

PART I - PLANNING FOR ENVIRONMENTAL PLAY

CHAPTER 1: WHERE DO THEY PLAY?

Play happens in all types of places, not just the playground. Perhaps the most useful exercise when considering this question is just to think over your own experiences:

Where did you play when you were a child?
What did you do when you played?
Do you still play, and if so where?

Some of the places where people play include: inside the home, in the home garden, in natural areas (such as the countryside, farmland, streams etc), on derelict sites (rubbish tips, demolished buildings, bomb sites etc), on roads or streets, in parks, in school grounds or on supervised playgrounds. There are, of course, many other play places not listed here.

The most popular places for play will naturally depend on the locality: what environments are available, what activities are preferred, and the suitability of the environments to particular activities. To maintain or improve play opportunities through the provision of appropriate environments, it is essential to know both:

What alternative play environments are available to people.
What type of play is likely to happen in those places.

TYPES OF PLAY

Even though our first thoughts of play might always focus on children, we should never forget that people of all ages play. Our major concern, however, throughout this book will be children's play.

Play begins at a very early age. Babies will grip, pull, or shake anything within reach - whether it be a rattle, a dummy, food or even their own hands. For a baby, play is very much a physical experience - an exercising or trying out of their muscles, or learning about the physical world about them. For the toddler, play retains this emphasis - learning about the capabilities and limitations of their own body. Play environments for babies or toddlers should provide a variety of opportunities to experience new activities and to confront new materials.

After the infant has mastered their ability to use their body, another dimension begins to grow in significance to the play activity - that of 'social play.' From the age of four or five, children increasingly play with each other rather than play alone. By playing together, children learn the ability to deal with relationships. A lack of proper opportunities for social play can lead to introverted adults who lack self-confidence in relationships with other people. Play environments should be developed in such a way as to enhance the opportunity for social interaction amongst children over the age of four.

Play can take an endless variety of forms which can be considered and classified in an almost endless variety of ways. Below is just one way of looking at different types of play:

1) Physical Activity

This could include such things as running, jumping, swinging, climbing, crawling, balancing, swimming, splashing, throwing, kicking, and so forth. This activity might be incorporated into

a structured game or could perhaps be completely unstructured play. If an environment is being developed to be used exclusively for one particular type of play (e.g. a sports facility), it is possible to plan and build an area which is of optimum suitability for that activity. When an area is being developed to cater for multiple-play possibilities however, compromises often need to be made. It is usually desirable in planning a playground to maximise the number of different physical activities which can occur there.



2) Pretending

Sometimes called 'role play,' this type of activity forms a major part of children's play. Pretending involves acting out fantasies, playing in roles outside their real situation. Children pretend to be 'grown ups': parents in the work place, housewives, hunters, actors, policemen, or perhaps some character out of history or a fantasy world such as a space man, cowboy, Roman warrior or knight in shining armour. Usually, the roles children play change from day to day. This means that the play environment (which is in constant use by the same child) needs to be flexible and adaptable to a wide variety of roles (i.e. a cubby which can be a house one day and a fort the next day is far better than one which looks very much like a castle and wouldn't inspire the children to treat it as anything but a castle).

3) Creating or Constructing

To be able to make things is one of the most desirable forms of play. Unfortunately, this type of play usually requires at least some form of supervision. On supervised playgrounds or at home under the guidance of parents, children can become involved in craft-type activities. In the back garden or yard, on a supervised adventure playground or in derelict areas etc, children build cubbies. Where construction play can be introduced into an area, the environment comes alive, continually changing as old creations are destroyed and new ones are born. As the environment is continually changing, so the play possibilities also change. Children should never become bored and tired with such a facility.

There are innumerable possibilities for overlap between the three types of play outlined above. Usually construction play is also a type of pretend play (e.g. when a cubby is being built, it is going to be a fort, fire station, or hospital, etc). Often, pretend play involves at least some type of physical activity (e.g. Robin Hood swinging out of the trees, or cowboys running after the Indians).



CHAPTER 2: PLANNING FOR PLAY

Planning can be carried out at many different levels and in many different ways:

Planning on a broad scale, often called macro-planning, involves such things as identifying the 'type' of facility required and locating where that facility is to be developed. At the other end of the scale, detailed planning, called micro-planning or design, involves actually organising where the various components of a facility are to be located. Micro-planning for a facility should occur only after macro-planning, or a review of macro-planning, has taken place.

Who Might Be Involved in Planning

Any of the following might be involved in planning for the provision of play areas:

- a) The authority which controls the area to be developed - e.g. local, regional, state or national government department; school council; pre-school committee; private person; etc.
- b) The community that will use the facility - this could involve individuals being invited to a public meeting, or participation of formed groups such as service clubs, resident action groups, etc.
- c) Groups from the community who will not be using the facility - e.g. service clubs from other areas, school children or youth clubs wishing to be involved in community service activities.
- d) Professionals - usually it is desirable to have involved in planning some people who have professional skills. These people might come from any of the three groups above, or perhaps be employed on a project as consultants.

Planning for play requires expertise in a number of different areas of concern. The most successful planning will always result from balanced consideration of all these concerns. Such a balance can sometimes be achieved by one person (if he is very well experienced in all the fields concerned), but it is usually beneficial to have at least some input from people experienced in each of the following disciplines:

1) Play Philosophy

You need to clearly consider the play needs of a particular area. Someone should be involved who knows the area being planned and can relate play philosophy to the case in question.

2) Planning

There are techniques and procedures in which planners are trained that will result in an effective plan or design. These procedures will help reduce mistakes and ensure a final plan which is of real worth. This person, in the case of macro-planning, would best be a town planner. When designing an outdoor playground, you would need a landscape architect or landscape designer; when designing an indoor environment, an architect or interior designer would be best.

3) Engineering

It is essential that a play environment be structurally sound. An engineer (or in some cases a skilled tradesman) will ensure that the right materials are used in the right way.

4) Safety

It is possible to have people well-versed in play philosophy, planning and engineering who still overlook safety in a play environment.

Apart from the four concerns above, in certain planning situations expertise in other areas is of immeasurable value. When designing outdoor playgrounds, expertise in horticulture, physical education, recreation, etc, can be of great benefit.

Before commencing to plan, look around and consider what people resources are available to you. If you are a 'parks administrator' planning a playground, you should seek the opinions of other departments in your city (e.g. engineers, social welfare, town planners, etc). If you are a school principal planning a playground, seek the opinions of other teachers and the students, and try to find out if any of the parents might have some skills which would be of value.



PLANNING PROCESSES

There are several variables to be considered:

- a) The amount of flexibility required in the plan.
- b) The degree of detail.
- c) Who is to be involved in the planning.
- d) Whether only one plan will be produced, or a number of alternatives.
- e) Whether or not there will be a process of review.

Four possible planning approaches are as follows:

1) Traditional (Comprehensive) Planning

This involves working from beginning to end, resulting in a permanent plan. Margaret Roberts defines comprehensive planning as "the devising of a plan to cover developments which use land in order to maximise overall benefits." Comprehensive planning is essentially concerned with physical or spatial considerations, the comprehensive consideration of factors involved, and the production of a blueprint plan.

2) Structure Planning

This places more emphasis on economic and social considerations. This planning results in several general policies or strategies, rather than a concrete blueprint. Throughout the process, structure plans are continually being reviewed and, if need be, changed.

3) Systems Planning

This is based on the concept of considering all possibilities in an unbiased way and then proposing a series of alternatives. Usually, this involves both community participation and a continuing process of review.

4) Advocacy Planning

This is similar to systems planning. Reasoning that decisions made in systems planning are achieved through public debate, and that some members of the public are less capable of arguing for themselves than others, advocacy planning gives 'biased' support to less capable groups in an attempt to achieve a more balanced community input.

STAGES IN PLANNING PROCESSES

Irrespective of the type of planning followed, there are basically three stages in any planning process:

A. Site Analysis

Prior to any planning it is always necessary to gather certain pre-planning information and analyse it (see the Project Questionnaire below).

Apart from the physical details, it is also important to consider social and economic factors.

The following questionnaire is based on one which was used by Playground Clearing House in Australia as a guide for clients when putting together information required for the preparation of a playground plan. You can probably find something similar, and perhaps more suited to your area, regardless of what country you live in - but you may still find this one useful when pre-planning information for your own project nonetheless. Alternatively, you could adapt it to better meet your needs:

PROJECT QUESTIONNAIRE

The information outlined and requested below is required before a design can be drawn. When the consultant is unable to visit the site prior to drawing a plan, the client should send both photographs of the proposed site(s) as well as detailed answers to the questions below. The accuracy and value of the plan will depend on the accuracy and completeness of information supplied.

1. Give:
 - a) Name of client (organization or individual).
 - b) Address for correspondence.
 - c) Address of the site to be developed.
 - d) Your name (contact person).
 - e) Phone number.

2. Who do you anticipate will use the proposed facility?
 - a) What numbers?
 - b) Ages?
 - c) Special considerations? (e.g. handicapped, sporting clubs, children supervised by adults etc.?)

3. Are there any things which definitely must be included or excluded from the plan?

4. What is your estimated total budget for the project?

5. Who owns the site?
 - a) Has the owner approved the use of the site?
 - b) Are there any restrictions the owner has placed on the use of the site?

6. ENCLOSE A PLAN OR SURVEY of the area showing all permanent features including:
 - a) Dimensions of the property. Show any significant features outside the property such as a street, large tree or building.
 - b) Dimensions and location of any buildings on the site (including windows and doors).
 - c) Location of north.
 - d) Variation in contour - use arrows to indicate the direction of a slope (if contour plans are unavailable).
 - e) Landscape features such as trees, walls, paths, steps, fences, gates, rocks, garden beds, etc.
 - f) Position of underground and overhead utilities (pipes, power lines etc).
 - g) Existing soil type (clay, sand, rocky etc).
 - h) Existing ground surfaces (bare earth, grass, sand, concrete, mulch, etc).

7. Give a firm instruction on exactly what work you require us to do (this will affect the cost of the work)?
Do you want:
 - a) A rough concept sketch.
 - b) A detailed landscape design.
 - c) Construction diagrams to assist with building the most difficult components.
 - d) Construction drawings for all but the most simple components.
 - e) Construction drawings for everything (i.e. even such things as post and rail fencing).
 - f) Materials specifications (i.e. a list of what materials are required for the job, and quantities).
 - g) Buying/Materials acquisition guide (i.e. a guide as to where and how materials can be acquired).
 - h) A programme for work to be carried out.
 - i) A list of tools, equipment and manpower requirements needed for the job.
 - j) Plant names for any planting indicated on the plan.
 - k) Indication of changes to be made to contours (i.e. do you want the plan to stay where there is to be a slope and leave it at that, or to specify the exact contours of that slope?)

8. Write a few lines to indicate how important each of the following factors are to you in the design:

- a) Aesthetics (the visual appearance/neatness etc).
- b) Safety.
- c) Maintenance (how important is it that the area have a low maintenance requirement)?
- d) Function (i.e. refers to the use which the area is to serve: play, picnicking, entertainment, sport, etc).

9. What materials are you prepared to use for the work?

- a) Do you intend using cheap recycled materials (e.g. tyres, power poles, cable reels, wood shavings, etc)? Note: just because they are recycled doesn't mean they are not solid.
- b) Do you prefer to use more expensive purchased materials (e.g. pine logs, etc)?

10. What resources other than money do you have?

- a) Voluntary labour?
- b) Skilled workers?
- c) Materials (in hand or possible donations)?
- d) Machinery (both heavy and light)?
- e) Tools in general (e.g. wheelbarrows, chain saws, drills etc)?

11. Do you intend for the work to be done by contractors, your organisation's members (or staff) or by the 'community' through work days? (Perhaps you prefer a combination of the above.)

12. On PARK AND PLAYGROUND COMMUNITY PROJECTS:

Ask the community (the potential users' children, sports club members, local residents, etc) what they want in the area. Send us the results of this effort (e.g. in a school project, get the children to draw pictures of what they visualise for their school ground. Send us the drawings along with your comments on the drawings).

13. DO YOU INTEND USING OUR SERVICES TO HELP ORGANIZE AND/OR SUPERVISE FOR THE WORK TO BE DONE?

B. Concept Development

This involves considering the possible approaches in the light of the collected pre-planning information. Concepts may be developed by an individual or a group. One possibility might be:

A group of professionals representing different areas of expertise might get together for a brainstorming session. After talking the project over, different aspects of the work might be assigned to different persons. A sociologist could put together a list of functions the playground might need to serve. A physical education expert might also list the functions as he sees them. These lists might be sent then to the landscaper who will put some rough concepts together which would serve those functions. These concepts could then be checked over by a safety expert and an engineer for their comments. Finally, the team might meet again for further discussion.

C. Final Plan Preparation

Detailed design, preparation of strategies, etc based on the concepts will usually be put into a proposal by one person. This person is usually a professional planner or designer. One of several proposals might be put forward at this stage. In any case, proposals here differ from those in the concept stage in that they are more involved and contain sufficient information to act upon.

Note: Some planning processes will incorporate reviews of the Final Plan followed by returns to the concept development stage. This type of approach can often take place with systems or advocacy planning.



MACRO PLANNING

In relation to planning for play, macro-planning refers usually to:

- Deciding on the size and distribution of play spaces.
- Locating the exact positions for play spaces.
- Deciding broadly the type of play spaces to be provided.

There are obviously interrelationships between all of these points.

From time to time throughout the world, different play space standards have been recommended by different authorities. No set of standards is accepted universally (there are simply far too many variables from place to place), although the following might serve as a guide to your planning:

CHILDREN'S PLAYSACE STANDARDS

(from: National Playing Fields Association: United Kingdom)

"NPF A has a recommended target of 6 acres of playing space per 1, 000 of population with particular reference to children."

a) Included in this 6 acre (2.43ha) target should be 1.5 to 2 acres (0.6-0.8ha) for children's play comprising:

- Casual or informal play spaces within housing areas - 1 to 1.5 acres (0.4-0.5ha).
- Equipped playgrounds, adventure playgrounds and other play spaces including provision for under fives – 0.5 to 0.75 acres (0.2-0.3ha).

b) The remaining 4 to 4.5 acres (1.6-1.8ha) of the 6 acres is for youth and adult use (i.e. this includes pitches, courts, greens and miscellaneous facilities such as pitch and putt golf courses, athletics tracks, ski slopes, etc).

c) Excluded from this 6 acre provision are:

- Playing fields of schools and other educational establishments.
- Grounds of Her Majesty's Services.
- Verges, woodlands, commons, ornamental parks and gardens.
- Full length 9- and 18-hole golf courses.
- Large areas of water.
- Indoor recreational facilities.



PLANNING GUIDELINES - OPEN SPACE REQUIREMENTS FOR SCHOOLS

(from: Town & Country Planning Board: Victoria, Australia)

- Sites for new primary schools with planned net enrolment of 500 should be at least 3 acres.
- If enrolment exceeds 500, the site should provide an additional 1 acre for every additional 100 students (where inner suburban schools are on sites of less than 3 acres).

EUROPEAN LEISURE & RECREATION ASSOCIATION RECOMMENDATIONS

Below is a summary of just some of the main points:

- Work and leisure places are better not separated.
- Provision of play areas should be covered by urban planning and construction legislation.
- Small children must be able to play within the view of their homes.
- In view of the lack of imagination and movement affecting urban children today, the so-called 'Adventure' or 'Robinson Playground' has particular appeal. "A Robinson Playground comprises a work area on which children can build their own town, an animal farm, a playground, sand and water for small children, a club house and a workshop for older children. Robinson Playgrounds require a surface area of at least three thousand square metres and a pedagogically trained leader who is supported by parents and voluntary assistants."
- Sports and athletics areas should also be provided in the vicinity of housing developments.
- In older areas of a city, playgrounds are obtained by appropriately zoning and recombining courtyards. Also, alleys and traffic-free local roads can be transformed into play streets.
- Adequately designed courtyards of schools and open areas near kindergartens and day schools can be utilised as additional play areas.

Department of Environment Circular 79/72 (United Kingdom)

- Toddlers' Play Areas - 1 play space of 100m² per 20 family dwellings.
- Children's Kickabout Areas - 0.2ha per 250 family dwellings.
- Conventional Equipped Play Areas - 0.2ha per 250 family dwellings.

MICRO-PLANNING – DESIGN

"Design involves selecting and arranging the elements of an environment in a pattern which will, as far as possible, adhere to the principles."

There are broadly two considerations in design:

- 1) The design **ELEMENTS** - These are the components which are to be arranged. They are tangible physical things such as seating, walls, plants, play structures, etc.
- 2) The design **PRINCIPLES** - These are the considerations which influence the way in which the "elements" are arranged. They are not solid objects - they are perceptions or feelings about the way something might function or appear.

The design process usually involves the following steps:

- Collect pre-planning information - this should include both details of the existing physical nature of the site plus notes on any principles for design which might be predetermined.
- Decide more fully on the purpose(s) to be filled by the facility (i.e. set down the principles for the design).
- Draw the site outline (in its existing condition).
- Select the appropriate elements to fulfil the purpose(s) or principles as set down.
- Arrange the elements on the site to fulfil the purpose(s).
- Review and, if necessary, reorganize the arrangement of the elements before drawing the final plan.

Though there may be many important criteria to consider in the development of play environments, the primary concern must be "function." What value is a playground which is safe and looks good if it offers little scope for play?

There are many questions which need to be considered when planning for play environments:

- Should we cater to what is demanded or should we cater to what is needed? Is there a difference between demands and needs?
- How do we best perceive needs?
- How can we rationalise cost-benefit differences between the provision of different types of facilities? (Some types of sporting facility cost a great deal of money but cater to a very small number of people).
- How often are managers or planners building for their own interests rather than for the needs of the community? (For example, an administrator who plays golf might give undue priority to a golf course development).
- What prejudices are brought into a design by the professional background of the planner? (For example, a horticulturalist plants more trees, the engineer is interested in structural excellence, the physical educationalist or sports person often neglects passive recreation).

