



IB MIDDLE YEARS PROGRAMME

MYP Design — Subject Overview

Digital Design & Product Design • Vertical Map (MYP 1–5)

Academic Year 2026–2027

MYP Design — Subject Overview / Vertical Map (MYP 1–5)		
Grade 6 · MYP 1		
Field	Digital Design · Unit 1	Product Design · Unit 2
Title/Theme	Bring your story to life	Smart Organizer
Content	Knowledge: the MYP design cycle; basic story structure; features of digital storytelling; how perspective (point of view, character choices) changes how a story is told and understood; digital storytelling tools such as Scratch, Twine and Slides with hyperlinks; what makes a story interactive (voiceover, sound, transitions). Skills: planning a branching story with storyboards and flowcharts; applying the design cycle; basic coding concepts (if/then, conditions, events); combining text, images and sound; presenting to an audience.	Creating a digital and visual portfolio to show the process of designing a customized tool organizer for another person using Tinkercad.
# of weeks	18	18
Key Concept(s)	Communication	Systems
Related Concept(s)	Perspective, Form	Sustainability, Ergonomics
Global Context	Orientation in Space and Time	Orientation in space and time
Statement of Inquiry	Designing interactive stories highlights how communication depends on both form and perspective.	By understanding systems and applying the principles of sustainability and ergonomics, we can design innovative tool organizers that reflect how humans orient themselves in space and time.
MYP Objectives	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)
ATL Skills	Self-management > Organization skills: plan strategies and take action to achieve personal and academic goals; bring necessary equipment and supplies to class; select and use technology effectively and productively.	Self-management > Organization skills: plan strategies and take action to achieve personal and academic goals. Strategies: Traveling Salesman; Brainstorming.
Assessment Task With Criteria	Using a presentation program or interactive storytelling site, students design an interactive story that gives the audience options to change some story events. All design-process evidence collected as an E-portfolio. GRASPS - Role: storyteller and designer. Audience: peers, teacher and family. Purpose: to inspire people to read and interact with the story. Criteria A-D.	Task 1: E-portfolio containing all evidence collected and created at each stage of the design cycle. Task 2: Design a desk or professional tool organizer for another person (not themselves), applying Systems, Sustainability and Ergonomics, and Orientation in space and time. Students identify the user’s tools and needs, analyse existing organizers, sketch and select a design, build a complete 3D model in Tinkercad, then present it for feedback and evaluate it. Criteria A-D.
Grade 7 · MYP 2		
Field	Digital Design · Unit 1	Product Design · Unit 2
Title/Theme	Developing an Online presence	Unleash Your Creativity, Design Your Game
Content	Students learn to create and publish a website, make links, find and organize information, and learn about digital citizenship.	Students design and create an innovative board game that appeals to Saudi youth aged 6 to 18. They explore how board games act as tools of communication, culture and entertainment; apply the design cycle; use different tools (Tinkercad, Inkscape, manual prototyping); and produce a playable board game, then reflect on their design process.
# of weeks	18	18
Key Concept(s)	Communication	Communication
Related Concept(s)	Function, Form	Markets and trends, Innovation
Global Context	Identities And Relationships	Scientific and technical innovation
Statement of Inquiry	Digital communication systems use form and function to present identity and values.	Through communication, understanding markets and trends, and applying innovation, we can create board games that reflect scientific and technical innovation
MYP Objectives	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)
ATL Skills	Communication skills > Exchanging thoughts, messages and information effectively through interaction: give and receive meaningful feedback; use a variety of media to communicate with a range of audiences; negotiate ideas and knowledge with peers and teachers. Strategies: I Spy; Traveling Salesman.	Social > Collaboration skills > Working effectively with others: help others to succeed. Strategies: Reciprocal Teaching; Dyad (paired listening).
Assessment Task With Criteria	Using one of the online tools, students create a website for an organization that presents its identity online. All design-process evidence collected as an E-portfolio. GRASPS - Role: web designer. Audience: the company or charity and its stakeholders. Product: a fully functional website (Canva, Wix, Google Sites, WordPress or similar) demonstrating strong form and function. Criteria A-D.	Task 1: E-portfolio containing all evidence collected and created at each stage of the design cycle. Task 2: Design a board game targeting Saudi youth aged 6 to 18. The game must be innovative, engaging and encourage communication among players. Students choose their production method: 3D design in Tinkercad, 2D design in Inkscape with laser cutting, or manual construction with suitable materials. Games are playtested with peers or the target audience, feedback collected, and improvements proposed. Criteria A-D.
Grade 8 · MYP 3		
Field	Digital Design · Unit 1	Product Design · Unit 2

MYP Design — Subject Overview / Vertical Map (MYP 1–5)		
Title/Theme	Make learning fun	Beyond the box
Content	The students take on the role of game designers, responsible for designing a fun and interactive computer-based educational game using virtual reality technology for students aged 6 to 10 (Grades 1 to 5). The nature of digital design is key to the success of the game; students integrate language arts, mathematics and science as part of solving puzzles in the game.	The main functions of packaging; sustainable packaging materials and technologies; SDG 12 (Responsible Consumption and Production); how packaging reflects culture and identity; design specifications using ACCESS FM; nets and CAD modelling with Cricut Design Space and Pacdora.
# of weeks	18	18
Key Concept(s)	Systems	Development
Related Concept(s)	Innovation, Function	Sustainability, Function
Global Context	Scientific and technical innovation Exploration: systems, models, methods; products, processes and solutions	Globalization and sustainability
Statement of Inquiry	Innovative systems that balance function and technology can enhance learning through the development of educational games within the context of scientific and technical innovation.	Development of functional and sustainable packaging can influence responsible consumption and reflect cultural values in a globalized world.
MYP Objectives	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)
ATL Skills	Communication > Communication skills: share ideas with multiple audiences using a variety of digital environments and media.	Research > Information literacy: collect and verify data from a range of sources. Communication > Communication skills: negotiate ideas and knowledge with peers and teachers. Strategies: Think-Pair-Share; case study research; peer assessment; Two Stars and a Wish.
Assessment Task With Criteria	Students take the role of a games designer responsible for designing a fun, interactive educational game for students aged 6 to 10, with all design-process evidence collected as an E-portfolio. GRASPS - Situation: the school's first interactive educational games competition. Audience: students aged 6 to 10. Purpose: games that engage and teach in an attractive and fun way. Criteria A-D.	Students are challenged to design and create a new packaging solution for a real product. The packaging must be functional (protects the product, easy to use), sustainable (environmentally friendly materials, reduced waste) and culturally expressive. GRASPS - Role: product designer at a company improving its sustainability and cultural expression. Products: a prototype made physically and digitally with Cricut Design Space, plus a design portfolio documenting the full design cycle. Criteria A-D.
Grade 9 · MYP 4		
Field	Digital Design · Unit 1	Product Design · Unit 2
Title/Theme	A nice time for an app	Up cycle
Content	Students will know: key components of app design (layouts, navigation, user interface elements); principles of UX and UI design; compatibility considerations across devices and operating systems; tools and software for app development; design patterns and best practice in mobile and web applications; accessibility standards for inclusive design; methods for gathering user feedback and usability testing; the importance of iterative design and the design cycle.	What upcycling is and which products can be upcycled; the social and environmental benefits of upcycling in communities; justifying the choice of materials and resources for a sustainable product design; techniques that maximize resource efficiency and minimize waste.
# of weeks	18	18
Key Concept(s)	Development	Communities
Related Concept(s)	Function, Form	Sustainability, Resources
Global Context	Scientific and technical innovation Exploration point: systems, models, methods; products, processes and solutions	Globalization and sustainability
Statement of Inquiry	Systems and applications can be developed as innovative tools using technology resources to enhance daily life through effective design and functionality.	Communities can reduce waste and conserve resources by transforming discarded products into new useful products, demonstrating sustainable practices that respond to local and global environmental challenges
MYP Objectives	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)
ATL Skills	Thinking > Critical-thinking skills > Analysing and evaluating issues and ideas: practice observing carefully in order to recognize problems. Strategies: Think-Pair-Share; case study as a research strategy.	Social skills, developed through structured critique sessions: present work individually and listen actively to teacher and peer feedback; give constructive feedback respectfully, focusing on what works, suggestions for improvement, and how well sustainability and resource use are addressed; respond to feedback by explaining how the design could be improved.
Assessment Task With Criteria	Task 1: Students act as web/app developers and design the interfaces for an application to serve a need in the community. Task 2: All design-process evidence collected as an E-portfolio. Deliverable: a detailed app interface design including mockups, plus a presentation outlining the app's purpose, features and user experience considerations. All objectives evaluated (Criteria A-D).	Design and Prototype an Upcycled Product. Students observe and investigate a challenge in their community, school or daily life that could be addressed using upcycled materials, describe the problem and who it affects, develop detailed design ideas and specifications, construct a functional prototype from upcycled materials, and evaluate it against the specifications and sustainability goals. GRASPS - Role: designer and innovator. Audience: peers, teachers and the local community. Criteria A-D.
Grade 10 · MYP 5		
Field	Digital Design · Unit 1	Product Design · Unit 2
Title/Theme	Communities in the Digital Age	Designing without limits

MYP Design — Subject Overview / Vertical Map (MYP 1–5)		
Content	The basic ideas and skills needed to complete the task: the design cycle applied to digital design projects; AI in digital media - definitions, key concepts, ethical considerations and examples of AI-generated video; communities, perspectives and resources in digital storytelling; research strategies for identifying, organizing and evaluating reliable information and AI tools; developing design specifications; generating and presenting design ideas (storyboards, scripts, flowcharts, digital mockups); technical skills for creating an AI video; documenting the process; reflection linking the product to sustainability, inclusivity, cultural expression and the SDGs.	Principles of inclusive and universal design, and what fairness and accessibility mean within a community; the range of barriers people face - physical, social and environmental, including everyday limitations as well as disability; how to investigate a user's needs and perspective; how to analyse existing inclusive design solutions for strengths and weaknesses; writing a design brief and design specifications from research findings; generating and refining ideas using the SCAMPER technique; prototyping a solution physically or digitally and documenting the making process; testing and evaluation methods, including peer critique and user feedback; justifying design decisions in terms of inclusivity, usability and innovation.
# of weeks	18	18
Key Concept(s)	Communities	Communities
Related Concept(s)	Perspective, Resources	Innovation, Perspective
Global Context	Personal and cultural expression Social constructions of reality; philosophies and ways of life; belief systems; ritual and play	Fairness and development
Statement of Inquiry	Through the use of resources and perspectives, communities design awareness campaigns that reflect cultural beliefs and ways of life	Communities transform when innovation and perspective are used to challenge limitations, fostering development and fairness for all.
MYP Objectives	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)	A. Inquiring and analysing / B. Developing ideas / C. Creating the solution / D. Evaluating (all four assessed)
ATL Skills	Research > Media literacy: locate, organize, analyse, evaluate, synthesize and ethically use information from a variety of sources and media. Integrating technology: students research AI video examples and community storytelling on online platforms, share findings in Microsoft Teams channels, and compare AI video tools (Pika Labs, Runway, Synthesia) for strengths, weaknesses and ethical implications.	Thinking skills: critical thinking - analyse problems, evaluate existing solutions and question assumptions; creative thinking - generate innovative design ideas that address barriers and promote inclusivity; transfer - apply knowledge from science, engineering and art to design functional solutions.
Assessment Task With Criteria	Students research, plan, create and evaluate an AI-generated video that communicates the perspective of a chosen community (local, cultural or global). Criterion A: research and analysis report, 800-1000 words, with annotated sources. Criterion B: design brief, storyboard or shot list, and production plan. Criterion C: the finished video and documentation of the making process. Criterion D: evaluation report, 600-800 words, with feedback results.	Students identify a barrier faced by individuals in their community, related to ability, access or an everyday limitation, and design an innovative solution that promotes inclusivity, fairness and development. GRASPS - Role: designer creating a prototype that removes limitations. Audience: the school community and the specific group who would benefit. Products: a design brief and specifications, multiple justified design ideas, a physical or digital prototype, and a presentation of the design process. Criteria A-D.