

Suggested activities for seven essential learning areas

The following activities illustrate some of the ways in which the resource areas might be used in seven essential learning areas: language; mathematics; science and the environment; technology; social sciences; the arts; and physical and personal development.

They are intended only as starting points for programme planning. No list could include all the ways that EOTC might be used.

Language

Mathematics

Science and the environment

Technology

Social sciences

The arts

Physical and personal development.

LANGUAGE to top

	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Listening and speaking activities	Using the outdoors for: <ul style="list-style-type: none"> - powhiri (welcoming), thanking, or other social occasions; - listening to sounds and identifying them; - observing and discussing; - oratory, waiata, story telling; - interviewing; - presentations or reports using Māori, English, and other languages of the school's community. 	Visiting local people at home or at work, and talking with them; Finding out about local information services (e.g., the public relations office) and using them; Interviewing local people, using Māori, English, or other languages of the local community; Studying community language patterns and how they vary in different situations, such as in the playground and at home, or in formal and informal situations.	Visiting an urban area and listening to "city sounds"; Visiting and talking with people who live or work in the city; Making a "city scape" of sounds on audiotape; Developing a radio programme based on the sounds and voices of urban New Zealand.	Visiting and talking about rural or natural places – the country, the park, the beach; Talking to people who live or work in such places; Listening to "nature sounds" and discussing or recording them; Developing a radio programme on the sounds and voices of rural New Zealand; Learning the correct language for emergency situations.
Reading activities	Using the outdoors for individual or group reading; Discovering and using signs and noticeboards around the grounds and environs; Following written instructions for individual or group outdoor activities.	Visiting the local library and using it. Related Activity: Reading material that deals with local people and places, and relating this to learners' own experiences.	Visiting and using a big city library. Related Activity: Reading stories, poems, and non-fiction dealing with city life, urban settings and situations, or outdoor activities.	Following written instructions for individual or group activities. Related Activity: Reading stories, poems, and non-fiction dealing with rural New Zealand, natural history, or outdoor activities.
Writing activities	Writing signs or notices, using the languages of the community, and putting them on display; Using playground sounds, experiences, discoveries, and activities as a basis for creative writing; Taking notes from observations, or recording data; Developing an environmental broadsheet or newsletter with letters and articles on the school's environment, including ideas and reports on developments to improve it.	Recording information during local trips or visits, e.g., answers to questions, results of surveys, or notes on observations; Recording local data for later presentation, e.g., through role play, mime, dance, or video; Putting together a publication about local outdoor activities. Related Activity: Writing about family, community, or work-related experiences.	Recording information during urban trips, e.g., filling in questionnaires or writing notes on observations; Conducting surveys; Compiling an "Outside in the City" newsletter to record urban outdoor activities. Related Activity: Creative or descriptive writing based on urban experiences and discoveries, or feelings about the city.	Reporting on investigations in the country; Compiling outdoor programmes, menus, and checklists; Putting together a publication to record rural outdoor activities. Related Activity: Creative or descriptive writing, such as poetry, based on rural experiences and discoveries, or feelings about the country
Activities for other kinds of language learning	Playing outdoor games based on different ways of communicating, e.g., body language, sign language, semaphore, and Morse; Designing and displaying signs, posters, or murals in the various languages used by learners.	Collecting street and place names and discussing them (what do they tell us about the cultures and history of New Zealand?); Collecting oral history from local residents.	Observing, recording, and discussing the images of New Zealand presented by the signs, notices, symbols, and advertisements found in urban settings. Related Activity: Composing and performing rap songs relating to modern life	Collecting road and place names and discussing them (what do they tell us about the cultures and history of New Zealand?); Learning and using the technical terms associated with adventure activities, e.g., sailing, orienteering, climbing. Related Activity: Composing, performing, and recording songs or chants relating to rural and natural areas.

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	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Using mathematical language	Using mathematical language to compare the sizes, shapes, positions, and quantities of things found outside; Using numerical terms from Māori and Pacific Islands languages in outdoor games, e.g., skipping games that involve counting.	Giving and following directions to local places; Visiting workplaces where numbers are used and talking to the workers, e.g., in local post offices or banks; Talking to people about pre-metric units; Finding out how quantities are shown, e.g., in supermarket packaging.	Visiting workplaces where people use mathematics, e.g., banks, stock exchanges, timber and building material suppliers, computer firms, fabric shops, and large stores.	Discussing the sizes, shapes, positions, and quantities of natural objects; Reading, and learning to understand, mathematical terminology and symbols in signs, maps, or orienteering instructions. Visiting workplaces of people who use mathematics, e.g., farmers, carriers, and forest workers.
Mathematical applications	Setting up or following “maths trails”; Collecting data for classroom or centre use, e.g., examples of natural and artificial patterns; Using mathematical techniques outdoors for various kinds of problem solving, e.g., finding places by following directions, timetabling, surveying and mapping the grounds; Building and operating weather stations (involving design and construction, as well as finding ways of collecting and recording data); Collecting data for later presentation in the form of graphs.	Setting up or following local “maths trails”; Investigating how businesses use computers, e.g., to discover sales patterns; Collecting data for later presentation in graphs, e.g., data on social services used by local people, the age of local houses, local traffic flows, or traffic speeds in the area compared with legal limits; Investigating cost effectiveness of dams or other power-generating systems; Investigating formulae used in local drainage.	Locating landmarks, directions, and bearings; Assessing and classifying number, type, or volume of something, e.g., motor vehicles (in traffic surveys); Setting up or following urban “maths trails”. Related Activity: Planning trips to town, taking into account budgeting, travel times, and distances; Analysing cost-benefit in terms of town planning or rating decisions; Investigating formulae used in road construction, e.g., for curves or embankments; Network planning, e.g., to improve bus routes or the timing of other services.	Gathering data through surveys on topics such as life in tidal zones, altitudinal zones of vegetation, patterns of land use and activity; Investigating formulae used in rural work, e.g., fertiliser application or cartage costs.
Counting, estimating, and measuring	Using the grounds as a resource and venue for counting, comparing, and recording numbers; Estimating and measuring lengths (e.g., of shadows or jumps), heights and depths (e.g., height of trees), volume (e.g., of water in swimming pools), weight (e.g., of rubbish), angles (e.g., of paths), speeds (e.g., of walking and running).	Using the local area as a resource and venue for counting, comparing, and recording numbers; Estimating the size of local landmarks, and then checking the actual size; Photographing numbers seen in the local area, and constructing number charts using these photographs.	Using an urban area as a resource or venue for handling money – budgeting, buying, and checking change; Analysing profit and loss in a city business; Estimating and measuring lengths, heights, volumes, and weights using data, e.g., on storage containers and packaging.	Estimating and measuring lengths, heights, volumes, and weights, using data about fences, trees, leaves, ponds, dams, animals, tides, or slopes; Measuring in relation to outdoor pursuits, e.g., testing strength of ropes.
Geometry activities	Recognising and reproducing natural and artificial geometric shapes and relationships in the grounds; Investigating regular and irregular shapes and designs in the grounds; Constructing scale models or large mathematical sculptures and 3-D graphs in the grounds; Drawing maps of the grounds, and planning athletics tracks and sports fields.	Observing shapes and designs, and looking for symmetries and transformations in bridges, houses, rooms, furnishings, or decorations; Designing or investigating play equipment, e.g., skate ramps, slides, or roller coasters, in local playgrounds; Sketching house plans; Drawing scale maps of the area.	Looking for symmetries and tessellations in paving and fencing patterns; Learning to understand survey maps in relation to an urban area; Undertaking simple urban surveys; Visiting a city council to learn about town planning systems and methods.	Investigating shapes in nature, e.g., plants, shells, land forms; Investigating movement patterns, e.g., of skiers, cyclists, or birds in flight; Designing and participating in orienteering exercises; Navigating in outdoor areas.

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	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Activities for increasing understanding of our world	<p>Observing natural processes, e.g., the weather, seasonal changes, life forms and their ecosystems, including food chains;</p> <p>Learning about caring for plants, using school or centre gardens.</p>	<p>Studying local ponds, streams, or reserves;</p> <p>Studying natural processes in the local area, e.g., earth sciences, plant and animal life, vegetation patterns, and the effects of weather and climate.</p>	<p>Investigating problems relating to urbanisation, e.g., water supply, waste disposal, public health;</p> <p>Investigating the effects that rising sea levels would have on a city;</p> <p>Studying:</p> <ul style="list-style-type: none"> -urban microclimates -science in the city. 	<p>Investigating natural phenomena in the country, e.g., earth and rock formation, food chains, weather and climate, and the effects of volcanic activity, earthquakes, and storms;</p> <p>Examining the problems caused to farmers by flood, drought, hail, or storm damage;</p> <p>Studying:</p> <ul style="list-style-type: none"> -changing farm practices; -conservation technology -science in outdoor pursuits (e.g., levers, pulleys, and balance friction for climbing, or river flow dynamics for kayaking or rafting).
Activities for increasing understanding of people and their environment	<p>Investigating the effects of people on the school or centre environment, e.g., heating, rubbish disposal, and use of playground equipment;</p> <p>Studying the effect of the school environment on people, e.g., the building design and décor, playground layout and landscaping, and natural features, such as slope, aspect, and vegetation.</p> <p>Related Activity: Studying how people have explained their natural and technological worlds in terms of legends and folklore.</p>	<p>Finding out how people have adapted their environment to their needs through landscaping, building design and décor, emergency services, and facilities for leisure and recreation;</p> <p>Investigating local buildings and amenities: consider heating and cooling facilities (including the amount of sunlight received), rubbish disposal, construction materials, and environmental impact;</p> <p>Studying horticulture, agriculture, or astronomy, where there is a local example.</p>	<p>Investigating how people in a city have affected their environment through landscaping, land use planning, central city architecture, waste disposal, etc;</p> <p>Studying science in the workplace, e.g., how the police use science to help solve crime;</p> <p>Studying the city as an artificial environment, e.g., climate and microclimate, urban lifestyles, animal life in cities, urban planning.</p>	<p>Investigating, in the field, how people have affected rural and natural areas: e.g., consider production, conservation, recreation, and waste disposal;</p> <p>Learning about the effects of nature (e.g., weather) on people, and how people can survive in the wild.</p>

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	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Social applications of technology	<p>Finding out about school or centre maintenance, cleaning, and pest control;</p> <p>Studying the changing nature of science and technology, e.g., in heating, care of grounds, and building maintenance;</p> <p>Discussing responsible decisions about the use of chemicals, e.g., weedkillers, insect sprays, and chlorine in pools;</p> <p>Studying swimming pool filtration, heating and cleaning.</p>	<p>Studying services which come into the home, e.g., water, electricity, gas, waste disposal, and communication;</p> <p>Examining simple machines in local workplaces (e.g., levers, pulleys, gears) and studying their efficiency, and social value;</p> <p>Finding out how technology has specifically affected the lives of various categories of local people, e.g., women, men, children, people with disabilities, and people of different cultures.</p>	<p>Observing machinery at work, e.g., trains, cranes, dock machinery;</p> <p>Learning the properties of commercial materials and their manufacturing implications;</p> <p>Exploring the use of technology in city workplaces and in urban services such as transport, or facilities for the disabled;</p> <p>Exploring the effect of technology on urban lifestyles.</p>	<p>Observing farm machinery at work;</p> <p>Discovering, in the field, evidence of past technologies;</p> <p>Finding out, in the field, how technology can aid or hinder conservation;</p> <p>Studying applications of technology to clothing and equipment for outdoor pursuits, and to first aid.</p>
Activities using technology	<p>Using and caring for school or centre technical equipment, e.g., video equipment, cameras, radios, tape recorders, scientific or musical instruments, and tools for gardening, maintenance and building.</p>	<p>Using and caring for scientific aids such as compasses and radios, during local excursions;</p> <p>Trying out technology related to outdoor adventure activities, e.g., fitness equipment.</p>	<p>Investigating city water supply and sewage disposal technology;</p> <p>Studying control and control systems, e.g., of water, air, and noise pollution;</p> <p>Studying the technology involved in transport and communications in the city.</p>	<p>Using technology in recreation, e.g., in sailing, or kite flying;</p> <p>Using and caring for scientific aids, such as compasses and radios, when tramping.</p>
Designing and making	<p>Making equipment for specific tasks, e.g., outdoor stoves, climbing walls.</p> <p>Related Activity: Designing and making clothing suitable for outdoor pursuits.</p>			

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	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Activities relating to culture and identity	Identifying the cultural heritage evident in the school's or centre's environment; Participating in school or centre outdoor events and identifying school or centre traditions; Involving local elders, kaumātua, and historians in school or centre outdoor activities; Using the school or centre grounds as the venue for welcoming ceremonies and cultural exchanges; Going outside for telling or role playing traditional stories, myths, and legends.	Finding, sharing, and visiting places associated with local traditional stories, myths, legends, and music; Exploring aspects of everyday life in a range of local families and communities; Finding out about the cultures and languages represented in the community; Participating in visits and exchanges to other local schools or centres, and home visits; Visiting local marae and maintaining links with them.	Visiting families who live in the city; Visiting cultural centres to study traditional art, drama, music, architecture, gardens, oral history, or graffiti; Taking part in street festivals or other urban community activities.	Visiting families who live in the country; Participating in local festivals, art shows, rodeos, or marae events; Taking part in rural traditional activities, such as food gathering
Developing a sense of place	Finding out what makes this place different; Distinguishing between formal and informal school or centre practices; Helping to plan school or centre ground developments and conservation; Strengthening the school or centre's place in the community, e.g., by arranging community activities in the grounds.	Exploring local places of interest, and identifying landmarks; Discovering the meanings attached to landmarks and natural features by a learner's own culture, and by other cultures; Sharing understandings and feelings about people, places, origins, and the environment. Discovering where local settlers came from, why they came, and any evidence of cultural heritage.	Exploring a city and identifying its characteristics; Going to places where many people are together, e.g., railway stations, or the rush hour in city streets, and making observations.	Exploring a rural or natural area; Identifying what makes a particular place different and unique.
Responding to the past	Finding out about the school's or centre's history, e.g., through archives, from local residents or former pupils, or from photos and newspaper clippings.	Finding out about changes which have affected the area in the past, such as settlement, changing patterns of land use, and major natural or social events; Collecting oral history and presenting it in a useful form.	Developing and following urban trails relating to changing lifestyles and the growth of a multicultural society; Exploring and comparing public buildings, venues, and landmarks of different ages.	Discovering evidence of earlier land use, and of other cultures and lifestyles; Developing and following rural trails relating to changing lifestyles; Researching the development of adventure pursuits, e.g., changes in equipment and clothing, or in techniques and safety.
Learning about social groups	Identifying different groups (e.g., family groups, cultural groups, school classes, sports groups, visitors to the school or centre); Observing how different groups interact within the school or centre grounds.	Taking part in group visits to other local groups, e.g., a local whanau, or the residents of a local old people's home.	Investigating the different ways people in cities form groups to live or work together; Investigating the causes and effects of social change in work and recreation.	Identifying and learning about rural cultural and recreational groups, e.g., the Women's Division of Federated Farmers, Country Women's Institute, sports clubs, park rangers, surf life savers, and Young Farmers.
Learning about political groups and processes	Making up adventure activities, problem-solving activities, and small group games; Practising leadership skills in the course of such activities; Becoming involved in decision-making procedures for outdoor activities.	Investigating how decisions are made in community organizations, e.g., trade unions, local councils, or marae committees; Visiting local branch offices of political parties.	Investigating and comparing the ways workers in cities organise themselves, choose leaders, make decisions, and effect change; Visiting Parliament, or city council offices, to study political progresses.	Studying important historical issues relating to the land, e.g., land confiscation, land subdivision; Studying important current issues that affect rural people, e.g., loss of farm subsidies or school bus services; Finding out how decisions are made in acclimatisation societies, fishing associations, and other rural organizations.

Learning about economic groups and activities	Investigating jobs within the school or centre, e.g., caretakers, ancillary staff; Participating in voluntary tasks, e.g. running a stall for a school fair.	Investigating local workplaces, e.g., businesses, service agencies, markets.	Finding out how urban workers organise themselves for economic purposes, e.g., producing goods or exchanging goods and services.	Visiting a farm and studying its economic basis; Studying economic influences on farm sizes; Investigating rural service agencies, e.g., stock agents, mail services.
Learning about rights and responsibilities	Discussing rights and responsibilities, as they apply to games and real life, during outdoor activities.	Studying family obligations in the home and community, including household tasks and childcare responsibilities; Investigating personal rights and how limits are set in community organisations and workplaces.	Checking out consumer rights, e.g., in hire purchase deals; Studying how personal rights and responsibilities are decided on in city workplaces, in relation to the police and courts, or by consumer and civil rights bodies.	Researching different cultural values relating to land use; Finding out about rights and responsibilities when using public and private land or facilities; Learning the responsibilities that go with using dangerous equipment, such as firearms or poisons; Studying family roles when camping or on family trips; Investigating family tasks and obligations in rural living.
Learning about rules and laws	Learning and discussing the rules for formal and informal playground use; Developing rules or guidelines for use in school or centre grounds.	Finding out how customs, beliefs, and laws operate in the Māori and other communities; Learning about and observing local traditional rules, e.g., rules relating to rāhui or tikanga; Investigating the role of the local police and courts, and finding out how to seek help or redress grievances.	Finding out how rules and laws are publicised and enforced in urban workplaces, courts, local government offices, or Parliament.	Finding out how national park and conservation rules and laws are publicised and enforced, e.g., in wildlife management or land management; Learning risk management practices: the safety rules that apply to outdoor pursuits.
Learning about co-operation and conflict	Playing small group games that involve trusting others, or co-operating with them; Role-playing to develop greater understanding of a particular conflict; Developing conflict resolution techniques through problem-solving “adventure” group activities and discussion.	Finding out the issues which cause conflict in the local community, e.g., conservation issues, noise pollution; Participating in attempts to solve local community problems, e.g., through visits to community leaders, groups and organisations.	Exploring the ways city people co-operate to achieve social, economic, and political goals; Finding out how people identify and resolve conflict, e.g., through formal hearings before a tribunal.	Talking to country people with a variety of viewpoints, e.g., elders and kaumātua, land developers, and conservationists. Related Activity: Learning about traditions relating to conflict over how to use the land, e.g., the legends of Rangi and Papa, or Tāne and Tangaroa.
Learning about community resources and using them	Developing the school or centre as a community resource; Being involved in the school or centre’s purchasing, ground improvements, organisation of sports equipment, or planning of camps and excursions; Using community services in the school, e.g.: -traffic officers for traffic skills and training; -sports coaches for sports training; -civil defence staff for training for emergencies; -kaumātua for explaining tikanga Māori.	Checking out community facilities and resources, and visiting people like local doctors, or fire fighters; Making contact with local people of differing ages, backgrounds, experiences, interests, and roles; Inviting kaumātua, elders, families, and community residents, as appropriate, to take part in EOTC activities.	Exploring and using consumer outlets, such as markets, auctions, and shopping malls; Visiting urban community facilities, such as big hospitals or libraries, and finding out about how urban agencies and government organisations serve the community.	Inviting rural community specialists (e.g., education officers, park rangers) to join in the EOTC programme; Learning about formal and informal support groups in the country.

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	GROUPS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Creative art, music, dance and drama	Using all these places and people for research, and as subjects for imaginative and descriptive work; Experiencing and experimenting with dance, drama, music, and visual arts from learners' own ethnic groups and others; Observing, and participating in: <ul style="list-style-type: none"> - making musical instruments; - creating sounds and making up chants; - composing music for instruments; - composing, performing, and recording songs; - role play and mime; - drama based on natural movements (wind, cloud, and water patterns, animal and plant movements), and on past and current events; - recording of spontaneous or planned experiences, e.g., via audiotape, videotape, photographs. 			
Visual arts and design	Using the area and the resources in it as subject matter for drawing, painting, printmaking, photography, and sculpture; Using the area for design, e.g., landscaping the school environment; Using the area as a source of materials for making art works involving collage, modelling, or tracing textures (e.g., concrete rubbings).	Visiting local artists, designers, and craftspeople; Visiting local people with particular knowledge, e.g., of Māori rituals and symbols; Asking local trade and business people with jobs in art and design to demonstrate their skills on site, e.g., window dressing.	Experiencing fine arts through visits to city art galleries, and studios; Observing and recording aesthetic and functional aspects of design, as reflected in city architecture, street layout, gardens and parks, or retail displays.	Creating sculpture, models, and mobiles in the area, using natural materials; Using the area as a source for observation and related imaginative work; Collecting materials for classroom work in collage, sculpture, and construction; Studying aspects of rural planning, e.g., national parks and roads.

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	GROUNDS AND ENVIRONS	LOCAL PEOPLE AND PLACES	URBAN CENTRES	RURAL AND NATURAL AREAS
Activities for personal growth	Outdoor activities involving problem solving, meeting challenges, and learning to trust other group members; Peer tutoring and peer support activities.	Learning about wairua, mauri, and oranga through marae visits.	Visiting places relevant to personal growth, e.g., telephone counselling services, urban marae, and cultural centres.	Planning and undertaking small group expeditions; Undertaking leadership courses; Practising tikanga Māori.
Activities for relating to others	Group activities involving trust, conflict resolution, shared experiences, and group support; Finding ways of meeting the needs of the disabled in the playground; Coping with mock emergencies through role-play.	Visiting families and community centres, such as marae and homes for the elderly; Meeting with neighbourhood support groups and discussing their role in the community; Visiting other schools or centres in the area.	Visiting cultural centres, hospitals, and city schools or centres.	Learning teamwork skills while engaged in camping, tramping, or other outdoor pursuits.
Care of the body	Protecting the body from the sun, heat, wind, cold, and harmful substances, such as chlorine.	Visiting local health centres.	Visiting specialist urban health centres, such as family planning clinics; Checking out food values in fast foods and restaurants.	Protecting the body from sun, wind, heat, cold, and harmful substances, such as plant sprays; Learning about edible and inedible plants; Learning about hygiene and how to store and cook food outdoors.
Safety routines and activities	Gathering outdoors during emergency procedures such as fire drills; Using safe practices in sport, e.g., lifting, shifting; Learning swimming pool safety routines; Learning outdoor first aid and practising it, e.g., by setting up an “accidental trail”.	Learning and practising road safety rules for pedestrians, passengers in cars and buses, and cyclists (ask your local traffic officer to help with this); Using safe practice in outdoor pursuits and sports.	Learning and practising footpath courtesy, traffic awareness, bus and train safety, and safety in buildings and lifts.	Learning first aid for accidental injuries, hypothermia, allergies, etc, and how to do cardio-pulmonary resuscitation (CPR); Learning and using safe practices for managing groups in the outdoors, including in the snow, and in or near water; Learning emergency procedures, e.g., what to do if a person or a group gets lost.
Developing skills in movement	Playing individual or team sports such as tennis or hockey. Note: Physical skills, such as walking, running, throwing, balancing, lifting, jumping, will be developed in the course of physical education, sports, outdoor dance and drama, and free playing.	Swimming, skateboarding, cycling, and practising other outdoor pursuits in the local area; Playing individual or team sports such as tennis or hockey.	Visiting and using urban fitness centres or recreation centres.	Learning new physical skills, such as abseiling or kayaking.