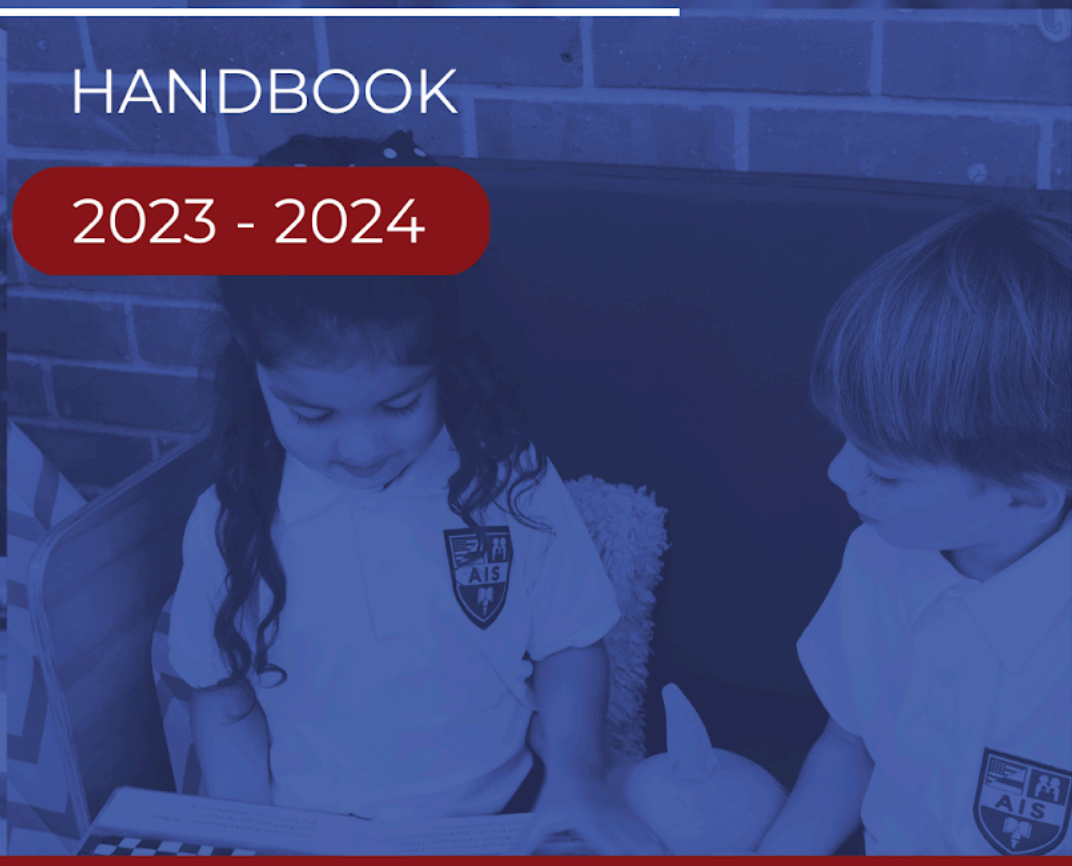
ALTAMIRA
INTERNATIONAL SCHOOL

TEACHING AND **LEARNING**

HANDBOOK

2023 - 2024



AIS


AIS

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Letter from Leadership team

Dear Faculty,

Welcome to the cornerstone of our educational practice, the Teaching and Learning Handbook. Within these pages, you will discover the compass that guides our pedagogical journey—the distilled essence of our educational philosophy and the practical strategies that bring our vision to life.

This handbook is not merely a repository of guidelines; it is a manifesto of our commitment to excellence in education. It's here where the ideals of Learn, Lead, and Serve transition from motion to action. Our Mission & Vision, Principles & Practices, and Culture & Norms are not just inscribed here—they are brought to life through your dedication and expertise.

As educators, you stand at the forefront of innovation, molding the changemakers of tomorrow with every lesson crafted and every question answered. This handbook is designed to be your ally, ensuring that you are well-equipped with the knowledge and tools to navigate the ever-evolving landscape of teaching and learning. It encapsulates our collective wisdom and serves as a beacon for those who are passionate about nurturing minds, hands, and hearts.

Embrace this guide as your educational map, knowing that it will steer you through the exhilarating challenge of shaping globally competitive individuals who are college-ready and community-oriented. Together, let us inspire a culture of continuous learning and growth—for our students and ourselves.

Introduction to Teaching and Learning

Over the past two years, our institution has undergone a transformative process, reimagining the educational landscape in response to the challenges posed by the COVID-19 pandemic. This period has brought forth unprecedented hurdles but has also presented unparalleled opportunities for growth. It has shed light on pre-existing educational disparities, prompting the school to redouble its efforts in fortifying its core focus, reimagining learning support structures, empowering educators through skill development, fostering stronger community engagement both internally and externally, and charting a coherent path towards realizing our aspirational vision encapsulated in the Vision of the Altamira Graduate.

Over its 31-year history, the school has meticulously curated a holistic educational framework, drawing from a myriad of research-based theories and methodologies tailored to the diverse needs of our students and community. These foundational theories and practices encompass:

- *Rigorous Project-Based Learning, influenced by Michael McDowell's groundbreaking work.*
- *Gold Standard PBL principles advocated by PBLworks.*
- *PBL by Design methodology, as exemplified by High Tech High, San Diego.*
- *Explicit Teaching strategies, as articulated by Archer & Hughes (2011).*
- *High Impact Teaching Strategies inspired by the research of Robert Marzano.*
- *Understanding by Design, championed by Wiggins and McTighe.*
- *New Pedagogies for Deep Learning, as proposed by Michael Fullan.*
- *Visible Learning principles, informed by the research of John Hattie.*
- *Universal Design for Learning (UDL) and Blended Learning approaches advocated by Catlin Tucker and Katie Novak.*
- *The Gradual Release of Responsibility model, developed by Fisher and Frey.*
- *Bloom's Taxonomy, providing a scaffold for cognitive learning objectives.*

In our pursuit of academic excellence, we have honed our teaching methodologies through professional development initiatives focused on project-based learning (PBL) and STEAM (science, technology, engineering, art, and math) education over the past two years. By leveraging the strengths of both methodologies, we aim to foster rigorous learning and problem-solving skills among our students and promote more real world experiences.

The implementation of the Gradual Release of Responsibility Instructional Framework (Fisher and Frey 2008), coupled with blended learning approaches (Catlin Tucker 2020), forms the backbone of our teaching framework. Rooted in the belief that cognitive work should transition gradually from teacher modeling to independent practice by the learner, this framework offers a structured approach to student engagement and skill acquisition. Drawing from various theoretical foundations, including the works of Piaget, Vygotsky, Bandura, and others, this model promotes active participation, student

engagement, and collaboration, resulting in heightened levels of student achievement.

Furthermore, our instructional model has been enriched through the adoption of Dr. Michael McDowell's Rigorous PBL Framework, an inquiry-based methodology that follows a distinct pathway of learning that organizes levels of rigor into a particular sequence - surface, deep and transfer levels of learning. Consequently, the use of Explicit Instruction Framework (Archer and Hughes, 2011) has been adopted in AIS to design and deliver effective lessons in the PBL/PrBL classroom, specifically in situations where a 'high intrinsic cognitive load' is placed on student memory as they are novice learners building new knowledge and skills.

MISSION

We create opportunities for discovery and reflection by engaging the minds, hands, and hearts of our students by inspiring in them the curiosity to learn, the self-confidence to lead, and the compassion to serve.

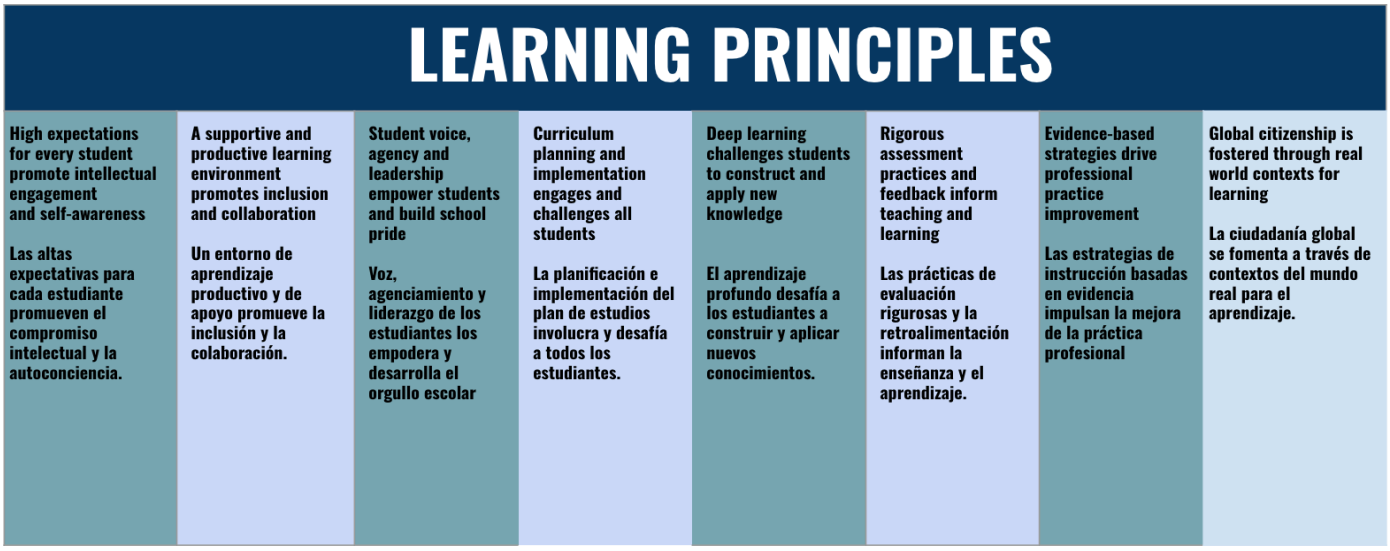
VISION

By 2025, AIS will become an Inspiring, Innovative and Welcoming school where our students feel empowered for life as well-rounded leaders, globally competitive, and with the purpose of having a positive impact in the world.

Teaching and Learning Framework:

Teaching and Learning Principles

Our learning principles are the bedrock of our educational approach, providing a clear, shared understanding of what drives student success within our school. They are the pillars that support every endeavor we undertake, ensuring that the development of our students is holistic, inclusive, and future-focused. These principles guide our curriculum, our classroom dynamics, and our relationships with students, creating an environment where intellectual curiosity thrives, leadership is cultivated, and global citizenship is ingrained. They serve not just as ideals but as practical directives that inform our pedagogy, professional development, and the very culture of learning within our walls.



High Expectations for Every Student

We believe in the potential of each student, which is why we set the bar high. High expectations challenge students to engage deeply, think critically, and become more self-aware. It's about pushing beyond the comfortable to reach new heights of academic and personal achievement. This principle underscores the belief that with the right support and encouragement, every student can excel.

A Supportive and Productive Learning Environment

The learning environment is where potential is nurtured, and it must be both supportive and productive. By fostering inclusion and collaboration, we create a space where diversity is celebrated and every voice is valued. This inclusive ethos empowers students to take risks in their learning and supports them in their journey, ensuring that the classroom is a place of growth for all.

Student Voice, Agency, and Leadership

Empowering students with a voice in their education is pivotal. It's about recognizing their ability to lead and contribute meaningfully to the school community. When students feel heard, they are more engaged, invested, and take pride in their school. This principle is about cultivating a sense of ownership and responsibility in our learners.

Curriculum Planning and Implementation

A well-planned and executed curriculum is at the heart of effective learning. Our curriculum is intentionally designed to engage and challenge all students, providing a scaffold for learning that is both rigorous and accessible. This principle ensures that our academic programs are comprehensive, coherent, and cater to the diverse needs and ambitions of our students.

Deep Learning

Deep learning is about engaging with content on a profound level. It goes beyond rote memorization to challenge students to construct and apply new knowledge in meaningful ways. This principle is fundamental to developing higher-order thinking skills and preparing students for the complexities of the real world.

Rigorous Assessment Practices and Feedback

Assessment is more than a measure of achievement; it's an integral part of the learning process. Rigorous assessment coupled with constructive feedback helps students understand their learning journey. It informs teaching and ensures that our educational practices are as effective as possible.

Evidence-Based Strategies

Our commitment to professional practice improvement is grounded in evidence. We adopt teaching strategies backed by research, ensuring that our methods are not just innovative but effective. This principle reflects our dedication to continuous improvement and excellence in education.

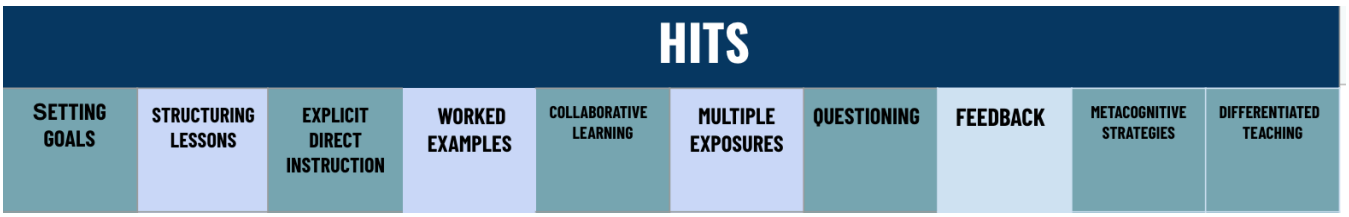
Global Citizenship

In a world that is increasingly interconnected, fostering global citizenship is critical. By integrating real-world contexts into learning, we prepare students to engage with and contribute to the global community. This principle is about broadening perspectives and understanding the impact one can have on a global scale.

Each of these principles interweaves to form a comprehensive framework for educational excellence. They are not standalone edicts but interact dynamically, reflecting the complexity and interrelated nature of teaching and learning. By grounding our practice in these principles, we empower our educators to create a learning experience that is truly transformational.

High Impact Teaching Strategies

In our commitment to educational excellence, we have meticulously integrated a suite of high impact teaching strategies (HITS) at the core of our pedagogical approach, deeply influenced by John Hattie's groundbreaking research on optimizing student learning. These strategies, which serve as the cornerstone of our instructional practices, encompass setting goals, structuring lessons, explicit instruction, and the use of worked examples to foster deep understanding. Additionally, we emphasize collaborative learning, multiple exposures to new information, effective questioning techniques, and regular, meaningful feedback. Metacognitive strategies encourage students to reflect on their own learning processes, while differentiated teaching ensures that we cater to the unique needs of each student. While these methods are pivotal, they do not stand alone; they are part of a broader, dynamic repertoire of teaching techniques that we employ to ensure that every student's educational journey is both impactful and transformative.



Setting Goals

Lessons have clear learning intentions with goals that clarify what success looks like. Lesson goals always explain what students need to understand, and what they must be able to do. This helps the teacher to plan learning activities, and helps students understand what is required.

Structuring Lessons

A lesson structure maps teaching and learning that occurs in class. Sound lesson structures reinforce routines, scaffold learning via specific steps/activities. They optimize time on task and classroom climate by using smooth transitions. Planned sequencing of teaching and learning activities stimulates and maintains engagement by linking lesson and unit learning.

Explicit Direct Instruction

When teachers adopt explicit teaching practices they clearly show students what to do and how to do it. The teacher decides on learning intentions and success criteria, makes them transparent to students, and demonstrates them by modeling. The teacher checks for understanding, and at the end of each lesson revisits what was covered and ties it all together (Hattie, 2009).

Worked Examples

A worked example demonstrates the steps required to complete a task or solve a problem. By scaffolding the learning, worked examples support skill acquisition and reduce a learner's cognitive load. The teacher presents a worked example and explains each step. Later, students can use worked examples during independent practice, and to review and embed new knowledge.

Collaborative Learning

Collaborative learning occurs when students work in small groups and everyone participates in a learning task. There are many collaborative learning approaches. Each uses varying forms of organization and tasks. Collaborative learning is supported by designing meaningful tasks. It involves students actively participating in negotiating roles, responsibilities and outcomes.

Multiple Exposures

Multiple exposures provide students with multiple opportunities to encounter, engage with, and elaborate on new knowledge and skills. Research demonstrates deep learning develops over time via multiple, spaced interactions with new knowledge and concepts. This may require spacing practice over several days, and using different activities to vary the interactions learners have with new knowledge.

Questioning

Questioning is a powerful tool and effective teachers regularly use it for a range of purposes. It engages students, stimulates interest and curiosity in the learning, and makes links to students' lives. Questioning opens up opportunities for students to discuss, argue, and express opinions and alternative points of view.
Effective questioning yields immediate feedback on student understanding, supports informal and formative assessment, and captures feedback on effectiveness of teaching strategies.

Feedback

Feedback informs a student and/or teacher about the student's performance relative to learning goals. Feedback redirects or refocuses teacher and student actions so the student can align effort and activity with a clear outcome that leads to achieving a learning goal. Teachers and peers can provide formal or informal feedback. It can be oral, written, formative or summative. Whatever its form, it comprises specific advice a student can use to improve performance.

Metacognitive Strategies

Metacognitive strategies teach students to think about their own thinking. When students become aware of the learning process, they gain control over their learning.

Metacognition extends to self-regulation, or managing one's own motivation toward learning. Metacognitive activities can include planning how to approach learning tasks, evaluating progress, and monitoring comprehension.

Differentiated Teaching

Differentiated teaching are methods teachers use to extend the knowledge and skills of every student in every class, regardless of their starting point. The objective is to lift the performance of all students, including those who are falling behind and those ahead of year level expectations. To ensure all students master objectives, effective teachers plan lessons that incorporate adjustments for content, process, and product.

Learner Expectations

Traditionally, cognitive competencies in critical thinking, analysis, and problem solving have been regarded as key indicators for success. However, changing economic, technological, and social contexts in the 21st century mean that interpersonal and intrapersonal competencies have become much more important than in the past.

Employers are increasingly valuing "soft" skills such as teamwork and leadership skills. Researchers cite evidence that "people skills" are "an important determinant of occupations and wages", concluding that young people's social skills affect their job prospects in adulthood.

21st century competencies are associated with growth in the cognitive(intellectual) , interpersonal, and intrapersonal domains.

Intellectually

Intellectually, we challenge our students with a rigorous curriculum that encourages critical thinking, creativity, and a love for lifelong learning. Our blend of traditional and innovative teaching methods, including rigorous project-based learning and advanced placement courses, ensures that our students are well-prepared for the demands of higher education and the global workforce.

Intrapersonal

Intrapersonally, we prioritize the emotional and mental well-being of our students. Through our comprehensive support systems, including individualized education plans and well-being programs, we aim to build resilience, self-awareness, and a positive sense of self. We believe that a strong foundation in intrapersonal skills is essential for personal growth and academic success.

Interpersonal

Interpersonally, we foster a community of respect, collaboration, and diversity. Our students are encouraged to develop strong communication and teamwork skills, which are crucial for building healthy relationships and succeeding in a connected world. Through student-led clubs, community service initiatives, and collaborative projects, our learners engage with real-world issues and develop empathy and social responsibility.

Students develop character when they build positive personal relationships and make responsible choices that are physically, socially, emotionally, and intellectually sound.

Resilient Learners

Students who are resilient persevere in facing the challenges and overcome adversity and challenging situations. They take risks, learn from mistakes, persevere, and move forward confidently.

Self-Directed Learners

Students participate in the learning process and accept responsibility for learning. Students practice self-evaluation, improvement of assignments, time-management, organizational skills, and study skills.

Effective Communicators

Students apply and understand knowledge in written and verbal communication. They develop and apply reading, writing, speaking, and listening skills.

College and Career Ready

Students demonstrate work ethics for a successful college or working career. They develop academic and interpersonal skills, utilizing modern resources. They can research college, career, and occupational training opportunities.

Community Participants

Students demonstrate knowledge of various cultures, as well as environmental and political issues and responsibilities. They are involved in the community and recognize their relationship to the world and need for and use of community resources.

Solution Seekers

Our students can apply complex critical and creative thinking skills to real life scenarios. They apply existing knowledge in order to make informed decisions, draw conclusions, and solve problems with integrity, honesty, respect and responsibility.

Service Oriented Leaders

Students demonstrate empathetic leadership by focusing on the needs of others, especially team members, before considering their own and demonstrating an ethical and caring behavior when considering and evaluating multiple historical and cultural perspectives in the local and global community.

Introduction

> *"Curriculum is the way in which we assist the development of reason, logic, and general knowledge in our students. It nurtures creativity, encourages thinking and risk-taking, fosters all experiences that result in physical, mental and emotional growth, shapes intellect and supports individual strengths and challenges."*
>
> Based on this definition, Curriculum is more than a collection of documents; it actually encompasses the whole learning experience for students at our school. This definition shaped the development of our vision for curriculum as follows:

Curriculum should be...

- An ideal match for our diversity of learners
- Guided by our school's purpose and direction
- A clearly articulated and aligned continuum of learning
- A coherent map of interconnected elements: concepts, knowledge, trans-disciplinary skills, dispositions, actions, and social emotional and service learning
- Clearly focused on assessment, learning outputs, and learning data
- Measureable; using a balance of internal and external quality measures
- Guided by essential agreements that reflect our beliefs and drive our practice
- Supported by professional learning and development based on AIS priorities and resources
- Supported by excellent resources (human, material, facility, financial etc.)
- Supported by effective structures and systems: schedules for common planning time; systems for reviewing, evaluating, and monitoring to ensure our curriculum is dynamic
- Our key areas of focus for 2023-2025 are:

  - **Curriculum Integration:** an integrated and coherent map of interconnected units; and an aligned and articulated continuum of learning

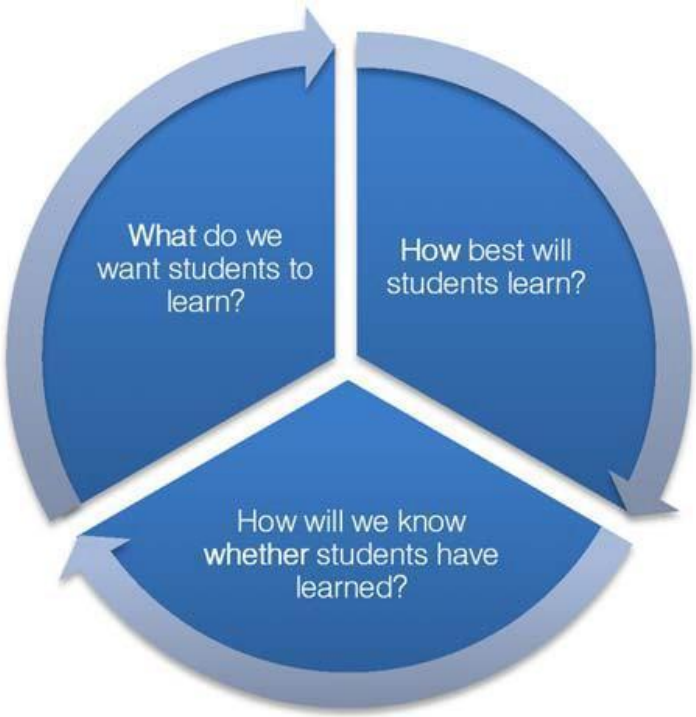
  - **Differentiation:** a differentiated and inclusive curriculum for our diverse learners through the use of UDL and blended learning.

- **STEM-able Curriculum:** That allows the integration of Science, Technology, Engineering, and Mathematics principles to develop problem-solving skills and foster innovation in real-world contexts.
- **Explicit Direct Instruction:** Explicit Direct Instruction is an instructional method that emphasizes clear and structured teaching techniques to actively engage students in the learning process. It involves breaking down complex skills and concepts into smaller, manageable steps, providing clear explanations, modeling, and guided practice, and gradually releasing responsibility to students as they demonstrate proficiency. See Appendix B
- **Rigorous PBL (RPBL):** Is an instructional methodology that is designed to ensure all students develop confidence and competence in learning by using a problem solving process that is thoughtfully designed, and more importantly implemented in the classroom, through a set of motion and action habits.

The Curriculum: The "What", the "Whether", and the "How"

Curriculum Components

At Altamira International School, we view curriculum as being made up of three interrelated components:



The "What" : The Written Curriculum

The purpose of the written curriculum is to assist teachers to cause maximum learning. AIS's written curriculum is based on standards for each subject area located in the AIS Master Curriculum in ATLAS. The curriculum is currently organized by subject area and should include:

- **Philosophy:** statements of beliefs about the way learners acquire the skills, knowledge, and understanding in the various subject disciplines
- **Standards:** broad statements of learning for the subject disciplines (may be the same for several grade levels or transversally k-12)
- **Benchmarks:** performance expectations for each grade level or course
- **Specific Content Indicators:** further define grade-level specific benchmarks
- **Curriculum Overviews or Course Descriptions:** a summary of the key learning for a particular grade level or course
- **Unit plans (RPBL):** a unit or module that details the standards and benchmarks and learning intentions and leveled success criteria, key assessments and learning activities, and resources for a period of time.
- **Lesson Plans:** Based on Explicit Direct Instruction.

The different subject areas listed below will developed their curriculum based on the following standards:

Area	Standards	Grade Level
English	Common Core Standards	PK - 12
Math	Common Core standards	PK - 8°
Math	MEN	9° - 12°
Science	NGSS-MEN	K - 10°
Chemistry	MEN	10° - 12°
Physics	MEN	10° - 12°
Spanish	MEN	2° - 12°
Sociales	MEN	2° - 12°

Curriculum Documents and Definitions

Curriculum Element	Definition	What we use them for
Philosophy	Statements of beliefs about the way learners acquire the skills, knowledge, and understanding in the various subject disciplines	To clarify the foundations of our practice
Subject Standards	Broad statements of learning for the subject disciplines. These are whole school and the same for Grades preK-12. Standards are the contract between the school and the students /parents.	These are the broad goals that are used to frame our units
Benchmarks	Performance expectations for each grade level or course. These break down the standards into grade level appropriate learnings.	These are the specific grade level objectives that guide our unit development
Specific Content Indicators	Further explain the benchmarks (bullets/ letters) and guide the learning within the benchmark	These are suggestions of how to teach the benchmarks. They are often found in the skills/knowledge section of the unit plan.
Learning Intentions	What the teacher wants students to learn during a single lesson. It is written in developmentally appropriate student-friendly language. It is measurable and in support of unit goals and standards. It is measured daily with a classroom-based formative assessment.	This is the way we unpack the benchmarks and make them accessible to students.
Leveled Success Criteria	What it will look and sound like, in all three phases of learning (surface, deep, and transfer) for both teacher and student, if the student hits the lesson learning target	It is a way to ensure that students know what is expected of them and encourage them to challenge themselves and think carefully how they structure their work. It allows students to know

		where they are in regards to their learning process.
Scope and Sequences	Maps of units including the transdisciplinary and dispositional skills	To ensure that the standards and benchmarks are vertically aligned (to see what comes before and after)
Transdisciplinary and Dispositional Standards	The skills, knowledge and attitudes that students learn and demonstrate in every subject. We use GLO`s and MegaSkills	Teachers plan to explicitly teach these in each subject
Unit Plans	A map that details how the standards and benchmarks translate into the plan for learning. We use RPBL as the template for our unit plans	This is the detailed teaching guide. It drives teaching, learning and assessment in the classroom.
Assessments	Evidence and information about student learning. Assessment is presented in two different forms: Formative and Summative. See attachment below with a link about	This is primarily collected so that teachers can see how well the students understand a concept, skill or knowledge. Assessment evidence is used to tailor instruction and customize teaching and learning for the students.
Curriculum Map	Maps out all the unit plans for the whole of a grade level. It provides an overview on one page about what is being taught in a subject/ grade for the year.	This is a planning tool and provides a snapshot for the whole year and is a useful reference to see what is taught in grades above and below.
Course Descriptions	This is not the curriculum – it is a summary or outline of a particular course.	Used by students and parents to see what is being taught in a unit.
Lesson Plans	A plan for a lesson within a unit of study. We use explicit direct instruction.	Most detailed teaching guide broken down by individual day or lesson to provide more opportunities for students' success.

Teacher Planning Protocol

Planning is considered an essential aspect of teaching and learning at AIS. Teachers design engaging, relevant, and challenging units of study that are continuously renewed to ensure that they are reaching all learners and their diverse needs.

Curriculum Development

AIS's Curriculum is standards-based and has been adapted from internationally recognized standards from the United States and Colombian National Standards as outlined by the local Ministry of Education (MEN). It is continuously reviewed so that it is relevant, aligned, challenging, and dynamic and that it ensures that it is based on current best practices. Our curriculum development process entails an annual review of units and the sequence and relevance of the units at the various grade levels. The review process includes identifying best teaching and assessment practices, and planning for professional development and supporting resources.

Unit Planning

Rigorous PBL

Rigorous PBL by Design Is an instructional methodology that is designed to ensure all students develop confidence and competence in learning by using a problem solving process that is thoughtfully designed, and more importantly implemented in the classroom, through a set of motion and action habits. RPBL is built on three key success criteria:

1. **Clarity:** Student clarity is central to a student's ability to transfer their learning, develop shared power in the classroom, and become assessment- capable learners and supporting others in doing the same. Units of study are built and daily habits are implemented to ensure students and teachers have Clarity of expectations of learning, problems that they are working to solve, and means for working through both relation and problem solving situations

2. **Challenge:** Student and teacher habits must be aligned to the teaching and learning strategies that have the highest probability of sustainably enhancing learning at the surface deep and transfer levels of complexity. Ensuring challenge is central to a rigorous program whereby students experience high quality instruction, feedback, and learning strategies that are aligned to each level of learning.Well all three levels of learning are critical deep and transfer learning are critical to ignite engagement, consolidate learning from general principles, and use critical thinking and collaboration.

3. **Culture:** Students and teachers develop a partnership toward the continued development of dignity, belonging, and collective growth. They examine the impact of student and teacher learning.A learning base culture is centered on the importance of promoting interdependence Between students and teachers in their work to improve learning, solve problems, and develop empathy, compassion,

and kindness

Design Phases

The design process ensures that a high level of clarity occurs for teachers and students throughout the project, and that all levels of learning are addressed. The design process occurs before a project begins. Projects are then adjusted throughout the project implementation process and the conclusion of the project. Teachers build a unit sequenced into four phases. The design phase is based on the following four motion habits:

Rigorous PBL Design Habit	Success Criteria
Habit 1: Make it clear	Create student-friendly learning intentions and success criteria at surface, deep, and transfer levels of learning.
Habit 2: See it everywhere	Generate multiple contexts and one or more driving questions.
Habit 3: Plan for the right fit	Align tasks across surface, deep, and transfer expectations. Design entry events, curveballs, and sequels for transfer.
Habit 4: Lock it in	Set tentative dates for workshops aligned to complexity levels.

RPBL Actions

RPBL methodology uses four main phases: Project Launch, Surface-Level Workshops, Deep-Level Workshop, and presentation - reflection.

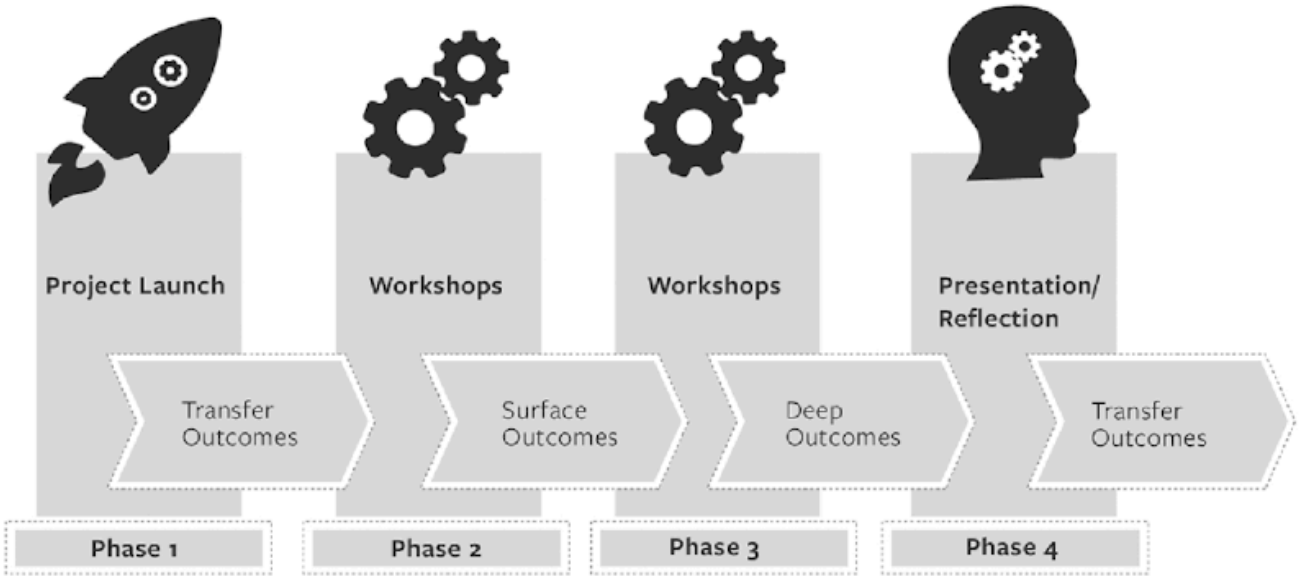


Figure 1.6 Rigorous PBL by Design Pathway

Phase 1: Project Launch

The project launch is built on the premise that students should encounter a set of real-world problems that ignites their engagement to solve challenging problems with others. This phase creates a rationale for learning new content and skills. This phase is at the beginning of a rigorous PBL unit. It is an opportunity for students to explore a problem, generate questions, assess their current level of understanding, and devise a game plan for next steps. Three high-impact strategies show up at the very beginning of the project and extend throughout: feedback, teacher clarity, and assessment capabilities. In addition, deep- and transfer-level strategies are embedded during this phase, including engaging in classroom discussions, seeking help from peers, seeing similarities and differences across contexts, and solving problems in unique contexts. Students are introduced to problems or problem contexts and are assessed for their current knowledge and skills relative to the demands of the problem. Students then identify next steps through the next three phases of the project-based process. Students also focus on the knowledge and skills they need to self-manage and engage in social contexts with others. This phase is based on three key teacher habits. From the very beginning, the primary goal of these habits is to enable students to set a clear path for themselves and establish their purpose for learning

Phase 1: Project Launch	
Rigorous PBL Teacher Habit	**Success Criteria**
Habit 5: **Start with a challenge** by setting your purpose with an entry event and getting students clear on what they're learning and what success looks like	~ Launch transfer-level expectations with a purposeful entry experience for all ~ Crystalize learning intentions, success criteria, and the driving question with students
Habit 6: **Name the gaps** by pre-assessing and discussing the results with students	~ Conduct a pre-assessment ~ Facilitate a discussion with students on their performance and next steps they can take via a protocol (ongoing criteria throughout the project)
Habit 7: **Look ahead** by creating next steps based on knows/need-to-knows and holding to learning agreements and protocols	~ Facilitate the Know/Need to Know list and create next steps ~ Hold to agreements and protocols that maximize the learning zone

Table 1.3 Project Launch Teacher Habits and Success Criteria during the Project Launch Phase

McDowell, Michael; Miller, Kelley, S. The Project Habit: Making Rigorous PBL Doable (p. 66). Mimi and Todd Press. Kindle Edition.

Phase 2: Surface-Learning Workshops

The building-knowledge phase is crucial, to ensure students build surface-level understanding of core content knowledge and skills to successfully meet underlying content standards and project demands. This phase is typically the second phase of the four-part sequence. After the project launch, typically student need-to-knows are centered on questions related to surface-level expectations (e.g., defining, labeling, outlining, developing fluency). Students participate in a series of lessons, often conducted through direct instruction. Students receive corrective feedback and complete daily tasks that require reading, writing, and talking. Teachers utilize strategies that include direct instruction along with high-impact learning strategies, including the use of mnemonics, outlining, and KWL charts (i.e., three-column tables that outline what a student knows [K], wants to know [W], and has learned [L]). What? This phase is based

on one key teacher habit related to surface-level learning. This habit is built on the premise that teachers and students have extensive experience in surface-level teaching and learning. This step is built on three success criteria.

Phase 2: Surface-Learning Workshops	
Rigorous PBL Teacher Habit	**Success Criteria**
Habit 8: **Build the foundation** by applying instructional and feedback strategies to support surface-level learning	~ Apply surface-level instruction to support student learning ~ Use appropriate feedback strategies to enhance student learning

Table 1.4 Teacher Habits and Success Criteria during the Surface-Learning Workshops Phase

McDowell, Michael; Miller, Kelley, S. The Project Habit: Making Rigorous PBL Doable (pp. 67-68). Mimi and Todd Press. Kindle Edition.

Phase 3: Deep-Learning Workshops

Deep-learning workshops are part of making meaning. Students relate ideas and skills to form principles and enduring understanding of a discipline or set of disciplines. This phase typically occurs after surface-level knowledge has been learned or while it's in the process of being learned. Students are introduced to how concepts relate to one another through structured collaborative protocols and, in general, more open-ended tasks. Teachers take a more inquiry-based role using inquiry-based feedback, structured means for student communication, and tasks that require the convergence of ideas, such as concept maps and jigsaw. The singular habit that composes Phase 3 is to question everything together. If ever a classroom were to sound noisy, this is the time. Student discourse thrives in this phase.

Phase 3: Deep-Learning Workshops	
Rigorous PBL Teacher Habit	**Success Criteria**
Habit 9: **Question everything together** through structured discussions, deep-level feedback strategies, and formative assessments	~ Use collaborative protocols to promote shared power and deep learning through engaging in classroom discussions that evaluate and reflect on knowledge and skills ~ Use deep-level feedback strategies to enhance student learning by reflecting on progress, determining next steps, and improving peer-to-peer feedback ~ Incorporate assessments (formative, two-thirds, and final) into the learning process to promote reflection

Table 1.5 Teacher Habits and Success Criteria during the Deep-Learning Workshops Phase

McDowell, Michael; Miller, Kelley, S. The Project Habit: Making Rigorous PBL Doable (p. 69). Mimi and Todd Press. Kindle Edition.

Phase 4: Presentations and Reflections:

This phase is designed to ensure students apply their learning to real-world tasks, work with others, and can understand patterns across contexts. Its purpose is to ensure students are learning to transfer. This phase is at the end of the process and in many ways mirrors the beginning of the unit. Both project launch (Phase 1) and presentations and reflections (Phase 4) are built for transfer learning. Students are introduced to lessons that provide them with the knowledge and skills to transfer their learning, collaborate with others in structured teams, handle change and ambiguity, engage with authentic tasks and audiences to solve problems, and reflect on learning. Teachers utilize a blend of advocacy and inquiry to instruct and intervene with students in their learning. This phase is based on three key teacher habits.

Phase 4: Presentations and Reflections	
Rigorous PBL Teacher Habit	**Success Criteria**
Habit 10: **Return to transfer** by implementing transfer-level workshops to apply learning in real-world contexts and address curveballs	~ Revisit the entry experience, driving questions, learning intentions, and success criteria to determine key knows/need-to-knows ~ Engage individually or in small teams to address the driving question ~ Implement transfer-level workshops to support student learning in how to apply their learning in real-world contexts, problems, and products ~ Engage students in curveballs (perspective, situation, content)
Habit 11: **Deliver on the challenge** by structuring means for showcasing work and giving/receiving feedback and engaging students in project sequels	~ Structure means for showcasing work and giving/receiving feedback to/from others ~ Engage students in project sequels
Habit 12: **Look in the mirror** by conducting reflective protocols on academic growth, meeting cultural expectations, and addressing the driving question	~ Conduct reflective protocols on academic growth, meet cultural expectations, and address the driving questions

Table 1.6 Teacher Habits and Success Criteria during the Presentations and Reflections Phase

McDowell, Michael; Miller, Kelley, S. The Project Habit: Making Rigorous PBL Doable (p. 70). Mimi and Todd Press. Kindle Edition.

Inspection Habits

To sustain the pursuit of improving our impact, our habit development and refinement, and our innovation in contemporary methodologies. While inspecting our impact occurs throughout a unit of study, this phase resides at the conclusion of our work. Teachers use a rapid inquiry-based process and engage with colleagues to determine impact, discover refinement or opportunities for change, and design next steps. This phase is based on three key habits. They require safe and supportive relationships with colleagues and a willingness to continually refine our practices.

Rigorous PBL Teacher Design Habit	Success Criteria
Habit 13: **Make discourse deliberate** by agreeing to shared values and behaviors for shared work and following through on them	~ Agree to shared values and assumptions and behaviors for shared work ~ Follow through on shared values, assumptions, and behaviors
Habit 14: **Sprint** by adhering to a rapid improvement process	~ Adhere to a rapid improvement process
Habit 15: **Choose action** by implementing a personalized plan for improving habits	~ Implement a personalized plan for improving habits ~ Incorporate deliberate deviations in practice

Table 1.7 Inspection Teacher Habits and Success Criteria during Implementation

McDowell, Michael; Miller, Kelley, S. The Project Habit: Making Rigorous PBL Doable (p. 72). Mimi and Todd Press. Kindle Edition.

Annual Unit Development Plan

All subjects develop four units during the school year.

Curriculum Roles and Responsibilities

Curriculum development and implementation is the shared responsibility of faculty, Teaching and Learning staff, and the Leadership Team. Principals work closely with the coaches and faculty to ensure that the curriculum supports our mission, reflects the latest research, and is continuously developed.

Teachers:

- Design units using the RPBL instruction methodology **(see FO-AB35 RPBL Template)** Units must be planned and uploaded in Control Academic before due dates.
- Revise units based on feedback and reflection. Teachers are encouraged to use feedback to improve, reshape or redesign their units.
- Plan collaboratively to ensure a common learning experience for learners in a particular grade level or course.
- Plan weekly using Explicit Direct Instruction. Teachers must upload their units weekly in Control Academic before each unit is taught.
- Incorporate into their lessons Visible Thinking Routines on a daily basis as well as other research-based high impact instruction strategies to maximize students opportunities for success. Evidence of these strategies must be on display both in teachers` lessons as well as in the classroom.
- Design standards-based evaluations to measure student progress and obtain valuable feedback (Data analysis) that helps make informed instructional decisions to best suit the immediate needs of the students (Unit Test, Recovery Exam). Major assessments must be designed based on the school official format (*see attachment below).
- Shape instruction based on students' learning needs (differentiation) using UDL and Blended Learning.
- Keep record of students`formative assessment using the 1 to 100 grading scale established by the school (*See attachment at the end of this document). Each summative grade uploaded in Control Academic must be supported by at least 3 formative assessment grades.

Instructional Coaches

- Facilitate the intellectual and Professional Development of teachers by communicating and demonstrating researched-based instructional practices that result in increased student performance (Visible Thinking Routines, Understanding by Design, Gradual Release of Responsibility, Blended Learning, Station Rotation, FIT, Formative Assessment, Newly Adopted Programs etc.)
- Promote a culture of collaboration (Teacher train Teacher, PLC, Collegial

Relationships).

- Ensure the alignment and proper implementation of the AIS Curriculum from K-12.
- Review unit and lesson plans and provide teachers with timely feedback and recommendations.
- Informally observe (non-evaluative) lessons and provide feedback for teachers´ professional growth and student success.
- Design official school academic-record forms needed to support instruction and assessment.
- Submit Coaching Log and pertinent data to the School Director.
- Ensure the implementation of AIS Teaching and Learning Handbook (TLH)

Principals

- Revise teachers` planning and provide feedback on time.
- Monitor teachers` assessment evidence in Control Academic, ensuring that teaching staff is complying with the school grading policy and established dates.
- Conduct formal and informal classroom walkthroughs and provide feedback as needed.
- Conduct level meetings to share critical information regarding student learning.
- Meet with staff Periodically.
- Coordinate reteaching and recovery sessions
- Guarantee that all teaching staff commits to each one of the instructional practices stated in this document.
- Provide a monthly report to the school principal of all academic activities regarding their session.
- Monitor teachers` planning in ATLAS and ensure all dates for submission are met.
- Promote a culture of collaboration among staff

Director:

- Ensure that inspiring and inclusive curricular development is a continuous process
- Advocate for curricular development and improvement within the community
- Provide resources to allow for continual reflection and collaboration
- Promote a culture of collaboration among staff.
- Provide leadership and support.
- Facilitate the growth of the professional development program.

Unit Planning Protocol

Unit Plans must have an overall length 7 to 8 weeks maximum for areas with 3 or more hours a week. The following corresponds to AIS official dates for delivery and revision of teachers` planning.

STEM / Design Thinking

The Need For A New Model

In today's rapidly changing world, the educational landscape is constantly evolving. With technological advancements and changing workforce needs, it's becoming increasingly important for schools to offer more than just academic learning to be of use to their students.

Developing 21st-century skills such as critical thinking, problem-solving, collaboration, global citizenship, sustainability, creativity, entrepreneurship, and communication, is essential for students to thrive in this rapidly changing world.

At our school, we recognized the need for a pedagogical framework that could support a wide range of teaching practices that foster those skills while also ensuring that a rigorous learning mindset was taking place. We drew inspiration from various pedagogical models such as Project-Based Learning (PBL), deep learning, inquiry-based learning, Engineering Design Process (EDP), and more to create a unique approach to education. However, we realized that our model lacked a comprehensive framework that could connect all of these practices. That's where the IDEA Model comes in. By merging the Engineering Design Process and Project-based learning, we've created a more holistic pedagogical framework that supports the transfer of learning to new situations and gives students agency and ownership of their learning process through an iterative double-diamond methodology that allows our students to apply divergent and convergent thinking.

The **"I"** in the IDEA Model stands for Inquiry, which is the heart and driver of the entire learning process. At our school, academic learning intentions are of utmost importance, so students are also presented with the academic objectives they need to achieve.

During this divergent phase, students are presented with a driving question to understand the user and its situational context (critical situation) that they can discuss and even reframe to help guide their learning through real-world connections. They are also asked to make a route of their learning with a series of "how might we" questions fostering empathy. By doing so, students take ownership of their learning and are more motivated to find answers to their questions. This phase helps students develop important skills such as critical thinking, problem-solving, and creativity, which are essential for success in the 21st century.

The **"D"** stands for Define. In this convergent phase, students begin to identify user needs and insights according to their research. They acquire basic or surface knowledge that will allow them to better understand the issue and phenomena involved at its basis and start making conceptual connections that promote a deep understanding of what they are trying to solve. They gain enough understanding of the issue at hand to refine their design question and define the problem that mostly covers the majority of the user's needs so they can come up with the best solutions.

The **"E"** stands for Execute. At this point in the learning process, students have acquired the necessary skills and generated a deep understanding to solve the issue or approach to the phenomenon. They use collaborative work to reach a consensus ideate and develop a product of their choice by getting ready to ideate, prototype, and plan tests for their solutions.

The Execute phase aims to provide students with an opportunity to propose solution ideas and put them into action, promoting creativity, collaboration, and critical thinking. Likewise, students are not only equipped with the necessary skills, tools, and understanding to tackle the situation or phenomenon, but they are also clear on how to approach and solve it. The driving question has been present throughout all phases, providing a clear pathway for them to act as changemakers. This allows for a sense of purpose and agency in their work, empowering them to make a real impact in their communities.

The **"A"** stands for Assess. During this phase, students engage in a process of test and self-reflection, where they collect and analyze the data, evaluating the performance and impact of their solution on the issue or phenomenon they were exploring.

This deep analysis allows students to evaluate the effectiveness of their learning and gain a deeper understanding of the concepts they have been exploring. Through this process, students become active participants in their own learning journey, taking ownership of their education and iterating to make adjustments to their solution and understanding as

they continue to explore and grow.

The assessment process in the IDEA Model is not just a means of measuring learning outcomes, but a critical component of the learning process itself, helping students to refine their knowledge, skills, and understanding, and empowering them to become lifelong learners and agents of change in their communities

The IDEA Model is a powerful framework that supports a student-centered learning experience. This model provides a clear pathway with a toolbox for students to transfer their learning to new situations and empowers them to take ownership of their learning process. By incorporating inquiry, design, execution, and assessment, students are able to gain a deep understanding of the critical situation or phenomenon they are trying to solve, develop innovative solutions, collaborate with peers, and receive feedback from stakeholders. In today's rapidly changing educational landscape, schools need to offer more than just academic learning.

The IDEA Model offers a way for students to develop the 21st-century skills they need to be successful in the real world, such as critical thinking, collaboration, communication, and creativity. Overall, the IDEA Model is a valuable tool for educators looking to create a learning environment that promotes deeper understanding, problem-solving skills, and meaningful engagement with real-world issues, all while making students' IDEAs come to reality.

For a better understanding of its implementation and grade progression read **IDEA Model Handbook.**

Curriculum Policy And Procedures For Curricular Changes And Revision

AIS academic programs are the result of a collective effort of selection, design and ongoing curricular updating. The standards, benchmarks and contents are adequately articulated and follow a sequential growth in complexity from grade to grade.

Although our school promotes a healthy level of teacher autonomy and curricular flexibility, unauthorized or unilateral modifications of the established sequences can produce gaps in the development of concepts or skills that will very likely be necessary as a prerequisite at later stages. For this reason, all AIS teachers are required to address the established sets of Standards and Benchmarks and to follow the sequence of contents described in the curriculum guides when designing unit plans, lessons, and assessments.

Revision Of Curricular Documents

Starting each school year, teachers receive an electronic version of the curricular guides for each course, the standards and benchmarks to be addressed in each grade level, and this guide for designing standards-based units.

A systematic revision of curricular documents is carried out every year. This activity takes

place within each department or school section, with the supervision of the instructional coaches office, and the assistance of the corresponding department heads.

Instructional Coaches should create a folder in Drive where the curriculum is stored. Benchmarks and indicators will be developed for each level that makes up the area. This folder should be shared with the school director, vice principals and coaches.

Procedure For Changes In The Curriculum

1. Teachers who decide to make any changes in the curriculum (delete, add or modify a particular benchmark) must Report to the instructional coach or principal, via institutional mail, the modification that is going to be made, providing a brief explanation that supports the reason(s) for the change.
2. In case of modification, the Instructional Coach is authorized to make such modification in Control Academic.
3. When deleting a benchmark, the teacher must notify whether that benchmark is to be deleted just for the year, due to lack of time, or if the benchmark will no longer be taught.
4. The benchmarks evaluated in Control Academic must correspond to the ones uploaded in it.