

Reflective project guide

For use from August 2016



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Reflective project guide

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Career-related Programme Reflective project guide

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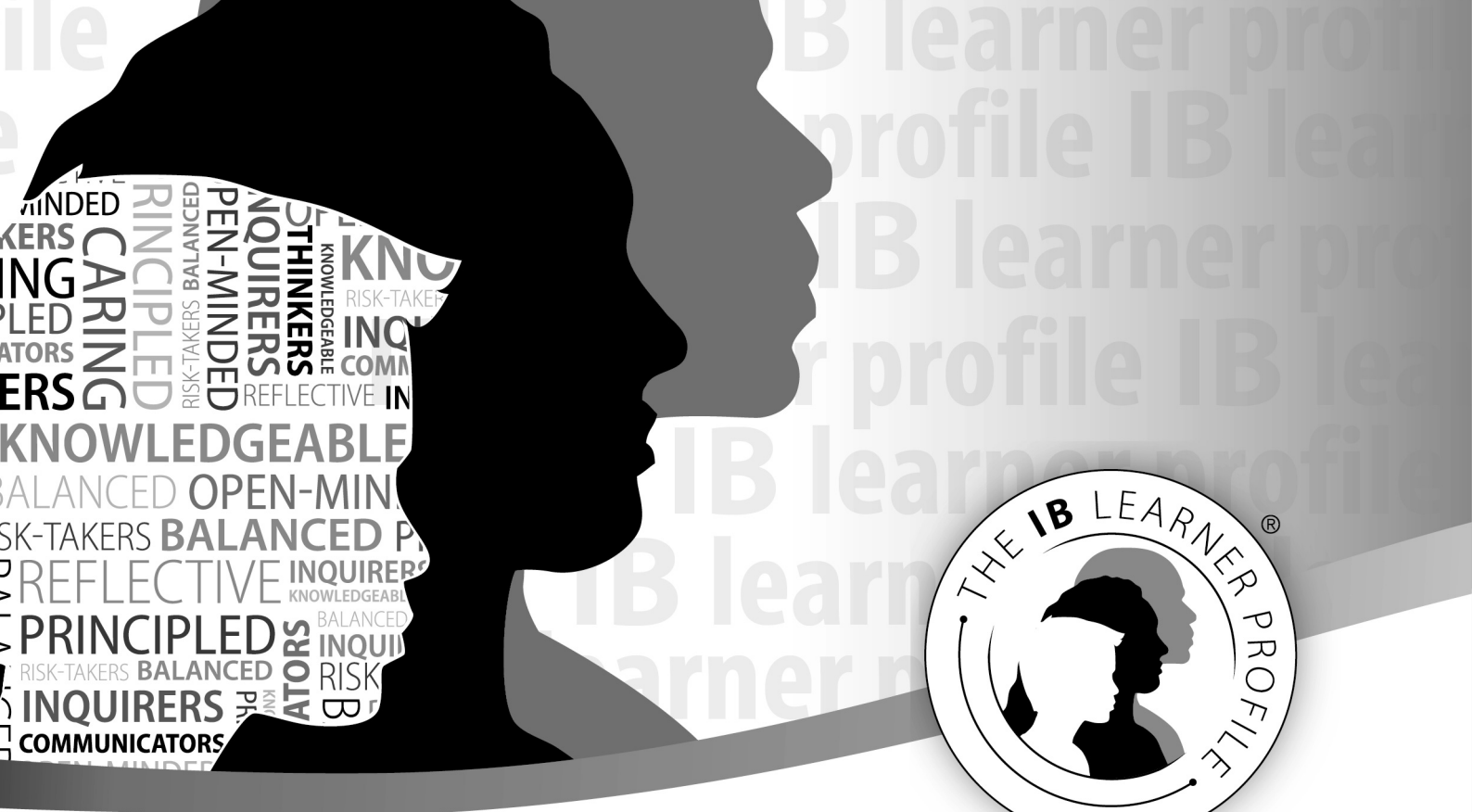
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IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.



IB learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be:

INQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

PRINCIPLED

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

BALANCED

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.



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About this guide

Purpose

This guide is intended to support the planning and organization of the reflective project, one of the components of the IB Career-related Programme (CP) core. It is written primarily for the teacher/supervisor/CP coordinator and is also expected to inform school staff members.

What it includes

The guide is divided into the following sections:

- Introduction
- The reflective project
- Roles and responsibilities
- Academic honesty
- Ethical guidelines for the reflective project
- Assessment in the reflective project
- Course review
- Programme evaluation
- Learning diversity
- Appendices

Further resources

The CP website offers resources for all four core components. There are additional resources—for example, web pages, books, videos, journals and teaching ideas—in the CP forum resource section.

Acknowledgment

The IB wishes to thank the educators and associated schools for generously contributing time and resources to the production of this guide.

Principles of the Career-related Programme core

The following principles must be followed by schools offering the Career-related Programme:

- The IB provides the curriculum and assessment framework for the programme's core components.
- Schools determine the nature of the delivery of the programme's core components.
- A teaching and learning philosophy that forms the basis of delivery for all core components is outlined in *What is an IB education?*
- Schools determine their own assessment for personal and professional skills, language development and service learning.
- Schools will assess the reflective project based on the assessment criteria determined by the IB; a sample of the school's reflective projects will be moderated by the IB.
- Schools are responsible for the health and safety of students and staff involved in the programme.

Aims of the Career-related Programme core

Drawing on the attributes of the learner profile, the core of the programme aims to develop students who are:

- thoughtful and active citizens
- responsible for their own learning and development
- competent and confident communicators
- reflective, creative and critical thinkers
- aware of our shared human condition
- able to establish a sense of identity in a context of time and place
- prepared to think about the needs, values and perspectives of other people
- active participants in their own intercultural learning.

Ethical education

The Career-related Programme provides an excellent opportunity for ethical education conceived as involving principles, attitudes and codes of behaviour. While ethical principles are also embodied in the IB's **mission statement** and **learner profile**, the programme's core emphasis is on helping students to develop their own identities and beliefs.

Various ethical issues will arise, either implicitly or explicitly, in the course of the programme's activities, for example as challenges to students' ideas, instinctive responses or ways of behaving. Schools have a specific responsibility to help students think, feel and act their way through ethical issues, particularly in view of the reflective project. Utilizing the personal and professional skills course for the exploration and application of ethics will support students' understanding of ethics.

Approaches to teaching and approaches to learning

Approaches to teaching and approaches to learning sit within the inner circle of the Career-related Programme model as they are within the models for all IB programmes. These approaches refer to the strategies, skills and attitudes that permeate the teaching and learning environment. They are closely linked with the **learner profile attributes** and aim to enhance student learning and prepare students for assessment and beyond.

Approaches to teaching and approaches to learning are also linked to the development of internationally minded students, a central aim of all IB programmes. Education for international-mindedness “relies on the development of learning environments that value the world as the broadest context for learning” (*What is an IB Education?* 2013).

Effective approaches to learning in the CP should therefore be developed within global contexts, with particular attention being given to promoting three key elements—global engagement, multilingualism and intercultural understanding.

There are clear connections between the core components and the approaches to teaching and approaches to learning. A package of resources (<https://ibpublishing.ibo.org/dpatl/>) has been developed to support approaches to teaching and approaches to learning in the Diploma Programme (DP) that can be an extremely useful source of guidance for teachers and coordinators in the design and delivery of the core components.

Assessment in the Career-related Programme

Teachers are encouraged to develop their own assessment criteria for all core components except the reflective project, depending on the context of the assessment, the student and the course.

The form of assessment should vary and teachers must ensure that students are explicitly aware of what is expected and that measurement of their achievements is valid, reliable, consistent, authentic and fair.

Monitoring progress

Performance across the core components should be included in a student's school report to provide a record of their progress. This can take many different forms, yet as its basis it should provide a way of clearly communicating to students, parents and educational institutions the student's engagement with the core components.

At the end of the Career-related Programme, schools should provide students with a summative statement of their achievements, which they can use for post-secondary applications.

Completion of core components

Schools must report to the IB whether a student has satisfactorily completed the requirements for the core components of language development, service learning and personal and professional skills and the grade awarded for the reflective project.

A school's provision for core components will be monitored by the IB.

Nature of the reflective project

The reflective project is one of the four compulsory components of the IB Career-related Programme (CP) core.

The reflective project is an in-depth body of work produced over an extended period of time and submitted towards the end of the CP. It is the product of the students' own initiative and should reflect their personal experience of the CP. The reflective project is intended to promote high-level research, writing and extended communication skills, intellectual discovery and creativity through a variety of different approaches.

Schools are encouraged to help students to recognize and make use of the links between all strands of their CP in order that the reflective project can be a formal representation of their studies overall.

The reflective project focuses on an ethical dilemma of an issue directly linked to the student's career-related study.

In addition to a written essay (see Options), students keep a record of their reflections on the process of undertaking and completing the reflective project using the *Reflections on planning and progress form* (RPPF). This record forms part of the final reflective project assessment.

Aims

The reflective project aims to give students the opportunity to:

- produce an extended piece of work
- engage in personal inquiry, action and reflection on a specific ethical dilemma
- present a structured and coherent argument
- engage with local and/or global communities
- develop research and communication skills
- develop the skills of critical and creative thinking.

Time required

Students are expected to devote a minimum of 50 hours to the reflective project.

Assessment

The school assesses all reflective projects. The IB will then select a sample for the school to send to an external moderator for confirmation of the school's marks.

Students will be assessed on two aspects of the project:

- the approach they use to complete the reflective project—the process
- the output from that process—the product.

The reflective project is assessed using five assessment criteria designed to foster independent study and encourage students to use their own initiative.

Overview of the reflective project

This section covers all the main aspects of the reflective project that a teacher introducing it will need to consider:

- Reflective project within the CP
- Requirements
- The career-related context
- Links with the personal and professional skills course
- The international dimension

Reflective project in the CP

The reflective project encapsulates the fundamental elements of the Career-related Programme. It is what makes the CP unique and meaningful, and enables students to see the culmination of their programme strands in formal assessment. It allows formal assessment of students' development indirectly and directly in all components of the core as well as their DP courses.

Requirements

All CP students are required to complete the reflective project.

Students should be told about the reflective project at the beginning of the CP in order to be thinking about, and working on, the reflective project throughout their CP.

The career-related context

From their career-related study, students identify an issue of interest then explore the ethical dimension associated with the issue in order to arrive at a focused ethical dilemma. The reflective project's primary focus is the ethical dilemma embedded within the issue, not the issue itself.

Students undertake research and analysis on the chosen ethical dilemma. This research will include consultation with the local and/or global community.

Linking the reflective project to the career-related studies of students provides a way for them to explore ethical dilemmas in real-life situations.

Links with the personal and professional skills course (PPS)

The relationship between the five themes of personal and professional skills and the reflective project is relevant and useful to students. Both the reflective project and the personal and professional skills course promote the development of research, writing and extended communication skills, intellectual discovery and creativity. In particular, the theme of applied ethics in the personal and professional skills course directly supports students in understanding and determining key concepts for their reflective project.

The five themes can be utilized by the reflective project supervisor in consultation with the personal and professional skills teacher.

Theme	Links to reflective project
1. Personal development	Forms the basis for self-reflection and explores the skills required to organize and manage time, make decisions and manage change; students require all of these to complete the reflective project successfully.
2. Intercultural understanding	Directly links with students' need to develop an appreciation of how cultural contexts may affect different perspectives on an ethical dilemma.
3. Effective communication	Its focus on interpersonal communication, writing, presentation and IT skills strengthens students' ability to present a structured and coherent project.
4. Thinking processes	The topics of ethical thinking, critical thinking, creative thinking, problem-solving and lateral thinking have direct application to the ways in which students learn and engage with the reflective project.
5. Applied ethics	Allows students to explore ethics, develop understandings, examine case studies and identify a focus for their reflective project.

The international dimension

The reflective project adds to the international dimension of the CP. It examines different cultural perspectives on an ethical dilemma, thus fostering an international perspective. The reflective project seeks to develop intercultural understanding as well as to raise students' awareness of the role that culture plays in their day-to-day lives.

While exploring an ethical dilemma, students become aware of the similarities and differences between their own cultures and those of others. Students can investigate and reflect on cultural values and behaviours, leading to a greater understanding and respect for other peoples and the way in which they lead their lives.

Details of the reflective project

This section gives a broad overview of what is involved in the reflective project, for students and staff alike. The areas covered are:

- Options for the reflective project
- Process for the reflective project
- Reflection

Options for the reflective project

At the end of the project, students submit:

- an essay or an essay with an additional format—see Options 1 and 2 below
- a *Reflections on planning and progress form* (1,000 words).

Students can choose to present their reflective project in one of two ways:

Option 1

A written essay (maximum 3,000 words). This should cover all the reflective project's requirements except reflection, which forms the content of the RPPF.

Option 2

A written essay (1,500–2,000 words) accompanied by an additional format (film, oral presentation, interview, play or display). Together, the written essay and additional format should cover all the reflective project's requirements except reflection.

Additional formats

The permitted additional formats are:

- **A short film** (7 minutes). Students are free to create whatever type of film they believe will be a valuable component of their reflective project, for example a documentary, a drama, a news report and so on. They can choose to submit a written film script instead (700 words).
- **A spoken presentation** (recorded on audio/video; 7 minutes). A presentation provides students with the opportunity to address in a spoken format aspects of their reflective project. They can choose to submit a written script instead (700 words).
- **An interview** (recorded on audio/video; 7 minutes). An interview allows students to be creative by imagining and developing a discussion between two or more people. They can choose to submit a written script instead (700 words).
- **A play** (recorded on audio/video; 7 minutes). The play should include one or more characters performing a spoken drama that supports elements of the reflective project. It can include dialogue, music and sound effects. Students can choose to submit a written script instead (700 words).
- **A display** (a storyboard or photo essay using up to 15 annotated images; 700 words). A storyboard/photo essay is usually a linear narrative told through imagery. Students can decide what their imagery will accomplish and how it will contribute to the reflective project overall. For example, it could provide an overview of their reflective project and create points of discussion or illustrate particular ideas.

Function of additional format

The chosen additional format should support and add information to the reflective project overall. For example, a film or presentation could reflect the different perspectives of the stakeholders involved, or detail the local/global manifestation of the issue, while the written essay contains the central argument(s) of the ethical dilemma.

Crucially, the content of the additional format must be different from the essay. For example, students should not take an argument presented in the essay and then repeat it in the additional format. The two elements should complement each other, each adding value to the other, ensuring that as an overall submission the assessment criteria are satisfied. Repetition or simply reformatting information will lose a student marks.

Whatever format the student chooses, it must be capable of being sent electronically to the IB for moderation. Live links to the reflective project are not permitted.

Time

Students should also consider carefully the amount of time associated with each format. Students are assessed on the reflective project's content, not their technical skills. Students should not spend the majority of their time making a technically brilliant film, but leaving insufficient time to write their accompanying essay.

Essay

An essay is a piece of formal writing organized into a number of sections or as a number of paragraphs linked together. Although students can choose the style of essay, the expository essay may prove to be the most suitable for the reflective project.

Choice

How students choose to use the additional format is at their discretion and should be made in light of discussions with their supervisor.

Word limits

The IB sets an upper word limit to give a framework to students. Moderators will not assess beyond the upper word limit. There is no lower word limit, but submitting assessments considerably below the indicated limit are self-penalizing with regard to the degree to which the criteria can be satisfied.

Language

The reflective project must be submitted in one of the working languages of the IB (*IB language policy*, 2014)—English, Spanish or French.

The Reflections on planning and progress form

The RPPF requires students to reflect on the challenges encountered during the reflective project, how these can be overcome (looking forward to the next stage of the project), or how they were overcome and what was learned from the process and the changes in approach.

During the project, students have three formal meetings with their supervisor to discuss their planning, progress and any concerns they have. After each meeting they complete the specified section of the RPPF.

The form is a writable PDF document with a maximum of 10,000 words, with the student reflection section having a maximum of 1,000 words. See also Reflection.

Students should be made aware of RPPF requirements at the start of their reflective project.

Process for the reflective project

Key activities

In developing the reflective project, students should:

- Identify an issue directly linked to their career-related study.
- Decide on an ethical dilemma that arises from the issue.
- Show an awareness of the ethical dilemma.
- Identify the key community(ies) involved in the dilemma.
- Examine different viewpoints.
- Develop a personal and relevant evaluation of the ethical dilemma.
- Reflect continuously at key points of the process.

Throughout, students are supported by their supervisor. They meet formally with their supervisor three times: before, during and at the end of the project.

Key content

While there is no prescribed structure for the project, the following features must be included.

The issue

Students need to explain the issue and clearly and explicitly link it to their career-related study. However, they must also remain aware that the issue itself is not the main focus of the reflective project.

The ethical dilemma

Students must be able to recognize the ethical dilemma that arises from the issue.

Research question

Students need to identify and describe accurately the question to be answered that explicitly references the ethical dilemma that has been identified.

The research

Students must provide evidence of research that supports different viewpoints on the ethical dilemma. They should also critically examine the research itself.

There are five main stages in the research process:

1. Defining the research's purpose and objectives and the research question.
2. Conducting a literature review.

3. Designing appropriate data collection methods and analysing the data.
4. Reflecting on the research methodology adopted.
5. Presenting the research findings.

Critical analysis of the ethical dilemma

This involves students evaluating the viewpoints on the ethical dilemma and then articulating their own point of view based on reasoned argument.

References, citations and a bibliography

The reflective project is an academic piece of work and should be presented as such. This ensures academic honesty and allows the readers to check the evidence themselves.

- A reference acknowledges the source of the information that the student has used.
- A citation is a shorthand method of referencing, which is then linked to the bibliography.
- A bibliography is an alphabetical list (by author) of every source cited in the project.
- Students must use a consistent style of referencing throughout the reflective project. For further information please consult the IB publications *Academic honesty in the IB educational context* and *Effective citing and referencing*.
- Appendices, footnotes and endnotes are not necessary but if students choose to use them they should do so appropriately and not circumvent the word limit.

Meetings

Students will have three formal meetings with their supervisor: prior to commencement of the reflective project, while working on it and at the end.

Reflections on planning and progress

Students record their reflections on planning and progress on the form provided—the RPPF—after each of their three formal meetings with their supervisor. See also Reflection below.

Reflection

The RPPF

The completion of this form is a mandatory part of the reflective project. It helps the students to reflect on their planning and progress, including:

- their initial ideas
- any concerns to discuss with their supervisor
- the outcome of those discussions
- interim thoughts about the reflective project's planning, progress and content
- any changes that need to be made as a result of the interim thoughts
- finishing the project and their conclusions.

The RPPF has two further functions:

- Together with the formal meetings with the supervisor, it provides the evidence to assess the students against Assessment Objective 5 (AO5): Engagement and reflection on planning and progress.
- It also acts as a record to support the authenticity of their work.

The RPPF is informed by scheduled meetings between the students and the reflective project supervisor where progress, planning and issues are discussed. The form is designed to document these discussions and is a formally assessed element of the reflective project.

A “researcher’s reflection space” (RRS)

Reflection is an integral part of the reflective project. Students should not see it as something that happens only sporadically, before a meeting or when they have a form to fill in. A “researcher’s reflection space” can help with this.

The researcher’s reflection space could be a journal or a blog to record day-to-day thoughts on progress within the reflective project.

This space can help students prepare for the meeting with their supervisor and identify what to include in the RPPF. Writing thoughts down regularly in this way may also help to develop the students’ skills of critical analysis.

When shared with their supervisor, the journal or blog can also give greater insight into the students’ thought processes and their progress within the reflective project.

The RRS is not submitted or formally assessed, but should inform the scheduled meetings with the supervisor, which in turn inform the RPPF.

Roles and responsibilities

This section of the guide looks at the roles and responsibilities of those involved in the reflective project.

- The school's responsibilities
- The project supervisor's responsibilities
- The students' responsibilities

The school's responsibilities

It is **required** that the school ensures that:

- reflective projects conform to the requirements outlined in this guide
- students decide on the topic for their reflective project in consultation with their supervisor
- each student has an appropriately qualified supervisor, who is a teacher within the school
- supervisors and students are issued with the guidelines for the reflective project contained in this guide
- supervisors are familiar with:
 - recent reflective project subject reports
 - the IB publications *Academic honesty in the IB educational context* and *Effective citing and referencing*
- students understand:
 - the reflective project's importance in the overall context of the Career-related Programme
 - that they will be expected to spend approximately 50 hours on their reflective project
 - by what date they must submit their completed reflective project to their supervisor.

It is **strongly recommended** that the school:

- ensures that students have been taught the necessary research skills
- provides appropriate training for supervisors
- sets internal deadlines for the different stages of producing the reflective project
- sets its own final internal deadline for students to submit their projects to ensure that all required paperwork is completed before the school's date to submit reflective projects to the IB for moderation.

For more information on the requirements of samples for moderation, teachers and CP coordinators should refer to the *Handbook of procedures for the Career-related Programme*.

The supervisor's responsibilities

Any reflective project submitted for assessment must be the students' own work. However, the supervisor plays a crucial role in supporting the students while they are undertaking the reflective project.

The role of the supervisor is to:

- explain to students the role of the supervisor
- discuss with students:
 - the nature of the reflective project
 - the most appropriate research methods to use
 - the formal requirements for the completion of the task
- help students to plan and undertake their research for the reflective project
- ensure students know what the assessment requirements are for the reflective project
- ensure students understand that they are responsible for their own work and should take pride in the finished product
- encourage students to ask their supervisor for advice and information
- ensure that students are familiar with the ethical guidelines for the reflective project.

If a student is unable to complete the reflective project without substantial help from the supervisor, the supervisor should record this on the appropriate form from the *Handbook of procedures for the Career-related Programme*.

If the student has received substantial support from a supervisor or other person, but has not reported this on the RPPF, then this too must be recorded.

It is **required** that the supervisor:

- is familiar with the regulations governing the reflective project and the assessment criteria
- ensures that students understand the meaning of ethics, particularly in light of their career-related study as this is fundamental to the reflective project
- ensures students understand the concepts of "authenticity" and "intellectual property" in relation to the reflective project and that they have access to *Academic honesty in the IB educational context*
- provides the students with instruction and guidance in the skills of undertaking research
- through discussion, helps the students to devise a well-formulated and focused research question
- ensures that the chosen research question satisfies appropriate legal and ethical standards with regard to health and safety, confidentiality, human rights, animal welfare and environmental issues
- encourages and supports the students through the research and writing of the reflective project
- ensures that students have access to exemplars, the *Reflective project guide*, the *Reflective project additional guide* and the IB publication *Effective citing and referencing*
- holds informal and formal meetings with the student; the formal meetings are held to enable the students to complete the formally assessed RPPF

- reviews and comments on only one complete draft of the reflective project (but does **not** edit the draft)
- monitors the progress of the reflective project to offer guidance and to ensure that the reflective project is the student's own work
- confirms the authenticity of the finished reflective project
- marks the finished reflective project
- completes the supervisor's report (if the reflective project cover is not signed by both the student and the supervisor, the reflective project will not be accepted for moderation and may be returned to the school)
- provides an explanation in the report in cases where the number of hours spent with the student in discussing the reflective project is less than the recommended three to five hours (in particular, it is necessary to describe how it has been possible to guarantee the authenticity of the reflective project in such circumstances)
- writes a report and presents it to the school's Career-related Programme coordinator if malpractice, such as plagiarism, is suspected in the final reflective project.

It is **strongly recommended** that the supervisor:

- reads recent reflective project assessment reports
- spends between three and five hours with each student, including the time spent on the three formal meetings
- ensures that the chosen research question is appropriate for the subject
- advises students on:
 - access to appropriate resources (such as people, a library, a laboratory)
 - techniques of information, evidence and data gathering and analysis
 - documenting sources
- conducts a number of interviews with the students.

The students may work with or consult external sources, but it remains the responsibility of the supervisor within the school to complete all the requirements described above.

Commenting on the reflective project draft

Commenting on one completed draft of the reflective project is a very important stage and is the last point at which the supervisor sees the reflective project before it is finally submitted. It is therefore vital that the level of support given is appropriate. Too little support and the reflective project will go forward as a weaker piece of work than it needs to be; too much help and it will not be the work of an independent learner.

After the supervisor comments on the completed draft of the reflective project, he or she does not read it again until the student submits the final reflective project. The supervisor's comments and subsequent discussion with the student are therefore very important. However, the supervisor must at no point edit or heavily annotate the draft.

The IB recommends that the student gives the reflective project to the supervisor before they meet so the supervisor has time to consider it and write comments.

When they meet, the student and supervisor can go through the comments together. They provide a starting point for a dialogue about the reflective project.

During this discussion, the supervisor can advise the student on how to improve the reflective project.

The next version the student hands to the supervisor must be the final one.

What help supervisors are permitted to give students with their draft reflective project

Supervisors can add comments that indicate that the reflective project could be improved. These comments should be open ended and not constitute editing. For example:

- The research question is expressed differently in some places.
Comment: Look at the research question in these places. Do you notice anything?
- The reflective project's argument is not clear.
Comment: Your project lacks clarity here. How could you make it clearer?
- The student has made a mistake in the calculations.
Comment: Check this area carefully.
- The student has left out a section.
Comment: You are missing something here. What is it? Check the reflective project against the requirements.
- The reflective project places something in the appendix that should be in the reflective project or vice versa.
Comment: Are you sure this belongs here?
- The conclusion is weak.
Comment: What is it you are trying to say here? Have you included all your findings? Have you looked at unanswered questions?
- The bibliography is not in alphabetical order.
Comment: Check your bibliography against the requirements.
- The reflective project has an incomplete citation.
Comment: You need to check this for accuracy of referencing.

What help supervisors are not permitted to give students with their draft reflective project

Supervisors must not:

- correct spelling and punctuation
- correct information, data, statistics etc
- rewrite or reproduce any of the reflective project
- indicate where whole sections of the project might be better placed
- proofread the reflective project for errors
- correct bibliographies or citations.

The reflective project submitted for internal assessment must be the student's own work. The supervisor nonetheless plays an important role in supporting the student during the planning stage and throughout the time the student is working on the reflective project. See Role of the supervisor.

The students' responsibilities

Students are **required** to:

- choose an issue arising from their career-related studies that presents an ethical dilemma
- consult with their supervisor regarding the ethical dilemma
- develop a well-formulated and focused research question
- state clearly the linked career-related study at the start of the reflective project
- complete the RPPF as the work progresses, and after each of the scheduled meetings with their supervisor
- meet both internal and external assessment deadlines
- address the assessment criteria fully
- acknowledge all sources of information and ideas in references, citations and bibliography
- inform their supervisor of details of any external assistance received.

It is **strongly recommended** that students:

- plan how, when and where they will find material for their project
- plan a schedule for researching and producing the reflective project, allowing time for delays and unforeseen problems
- record sources as the research progresses (rather than trying to reconstruct a list at the end)
- maintain a "researcher's reflection space" (see appendix 3) to reflect upon their progress and inform scheduled meetings with the supervisor
- have a clear structure in mind for the reflective project before beginning to write
- carefully check and proofread the final version of the reflective project
- ensure that all basic requirements are met.

Academic honesty

It is the responsibility of supervisors to ensure that all students understand the basic meaning and significance of concepts that relate to academic honesty, especially authenticity and intellectual property.

Supervisors are required to ensure that all student work for assessment is prepared according to the requirements and to explain clearly to students that the reflective project must be entirely their own work.

All reflective projects submitted to the IB for moderation must be authenticated by the supervisor as the student's own work, and must not include any known instance of academic misconduct.

All supervisors and students are required to confirm that the work submitted has been authenticated.

Once a student has officially submitted the final version of the reflective project to a supervisor (or coordinator) for assessment, and has confirmed the authenticity of the work, it cannot be retracted.

If the supervisor is unable to confirm the authenticity of the work then he or she must inform the CP coordinator.

Any reflective project that does not comply with the expectations and requirements outlined in the IB publication *Academic honesty in the IB educational context* will be treated as a case of academic misconduct.

If unsure that the entire reflective project is the student's own work, the supervisor should first discuss this with the student. In addition, the supervisor can:

- compare the style of writing with work known to be that of the student
- compare the final submission with the first draft of the reflective project
- check the references cited by the student and the original sources
- interview the student in the presence of a third party
- use a plagiarism detection software system.

The same piece of work cannot be submitted to meet the requirements of both the reflective project and a subject-specific internal assessment component.

For further guidance on this issue and the procedures for confirming authenticity please refer to the IB publication *Academic honesty in the IB educational context* and the relevant articles in the *General Regulations: Career-related Programme*, as well as the *Handbook of procedures for the Career-related Programme*.

Ethical guidelines for the reflective project

The following guidelines are applicable for all students preparing a reflective project.

- Any research that creates anxiety, stress, pain or discomfort for participants is prohibited.
- Any research that involves unjustified deception, involuntary participation or invasion of privacy, including inappropriate use of information technology (IT), email and the internet, is prohibited.
- All participants in research activities must be informed before commencing the research that they have the right to withdraw at any time. Pressure must not be placed on any individual participant to continue with the investigation beyond this point.
- Each participant must be informed of the aims and objectives of the research and must be shown the results of the research.
- Research involving children needs the written consent of parent(s) or guardian(s). Students must ensure that parents are fully informed about the implications for children who take part in such research. Where research is conducted with children in a school setting, the written consent of the teachers concerned must also be obtained.
- Participants must be debriefed and given the right to withdraw their own personal data and responses. Anonymity for each participant must be guaranteed.
- Students must exercise the greatest sensitivity to local and international cultures.
- Students must avoid conducting research with any adult who is not in a fit state of mind and cannot respond freely and independently.
- If any participant shows stress and/or pain at any stage of the research, the research must finish immediately, and the participant must be allowed to withdraw.
- All data collected must be kept in a confidential and responsible manner and not divulged to any other person.
- Research that is conducted online, using electronic and internet sources, is also subject to these guidelines. Any data collected online must be deleted once the research is complete. Such data must not be used for any purpose other than the conduct of the research.

Assessment in the reflective project

This section outlines in detail the objectives against which students' work is judged and also the markschemes.

- Assessment objectives
- Marking
- Reflective project criteria

The IB uses summative assessment principles and a criterion-related approach to assess the reflective project. The students' work is assessed against defined assessment objectives and not against that of other students.

Teachers must use the assessment criteria published in this guide to assess their students' work. The descriptors for each objective are hierarchical. When assessing each student's work, teachers should adopt a best-fit approach.

The descriptors are a measure of performance and should not be considered as marks, although the descriptor levels are ultimately added together to obtain a total.

The maximum score for the reflective project is 36.

The school must assess all reflective projects. A sample will then be selected by the IB and sent to an external moderator for confirmation of the school's marks.

Assessment objectives

The reflective project will assess the following assessment objectives (AO), which are to be demonstrated throughout the students' reflective project process, from identification of an ethical dilemma embedded in an issue linked to their career-related study, to planning, through to reflection.

Students will be expected to:

AO1: Focus and method

- select and explore an ethical dilemma embedded in an issue linked to a career-related context
- select and apply appropriate research methods and collect and select relevant information from a variety of sources, showing an understanding of bias and validity

AO2: Knowledge and understanding in context

- demonstrate knowledge and understanding of the issue
- contextualize the ethical dilemma and analyse different perspectives on it through the use of a local/global example of the issue in which the dilemma is embedded
- demonstrate awareness and understanding of the impact of the ethical dilemma on a local/global community and the cultural influences on, and perceptions of, the ethical dilemma

AO3: Critical thinking

- demonstrate logical reasoning processes and the ability to interpret, analyse and evaluate material
- develop the ability to synthesize information, making connections and linking ideas and evidence

AO4: Communication

- present a structured and coherent project, use appropriate terminology accurately and consistently, and communicate ideas and concepts clearly

AO5: Engagement and reflections on planning and progress

- reflect on and refine the research process, and react to insights gained through exploration of the ethical dilemma
- critique decisions made throughout the research process and suggest improvements to their own working practices

Marking

Criterion	Aspect of reflective project assessed	Marks available
A: Focus and method	<ul style="list-style-type: none"> Ethical dilemma and issue Research question Methodology 	6 marks
B: Knowledge and understanding in context	<ul style="list-style-type: none"> Context Local or global example Alternative perspectives and perceptions of dilemma 	9 marks
C: Critical thinking	<ul style="list-style-type: none"> Research Analysis Discussion and evaluation 	12 marks
D: Communication	<ul style="list-style-type: none"> Structure Layout 	3 marks
E: Engagement and reflection	<ul style="list-style-type: none"> Process Engagement Research focus 	6 marks
Total marks		36

Teachers and moderators should give students a mark for their achievement against each criterion based on a best-fit approach. A best-fit approach means that compensation should be made when a piece of work matches different aspects of a markband at different levels. The aim is to find the level that most appropriately conveys the level attained as demonstrated by the student's work.

The mark awarded should be one that most fairly reflects the balance of achievement against the markband. It is not necessary for every indicator of a level descriptor to be met for that mark to be awarded. For example, if student work matches two of the three requirements within a markband but one is lacking, the student should be rewarded for the strands that have been met well, but the mark awarded should be at the lower end of the markband to compensate for the element that is lacking.

Teachers and moderators should read the level descriptors in ascending mark order until they reach a descriptor that most appropriately describes the level of the work.

If a piece of work falls between two level descriptors, both should be read again and the one that best fits the student's work should be chosen.

Teachers and moderators should then award the mark that most fairly reflects the student's balance of achievement. Students do not need to meet every element of a level descriptor to receive a mark within that mark band.

If the student's work demonstrates the qualities described within a level to a greater extent, it should receive the upper marks for that level. Lower marks should be awarded if the work demonstrates the qualities described to a lesser extent.

Marks awarded must be whole numbers (ie no fractions or decimals).

The highest level descriptors do not imply faultless performance but should be achievable by students at the given point in their education. Do not hesitate to use the extremes if they are appropriate descriptions of the work being assessed.

Reminder about the word limits: if any written element of the reflective project exceeds the maximum permitted word limit, teachers and moderators will not read or assess beyond that maximum.

Reflective project criteria

Criterion A: Focus and method

This criterion assesses the student's ability to select and explore an ethical dilemma embedded in an issue, which is contextualized in light of their career-related study, through careful formulation of a focused and systematic research question. It also assesses the student's ability to select and apply appropriate research methods and collect and select relevant information from a variety of sources, showing an understanding of bias and validity.

Markband	Descriptor
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below.
1–2	<ul style="list-style-type: none"> The research question identifies an ethical dilemma related to the career-related study. There is evidence of planning and acknowledgement of bias and validity.
3–4	<ul style="list-style-type: none"> There is an identification of an issue linked to the career-related study and an arising ethical dilemma. The research question is clearly stated and the focus on it is generally sustained throughout the project. There is evidence of a planned approach and the determination and collection of largely appropriate sources/data/information. There is evidence of understanding of potential bias and validity.
5–6	<ul style="list-style-type: none"> Clear identification of an issue linked to the career-related study, and the arising ethical dilemma. The relevance of the study is clear. The research question is clearly stated and sharp focus on it is sustained throughout the project. There is evidence of excellent planning of research, and the determination and collection of appropriate and varied sources. There is evidence of understanding of potential bias and source validity and measures have been taken to limit bias through source selection.

Criterion B: Knowledge and understanding in context

This criterion assesses the way in which the student evidences an understanding of the issue and the ability to contextualize the ethical dilemma in light of the wider issue, and through a local or global example of the issue and dilemma. It assesses also the ability to analyse different perspectives, showing an awareness and understanding of the impact of the dilemma on a global or local community, appreciating also the cultural influences and perception of the ethical dilemma.

Markband	Descriptor
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below.
1–3	<ul style="list-style-type: none"> The central ethical dilemma is identified and the student shows an awareness of its context(s), although this is largely implicit. Overall, the project demonstrates basic knowledge and understanding of the ethical dilemma, generally dominated by one view. There is evidence of an awareness of the relevance of the chosen dilemma to community members, which is only partially integrated into the overall inquiry. Some awareness of how cultural perspectives can influence the ethical dilemma is demonstrated, although this is likely to be largely implicit.
4–6	<ul style="list-style-type: none"> The central ethical dilemma is described from more than one perspective. Overall, the project demonstrates clear and consistent knowledge and understanding of the ethical dilemma and its context(s). There is evidence of a relevant and sustained understanding of the impact of the ethical dilemma on community members. Understanding of how cultural perspectives can influence the ethical dilemma is demonstrated and supported, where appropriate, with relevant examples.
7–9	<ul style="list-style-type: none"> The central ethical dilemma is analysed from different perspectives, which are evaluated in a balanced way. Overall, the work demonstrates a considered and developed knowledge and understanding of the ethical dilemma with a clear sense of scope and context(s). The use of a local or global example to contextualize the ethical dilemma is effective and well integrated. The impact of the ethical dilemma on community members is analysed and forms an integral part of the inquiry. Analysis of how cultural perspectives can influence the ethical dilemma is developed and integrated into the ideas presented.

Criterion C: Critical thinking

This criterion assesses the student's logical reasoning and evaluation of the issue, the ability to interpret, analyse and evaluate material, and the student's ability to synthesize and make connections, linking ideas and evidence and weighing them up as necessary. It assesses also the student's reasoning processes and the ability to present a coherent and sustained argument and personal voice. Finally, it assesses the appropriateness of findings and opinions related back to the research question.

Markband	Descriptor
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below.
1–4	<ul style="list-style-type: none"> A basic argument is presented. Evidence is presented. The student presents straightforward conclusions, although these are asserted without drawing on any arguments or evidence provided. Some simple ideas are connected and supported with evidence, although this may not be consistent throughout the project.
5–8	<ul style="list-style-type: none"> An argument is presented with a viewpoint maintained throughout. Partial use of evidence is made to develop the argument. The student is able to reason and demonstrates an understanding of cause and effect. Conclusions made are logical, drawing on the arguments and evidence presented. Ideas are supported by relevant evidence from different sources to develop an overall argument.
9–12	<ul style="list-style-type: none"> The argument presents a considered and convincing discussion of the issue and the associated ethical dilemma, interpreting and applying evidence to draw considered inferences. Conclusions made are perceptive and concise, drawing consistently on the arguments and evidence presented. Connections made between ideas are insightful, sustained and coherent and developed by a range of well-chosen evidence.

Criterion D: Communication

This criterion assesses the way in which the student presents a structured and coherent project through their communication style, using appropriate terminology accurately and consistently, assisting to convey ideas and concepts clearly.

Markband	Descriptor
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below.
1	<ul style="list-style-type: none"> There is a straightforward structure to the project as a whole, with similar material grouped together in a logical manner.
2	<ul style="list-style-type: none"> Communication is generally clear and structured appropriately, with consistent use of appropriate terminology.
3	<ul style="list-style-type: none"> Communication is coherent and structured in a way that supports the understanding of the student's ideas and arguments, with effective use of appropriate terminology to support and develop ideas.

Criterion E: Engagement and reflection

This criterion assesses how the student has engaged in discussions with their supervisor in the planning and progress of their research; the student's ability to reflect on and refine the research process, and react to insights gained through the exploration of their research question; and how well the student has been able to evaluate decisions made throughout the research process and suggest improvements to their own working practices.

This criterion also assesses engagement with the focus of the research through an insight into the student's thinking, their intellectual initiative, and their creativity through reflections on the thought and research process. Finally, through reflections on the process, it assesses the extent to which the student voice is present rather than only that of the supervisor and academics.

Markband	Descriptor
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below.
1–2	<ul style="list-style-type: none"> There is evidence of student reflection but this is mostly descriptive. Reflections given on decision-making and planning are procedural. These reflections communicate a limited degree of personal engagement with the subject and/or the process of research.
3–4	<ul style="list-style-type: none"> There is evidence that student reflection is analytical. Reflections given on decision-making and planning include reference to conceptual understanding and skill development. These reflections communicate a moderate degree of personal engagement with the subject and process of research, demonstrating some intellectual initiative and/or creativity.
5–6	<ul style="list-style-type: none"> There is evidence that student reflection is evaluative. Reflections given on decision-making and planning include reference to the student's capacity to consider actions and ideas in response to setbacks experienced in the research process. These reflections communicate a high degree of intellectual and personal engagement with the subject and process of research, demonstrating authenticity, intellectual initiative and/or creativity in the student voice.

Clarification and explanation of the criteria

This section will help the teacher/moderator to decide which descriptor best fits the student's work.

It gives a detailed description of the characteristics of each descriptor, with examples, for each of the five assessment criteria.

A: Focus and method

Markband	Descriptor	Characteristics of performance
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below. 	<ul style="list-style-type: none"> Work in this band will not meet the requirement to select and define an appropriate research question. For example, there may be identification of an issue (animal experimentation) without linking it to an ethical dilemma (Should animals be used for medical testing for the development of better medicines for humans?).
1–2	<ul style="list-style-type: none"> The research question identifies an ethical dilemma related to the career-related study. There is evidence of planning and acknowledgement of bias and validity. 	<ul style="list-style-type: none"> Work in this band is likely to identify an appropriate ethical dilemma but show weakness in shaping it into a meaningful research question. For example, selecting an ethical dilemma where the issue does not have enough scope to show legitimate contrasting perspectives (eg Is human trafficking wrong?) or one that leads to a mainly descriptive response (What can be done to reduce human trafficking?). There will be a link to a career-related context, although this is likely to be incidental or undeveloped. Work in this band will include relevant supporting evidence but may draw heavily on a limited range of sources (eg quoting large sections from a single document or over-relying on websites such as Wikipedia). Selection of evidence will tend to be heavily weighted to one perspective. Awareness of bias and validity is likely to be mainly implicit (eg quoting evidence from contrasting sources).

Markband	Descriptor	Characteristics of performance
3–4	<ul style="list-style-type: none"> There is an identification of an issue linked to the career-related study and an arising ethical dilemma. The research question is clearly stated and the focus on it is generally sustained throughout the project. There is evidence of a planned approach and the determination and collection of largely appropriate sources/ data/information. There is evidence of understanding of potential bias and validity. 	<ul style="list-style-type: none"> Work in this band is likely to both identify a relevant issue with an ethical dilemma (eg privacy in social media) and develop it into an appropriate research question (eg How far is it acceptable for social media companies to use data gathered from their users?). The approach to the question is likely to be methodical (eg acknowledging points from opposing perspectives) and rely on a straightforward “for and against” format. The information gathered will be well chosen and consistently relevant. Evidence for different perspectives is more balanced, but still may be weighted towards one side. Quotations and evidence tend to be used more selectively, drawing on a wider range of sources and formats (eg including graphs and tables as well as quotations). Understanding of bias and validity is likely to be mainly implicit, but there is clearer evidence of choosing reliable sources and understanding the difference between fact and opinion.
5–6	<ul style="list-style-type: none"> Clear identification of an issue linked to the career-related study, and the arising ethical dilemma. The relevance of the study is clear. The research question is clearly stated and sharp focus on it is sustained throughout the project. There is evidence of excellent planning of research, and the determination and collection of appropriate and varied sources. There is evidence of understanding of potential bias and source validity and measures have been taken to limit bias through source selection. 	<ul style="list-style-type: none"> Work in this band includes a question that provides the opportunity to evaluate the implications of the ethical dilemma beyond simply giving the case for and against. For example, “Should terminally ill individuals have the option of physician-assisted suicide?” allows the student to explore a wider range of perspectives at a theoretical (medical, legal, moral) and personal (doctor, patient, family) level. Source materials are well chosen, varied and are often used with precision to illustrate particular points, arguments and ideas. Work in this band is likely to take account of aspects such as value judgments, bias and misrepresentation of evidence/statistics in their responses and comment on them where appropriate.

B: Knowledge and understanding in context

Markband	Descriptor	Characteristics of performance
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below. 	<ul style="list-style-type: none"> Work in this band shows little or no awareness of the wider contexts that might affect or influence the ethical dilemma chosen (eg choosing an ethical dilemma around animal experimentation, but not considering life-saving medicines that may have been developed as a result).
1–3	<ul style="list-style-type: none"> The central ethical dilemma is identified and the student shows an awareness of its context(s), although this is largely implicit. Overall, the project demonstrates basic knowledge and understanding of the ethical dilemma, generally dominated by one view. There is evidence of an awareness of the relevance of the chosen dilemma to community members, which is only partially integrated into the overall inquiry. Some awareness of how cultural perspectives can influence the ethical dilemma is demonstrated, although this is likely to be largely implicit. 	<ul style="list-style-type: none"> Work in this band is likely to focus on the more obvious or surface features of the ethical dilemma or mainly deal with one aspect at the expense of a broader perspective (eg Wind power is good because it does not hurt the environment). Wider contexts (eg negative impact on residents, cost versus benefit) are likely to be referred to only in passing or left implicit. Work in this band may be more likely to present a particular view on the ethical dilemma, rather than explore different perspectives on it. Consequently, while different viewpoints may be acknowledged or referred to, evidence is not weighed up or balanced. Work in this band demonstrates awareness that the ethical dilemma will have a particular impact on relevant community members, but this will tend to be stated rather than explored or presented in a way that is self-evident. As with wider contexts, cultural perspectives are likely to be referred to only in passing or left implicit.

Markband	Descriptor	Characteristics of performance
4–6	<ul style="list-style-type: none"> The central ethical dilemma is described from more than one perspective. Overall, the project demonstrates clear and consistent knowledge and understanding of the ethical dilemma and its context(s). There is evidence of a relevant and sustained understanding of the impact of the ethical dilemma on community members. Understanding of how cultural perspectives can influence the ethical dilemma is demonstrated and supported, where appropriate, with relevant examples. 	<ul style="list-style-type: none"> Work in this band presents a balanced view of the ethical dilemma recognizing the pros and cons of different viewpoints (eg Wind power is a clean, renewable energy source, but can be unreliable), all with supporting evidence, although coverage may still be uneven. The different ideas and arguments will be presented/described, often methodically, in a way that shows an understanding of the issue and related ethical dilemma. However, there is likely to be limited analysis and the responses will still tend to deal mainly with the more obvious aspects of, and perspectives on, the ethical dilemma. An understanding of the impact on the communities and influence of cultural perspectives is beginning to be more integrated into the overall arguments presented and informs the whole response. Examples are relevant and begin to develop some of the points made.

Markband	Descriptor	Characteristics of performance
7–9	<ul style="list-style-type: none"> The central ethical dilemma is analysed from different perspectives, which are evaluated in a balanced way. Overall, the work demonstrates a considered and developed knowledge and understanding of the ethical dilemma with a clear sense of scope and context(s). The use of a local or global example to contextualize the ethical dilemma is effective and well integrated. The impact of the ethical dilemma on community members is analysed and forms an integral part of the inquiry. Analysis of how cultural perspectives can influence the ethical dilemma is developed and integrated into the ideas presented. 	<ul style="list-style-type: none"> Work in this band is beginning to be more nuanced (eg becoming aware of the subtleties, ironies and contradictions within the different perspectives: The hazard to wildlife/visual impact on the landscape of the most “green” source of power), although this may not be sustained throughout the whole response. A range of different perspectives/viewpoints is analysed and evaluated rather than just presented/contrasted. There is justification of the validity and weaknesses of different arguments and balance between them when drawing conclusions (eg large upfront investment required to build wind turbines balanced against low running costs). Similarly, the impact on communities and/or global and cultural perspectives is considered and, where appropriate, balanced (eg impact on rural communities of wind turbines, the economic impact on mining communities of decreasing reliance on coal balanced with the global environmental benefits of clean renewable energy).

C: Critical thinking

Markband	Descriptor	Characteristics of performance
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below. 	<ul style="list-style-type: none"> Work in this band will tend not to present an argument, but simply describe an issue.
1–4	<ul style="list-style-type: none"> A basic argument is presented. Evidence is presented. The student presents straightforward conclusions, although these are asserted without drawing on any arguments or evidence provided. Some simple ideas are connected and supported with evidence, although this may not be consistent throughout the project. 	<ul style="list-style-type: none"> Work in this band presents a basic argument, outlines some main points that are relevant and, as a minimum, acknowledges different viewpoints. However, some ideas are likely to be presented as self-evident rather than explained (eg poorer people don't have any choice but to use payday loan companies). The viewpoint expressed in the project (eg banks behave unfairly) is mostly consistent and at times supported with evidence, but remains largely undeveloped. Similarly, inferences made from the evidence are relevant but mainly at the surface level (eg The high fees charged by banks are unfair because they affect those who can least afford them). Conclusions are relevant, but may be repetitious or not well linked to the ideas in the rest of the essay.
5–8	<ul style="list-style-type: none"> An argument is presented with a viewpoint maintained throughout. Partial use of evidence is made to develop the argument. The student is able to reason and demonstrates an understanding of cause and effect. Conclusions made are logical, drawing on the arguments and evidence presented. Ideas are supported by relevant evidence from different sources to develop an overall argument. 	<ul style="list-style-type: none"> Work in this band uses evidence more effectively to develop ideas and shows a straightforward understanding of consequences (eg Building a hotel resort bordering a nature reserve can damage the reserve). Conclusions may still tend to re-present points made in the main body of the essay rather than use them to develop new ideas, but the point of view reached will be justified and explained. Points made are beginning to build on one another in a logical sequence to provide an overview of the ethical dilemma, although this may not always be consistent.

Markband	Descriptor	Characteristics of performance
9–12	<ul style="list-style-type: none"> The argument presents a considered and convincing discussion of the issue and the associated ethical dilemma, interpreting and applying evidence to draw considered inferences. Conclusions made are perceptive and concise, drawing consistently on the arguments and evidence presented. Connections made between ideas are insightful, sustained and coherent and developed by a range of well-chosen evidence. 	<ul style="list-style-type: none"> In this band, points made and evidence chosen combine to develop a clear and coherent argument, moving with confidence between taking an overview of the subject and engaging with specific details and evidence. Understanding of concepts such as cause and effect is becoming more developed and nuanced, for example by considering different unintended negative consequences of positive actions (Diverting resources into cancer treatments leads to lower funding for social care and a reduction in the quality of life for a larger number of patients with less serious, chronic conditions). Conclusions tend to draw on, but not simply repeat, ideas, evidence and arguments from earlier in the response, providing an effective overview of the issue and the associated ethical dilemma. Work in this band begins to synthesize, rather than simply select and present, evidence, bringing together ideas and information from different sources to support and develop the argument.

D: Communication

Markband	Descriptor	Characteristics of performance
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below. 	<ul style="list-style-type: none"> There is little sense of a logical sequence to the response; introductions and/or conclusions may be brief or missing.
1	<ul style="list-style-type: none"> There is a straightforward structure to the project as a whole, with similar material grouped together in a logical manner. 	<ul style="list-style-type: none"> Work in this band provides a structure that is appropriate to the task, including an introduction and conclusion. The response is organized into paragraphs with simple links between them that usually follow a logical sequence, although transitions between sections may, at times, be awkward. Work in this band uses terminology appropriately, but it may not always be fully explained and there may be some evidence of misunderstanding.
2	<ul style="list-style-type: none"> Communication is generally clear and structured appropriately, with consistent use of appropriate terminology. 	<ul style="list-style-type: none"> Work in this band structures material to support the argument, with points following logically on from each other and leading to an appropriate conclusion. Linking between paragraphs and/or sections is clear and consistent, although it will often follow a straightforward “for and against” model. Terminology is mostly used appropriately and is explained or defined where relevant.
3	<ul style="list-style-type: none"> Communication is coherent and structured in a way that supports the understanding of the student’s ideas and arguments, with effective use of appropriate terminology to support and develop ideas. 	<ul style="list-style-type: none"> The structure of the response is organized to develop an overall argument. Each section builds effectively on what has gone before, leading to a logical conclusion. Terminology is used clearly and precisely to support and develop ideas.

E: Engagement and reflection

Markband	Descriptor	Characteristics of performance
0	<ul style="list-style-type: none"> The work does not reach the standard of the descriptor below. 	<ul style="list-style-type: none"> There is little evidence of a planned approach to research or awareness of how it could be improved.
1–2	<ul style="list-style-type: none"> There is evidence of student reflection but this is mostly descriptive. Reflections given on decision-making and planning are procedural. These reflections communicate a limited degree of personal engagement with the subject and/or the process of research. 	<ul style="list-style-type: none"> Work in this band tends to describe what was done rather than why it was done and what impact it had on the response. Comments on how the research methods could have been improved are likely to be appropriate, but general. Work in this band expresses a relevant personal view on the issue and related ethical dilemma, but this is unlikely to be developed.
3–4	<ul style="list-style-type: none"> There is evidence that student reflection is analytical. Reflections given on decision-making and planning include reference to conceptual understanding and skill development. These reflections communicate a moderate degree of personal engagement with the subject and process of research, demonstrating some intellectual initiative and/or creativity. 	<ul style="list-style-type: none"> Work in this band considers what has been learned about the issue and research methods, justifying choices and suggesting improvements, although this may not be consistent. Work in this band reflects critically on the choice of research methods and begins to link this to an understanding of the issue and related ethical dilemma (eg explaining the need for a range of evidence to represent different perspectives). Work in this band expresses a reasoned personal response to the issue and related ethical dilemma and begins to show evidence of ability to identify and explain insights gained.

Markband	Descriptor	Characteristics of performance
5–6	<ul style="list-style-type: none"> There is evidence that student reflection is evaluative. Reflections given on decision-making and planning include reference to the student's capacity to consider actions and ideas in response to setbacks experienced in the research process. These reflections communicate a high degree of intellectual and personal engagement with the subject and process of research, demonstrating authenticity, intellectual initiative and/or creativity in the student voice. 	<ul style="list-style-type: none"> Work in this band expresses and explains how the student's understanding of the issue and related ethical dilemma has changed and developed and what new insights they have gained as a result of undertaking the project. Work in this band justifies the approach taken to developing a research method, often linking it explicitly to the chosen issue and related ethical dilemma (eg showing understanding that different forms of evidence can have different effects—a graph could show the scale of an issue precisely, but a first-person account may have a more emotional impact). There is evidence in the work that the student is beginning to develop their own ideas and insights rather than re-presenting the views of others. Evidence of initiative in research methods could include effective primary research (eg seeking an interview with someone directly involved in or affected by the issue).

Course review

Teachers and coordinators must continually and collaboratively review the delivery of the four core components to ensure relevance and links between them.

Teachers should also seek to improve understanding of the core components among all school staff and discuss opportunities for connections between the written curriculum and the core components.

Resources

Teachers, coordinators and students can develop a list of employers, companies, and organizations that can contribute towards the delivery and experience of the core component (eg by providing guest speakers or providing authentic materials). The school community should continually investigate and document new opportunities for the development of resources.

Raising awareness

Schools should work with the wider school community (potentially including students), so they can collectively identify areas of the programme that need strengthening, and recognize and celebrate achievements. To achieve this, the school could:

- organize events to highlight and celebrate students' experiences and achievements
- invite alumni to speak to students about their careers
- invite students from other IB schools to share their experiences
- provide information on the school website and in school newsletters, newspapers and magazines
- formally recognize students' achievements (eg through award ceremonies).

Networking

Teachers are encouraged to use the forum on the online curriculum centre to develop networks with other schools, share resources and exchange advice. Students could also be assisted in contacting students from other schools to collaborate or share ideas.

Programme evaluation

Every five years, schools engage in a programme evaluation and self-study process to assess the implementation of their Career-related Programme. The school's implementation of each core component is evaluated as part of this process. Schools submitting their programme evaluation self-study will be required to provide evidence that the planning, organization and delivery of each core component meets the individual core components requirements.

Please see the *Programme evaluation guide and self-study questionnaire: Career-related Programme* for more detailed guidance about the process and the evidence that must be submitted.

Learning diversity

Some students may find it difficult to participate due to a physical, medical or psychological condition. The principle in all such circumstances is to focus on what students **can** do, not on what they cannot. It must be remembered that the school plays a vital part in defining students' future lives, including the development of their interests and talents.

In IB World Schools, all students in the IB programmes should have meaningful and equitable access to the curriculum. The IB document *Programme standards and practices* calls for schools to be organized in ways that value student diversity and respect individual learning differences. This is a key aspect of becoming more internationally minded and is an important goal of all IB programmes.

Schools must ensure that equal access arrangements and reasonable adjustments are provided to candidates with learning support requirements and that these arrangements are in line with the IB documents *Candidates with assessment access requirements* and *Learning diversity in the IB programmes: Special educational needs within the IB programmes*.

Schools can contact their regional office for advice.

Appendix 1—Explanation of key terms

What is an “issue”?

An issue is a topic that is worthy of consideration in a particular context—for example, for people in the workplace, or those engaging in a sporting activity.

The issue can be one that directly affects those who are interested in it, or one outside their immediate situation.

In the case of the reflective project, the issue **must** arise from a student’s career-related study. At the beginning of the reflective project the student must state what their linked career-related study is.

What are “ethics” and an “ethical dimension”?

Ethics are a set of moral principles within a society or culture that help to guide behaviours, actions and choices.

The ethical dimension refers to the range of moral aspects related to a topic.

In the context of the reflective project there are two useful ways to think of ethics:

- as the standards of right and wrong
- as the rules of conduct that govern how people behave towards each other, or towards society as a whole.

There are many opinions as to what is “right” and what is “wrong”. What one person is opposed to may be quite acceptable to another. It all depends upon the context of the situation, and the way that individuals respond to that situation.

This is what makes the reflective project such a rich task, with the chance to form, critique and defend opinions, and to appreciate their strengths and weaknesses.

Students will need assistance in order to support their understanding of ethics, and to understand how ethics should be applied in order to produce a successful reflective project. The personal and professional skills course is where ethics should be explained and discussed for the purposes of the reflective project.

What is an “ethical dilemma”?

Within an ethical dimension there are ethical dilemmas. An ethical dilemma is a choice between two (or more) conflicting moral perspectives where neither provides a perfect solution.

In philosophical terms, an ethical dilemma is something to which, whatever a person’s views, there is no right or wrong answer.

Issues that involve conflicts of interest in the workplace or at a societal level are often referred to as ethical dilemmas.

When students choose an issue and ethical dilemma within career-related studies for their reflective project, they need to consider:

- Can they identify the different perspectives that various stakeholders may adopt?
- Can they understand the arguments each stakeholder puts forward?
- Can they put forward a reasoned argument to support their own view on the dilemma and so answer the research question?

The issue to be explored should be:

- controversial
- have two or more perspectives on it based on the moral principles of the individuals or groups involved
- open to different answers according to the respective moral principles of those involved.

What is a “local/global example”?

The local/global example is key for the reflective project.

Students may be able to take the example from first-hand experience of the issue they are investigating.

Alternatively, students may have found the example during their research.

The example should illustrate/support the students’ knowledge and understanding of the issue. A specific and focused example will also help them to think the issue through more critically.

The local/global example should be linked to the community in question, that is to say, the group of people with common interests such as where they live, religion or ethnicity. A community can also be a workplace community, or a community of those involved in the same line of work, even if these individuals are dispersed globally.

Appendix 2—Examples of reflective projects

The following are examples of issues and associated ethical dilemmas in some career-related fields:

Issue	Ethical dilemma	Career-related study
The way banks make money	Should the practices of certain parts of banking business be constrained or controlled, perhaps by requiring bankers to swear an “ethics oath”?	business studies
Accepting inducements in order to win contracts	Should businesses accept any form of inducement either before winning or during a contract?	business studies
Fracking for shale gas	Should the government grant fracking licences to companies in order for them to make potentially high profits?	business studies, outdoor education, environmental studies
Building on flood plains	Should construction firms be granted planning permission to build on areas that are known to have flooded in the past?	outdoor education, environmental studies
Childcare for under fives	Should one parent stay at home to look after children?	childcare, health and social studies
Behaviour on the football pitch	Should the use of tactics designed to gain unfair advantage be deemed professional or intolerable?	sport studies
Police tactics used during civil protests or demonstrations	Should police be allowed to use force when dealing with demonstrators?	police studies

Appendix 3—How to use the researcher's reflection space

The researcher's reflection space (RRS) is central to the process of the reflective project. It connects strongly with the IB learner profile, which encourages students to be reflective by working 'to understand our strengths and weaknesses in order to support our learning and personal development'. The RRS invites personal reflections related to the topic under study and so can support students who are undertaking the reflective project by inviting them to reflect on the process of researching and then creating their reflective project.

Students can include in their *Reflections on planning and progress form* (RPPF) the information they have collected, ideas developed through reflection, or new questions posed in the RRS.

Here are some examples of what students may include in their RRS:

- annotated newspaper cuttings or web printouts on their research topic
- concept maps, tables, charts, graphs and any other salient information relating to their research topic
- images of products, people, institutions or events that relate to the issue under study
- maps illustrating how people, communities and places are connected by the topic
- entries that describe or explain the students' personal feelings about the issue and ethical dilemma under study, about themselves and the people around them as they learn more about their chosen topic
- records of how they may have changed their mind about the ethical dilemma
- brainstorm of the possible methods that could be used for their study
- work plan for the research, with reflections on its usefulness
- key quotations with attributions that they have found relevant and useful for their research topic.

Appendix 4—Reflections on planning and progress form



REFLECTIONS ON PLANNING AND PROGRESS

Supervisor name										
Candidate session number	0	0								
Candidate name										
School number	0	0								
School name										
Examination session (May or November)					Year					

This form is a formally assessed element of the reflective project to be completed by the candidate for first assessment May 2018.

Candidate:

This form records reflections on your planning and progress, and the nature of your discussions with your supervisor.

You must undertake three formal meetings with your supervisor. These meetings will inform each of your reflections below.

The first formal meeting should focus on your initial ideas and how you plan to undertake your research; the interim meeting is once a significant amount of your research has been completed, and the final meeting once you have completed and handed in your reflective project.

After each formal meeting you must record your reflections on this form and your supervisor must sign and date each reflection.

This form acts as a record in supporting the authenticity of your work. This form must be submitted with your reflective project and will be assessed under Criterion E. Please refer to assessment Criterion E in the reflective project guide when completing this form.

Supervisor:

You must have at least three meetings with each candidate, one early on in the process, an interim meeting and then the final meeting. Other meetings are permitted but do not need to be recorded on this sheet. After each formal meeting candidates must record their reflections and as the supervisor you must sign and date this form.



Reflections on planning and progress	Candidate reflections	Date	Supervisor signature
First reflection			
Interim reflection			
Final reflection			



Supervisor's comments: