



Singapore Examinations and Assessment Board

Singapore–Cambridge General Certificate of Education Advanced Level (2027)

Project Work (Syllabus 8882)

CONTENTS

	<i>Page</i>
INTRODUCTION	3
AIMS	5
LEARNING OUTCOMES	5
ASSESSMENT OBJECTIVES	6
SCHEME OF ASSESSMENT	6

INTRODUCTION

This document explicates the intent and design of A-Level Project Work (PW), the expected learning outcomes of students taking this course of study, and the scheme of assessment.

Project Work as a Key Enabler of 21st Century Competencies (21CC) Development in the A-Level Curriculum

PW has a unique value proposition which sets it apart from other subjects in the A-Level curriculum as it develops competencies and life skills in an authentic and applied manner. The nurturing of 21CC requires a combination of knowledge and skills that build on one another. PW facilitates the dynamic interplay of 21CC as students make sense of a real-world issue, share and embrace multiple perspectives to build new understanding and solutions. Students also grow as individuals and responsible members of society as they collaborate and learn to manage relationships with others from diverse backgrounds.

In PW, students have the opportunity to:

- break away from the compartmentalisation of subject-specific knowledge and skills. In examining a real-world issue, students integrate knowledge from different domains, making interdisciplinary connections that help to deepen their understanding of the issue;
- think flexibly and inventively to generate ideas and possibilities for problems without fixed solutions, so as to make a positive difference;
- pursue research in an area that is of interest to them, developing information and digital literacy in the process;
- experiment, innovate and create, nurturing student agency and engendering joy of learning;
- engage relevant stakeholders to enable deeper learning through an authentic learning experience;
- work in groups over a sustained period which allows them to learn more about themselves and others, developing the skills for effective communication and collaboration, and nurture essential social-emotional competencies; and
- become more confident and effective communicators as they are required to make a formal oral presentation (OP) of their project ideas.

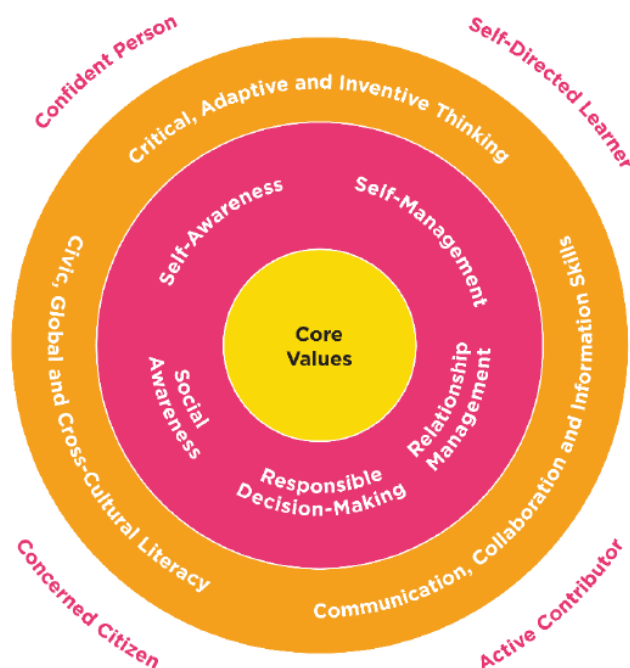
Nurturing the Desired Outcomes of Education through Project Work

The PW curriculum seeks to nurture the Desired Outcomes of Education which are the attributes that educators aspire for all students to possess. These attributes are:

- **a good sense of self-awareness** as students would have tapped internal resources, reflected on themselves and also managed relationships with others while working together;
- **a sound moral compass**, having made decisions that would bring about improvement to various stakeholders; and
- **the necessary knowledge, skills and dispositions to take on opportunities and challenges of the future** as students would have adapted to new and changing contexts presented by their project.

The PW learning experience will also develop students who are:

- **confident persons** who have a zest for life, have a strong sense of right and wrong, are adaptable and resilient, know themselves, are discerning in judgment, think independently and critically, and communicate effectively;
- **self-directed learners** who take responsibility for their own learning, are curious, reflective, and persevering in the lifelong pursuit of learning, driven by their passion and purpose;
- **active contributors** who are empathetic and open-minded to collaborate effectively in teams, exercise; and initiative, have courage to take risks responsibly, are innovative, and strive for excellence; and
- **concerned citizens** who are rooted to Singapore, have a strong civic consciousness, are responsible to their family, community and nation, and take active roles in improving the lives of others.



©2023 Ministry of Education, Singapore

Framework for 21st Century Competencies and Student Outcomes¹

Critical, Adaptive and Inventive Thinking

In PW, students apply Critical, Adaptive and Inventive Thinking Skills to analyse a real-world issue and generate fresh solutions. Students ask questions and probe deeper to better understand their project area. Through their analysis and evaluation, students ensure a sound basis for their ideas. They engage in interdisciplinary learning as they tap and synthesise knowledge from different domains such as Science and Technology, the Humanities, Social Sciences, Media and Business.

Students exercise cognitive flexibility and think inventively as they co-construct innovative ideas to address a real-world issue. They demonstrate adaptability by actively exploring alternatives, reframing issues and modifying their plans in response to new and unexpected developments. Gradually, students also develop the skills of metacognition as they learn to regulate their thinking and feelings as individuals and as members of a group to enable strong teamwork.

Communication, Collaboration and Information Skills

Through the sustained social interaction in teamwork, PW deepens the development of communication and collaboration skills, as well as dispositions such as openness, a commitment to participate in discussions in a respectful manner and a willingness to consider different perspectives. Students learn to communicate their ideas clearly and confidently to an audience, in written and oral forms, leveraging digital platforms and tools appropriately. As they work with others and seek consensus in pursuing shared goals, students develop their social-emotional competencies, such as self-management, social awareness and relationship management.

With the availability of a diverse range of sources, including digital information, students learn to evaluate information to ensure it is accurate, credible and current. They also learn to select and use information ethically, adhering to responsible behaviour when they use and create information.

Civic, Global and Cross-Cultural Literacy

Through PW, students conduct research on a real-world issue or concern that they are interested in. In this process, they acquire a deeper understanding of issues within their community and also have their pulse on global developments. They develop a sensitive understanding of context. In developing a sensitive understanding of context, they are better prepared to engage with current concerns as they reach out to relevant stakeholders to ascertain their needs. Students learn to appreciate and respect diversity and demonstrate sensitivity as they work with people from various backgrounds.

These are skills that help students to develop a sense of responsibility towards the community, care and concern for others and readiness to act in ways that will make a positive difference. As students learn to always consider

¹ For more information on the Framework for 21st Century Competencies and Student Outcomes, access [21st Century Competencies | MOE](https://www.moe.gov.sg/21st-century-competencies).

different contexts and perspectives, they develop empathy and appreciate the value of social cohesion.

PROJECT WORK SYLLABUS AIMS AND LEARNING OUTCOMES

Syllabus Aims

PW aims to develop students who are:

- active and discerning inquirers of knowledge;
- inventive thinkers who have the courage to explore novel ideas;
- empathetic and effective communicators;
- adaptable individuals who work well independently and in teams; and
- responsible stewards of society.

PW Learning Outcomes – 21st Century Competencies (21CC), Skills, Values and Dispositions

The PW course enables students to develop the knowledge, skills, values and dispositions outlined below. Values and dispositions underpin students' acquisition of 21CC and life skills.

KNOWLEDGE AND SKILLS
<p>By the end of the PW course, students will be able to:</p> <ul style="list-style-type: none"> • demonstrate critical and inventive thinking skills in gathering, analysing and evaluating information, and generating ideas that address real-world needs; • communicate clearly, coherently and persuasively in collaborative discussion and in presenting ideas to a specific audience in both the written and oral forms; and • apply collaborative skills in managing the project effectively to achieve the group's goals.
VALUES
<p>The PW course provides students with opportunities to further develop the following values:</p> <ul style="list-style-type: none"> • Respect through appreciating the diverse views and perspectives of team members and others involved in the project; • Responsibility through seeking out accurate, credible and current information in order to make informed decisions at different stages of the project; • Resilience through persevering in the pursuit of knowledge and understanding, as well as personal growth in the course of navigating the dynamic and uncertain challenges in their research and decision-making; • Integrity through representing with fidelity the views and data gathered, as well as adhering to ethical principles in the conduct of research; • Care through developing empathy for others and the desire to make a positive difference; and • Harmony through contributing to a safe learning environment for the discussion of ideas and appreciating the need for both unity and diversity in their team.
DISPOSITIONS
<p>Through the PW course, students should develop the following dispositions:</p> <ul style="list-style-type: none"> • an intrinsic motivation to wonder and seek new understanding, as well as to have a growth mindset; • a discerning mind towards information, ideas and issues; • a willingness to acknowledge and respect different perspectives; • the humility to reflect on their own learning, mindset and beliefs; • a commitment to participate in discussions in a respectful and informed manner; • an openness towards managing uncertainties faced in new and unfamiliar contexts; • the confidence to be resourceful and adaptable in generating innovative solutions; • an appreciation of and an active interest in real-world issues, as well as local and global developments; and • an appreciation and enactment of their responsibility to make a positive difference.

ASSESSMENT OBJECTIVES

The assessment in PW aims to measure the extent to which candidates have achieved the expected learning outcomes. During the course, candidates have to demonstrate their ability, individually and as a group, by applying the knowledge and skills acquired to complete a project.

Candidates are expected to apply their knowledge and skills to:

- generate ideas that address real-world needs;
- analyse, evaluate and support ideas taking into consideration real-world needs; and
- present ideas clearly and coherently in both the written and oral forms.

SCHEME OF ASSESSMENT

Candidates are assigned to work in groups, with each group having 4 to 5 members. The candidate group is to work on a project that is focused on addressing a problem or tap an opportunity identified in a real-world context. Each candidate group is required to work on a project that engages with either:

(A) the set theme; or

(B) an area of interest chosen by the candidate group.

For the above two options, candidate groups may also draw ideas for their project from real-world problem statements made available to candidates through the Marketplace of Ideas (MOI).

The groups are expected to complete the project within 28 weeks (recommended time of 60-75 hours, assuming an average of 2.5 hours per week).

Candidates will be assessed on their performance both as members of the group and as individuals.

The performance of individual candidates and that of groups are assessed through the following compulsory papers:

- **Written Component**

Paper 1a: Project Summary

Each group is required to submit a *Project Summary* documenting the real-world problem or opportunity identified, and the proposed ideas to address the project aim. The problem or opportunity, as well as the proposed ideas, are to be analysed and evaluated and supported by research findings. A group mark is awarded for *Project Summary*.

Paper 1b: Individual Reflection

Each candidate is required to submit a written reflection which includes an individual candidate's analysis and evaluation of group ideas or learning about self in the process of completing the project. Candidates are to generate ideas in the process of their reflection. An individual mark is awarded for *Individual Reflection*.

- **Oral Component**

Paper 2: Oral Presentation

Each candidate from the group is given an opportunity to present a part of the project orally to the assessors as audience. This is followed by a group segment where the group responds to questions posed by the assessors. The candidates are assessed on their individual contributions and as a group for *Oral Presentation*.

Table 1: Assessment Framework

Components	Group	Individual	Total
Written Component			
Paper 1a: Project Summary	30%	–	30%
Paper 1b: Individual Reflection	–	20%	20%
Total for Paper 1	30%	20%	50%
Oral Component			
Paper 2: Oral Presentation	20%	30%	50%
Total for Paper 2	20%	30%	50%
Total for Papers 1 and 2	50%	50%	100%

Table 2: Assessment Criteria

Components	Group	Individual
Written Component		
Paper 1a: Project Summary <ul style="list-style-type: none"> About 1200 words Sources must be acknowledged 	<ul style="list-style-type: none"> Critical Thinking Inventive Thinking Information Skills 	
Paper 1b: Individual Reflection <ul style="list-style-type: none"> About 400 words 		<ul style="list-style-type: none"> Critical Thinking Inventive Thinking
Oral Component		
Paper 2: Oral Presentation <ul style="list-style-type: none"> Maximum of 25 minutes per group for groups with 4 candidates; maximum of 30 minutes for groups with 5 candidates 5 minutes per candidate May include group presentation not exceeding 5 minutes Group response to questions not exceeding 20 minutes for groups with 4 candidates and not exceeding 25 minutes for groups with 5 candidates 	<ul style="list-style-type: none"> Effectiveness of Group Presentation Quality of Group Response 	<ul style="list-style-type: none"> Fluency and Clarity of Speech Awareness of Audience Individual Contribution to Group Response

Assessment Criteria and Rubrics**Written Component*****Paper 1a: Project Summary***

Criterion	No mark	Approaching Expectation	Meeting Expectation	Exceeding Expectation
Group				
Critical Thinking	Criterion has not been met	Ideas are analysed and evaluated in a limited way	Ideas are sufficiently analysed and evaluated	Ideas are thoroughly analysed and evaluated
Inventive Thinking		Ideas are largely rehashed with little modification	Ideas are appropriately modified	Ideas are insightful and/or innovative
Information Skills		Ideas are inadequately supported by research	Ideas are adequately supported by research	Ideas are well supported by research

Paper 1b: Individual Reflection

Criterion	No mark	Approaching Expectation	Meeting Expectation	Exceeding Expectation
Individual				
Critical Thinking	Criterion has not been met	Reflection demonstrates limited analysis and evaluation	Reflection demonstrates sufficient analysis and evaluation	Reflection demonstrates thorough analysis and evaluation
Inventive Thinking		Ideas are largely rehashed with little modification	Ideas are appropriately modified	Ideas are insightful and/or innovative

Oral Component

Paper 2: Oral Presentation

Criterion	No mark	Approaching Expectation	Meeting Expectation	Exceeding Expectation
Individual				
Fluency and Clarity of Speech	Criterion has not been met	Speech is halting and/or difficult to understand most of the time	Speech is clear and intelligible most of the time	Speech is fluent and clear, with an appropriate pace throughout
Awareness of Audience		Shows little awareness of audience	Shows some awareness of audience	Shows personal engagement with audience
Individual Contribution to Group Response		Candidate contributes minimally or contributes to group response at inappropriate junctures	Candidate contributes to group response at appropriate junctures	Candidate participates collaboratively in contributing to the group response
Group				
Effectiveness of Group Presentation	Criterion has not been met	<p>Presentation can be understood but has limited effect due to lack of cohesion and organisation</p> <p>Presentation aids are used with limited effect to enhance the presentation</p>	<p>Presentation is effective, cohesive and organised</p> <p>Presentation aids are used effectively to enhance the presentation</p>	<p>Presentation is highly effective, highly cohesive and well-organised</p> <p>Presentation aids are used very effectively to enhance the presentation</p>
Quality of Group Response		Group response addresses questions in a limited way and/or with little elaboration	Group response addresses questions and is adequately elaborated	Group response addresses questions and is well elaborated