MIRA

Metacognition · Inner Life · Resilience · Agency

Stage Guide

Upper Secondary · Years 1 and 2 (ages 16 to 18)

Assessment system linked to the MIRA Model

> For Upper Secondary teachers and stage coordinators · Guide body · Printable instruments are in the Annex of this document.

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1. The philosophy of assessment in Upper Secondary

Upper Secondary is the most distinctive stage of the MIRA model, and the only one that must coexist with a high-stakes external assessment: the university entrance examination. Ignoring that assessment would make the guide unrealistic; subordinating the model to it would make the model pointless. The proposal is a third way: the MIRA model as the best possible preparation for the selective assessment, not despite it.

1.1 The distinctive challenge: a one-year MIRA Upper Secondary (in Spain)

In the Spanish context, Year 2 of Upper Secondary is shaped from start to finish by the university entrance examination. Expecting the model to operate in full during that year would be unrealistic: the intensity and calendar of the selective assessment govern every teaching decision. That is why the MIRA model operates in full in Year 1 of Upper Secondary — the last year in which the pupil can still grow with the model — and in Year 2 it withdraws to a lighter presence, already under the logic of the assessment.

This is not a concession: it is recognising where MIRA delivers real value. Year 1 of Upper Secondary is a full year of the model, with a competency assessment, a project and the stage milestone. Year 2 is the year of the competency assessment aligned with the university entrance examination, where the model concentrates on the only form the selective assessment allows.

> *The underlying thesis: a pupil who can monitor their own learning, spot their gaps and manage error performs better in a high-pressure exam than one who has only memorised. MIRA in Year 1 does not take time away from the Year 2 entrance examination: it builds exactly the skills the assessment rewards.*

1.2 The dual configuration: Spain and systems without a terminal assessment

The “one-year MIRA Upper Secondary” approach is a Spanish particularity, arising from the existence of a high-stakes terminal selective assessment. It is not a limitation of the model. In education systems without an equivalent stage validation or certification assessment, the full Year-1 approach extends across both years, and the stage milestone moves to Year 2.

Year	Spain (with the entrance examination)	Systems without a terminal assessment
Year 1 Upper Secondary	Full year of the MIRA model: competency 75–90% + project/Research Project 10–25% (band). Stage milestone (Research Project).	Full year of the MIRA model, identical approach.
Year 2 Upper Secondary	100% competency assessment in core subjects, aligned with the entrance examination. Model scaled back.	Full year of the MIRA model. The stage milestone (Research Project) moves here.

1.3 The four MIRA conditions at ages 16–18

The Upper Secondary pupil has consolidated formal thought: they can reason abstractly and hypothetico-deductively, hold a position with arguments, and monitor their own process. The four conditions reach their greatest demand here.

Condition	Expression in Upper Secondary	What the pupil does (ages 16–18)
M	**Developed Metacognition**	Monitors their own study process, spots their gaps and adjusts strategies. The key question is: what don't I know, and how will I find out before the exam?

I	**Inner Life transformed into vocation**	Asks what they want to serve, and towards what life project they are heading. Pathway decisions and the Research Project are moments of real, not artificial, inner reflection.
R	**Resilience under pressure**	Manages the pressure of the selective assessment without letting it destroy their motivation. Turns exam error into information for the next attempt.
A	**Full Agency**	Designs their own research project, takes part in its assessment and stands by their work in public. The distance between pupil and teacher is the smallest across the whole 3–18 journey.

1.4 Why MIRA in Year 1 prepares better for the Year 2 entrance examination

The educational evidence is clear: the skills the MIRA model trains are precisely the ones that best predict performance in high-stakes assessments. Self-assessment has one of the largest documented effects on learning, metacognitive strategies substantially improve performance, and feedback focused on the process clearly outperforms feedback focused only on the mark.

Skill trained by MIRA	Effect on learning	Usefulness for the entrance examination
Self-assessment / self-calibration	**d = 1.33 (very high)**	Knowing what you have mastered and what you have not, before the exam
Feedback on the process	**d = 0.73 (high)**	Correcting the study method, not just the result
Metacognitive strategies	**d = 0.69 (high)**	Planning study and managing time under pressure

Effect-size figures drawn from the MIRA Technical Document. An effect size of d ≥ 0.40 is considered relevant in educational research.

1.5 Convergence of competency-based curricula × MIRA in Upper Secondary

In Upper Secondary the numerical grade (1–10) is mandatory and has a direct bearing on university entrance. The MIRA model does not replace it: it coexists with it by mapping the A–D rubric onto the 1–10 scale. Competency-based curricula also establish the Research Project, or its equivalent, as a curriculum component, which the MIRA model adopts as the stage milestone.

2. Distribution of weightings and grading

2.1 Year 1 of Upper Secondary: the full year of the MIRA model

Year 1 of Upper Secondary keeps the model's components, with a high competency weighting that anticipates the demands of Year 2. MIRA does not set a single percentage: it defines a band within which each school decides its own balance between the competency component and the project component. The project component covers experiential work as a whole, without breaking it down further. The competency assessment is the main instrument; the Research Project (stage milestone) provides the agency and project component.

Component	Band	Instrument
Competency assessment	**75 – 90 %**	Block assessments A1-A2-B-C with graded self-assessment (see 3.3)
Project / Research Project	**10 – 25 %**	Stage milestone with self-assessment and peer assessment of the project

> *The choice within the band is made for the whole year (not per subject or per teacher) and is set out in the school's Education Project. The 75% competency floor ensures the assessment remains the dominant instrument and that the SAT keeps its base; the 10% project floor ensures Agency never disappears. The 85/15 reference point falls within the band: schools already using it need not change anything.*

2.2 Year 2 of Upper Secondary: 100% competency weighting in core subjects

In Year 2 of Upper Secondary, core subjects are assessed 100% through the competency assessment, aligned with the formats of the university entrance examination. It is the only configuration compatible with the intensity and calendar of the year. The MIRA model remains present in the internal logic of the assessment — the A1-A2-B-C blocks, graded self-assessment — but not in project components, which the year does not allow.

> *Why 100% competency-based in Year 2: the selective assessment dictates its own format and calendar. Keeping a project component in Year 2 core subjects would be unrealistic. MIRA's contribution in this year is qualitative: the block structure of the assessment and graded self-assessment prepare pupils for the entrance examination better than a conventional exam, within the 100% competency format.*

2.3 Mapping the A–D rubric onto the 1–10 scale

The mandatory numerical grade is derived from the model's four-level rubric. The mapping is consistent across all subjects to ensure fairness.

Rubric level	Descriptor	Grade 1–10	Assessment blocks
A · Emerging	Understands with support	**1 – 4**	Does not complete A1+A2
B · Basic	Applies independently	**5 – 6**	Passes A1+A2
C · Advanced	Transfers to new contexts	**7 – 8**	Passes up to B
D · Excellent	Reasons critically and argues	**9 – 10**	Completes block C

2.4 The international configuration (without a terminal examination)

MIRA network schools in systems without a terminal selective assessment apply the same full band in Year 2 of Upper Secondary as in Year 1: competency 75–90% + project/Research Project 10–25%. The stage milestone (Research Project) is carried out in Year 2. The rest of the guide is identical; the only differences are explicitly noted in sections 5.1 and 5.5.

3. The competency assessment in Upper Secondary

3.1 Continuity and difference with the Secondary assessment

The Upper Secondary competency assessment keeps the block structure from Secondary (A1, A2, B, C) but raises the level of demand for each one, especially block C, which becomes an argued essay taking a position supported by sources, calibrated to the level the selective assessment requires.

Block	Points	What it assesses	Difference from Secondary
A1	up to 4	Understanding of essential concepts	Greater conceptual density
A2	up to 6	Guided application	Multi-step problems
B	up to 8	Transfer to a new context	Contexts not covered in class
C	up to 10	Critical reflection and argumentation	20–30-line essay with sources

3.2 Aligning the blocks with entrance-examination formats

The block structure of the MIRA assessment is not unrelated to the entrance examination: it is direct training for it. Each block corresponds to a type of question that appears in the selective assessment. Preparing for the MIRA assessment is, in practice, preparing for the entrance examination with added metacognitive scaffolding.

MIRA block	Equivalent entrance-examination format	What it trains for the selective assessment
A1 · Comprehension	Definition, identification and concept questions	The factual base without which no higher-level exercise is possible
A2 · Application	Problems, guided commentaries, procedural exercises	Independent completion of structured tasks
B · Transfer	Questions applying to new sources or cases	Using what has been learnt on material not seen before
C · Argumentation	Extended-response questions, essay, critical commentary	Holding a thesis with sources: the highest-weighted question in the entrance examination

3.3 Graded self-assessment of the competency assessment

This is the distinctive instrument of Upper Secondary. After sitting a competency assessment, the pupil does not immediately receive their mark: they first self-assess following the teacher's criteria, and only afterwards learn the actual mark. The contrast between the two marks is, in itself, the learning.

Step	What happens	What the pupil learns
1	The teacher returns the uncorrected assessment and explains the solutions and the criteria.	Sees the correct-answer model and the grading criteria before knowing their mark.

2	The pupil self-assesses by applying those criteria and gives themself a mark.	Applies the criteria to their own work: learns to judge their own performance through the assessor's eyes.
3	The teacher hands back the assessment, now corrected, with its mark.	Learns the actual mark and the detailed correction.
4	The self-given mark is compared with the actual mark. The pupil records the gap.	The difference (self-given mark − actual mark) measures their calibration: how well they know themself as a learner.

> *Why this is valuable and not just a formality: the gap between the self-given mark and the actual mark measures self-knowledge, not content. A pupil who gives themself a 7 and gets a 4 does not have a syllabus problem: they do not know what they do not know, which is the most common cause of failure in the entrance examination. Training calibration — having the pupil learn to predict their mark accurately — is training the very skill the selective assessment rewards: knowing where you stand before the exam tells you.*

The calibration gap as a tracking measure

The pupil records the difference between their self-given mark and the actual mark for each assessment throughout the year. The goal is not for the self-given mark to rise, but for the gap to narrow: a well-calibrated pupil predicts their mark within a small margin, which shows they accurately know their level of mastery. The calibration gap is a measure specific to the model and is recorded in Annex 2.

4. The project in Upper Secondary (Year 1)

In Spain, the project component lives in Year 1 of Upper Secondary, embodied in the Research Project, which is also the stage milestone. In international systems without a terminal assessment, the project is present in both years. The project is the space where the pupil's agency reaches its fullest expression: they choose the topic, design the process and stand by the result.

4.1 The project as a space for agency in the full year

At ages 16–17 the pupil can sustain a genuine research project, with their own question, data gathering and argued conclusions. The project does not compete with the assessment: it complements it, because it develops transfer (block B) and argumentation (block C) in an extended format that the exam does not allow.

4.2 Self-assessment of the project

The project is assessed with its own instrument: a checklist the pupil completes before handing in, plus peer assessment. Unlike the competency assessment, where self-assessment is graded and compared with the teacher's mark, in the project self-assessment is formative: it guides improvement of the work before the final submission.

Instrument	How it works
Pupil's checklist	The pupil checks that their project meets the A–D criteria before handing in. It is formative self-assessment, not graded.
Peer assessment	A classmate assesses the project using the same rubric. At ages 17–18 the pupil can judge a peer's work rigorously, and receiving that perspective improves the result.
Teacher's assessment	The teacher issues the final grade using the A–D rubric, taking into account both the process and the product.

4.3 The Reflection Card

Continues the Secondary format: all four questions together, without scaffolding. It is the only instrument that is not graded. In Upper Secondary, the Inner Life question sharpens towards the pupil's life project: generic in Year 1, and made concrete towards the pathway decision in Year 2.

Condition	Question	Year 1 Upper Secondary	Year 2 Upper Secondary
M	How did you plan it, and what did you adjust along the way?	—	—
I	Does this have to do with who you want to become?	Used as is	—
	To what extent does this bring you closer to the academic or professional pathway you are seeking?	—	Used as is
R	How did you manage the pressure or the real difficulty of the process?	—	—
A	What did you produce that did not exist before, and for whom?	—	—

5. Stage milestone: the Research Project (RP)

The Research Project is the closing milestone of the stage and the moment when the complete MIRA cycle takes shape in a single product. The pupil formulates their own question, builds a theoretical framework using sources, carries out fieldwork or an experiment, writes a report and defends it in public.

5.1 Why the milestone falls in Year 1 of Upper Secondary (Spain)

In the Spanish context, the stage milestone falls in Year 1 of Upper Secondary, not Year 2. The reason is direct: Year 2 is devoted to preparing for the entrance examination and does not allow the time or dedication a serious research project requires. Placing the RP in Year 1 ensures the pupil experiences the full agency cycle before entering the year dominated by the selective assessment.

> *Design decision: in Spain, the RP is carried out in Year 1 of Upper Secondary. In systems without a high-stakes terminal assessment, the RP moves to Year 2, closing the stage in its final year, as with the other stages of the model (see 5.5).*

5.2 Full structure and timing

Phase	What the pupil does	Product / MIRA condition
1 · Question	Formulates their own research question, bounded and manageable.	Validated question · I
2 · Theoretical framework	Builds the framework using cited primary and secondary sources.	Framework with sources · M
3 · Fieldwork	Gathers data, experiments, or analyses real material.	Own data · R + A
4 · Report	Writes a 3,000–5,000-word report with results and conclusions.	Written report · M
5 · Defence	Orally defends the work before a panel and answers questions.	Oral defence · M + A

5.3 The complete MIRA cycle in the RP

The RP is the only instrument in the model where all four conditions are travelled through in a complete sequence: the Inner Life of choosing one's own question and sustaining it in the Reflection Card throughout the process, the Metacognition of building and citing a framework, the Resilience and Agency of the fieldwork, and once again Metacognition and Agency in the report and its defence. That is why it is the natural closing point of the stage and of the entire 3–18 journey.

5.4 Pass threshold

The RP is graded with the A–D rubric mapped onto the 1–10 scale. The pass threshold is level B (5–6): the pupil must have formulated their own question, built a framework with sources, gathered data and defended the work coherently. If the threshold is not reached, the pupil is given a review opportunity with agreed deadlines before the end of the school year.

5.5 Note for international schools: the RP in Year 2

In network schools located in systems without a terminal selective assessment, the RP is carried out in Year 2 of Upper Secondary. The structure, phases and threshold are identical; only the year changes. This way the stage closes in its final year, as happens in the Early Years (Age-5 Mini-Exhibition), Primary (Year 6 Exhibition) and Secondary (Year 4 Personal Project).

6. The termly family report in Upper Secondary

In Upper Secondary the pupil is 16–18 years old and is the lead player in their own process. The family report keeps the model's minimal format — numerical grade, A–D profile and a single next step — but with one distinctive feature: the pupil reads and comments on the report before the family does, as in Secondary. At this age, the report is above all a tool for the pupil themself.

Component	What it contains	Source
Numerical grade	The 1–10 grade per subject, mandatory under regulations.	A–D rubric
A–D profile	The level of competency achieved in each block, which qualifies the grade.	Competency assessment
Calibration gap	How the difference between the self-given mark and the actual mark has evolved over the term.	Self-assessment (3.3)
A next step	One single, concrete action for improvement next term, framed positively.	Teacher

7. Transition from Upper Secondary to university / higher vocational training

Upper Secondary is the final stage of the MIRA model, and its transition is external: towards university or higher-level vocational training. The model's contribution to that transition is precisely what university study demands most and teaches least: the capacity to learn independently.

Skill from the MIRA model	Why it is decisive at university / in higher vocational training
Metacognition and self-calibration	At university no one supervises daily study. A pupil who knows what they have and have not mastered manages their own learning without oversight.
Independent research (RP)	The RP is a rehearsal of university-level academic work: question, sources, data, report and defence.
Argumentation with sources (block C)	The argued essay is the dominant format for assessment at university in most degree courses.
The Upper Secondary portfolio	A document of the learner's identity: it shows who they are, what interests them and how they learn. Useful for guidance and for their own pathway decisions.

8. The SAT in Upper Secondary

The Tutorial Support System (SAT) operates in Upper Secondary on a different logic from earlier stages. The intensity and calendar of the year — especially Year 2 — do not allow for the extended 4-step protocol used in Primary and Secondary. In Upper Secondary the SAT focuses on a single, concrete academic-improvement measure: grade-improvement competency assessments in core subjects, at the end of each term.

> *The SAT in Upper Secondary is exclusively an academic-improvement measure. It is neither a developmental support protocol (as in the Early Years) nor a 4-step systemic analysis protocol (as in Primary and Secondary). Its sole function is to offer the pupil a structured route to raise their mark in core subjects before the end of each term.*

8.1 The grade-improvement competency assessment

At the end of each term, pupils who have not reached the desired level in a core subject are offered an improvement competency assessment. This assessment follows the same A1-A2-B-C block structure and allows the pupil to demonstrate a higher level of mastery than the ordinary assessment showed.

Element	Definition
Who it is for	Upper Secondary pupils who want to improve their mark in a core subject.
When	At the end of each term, before the assessment period closes.
Which subjects	Core subjects only (those carrying the greatest weight in the entrance examination and university access).
How	A competency assessment with the same block structure. The improved mark replaces the previous one if it is higher.
What it does not include	There is no group-consolidation protocol and no move down to individual developmental support. It is academic improvement only.

8.2 The warning signal specific to Upper Secondary

Although the formal SAT is limited to grade improvement, the Upper Secondary form tutor must remain alert to a signal specific to this stage that no grade protocol detects: the difference between genuine academic difficulty and collapse under the pressure of the selective assessment.

- Genuine academic difficulty: the pupil has not mastered the content. The improvement assessment and revision are the appropriate response.
- Collapse under pressure: the pupil has mastered the content but their performance drops due to anxiety about the entrance examination. Signals: abandoning submissions, hyperfocus on the mark, loss of intellectual curiosity they previously had.

When the form tutor detects collapse under pressure rather than a content difficulty, the response is not more assessment: it is coordination with the school's guidance team for emotional support. Telling the two situations apart is the main tutorial function of the SAT in Upper Secondary.