<u>Do the following in your group</u>	<u>Tips: Brainstorming methods</u>
<p>☞ <b>Brainstorm possible methods</b> for solving the problem and <b>record them here.</b></p>	<p>Brainstorming means simply calling out any ideas that come to your mind. There are <b>three things</b> that you shouldn't do during brainstorming:</p> <ol style="list-style-type: none"> <li>1. <b>Do not</b> make judgement on any ideas For example: "That won't work", "That's not practical", "We don't have enough time".</li> <li>2. <b>Do not</b> just wait for others' ideas.</li> <li>3. <b>Do not</b> always stick to what has been tried before. In fact, marvellous ideas always come from "crazy" ideas.</li> </ol>

# *Working on a Project*

## 3

### Suggesting methods for tackling the question

Planning a Project



#### Do the following in your group

☞ **Outline the designs of the methods** suggested in the brainstorming stage. You may use the table on the next page.

#### Tips: Outlining the suggested methods

After you have got a list of interesting ideas, you should try to work out each method in some details:

- The theoretical background
- The design of experiments/survey
- The equipment/questionnaire required
- The data collection
- Nature of the data and how can they be processed

## *Working on a Project*

### 4

#### Selecting the best method

##### Planning a Project



Be wise in choosing the best method from those you have generated. Here are **three useful criteria** to help you make a decision.



<u>Do the following in your group</u>	<u>Tips: Criterion (1) - relevance</u>
<p>☞ Look at the solutions that you have suggested. <b>Are they based on relevant theories?</b></p>	<ul style="list-style-type: none"> <li>• <b><i>The Criterion of <u>relevance</u> :</i></b> Have you used the <u>relevant theories and appropriate methodology</u> to investigate and solve the problem?</li>   <li><u>Example:</u>  <i>The project question</i> “Identify a smart machine, analyse its hardware with reference to the principles of operation and limitations. Based on your analysis, make proposals for improving its performance.”</li>   <li>Each of the proposals for improvement should be checked that:               <ul style="list-style-type: none"> <li>• It is based on the principles of operations used by the machine</li> <li>• It is addressing the limitations of the machine</li> <li>• It can be applied to this machine</li> </ul> </li> </ul>



# Working on a Project

## 4

### Selecting the best method

Planning a Project



<u>Do the following in your group</u>	<u>Tips: Criterion (2) - practicality</u>
<p>☞ <b>List the things that will affect the practicality</b> of your solution:</p> <ul style="list-style-type: none"><li>a)</li><li>b)</li><li>c)</li></ul> <p>☞ <b>Judge the practicality</b> of each of your suggested solutions with the above list.</p>	<ul style="list-style-type: none"><li>• <b><i>The Criterion of practicality :</i></b> Sometimes we dream about ideas or designs which sound very attractive but are not practical. Therefore, it is important to ask: Can the solution really be used?  <u>Example:</u> Design a smart machine with the features that you think it should possess. <u>Using the Criteria of practicality:</u> You should judge whether the suggested machine<ul style="list-style-type: none"><li>(a) Can satisfy market needs</li><li>(b) Can function effectively</li><li>(c) Can be manufactured</li><li>(d) Can be distributed through an agent, etc.</li></ul></li></ul>

## *Working on a Project*

4

### Selecting the best method

Planning a Project



<u>Do these in your group</u>	<u>Tips: Criterion (3) - constraints</u>
<p>☞ For each of the suggested solutions, <b>check</b> that your group can carry it out under the <b>constraints</b> that you have to face.</p>	<ul style="list-style-type: none"> <li>• <i>The <u>Criterion of constraints</u> :</i></li> </ul> <p>Sometimes you may come up with ideas which are great but difficult to carry out. Be aware that you are always working under many constraints. Some examples of constraints are:</p> <ol style="list-style-type: none"> <li>(a) You do not have the <u>knowledge or ability</u> to carry out the idea</li> <li>(b) It will take more <u>time</u> than you are allowed</li> <li>(c) It is difficult to get hold of the <u>resources or equipment</u> required</li> </ol> <p>It is important to make sure that your group can complete the project under the various constraints.</p>

# Working on a Project

## 4

### Selecting the best method

Planning a Project



#### Do the following in your group

- ☞ Based on the list of criteria that the whole group has agreed on, involve everybody to rate each solution.

#### Tips: Ranking the methods

Weigh the solutions in order to select the best one. Based on the list of criteria:

- Compare each solution using the criteria by means of some rating scale, e.g. five-point scale or ten-point scale, etc.
- Select the solution with the highest total scores

Example:

→ Five-point scale (1—low; 5—high) is used in the following:

Alternative	Related Theory	Practicality	Control of Constraint	Total
A	3	2	1	6
B	1	4	3	8
C	2	4	4	10

## *Working on a Project*

### Self-evaluation: How well have we done?



#### **Planning a Project**

*Be honest to yourself and circle the number that best reflects how well you have done.*

	<b><i>Working as a Group</i></b>	<u>Lowest</u>				<u>Highest</u>
1	All members were involved in the planning and decision-making process.	1	2	3	4	5
2	Group members valued and respected the knowledge and expertise of individual members	1	2	3	4	5
3	Suggestions made by individual members were carefully considered by the group.	1	2	3	4	5
4	Group members encouraged each other to make creative suggestions.	1	2	3	4	5
5	Differences in opinions helped the group learn more and arrive at better decisions.	1	2	3	4	5
6	The group always made sure that everybody had understood and agreed on the decision before moving on to another issue.	1	2	3	4	5
	<b><i>Performance in the Task</i></b>	<u>Lowest</u>				<u>Highest</u>
7	The discussion at the beginning helped group members to understand the requirements of the project thoroughly.	1	2	3	4	5
8	We were able to bring in knowledge/examples from many subjects and areas to tackle the problem.	1	2	3	4	5
9	We were able to propose creative and useful ideas for the project.	1	2	3	4	5
10	We agreed on the most appropriate method by evaluating the different ideas based on the appropriate criteria.	1	2	3	4	5
	<b><i>Working as a Member in the Group</i></b>	<u>Lowest</u>				<u>Highest</u>
11	I tried hard to make use of my knowledge and expertise to contribute to the project.	1	2	3	4	5
12	I tried my very best to understand what had been discussed in the group.	1	2	3	4	5
13	I did my best to contribute ideas in discussions.	1	2	3	4	5
14	I found that sharing in the group could inspire me to come up with more ideas.	1	2	3	4	5
15	I took a positive attitude in considering my group members' comments on my ideas and my work.	1	2	3	4	5
16	I considered others' feelings seriously before I raised any different opinions.	1	2	3	4	5

# *Working on a Project*

5

**Doing a Project**

## Managing the progress of the project



When you carry out the selected plan, you need to keep everything in order. Management is particularly important for a group project because there are several people working together. Here are tips on (a) time and workflow management, (b) manpower management, (c) data management, and (d) quality management.



### Do the following in your group

- ☞ **Discuss in your group** the **questions about workflow** listed in the right hand box.
- ☞ **Draw a Workflow Diagram** for your project by referring to the example of a Workflow Organiser on the next page.

### Tips: Time and workflow management

**You should begin with defining the workflow by:**

- a) Splitting up the whole project into different smaller sub-tasks
- b) Estimating how much time is needed for each sub-task

*Think about .....*

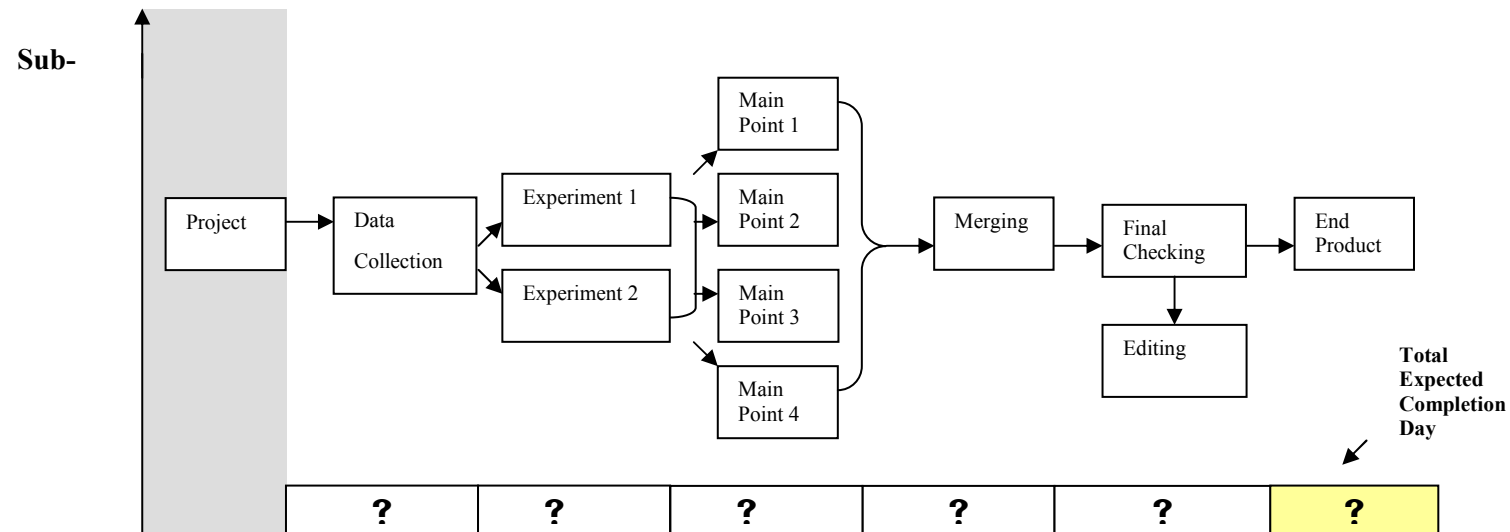
- What is the best way to break down the project?
- How many sub-tasks can the project be divided into?
- Are all sub-tasks necessary?
- How much time is required for each sub-task?
- How should the sub-task be sequenced?
- Which sub-task should be done first?
- Which sub-tasks can be done at the same time?
- When does each sub-task have to be completed?
- How can the sub-tasks be integrated?

# *Working on a Project*

5

## Managing the progress of the project

### Workflow Organizer



# Working on a Project

5

Doing a Project

## Managing the progress of the project



<u>Do the following in your group</u>	<u>Tips: Manpower management</u>
<p>☞ <b>Discuss</b> in your group the <b>questions about manpower</b> in the right hand box.</p> <p>☞ <b>Agree</b> on a <b>system to monitor work schedules</b> of members. (You can use the work scheduler on the next page for this purpose.)</p>	<p><b>The workflow can only be maintained if the manpower of the group is coordinated properly</b></p> <p><i>Think about .....</i></p> <ul style="list-style-type: none"><li>• How much manpower is needed for each sub-task</li><li>• Who is the most appropriate person for a particular sub-task</li><li>• How much time is required by each member to complete his/her responsible areas</li><li>• What time interval is appropriate for reporting individual work</li></ul> <p><b>In order to make sure that the manpower of the group is used properly, a <u>work scheduler</u> can be set up to .....</b></p> <ul style="list-style-type: none"><li>• Keep track of the progress of each member</li><li>• Make sure that everybody can complete the task as scheduled</li><li>• Check that the actual time spent on the assigned task does not exceed the expected time; otherwise, adjustment to the workflow is necessary</li></ul>

# *Working on a Project*

## 5

### Managing the progress of the project

#### Work Scheduler

	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>
<b><u>Peter</u></b> <b><u>Sub-task 1</u></b>	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •
<b><u>Mary</u></b> <b><u>Sub-task 2</u></b>	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •
<b><u>Robert</u></b> <b><u>Sub-task 3</u></b>	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •	Write down the job(s) to be done here • • •

deadline

Key Amount of work done by each member

N.B. ☞ This Work Scheduler is to be completed in a regular group meeting (e.g. weekly or bi-weekly meeting) when members are required to report their progress or

☞ Members can use this Work Scheduler to monitor their own progress



# *Working on a Project*

## 5

### Managing the progress of the project

Doing a Project



<u>Do the following in your group</u>	<u>Tips: Data management</u>
<p>☞ <b>List</b> the <b>kinds of information/data</b> that you will accumulate throughout the project:</p> <ul style="list-style-type: none"><li>a)</li><li>b)</li><li>c)</li></ul> <p>☞ <b>Record</b> the data into data organisers. You can design your own <b>organiser charts</b> or use the two examples given on the next two pages.</p>	<p>Throughout the project, you will find that you are collecting more and more information and data, e.g.</p> <ul style="list-style-type: none"><li>• Notes from references</li><li>• Findings from experiments</li><li>• Interview records</li><li>• Data search records</li></ul> <p>Organising the data meaningfully will help a lot in the writing up stage. The next two pages will show you two examples of how you can organise your data:</p> <ul style="list-style-type: none"><li>a) <u>Data Organize</u></li><li>b) <u>Experiment Recorder</u></li></ul>



## *Working on a Project*

### 5













#### Managing the progress of the project

#### Data Organizer

*Fill out the following Data Organization Sheet upon the completion of data collection and make use of it as a rough work to .....*

-  structure the collected data in a way that you will present in your written report
-  put the entries in key word or point form only



Main Topic	Sub-point	<i>Relevance to the contents (e.g. introduction, literature review, methodology, etc)</i>	Logical Order (e.g. 1, 2, 3... or a, b, c...)	Source of Reference
(1)				
				
				
(2)				
				
				
(3)				
				
				
(4)				
				
				

# *Working on a Project*

## 5

### Managing the progress of the project

The following Experiment Recorder helps you to .....

- 📄 record the results of the experiments for easy comparison
- 📄 make decisions with all the necessary information that is listed out

#### *Experiment Recorder*



Objective:				
Experiment No.	Result			Analysis
	Testing 1	Testing 2	Testing 3	

## *Working on a Project*

### 5

#### Managing the progress of the project

Doing a Project



<u>Do the following in your group</u>	<u>Tips: Quality management</u>
<p>☞ <b>At different stages, complete the Project Quality Checklist</b> on the next page. You should complete the checklist after discussing among yourselves.</p> <p>☞ <b>Adjust your work plans if problems are found.</b></p>	<p><b>Two types of project quality management should be carried out:</b></p> <ol style="list-style-type: none"> <li>a) On-going checking to make sure that you are on the right track throughout the process</li> <li>b) Thorough examination of the final project before submission</li> </ol> <p>The Project Quality Checklist on the next page is based on the major tips and guidelines given in the previous sections. It can be a useful tool for quality management.</p>

## *Working on a Project*

### 5

#### Managing the progress of the project

##### *Project Quality Checklist*

*Yes No*



1	Our work addresses the requirement of the project.	<input type="checkbox"/>	<input type="checkbox"/>
2	Our work is based on strong theoretical foundation because we have made adequate reference to theories.	<input type="checkbox"/>	<input type="checkbox"/>
3	The methods, instruments etc. that we have chosen are the best among all possible alternatives because we have considered enough criteria and the possible constraints in evaluating them.	<input type="checkbox"/>	<input type="checkbox"/>
4	The method used to tackle the project is free from illogical assumptions.	<input type="checkbox"/>	<input type="checkbox"/>
5	Our work contains adequate contents because we have collected sufficient information for the project.	<input type="checkbox"/>	<input type="checkbox"/>
6	The information used in the project is relevant to the question.	<input type="checkbox"/>	<input type="checkbox"/>
7	The objectives of the investigations (experiments, surveys, etc.) are relevant to the project.	<input type="checkbox"/>	<input type="checkbox"/>
8	Our data are reliable because the procedures for collecting data are appropriate and have been properly carried out.	<input type="checkbox"/>	<input type="checkbox"/>
9	Our findings and conclusions are reasonable because we have thoroughly analyzed the data.	<input type="checkbox"/>	<input type="checkbox"/>
10	The reporting of our work is accurate and of a high standard.	<input type="checkbox"/>	<input type="checkbox"/>

## *Working on a Project*

### Self-evaluation: How well have we done?



#### ***Doing a Project***

*Be honest to yourself and circle the number that best reflects how well you have done.*

	<b><i>Working as a Group</i></b>	<u>Lowest</u>				<u>Highest</u>
1	All members understood and agreed on how the whole project was broken down into sub-tasks.	1	2	3	4	5
2	Job was allocated according to the strengths of each member.	1	2	3	4	5
3	All members were clear about the time frame and their own responsibilities.	1	2	3	4	5
4	All members understood that their own part would contribute to the group's success.	1	2	3	4	5
5	Individual difficulties experienced by individuals were discussed in the group and other members helped to resolve the difficulties.	1	2	3	4	5
	<b><i>Performance in the Task</i></b>	<u>Lowest</u>				<u>Highest</u>
6	The work breakdown schedule allowed effective collaboration among group members.	1	2	3	4	5
7	The timing and sequencing of sub-tasks allowed the project to progress smoothly.	1	2	3	4	5
8	Data collected were organized systematically for later use.	1	2	3	4	5
9	On-going checking throughout the process was made to ensure that everything was on the right track.	1	2	3	4	5
10	Appropriate corrective actions were taken to handle unexpected problems.	1	2	3	4	5
11	The quality of work produced was examined regularly during the process and also at the end.	1	2	3	4	5
	<b><i>Working as a Member in the Group</i></b>	<u>Lowest</u>				<u>Highest</u>
12	I tried my best to complete my responsible area on time.	1	2	3	4	5
13	I tried my best to complete what I was assigned and produce good quality work.	1	2	3	4	5
14	I regarded the group success as my own success.	1	2	3	4	5
15	I cared about how well other members could learn from my responsible area.	1	2	3	4	5
16	I learned from other group members.	1	2	3	4	5

*Section D: Presentation*

## *Working on a Project*

### 6

#### Previewing your presentation skills



Projects usually include a presentation at the end. This always causes tension among students. Do not worry, this section will give you useful tips in putting up a good show. The following self-evaluation form can show you how well you are doing now.



<b>Structure of the Presentation: <i>How well can you organize your contents? (Use 5-point scale)</i></b>	Lowest					Highest
* I am able to state the purpose of the presentation correctly.	1	2	3	4	5	
* I am able to select materials which are appropriate for the purpose of the presentation.	1	2	3	4	5	
* I am able to organize the contents in an orderly and logical manner.	1	2	3	4	5	
* I am able to link up the areas smoothly.	1	2	3	4	5	
* I am able to give a good summary at the end.	1	2	3	4	5	
<b>Preparing presentation materials: <i>How well can you show your content to the audience?</i></b>	Lowest					Highest
* I am able to select suitable visual aids for displaying my contents.	1	2	3	4	5	
* I am able to produce visual aids (PowerPoint slide, transparencies) which are attractive and easy to read.	1	2	3	4	5	
* I am able to design good and useful handouts.	1	2	3	4	5	
* I can handle the visual aid equipment, such as overhead projector, microphone, etc. effectively.	1	2	3	4	5	
<b>Delivery of the Presentation: <i>How good are your presentation skills?</i></b>	Lowest					Highest
* I can be heard clearly.	1	2	3	4	5	
* I am confident and fluent.	1	2	3	4	5	
* I use my facial expressions and body movements appropriately.	1	2	3	4	5	
* I have good timing.	1	2	3	4	5	



# *Working on a Project*

## 6

### Presenting the project - Structure of the presentation



There are usually a lot of materials that you want to talk about in the presentation. How can you organise the materials for presentation such that your audience can easily understand?



<b>Do the following in your group</b>	<b>Tips: Initial planning</b>
<p>☞ We are given _____ <b>minutes</b> for our presentation.</p> <p>☞ <b>Our teacher expects us</b> to do the following in the presentation.</p>	<p>When you begin planning your presentation, clarify the following two points:</p> <p><b>(A) <u>Time limit for the presentation</u></b></p> <ul style="list-style-type: none"><li>• Make sure you do not put in too much information in your presentation and have it overrun</li><li>• If time is limited, select only the essential information</li></ul> <p><b>(B) <u>Purpose(s) of the presentation</u></b></p> <ul style="list-style-type: none"><li>• Think about what the audience need to know</li><li>• Think about what the teacher expects from you</li></ul>

## *Working on a Project*

### 6

#### Presenting the project - Structure of the presentation



Do the following in your group	Tips: Presentation outline
<p>☞ <b>Work out</b> the <b>structure</b> of your presentation together.</p> <p>☞ <b>Allocate responsibilities:</b></p> <ul style="list-style-type: none"> <li>- who will prepare for which part</li> <li>- who will do the actual presentation</li> <li>- any other tasks</li> </ul>	<p>When all members are clear about the purpose(s) of the presentation, write an <u>outline</u> of how the entire presentation is <u>organized</u> and how the ideas are <u>developed</u></p> <p><i>Example:</i></p> <p>Purpose(s) of the presentation: _____</p> <p><b><u>Introduction</u></b></p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul> <p><b><u>Body</u></b></p> <p>I. Main point #1</p> <ul style="list-style-type: none"> <li>A. Supporting details               <ul style="list-style-type: none"> <li>1.</li> <li>2.</li> </ul> </li> <li>B. Supporting details               <ul style="list-style-type: none"> <li>1.</li> <li>2.</li> </ul> </li> </ul> <p>II. Main point #2</p> <ul style="list-style-type: none"> <li>A. Supporting details               <ul style="list-style-type: none"> <li>1.</li> <li>2.</li> </ul> </li> <li>B. Supporting details               <ul style="list-style-type: none"> <li>1.</li> <li>2.</li> </ul> </li> </ul> <p><b><u>Conclusion</u></b></p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>

Begin each main point with subject heading

Don't overwhelm the audience with too many main points

Subpoints are used to support the main point

# *Working on a Project*

## 6

### Presenting the project - Structure of the presentation



Do the following in your group	Tips: The introduction of the presentation
<p>☞ In your group, <b>brainstorm ideas</b> for the <b>introduction</b>. Make sure that the introduction can capture the attention of your audience.</p>	<p>The introduction takes up about 10 to 15 % of the total presentation time and serves the following two purposes:</p> <ol style="list-style-type: none"><li>1. Catch the <u>audience's attention</u> Make the audience feel interested in your topic, or see the importance of your topic. Here are some of the things you can do to catch the audience's attention:<ul style="list-style-type: none"><li>• Describe an event which has connection with your project</li><li>• Challenge the audience with an imaginary situation which your project can provide a solution</li><li>• Show some statistics which suggests that your topic is addressing some urgent issues</li><li>• Do a small-scale survey with your classmates to illustrate some key points related to your topic</li><li>• Ask a question which does not have an obvious answer to create suspense</li><li>• Tell a joke</li></ul></li><li>2. Give an overview of your presentation<ul style="list-style-type: none"><li>• Highlight the main areas that you are going to present, e.g. by a graphical summary</li></ul></li></ol>

## *Working on a Project*

### 6

#### Presenting the project - Structure of the presentation



Do the following in your group	Tips: The body of the presentation
<p>☞ Group members responsible for the main points take turns to <b>explain</b> to the group <b>the materials</b> selected for presentation. Other group members <b>comment on the quality</b> of the materials.</p>	<ol style="list-style-type: none"> <li>1. Develop your main points with supporting material, such as examples, evidences, explanations, etc.,               <ul style="list-style-type: none"> <li>• determine what main points to present</li> <li>• decide the appropriate weighting for each main point</li> <li>• provide at least one piece of supporting material to back up each main point</li> <li>• use a variety of supporting materials</li> <li>• estimate the time for each main point based on the amount of materials included</li> </ul> </li> <li>2. Organize the main points in a <u>logical order</u>:               <ul style="list-style-type: none"> <li>• Topical Order                   <ul style="list-style-type: none"> <li>☞ Arrange the main points from <u>general to specific</u> or from the least important to the most important, or vice versa</li> </ul> </li> <li>• Time Order                   <ul style="list-style-type: none"> <li>☞ Commonly used to describe the <u>process</u> or <u>procedure</u> of something that follows a certain time sequence</li> </ul> </li> <li>• Problem-solving Order                   <ul style="list-style-type: none"> <li>☞ A more persuasive method. You do not present only the outcome of the project, but also discuss how and why you have chosen the particular methods to solve the problems.</li> </ul> </li> </ul> </li> </ol>

## *Working on a Project*

### 6

#### Presenting the project - Structure of the presentation



##### Do the following in your group

☞ **Discuss** among your group members to agree on **the most important points** to be **put** in the conclusion.

##### Tips: The conclusion of the presentation

The conclusion usually takes up about 5 to 10 % of the total presentation time and serves the following purposes:

- Summarize the main points
- Re-emphasize the central idea of the presentation
- Inspire the audience with a new perspective of the topic

## *Working on a Project*

### 6

#### Presenting the project - Structure of the presentation



Do the following in your group	Tips: Linking ideas smoothly
<p>☞ Go through the main points and <b>identify</b> places <b>where linkage is needed. Write down</b> the appropriate <b>linking words.</b></p>	<p>You can use some linking words to connect ideas. For examples:</p> <ul style="list-style-type: none"> <li>☞ To link up ideas that have a time relationship, you can use           <ul style="list-style-type: none"> <li>➤ before, after, later, at the same time, while, finally, etc.</li> <li>➤ Example: <u>After</u> we completed the first phase of the project ....</li> </ul> </li> <li>☞ To link up ideas that are different from previous ideas, you can use           <ul style="list-style-type: none"> <li>➤ but, on the other hand, in contrast, in spite of, etc.</li> <li>➤ Example: <u>On the other hand</u>, we should also consider ...</li> </ul> </li> <li>☞ To show a cause-and-effect relationship between ideas, you can use           <ul style="list-style-type: none"> <li>➤ because, therefore, consequently, etc</li> <li>➤ Example: <u>Therefore</u>, we must do something to .....</li> </ul> </li> <li>☞ To introduce upcoming ideas           <ul style="list-style-type: none"> <li>➤ firstly, in addition to, likewise, etc.</li> <li>➤ Example: <u>In addition</u>, our experiment was designed to show that .....</li> </ul> </li> </ul>

## *Working on a Project*

### 6

#### Presenting the project - Preparing presentation materials



Now that you have prepared the contents of your presentation. How are you going to present the information to the audience? Information should be displayed in an interesting way which can be easily seen and understood.



<b>Do the following in your group</b>	<b>Tips: The best way to display information</b>
<p>☞ <b>Go through the main points</b> in your presentation and <b>decide the best way to show them</b> to your audience.</p>	<p><b>Do not limit your presentation to just words.</b> It will be so much more impressive by showing a real sample than just talking about it or showing a drawing of it. <b>Be wise in deciding the best way to display a piece of information.</b></p> <p><i>You can use:</i></p> <ul style="list-style-type: none"><li>• Words and figures (e.g. theories and facts)</li><li>• Real objects (e.g. samples, models, real equipment)</li><li>• Video images (e.g. to show how an equipment works)</li><li>• Audio recordings (e.g. interviews)</li><li>• Big maps, charts (e.g. those obtained commercially or from special organizations)</li></ul>

## *Working on a Project*

### 6

#### Presenting the project—Preparing presentation materials






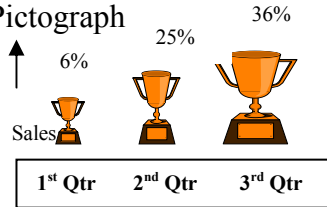



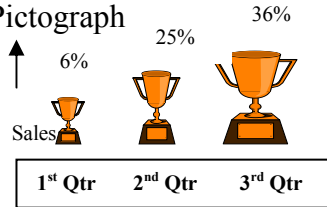



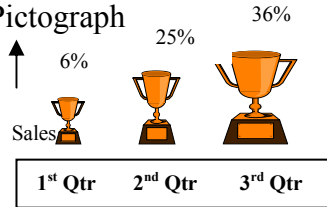



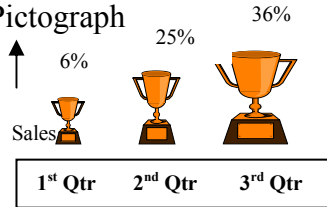



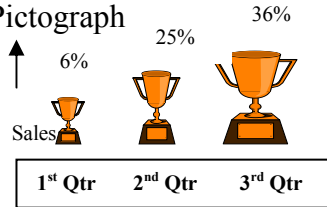



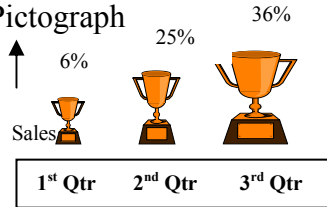

Do the following in your group	Tips: Media of displaying information
<p>☞ <b>Find out</b> what kinds of information display technologies are <b>available</b> for your presentation.</p> <p>☞ <b>Decide</b> in your group the kind(s) of information display technologies that will be <b>most appropriate for your topic</b>.</p>	<p><u>Different technologies can be used for different purposes, e.g.</u></p> <p><b>Computer</b>      PowerPoint for presenting facts and simple graphics</p> <p><b>Overhead projector</b>      Transparencies of maps/figures can be made easily by using a photocopier</p> <p><b>Visualizer</b>      Project opaque real objects</p> <p><b>Audio/Video tapes</b>      Show interviews and events</p> <p><b>White board</b>      Display information throughout the presentation, e.g. title, focus questions, cartoon for catching the attention of the audience</p> <p><b>Flip chart</b>      Record data generated during the presentation, e.g. results of a small-scale survey conducted with the audience</p> <p><b>Handout/ Worksheets</b>      Summarise key points to help the audience to follow the presentation. You can also include questions for the audience to answer and space for them to write answers and take notes</p> <p>Be CREATIVE: You can use several technologies in one presentation, but make sure that you know how to handle the equipment and can switch from one kind to another smoothly</p>



# *Working on a Project*

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### Presenting the project - Preparing presentation materials

Do the following in your group	Tips: Displaying numbers and statistics																								
<p style="text-align: center;"><b>Visual Aid</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Types</th> <th style="width: 50%; text-align: center;">Features</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">                     Line Graph  </td> <td style="padding: 5px;">                     --Show trends over time                      --Commonly used for comparing different items                 </td> </tr> <tr> <td style="padding: 5px;">                     Bar Graph  </td> <td style="padding: 5px;">                     --Display data either in vertical or horizontal format                      --Commonly used for comparing different items                 </td> </tr> <tr> <td style="padding: 5px;">                     Pie Graph  </td> <td style="padding: 5px;">                     --Show distribution pattern                      --Show percentage of a whole                 </td> </tr> <tr> <td style="padding: 5px;">                     Pictograph  </td> <td style="padding: 5px;">                     --Incorporate pictures into graphics                      --Less formal and more interesting                 </td> </tr> <tr> <td style="padding: 5px;">                     Others: Charts, drawings, &amp; maps                 </td> <td style="padding: 5px;">                     Charts--                      --summarize information                       Drawings &amp; Maps--                      -- emphasize important points                      --make technical points more clear                 </td> </tr> </tbody> </table>	Types	Features	Line Graph 	--Show trends over time --Commonly used for comparing different items	Bar Graph 	--Display data either in vertical or horizontal format --Commonly used for comparing different items	Pie Graph 	--Show distribution pattern --Show percentage of a whole	Pictograph 	--Incorporate pictures into graphics --Less formal and more interesting	Others: Charts, drawings, & maps	Charts-- --summarize information  Drawings & Maps-- -- emphasize important points --make technical points more clear	<p style="text-align: center;"><b>Visual Aid</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Types</th> <th style="width: 50%; text-align: center;">Features</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">                     Line Graph  </td> <td style="padding: 5px;">                     --Show trends over time                      --Commonly used for comparing different items                 </td> </tr> <tr> <td style="padding: 5px;">                     Bar Graph  </td> <td style="padding: 5px;">                     --Display data either in vertical or horizontal format                      --Commonly used for comparing different items                 </td> </tr> <tr> <td style="padding: 5px;">                     Pie Graph  </td> <td style="padding: 5px;">                     --Show distribution pattern                      --Show percentage of a whole                 </td> </tr> <tr> <td style="padding: 5px;">                     Pictograph  </td> <td style="padding: 5px;">                     --Incorporate pictures into graphics                      --Less formal and more interesting                 </td> </tr> <tr> <td style="padding: 5px;">                     Others: Charts, drawings, &amp; maps                 </td> <td style="padding: 5px;">                     Charts--                      --summarize information                       Drawings &amp; Maps--                      -- emphasize important points                      --make technical points more clear                 </td> </tr> </tbody> </table>	Types	Features	Line Graph 	--Show trends over time --Commonly used for comparing different items	Bar Graph 	--Display data either in vertical or horizontal format --Commonly used for comparing different items	Pie Graph 	--Show distribution pattern --Show percentage of a whole	Pictograph 	--Incorporate pictures into graphics --Less formal and more interesting	Others: Charts, drawings, & maps	Charts-- --summarize information  Drawings & Maps-- -- emphasize important points --make technical points more clear
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## *Working on a Project*

### 6

#### Presenting the project - Preparing presentation materials



Do the following in your group	Tips: PowerPoint slides or transparencies
<p>☞ <b>Go over your slides / transparencies</b> to check that they <b>follow the guidelines</b></p>	<p><b>Some guidelines for making slides / transparencies:</b></p> <ul style="list-style-type: none"> <li>• Use <b>large</b> letters and diagrams</li> <li>• Give a heading to each slide/transparency</li> <li>• Do NOT put too much information on each slide</li> <li>• Do NOT simply photocopy a page from a book. Cut the useful part and enlarge it before making it into a transparency</li> <li>• Do NOT overdo your graphs with unnecessary information (data label, grid line, legend, etc)</li> <li>• Do NOT put more than one graph on a transparency</li> <li>• Do NOT use too many colors in one slide</li> <li>• Make sure that the sound and the animation of your electronic visual aids are coordinated.</li> <li>• Be WISE. Do NOT spend an unproportionally large amount of time on graphics. Good contents are the most important. Display is cosmetic.</li> </ul>

# *Working on a Project*

## 6

### Presenting the project - Preparing presentation materials



Do the following in your group	Tips: Handout / Worksheets
<p>☞ <b>Go over your handout / worksheets</b> to check that they <b>follow the guidelines</b></p>	<p><b>Some guidelines for making handouts/worksheets:</b></p> <ul style="list-style-type: none"><li>• Ensure that the provided information is correct</li><li>• Use diagrams, tables, charts, etc., to explain complicated concepts</li><li>• Include the important information only</li></ul> <p><b>Handouts</b></p> <p>1) There are two types of handouts:</p> <p>(a) <u>Full coverage</u></p> <ul style="list-style-type: none"><li>• All main points are given</li></ul> <p>(b) <u>Partial coverage</u></p> <ul style="list-style-type: none"><li>• Audience's participation is greatly encouraged in the presentation</li><li>• Only parts of the main points are given and the rest is to be filled in by the audience</li></ul> <p>2) Distribution:</p> <ul style="list-style-type: none"><li>• Given right before the presentation → as a preview</li><li>• Given during the presentation → as a summary</li><li>• Given at the end of the presentation → as a review</li></ul>

## *Working on a Project*

### 6

#### Presenting the project - Preparing presentation materials

Do the following in your group	Tips: Handouts / Worksheets
	<p>Worksheets:</p> <p>1) Questions are commonly used to help audience better understand the contents and to invite audience's involvement in:</p> <ul style="list-style-type: none"> <li>• Listing or naming the concepts that are covered in the presentation</li> <li>• Tackling the situation that is to be discussed in the presentation before the concepts are introduced</li> <li>• Thinking about how the presented materials are useful to them</li> <li>• Discussing controversial issues that may lead audience to go beyond the presented topics</li> </ul> <p>2) Distribution</p> <ul style="list-style-type: none"> <li>• Given right before the presentation → to arouse the audience's curiosity</li> <li>• Given during the presentation → to get the audience's interest</li> <li>• Given at the end of the presentation → to review the main ideas of the presentation</li> </ul>

# *Working on a Project*

## 6

### Presenting the project - Delivery



**Then come the most exciting time of standing in front of the audience to deliver the presentation!!  
Here are some tips for effective use of your (a) voice, (b) body movements, and (c) visual aids**



Do the following in your group	Tips: Using your voice											
<p>☞ Take turns to <b>rehearse</b> your own part of presentation in a group.</p> <p>☞ Other members should <b>comment</b> on how well the presenter has used his/her :</p> <p>(a) voice (b) body movements (c) visual aids</p>	<p style="text-align: center;"><b>RELAX</b></p> <p style="text-align: center;">Communicate with your audience Do not recite</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th colspan="3" style="text-align: center;">VOICE QUALITY CONTROL</th> </tr> </thead> <tbody> <tr> <td style="width: 20%; padding: 5px;">Pitch</td> <td style="width: 60%; padding: 5px;">                     --Monotone (one tone)—boring                      --Too high } distracting                      --Too low }                 </td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 5px;">Volume</td> <td style="padding: 5px;">                     --Loud enough to be heard                      --Too soft (shows that you are not confident)                      --Too loud (makes the audience uncomfortable)                 </td> <td rowspan="3" style="vertical-align: middle; text-align: center; padding: 5px;">Vary according to the contents</td> </tr> <tr> <td style="padding: 5px;">Rate</td> <td style="padding: 5px;">                     --Speaking too fast is a common mistake                      --Slow down at difficult parts                      --Use short pauses wisely                      --Quicken to show excitement or happiness                 </td> </tr> </tbody> </table>	VOICE QUALITY CONTROL			Pitch	--Monotone (one tone)—boring --Too high } distracting --Too low }		Volume	--Loud enough to be heard --Too soft (shows that you are not confident) --Too loud (makes the audience uncomfortable)	Vary according to the contents	Rate	--Speaking too fast is a common mistake --Slow down at difficult parts --Use short pauses wisely --Quicken to show excitement or happiness
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## *Working on a Project*

### 6

#### Presenting the results - Delivery

Do the following in your group	Tips: Using your body movements
	<p>Appropriate body movements, such as eye contact, facial expression, posture, etc. can help to capture attention. <u>But do not overdo</u> because they will distract your audience.</p> <p>Some suggestions:</p> <ul style="list-style-type: none"> <li>• There is no need to stand still. You can walk around a little. Walk close to the audience to show your interest in them</li> <li>• Use appropriate gestures to emphasize important ideas</li> <li>• Make eye contact to get feedback from the audience</li> <li>• Avoid fixing your eyes on one or two persons</li> <li>• Avoid showing emotions to any negative responses from audiences</li> <li>• People tend to fiddle about when they are nervous. Remind yourself to avoid fiddling about.</li> </ul>

# *Working on a Project*

## 6

### Presenting the results - Delivery



Do the following in your group	Tips: Using visual aids
<p>☞ <b>Test run</b> the audio visual equipment beforehand.</p>	<ul style="list-style-type: none"><li>• Avoid talking to visual aids, you should talk to the audience</li><li>• Do NOT block the view of the audience to the visual aids</li><li>• Check that transparencies (or other visual aids) are properly positioned on the projector</li><li>• Look at the screen from time to time to check that the projection is good enough</li><li>• Make sure that you know how to use the technology. Check that it is available and working beforehand.</li><li>• Check the lighting, size of projection, etc to make sure that your audience can see/hear clearly from all parts of the room</li></ul>

## *Working on a Project*

### Self-evaluation: How well have we done?



#### *Presentation*

*Be honest to yourself and circle the number that best reflects how well you have done.*

		<u>Lowest</u>				<u>Highest</u>
	<b><i>Working as a Group</i></b>					
1	All members were involved in planning the structure of the presentation.	1	2	3	4	5
2	Responsibilities for preparing and delivering the presentation were allocated appropriately.	1	2	3	4	5
3	The group brainstormed ideas to make the presentation more interesting.	1	2	3	4	5
4	Enough group effort was put in checking the quality of the contents of presentation.	1	2	3	4	5
5	A group rehearsal was carried out to fine-tune the quality of delivery.	1	2	3	4	5
6	Group members helped each other to learn the presentation skills and the information display technologies.	1	2	3	4	5
7	Suggestions made by individual member were carefully considered by the group.	1	2	3	4	5
	<b><i>Performance in the Task</i></b>					
8	The contents of the presentation were considered relevant and good by our teacher.	1	2	3	4	5
9	The structure was systematic and logical such that the audience was able to follow through.	1	2	3	4	5
10	The materials were displayed clearly such that the audience was able to see well and understand.	1	2	3	4	5
11	The visual aids were attractive and effective in explaining ideas.	1	2	3	4	5
12	The delivery was successful and the attention of the audience was captured	1	2	3	4	5
	<b><i>Working as a member in the group</i></b>					
13	I made good use of the opportunity to develop my presentation skills.	1	2	3	4	5
14	I managed to complete my share of responsibilities on schedule.	1	2	3	4	5
15	I tried my best to complete my share of responsibilities and produce good quality work	1	2	3	4	5
16	I contributed my critical comments during the rehearsal.	1	2	3	4	5
17	I took a positive attitude in considering my group members' comments on my part of work.	1	2	3	4	5