

CURRICULUM DURING PLANNING STAGES

STEP	ACTIVITY	GRADE	SUBJECT	UNIT	ACTIVITY	
1	Share the Concept	Informing, consulting stakeholders	1	Social Studies	Topic A: My Community in the past, present and future	Discuss whether we should change the schoolgrounds, how they would like it changed
	Informing public, school community	All	English, Art		Posters, letters, newsletter, flyers etc. with benefits, rationale, ideas about the concept	

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2	Develop Vision	Name	All	English, Art		Naming contest, logo contest for the project	This can be used on t-shirts, as letterhead etc.	
	Attitude Surveys: Need to know how stakeholders perceive schoolyard now; what changes they would like to see and why (very general)	5, 7, 8, 9	English	1.1 Clarify and Extend	Create questionnaire to determine what other classes and grades think and feel about their existing school grounds. Perhaps develop same for teachers, parents, community members.	All survey information provides a baseline for judging improvements. Perhaps each grade creates own questionnaire?		
		2-9	English	3.1 Plan and Focus	Create questionnaire to determine what other classes and grades think and feel about their existing school grounds. Perhaps develop same for teachers, parents, community members.			
		4-7,8	Math	Statistics and Probability (Data Analysis)	Design questionnaires, collect data, analysis and graph data			
		All	English		Complete forms, either as a group, or individually			
	Determine results of attitude surveys	8, 9	English	1.1 Clarify and Extend	Examine, process, tabulate results			
	Develop rationale for site	7,9	Science	Unit A: Biological Diversity	Discuss the rationale for ecosystem preservation, restoration			

2 Develop Vision	Experience what is in the schoolyard now.	1	Science	Topic D: Senses	Use senses to describe objects or materials, living things, and the environment of the schoolyard	Also useful for baseline information	5 Minute Field Trips - Nature Trust, pg. 4; Texture Hunt, Colour Swatch; Alphabet Hunt etc.
		3	Science	Hearing and Sound	Discover the sounds found on the schoolground		Sounds Maps
	Start to explore possibilities for the landscape - anything goes!! Very general.	3	Science	Topic C: Building Things	Create models of ideal landscape; could create the buildings of the school ground, then benches, seating, plantings etc.	Don't hold anyone back at this point; brainstorming!	
		All	Art		Creating representations of what they would like the schoolyard to look like: collage, drawing, sculpting, models etc.; could collaborate on this		
	Start to explore more definite ideas for the landscape i.e. plants, ecosystems etc.	6	Science	Topic E: Trees and Forests	In learning the importance of trees to the environment, discuss why/how they might be able to bring trees onto the school grounds; how these might support other life forms on the site		
	Start to explore more definite ideas for the landscape i.e. plants, ecosystems etc.	7	Science	Unit A: Interactions and Ecosystems	Study a local ecosystem, and compare with existing schoolground ecosystem. Explore possible restoration projects		
			English	3.2 Select and Process; 3.3 Organize, Record and Evaluate; 3.4 Share and Review	Seek information from a variety of sources on what the site might look like i.e. books, photos, field trips etc.; put together ideas; present to others		
		1	Science	Topic E: Needs of Plants and Animals	Learning what living things need to live and grow; see what is available on the schoolground now, and what they might be able to provide; how they can provide the interactions between plants and animals on their site i.e. pollinators		

2 Develop Vision		2	Science	Topic E: Small Crawling and Flying Animals	Recognize what small animals need; see if they can provide		
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3 Form Naturalization Committee	Starting the planning etc.	All			Need student input into the planning process; also need method of relaying information back to the rest of the student body	Could have student representatives on the greening committee; would relay back to others. Might involve the garden or environmental club. Could have an adult liaison that communicates with an independent student committee. Older students could relay information back to younger.

STEP
4 School Board Approval

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5 Survey the Schoolyard	Base map construction	3	Science	Topic B: Building with a Variety of Materials	Create models for a specific purpose - use for base map, analysis, survey - also can be used to visualize future plans.		
		3,4	Math	Shape and Space (Transformations)	Use directions (N,S, etc) on a map		
		3	Social Studies	Topic A: My Community in the past, present and future	Make a simple map, with legend	Use part of schoolyard as the subject	
		8	Social Studies	Topic A: Geography of Canada and the United States	Construct map including symbols, location, direction, distance, scale etc.		

5 Survey the Schoolyard		8	Math	Shape and Space (Transformations)	Draw and interpret scale diagrams	Could use the real property report obtained from the schoolboard; translate into kid-friendly maps	
	Physical survey					Consider dividing work-load into areas, or subjects of the survey (i.e. vegetation, hard elements etc.)	For all surveys - NWF - pg. 84, 242-256, also 5 Minute Field Trips - Schoolyard Mapping pg. 32
	- Hard elements (i.e. buildings, pathways, fences, play equipment, entrances, exits, materials) and Vegetation (trees, shrubs, perennials, weeds, turf)	K-3	Math	Shape and Space (Measurement)	Measure various elements, objects in the existing landscape		
	- Vegetation (trees, shrubs, perennials, weeds, turf)	K-4	Math	Number (Number Concepts); Patterns and Relationships (Patterns)	Sorting and counting leaves, trees, plants etc.	Finding out what is existing on the schoolground	5 Minute Field Trips - Leap into Leaves, pg. 35
		K-1	Math	Statistics and Probability (Data Analysis)	Sorting and counting leaves, trees, plants etc.	Finding out what is existing on the schoolground	
		2,3	Math	Statistics and Probability (Data Analysis)	Sorting and counting leaves, trees, plants etc.		
		6	Science	Topic E: Trees and Forests	Determine identity of existing trees; determine if they are native, or introduced; conduct experiments		NWF - Tree Detectives, pg. 126-132; SYEFEST Activity - Bagged Branches (see SYEFEST website)
		9	Science	Unit A: Biological Diversity	Estimating population numbers of plants		
	- Hard elements and vegetation etc.	4-6	Math	Space and Shape (Measurement)	Measure various elements, objects, plants in the existing landscape including height and spread of trees, shrubs		

5 Survey the Schoolyard	<p>- Vegetation (trees, shrubs, perennials, weeds, turf)</p> <p>- Hard elements and vegetation etc.</p> <p>- Wildlife (animals, birds, insects, spiders etc.)</p> <p>- Slope, aspect; drainage</p> <p>- Soil conditions</p> <p>- Patterns of light and shade</p>	8	Math	Space and Shape (Measurement)	Areas, perimeters, circumferences, surface area		
		7	Math	Shape and Space (3-D Objects and 2-D Objects)	Measuring distance using triangulation		Patterns, Plants and Playgrounds - pg. 57
		9	Math	Shape and Space (3-D Objects and 2-D Objects)	Measuring distance using triangulation		
		6,7	Math	Statistics and Probability (Data Analysis)	Collecting data on existing species		
		6, 7, 8	Math	Number (Number Concepts)	Examining percentage cover of trees, turf, buildings, paths etc.	Could use maps or models; percentage and fractions	
		2	Science	Topic E: Small Crawling and Flying Animals	Investigate outdoor spaces in and around school; observe local species	This info can contribute to survey	Worm Watch; Soil Dweller Experiment (see SPLASHD website); 5 Minute Field Trips - Bugs R Us, pg. 32
		2,3	Math	Statistics and Probability (Data Analysis)	Sorting and counting species.		
		6	Science	Topic D: Evidence and Investigation	Investigating evidence of animal activity in a natural outdoor setting		NWF - Wildlife Clues, pg. 253
		6,7	Math	Statistics and Probability (Data Analysis)	Collecting data on existing species		SYEFEST Activity - Dandelion Determinations (see SYEFEST website)
		3	Science	Topic A: Rocks and Minerals	Recognize components of soil; describe soil samples		Patterns, Plants and People - Several Soil Tests, pg. 106-109
		4	Science	Plant Growth and Change	Determine the soil quality required by plants for growth		
		9	Science	Unit C: Environmental Chemistry	Soil pH tests		
		7	Science	Unit B: Plants for Food and Fibre	Observe practices that degrade soil conditions		
		4	Science	Topic D: Light and Shadows	Describe the changes in the size and location of sun shadows during the day - early, mid, late	Added to base map	5 Minute Field Trips - Student Sundial, pg. 28

5 Survey the Schoolyard	- Temperature patterns	5	Science	Topic D: Weather Watch	Predict where you will find warmest and coolest temperatures spots in the landscape	Can be used for habitat planning by identifying microclimates	
		3	Math	Shape and Space (Measurement)	Measure temperatures outside		
	- Patterns of air movement/wind	5	Science	Topic D: Weather Watch	Describe patterns of air movement; demonstrate methods for measuring wind speed, finding direction	Can be used for habitat planning by identifying microclimates	
	- Measure precipitation	5	Science	Topic D: Weather Watch	Describe and measure different forms of precipitation		
					Record weather over a period of time		
	Existing Rules	1	Social Studies	My School	Understand rules governing the current school ground	How they might change with a new landscape	
	Cultural Survey, History of the site	3	Social Studies	Topic A: My Community in the past, present and future	How has our community changed? What was is like before settlers came?		
	- Uses of the site	6	Science	Topic D: Evidence and Investigation	Recognize evidence of recent human activity		
	During school hours			**These can also be approached in the same way as the		Could be performed with maps, or with questionnaires; also by observation, or by asking for feedback from students	
	By grade, by sex, by activity			questionnaires etc. for the Attitude Surveys			
	Traffic patterns; use patterns; view lines					Can be added using overlays; transparencies or using coloured areas or codes; good for models!	
	Outside school hours (community use)						

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6 Create Preliminary Designs	Use models, visions, maps to start to decide which elements will go where	All		**Same as above for surveying, basemaps, measuring, models	Using representations of different elements to experiment with locations	Have each class/grade submit their ideas?
	Determine how large each area needs to be	8	Math	Space and Shape (Measurement)	Areas, perimeters, circumferences, etc.	
	Determine room and space required	4 and up	Social Studies	Mapping	Determining Scale	

STEP	ACTIVITY
7 Select the Site	Decision is made

STEP	ACTIVITY	GRADE	SUBJECT	UNIT	ACTIVITY
8 Create Final Design	Information to provide to the designer				
	Appearance; Elements	All	Social Studies; Art; English		Descriptions for the designer on what it should look like, based on choices made by committee
	Plants	6	Science	Topic E: Trees and Forests	Suggest trees, show selections to school
	Habitat enhancement concepts	1	Science	Topic E: Needs of Plants and Animals	Provide information on what the site needs to provide to be a valuable habitat for local wildlife
	Weather Station	5	Science	TopicD: Weather Watch	Design or choose weather station, build a model of it
	<u>Keep in public eye</u>				
	Models, maps, information on plants, info on wildlife attracting ability	All	All		Use plans, maps, models to explain to the public and community what will be happening on the school grounds. May help with fundraising activities.

STEP	ACTIVITY	GRADE	SUBJECT	UNIT	ACTIVITY
9 Project Needs	Calculating areas, volumes for materials, number of plants, costs, labour requirements, time required	5	Math	Number (Number Operations)	Multiplying to determine cost of plants, materials; work with money, costs
		4	Math	Shape and Space (Measurements)	Keep track of fundraising activities, money raised
		2	Math	Number (Number Operations)	Adding to determine what is needed for the project
		7	Math	Number (Number Operations)	Determine costs for implementing the project
		9	Math	Number (Number Operations)	Using calculators to determine costs, labour needs, value of gifts in kind
	Keeping track of volunteer hours, expenses	5	Math	Number (Number Operations)	Tabulating, adding volunteers hours

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10 Gather Donations	Contact potential donors.	All	Art, English		Letters, pictures etc. to explain the project to potential donors
	School fundraising	All			Organize events (bake sale, school fair) to raise funds.

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11 Preparation for Installation	Gather supplies.	All	English, Art		Create signs, plant labels, ect.
		All	English, Art		Construct instructional diagrams and posters.

STEP	ACTIVITY	GRADE	SUBJECT	UNIT	ACTIVITY
12	Install the Site	Participate!!	All		Community!!

STEP	ACTIVITY	GRADE	SUBJECT	UNIT	ACTIVITY
13	Celebrate	Acknowledgements	All	English, Art	Thank-you cards for volunteers, donors
		All	Fine Arts	Songs, dance, drama	
		All		Art (can be used for thank-you's)	
		All	Fine Arts, English	Before/after photos, drawings, poems	
	Questionnaires on new schoolgrounds			**These can also be approached in the same way as the questionnaires etc. for the Attitude Surveys	