NORGES SKIFORBUND

CROSS-COUNTRY CROSS
FOR CHILDREN
AND YOUTH

CROSS-COUNTRY CROSS FOR CHILDREN AND YOUTH

is an inspiring way to train, compete and enjoy snowsport. It inspires and motivates children and youth alike, while developing general skiing skills and having fun skiing. Cross-country cross is great FUN!

Our aim is to fill skiing arenas with children and youth who are looking forward to being challenged by technical challenges. Music and good commentators will help to create fun events!

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CONSTRUCTING THE COURSE

How a cross-country cross course should be laid out depends on the terrain at the site. There is no right or wrong when it comes to what the course should consist of or how it should look. It should however always be exciting for the participants and challenge their technical skiing skills.

Make sure as many of the elements as possible on the course can be removed and replaced for grooming.

Skate skiing is the best suited style for cross-country cross, but it is also possible to use classic style.

Before constructing the course it must be considered whether the course is going to be used for competitions or practice, what age group will use it and the size of the group.

There are always several ways to utilize the terrain. If cross-country cross is going to be a regular activity throughout the season the contents and layout of the course should be varied every now and then.

It is not necessary to restrict a specific area for the cross-country cross course. An area where there are already other elements eg. ski play elements or training tracks, could be a perfect spot for a cross-country cross course. Be creative and utilize the terrain. *(See illustrations)*

When organizing a contest you can choose to do either one lap on a long course or several laps of a shorter one. The length of the course can be adjusted by adding and removing elements.

Based on experience, recommend 1.5- 2.5 km courses for 15 and 16 year olds.

PERMANENT LOOPED COURSE

A looped course is usually the best option. Then the course can easily be repeated, both during practice and competitions, without having to travel from finish to start.

If the finish and start of the course are not in the same location, it should be possible to move between them by skiing.

SPEED AND FLOW

The skiers should experience speed, flow and rhythm on the course. Remember to keep it challenging for the skiers to maintain speed!

The order of the elements is just as important as the elements themselves.

Avoid bottlenecks! Two identical elements can be placed parallel to each other. Two variations of an element can also be placed next to each other, and the skier can choose which one to pick; the long and easy one, or the shorter, but more difficult one.

The course should challenge the skiers technical skills! Technically good skiers will achieve high speed and rhythm.

EQUIPMENT

- Slalom gates, with and without flags
- Short poles
- Double gates
- A variation of visual aids to guide and decorate
- Shovels

START FORMATS

These variations can be used, both during practice and competition:
- Mass start
- Four and four, as in a sprint
- Paired start
- Paired start, pursuit (start in two different locations, requires a looped course)
- Individual start, timed

ARENA LAYOUT

Study the illustrations in this brochure! Let them inspire you and give you ideas on how to utilize the terrain, how to construct the course and how to integrate the different elements.

The aim is to create a compact and intimate course that can provide a nice flow, with both technical and physical challenges.

SUGGESTED MODELS

- Alpine start. Build a raised area so the start is a small downhill
- Pump organ, works well downhill and on the flat
- Moguls and ditches. Large moguls, 6-8 meter between
- Individual moguls. Can be quite large
- Contoured turns
- U-turns, on long flats and at the stadium
- Short and steep hills
- Gates to go under
- Backward gate, only to be passed skiing backward
- Slalom course with 5-8 turns, downhill or on a flat
- 2-3 kickers in a row. Make sure there is sufficient distance between them

Use your imagination! There is no right or wrong when it comes to what a cross-country cross course should look like. Cross-country cross should be fun and challenging!

Alpine start

Starting the cross-country cross course starting on top of a raised area works well. This way the skiers get the sensation of speed and action from the very beginning! If the terrain does not provide a raised area, all that is needed is a pile of snow. At sites where there will be a permanent cross-country cross course, artificially raised areas should be constructed.
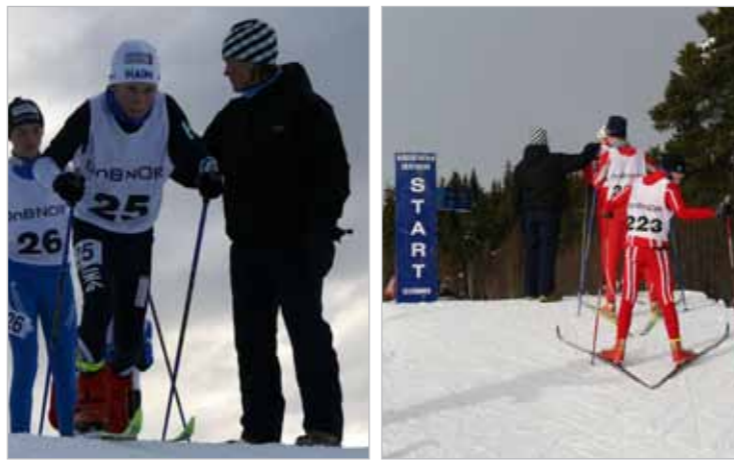
Kickers

Kickers can be a natural and exciting part of a cross-country cross course. The size and number of kickers should depend on the age and level of experience of the users, as well as the terrain. The height of the kicker should not exceed 0.5 meter, and it should be positioned so the landing starts with a natural knoll (the knoll can be built/shaped if it does not occur naturally). The flight curve should follow the profile of the landing. If several kickers occur in a row, the distance between them should be about 10 meters to create a good rhythm.

Slalom

A slalom section could occur either on a hill or on a flat. Imagine a straight line between the start and the finish of the slalom section, then place a gate every seven meters along that line. The gates should then be offset by about 0.5 meter to cause the skier to change direction. Gates can also be placed randomly to challenge the skiers to pick the best track.

Compression

A compression element can be a challenging section for skiers. For example a sharp turn following a steep downhill section. A rough surface will increase the challenge.

Reverse passage

Place the gates on flat or sloping terrain, where the skier has a bit of speed that can be maintained through the passage. To avoid delays two or three passages can be placed next to each other. Make sure it is not possible to bypass the reverse passage. Use signs and make it obvious.

Humps

Humps are a well proven element within ski play and education. They can be made in various sizes and shapes, depending on how steep the slope is. Both height, depth and the distance between the humps can be varied. Try different configurations. If you are using machinery it is important that it is capable of making smooth transitions between the humps without leaving flat sections. The size of the machinery will determine the frequency of the humps.

To create variations in the terrain, and challenges for the skiers, single humps can be made throughout the course.

360 degree turn

In a 360° the skier is crossing his/her own track. This element should be placed in a flat section of the course. A built up contour is preferable, this is to make it easier to maintain flow and speed through the section. A wide entry section to the element is preferred, since the skier then can pick his/her preferred track. The contour should be built so it will provide support for the skier.

Other cross-country cross elements

Gate jungle

Portals

Pump organ

The pump organ is a challenging element. It works well on flat terrain and on a slight uphill as well as downhill.
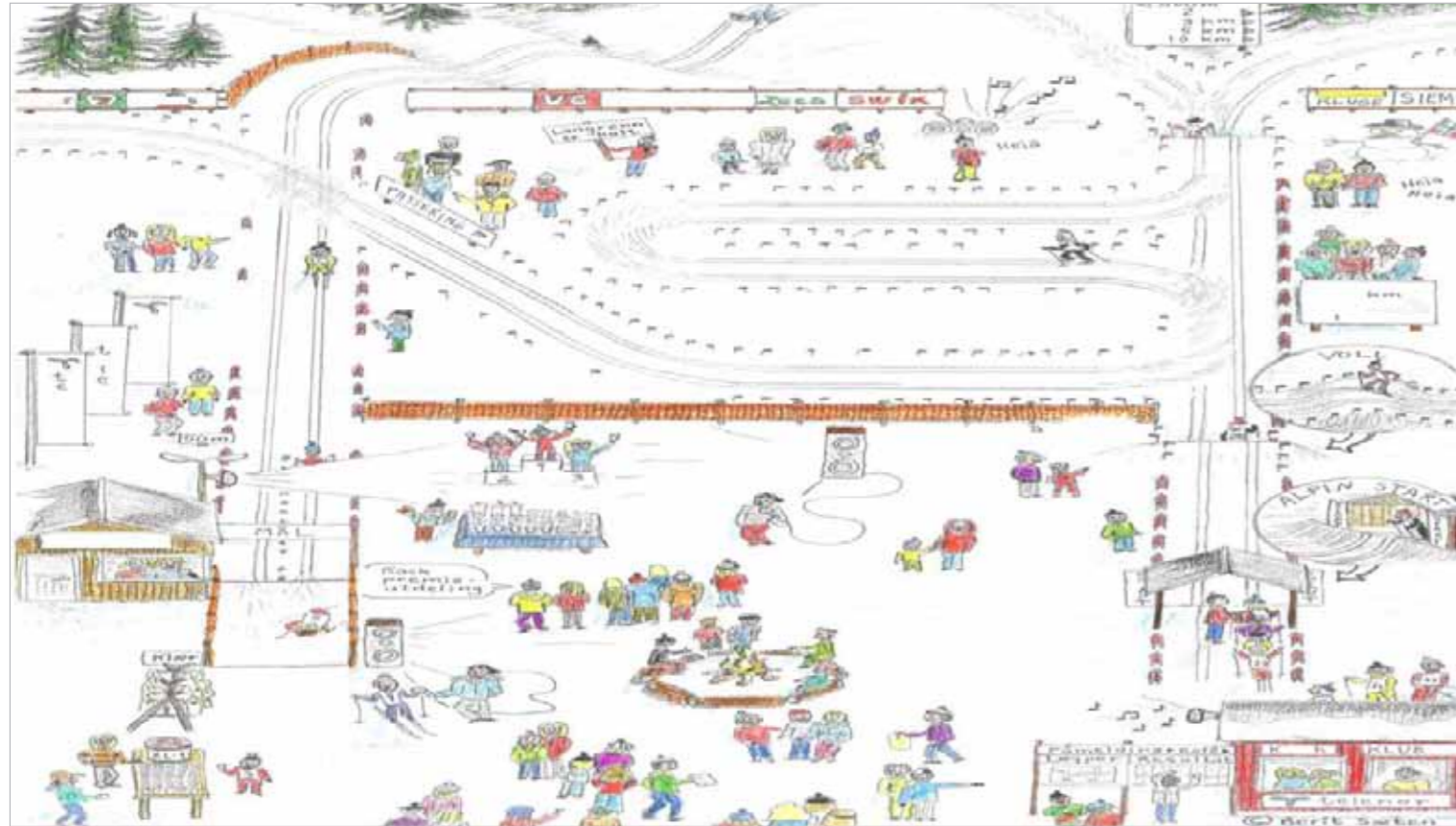
U-turns and contoured turns

U-turns look cool, and challenge the skiers ability to create speed. They also help maintaining flow in the course.

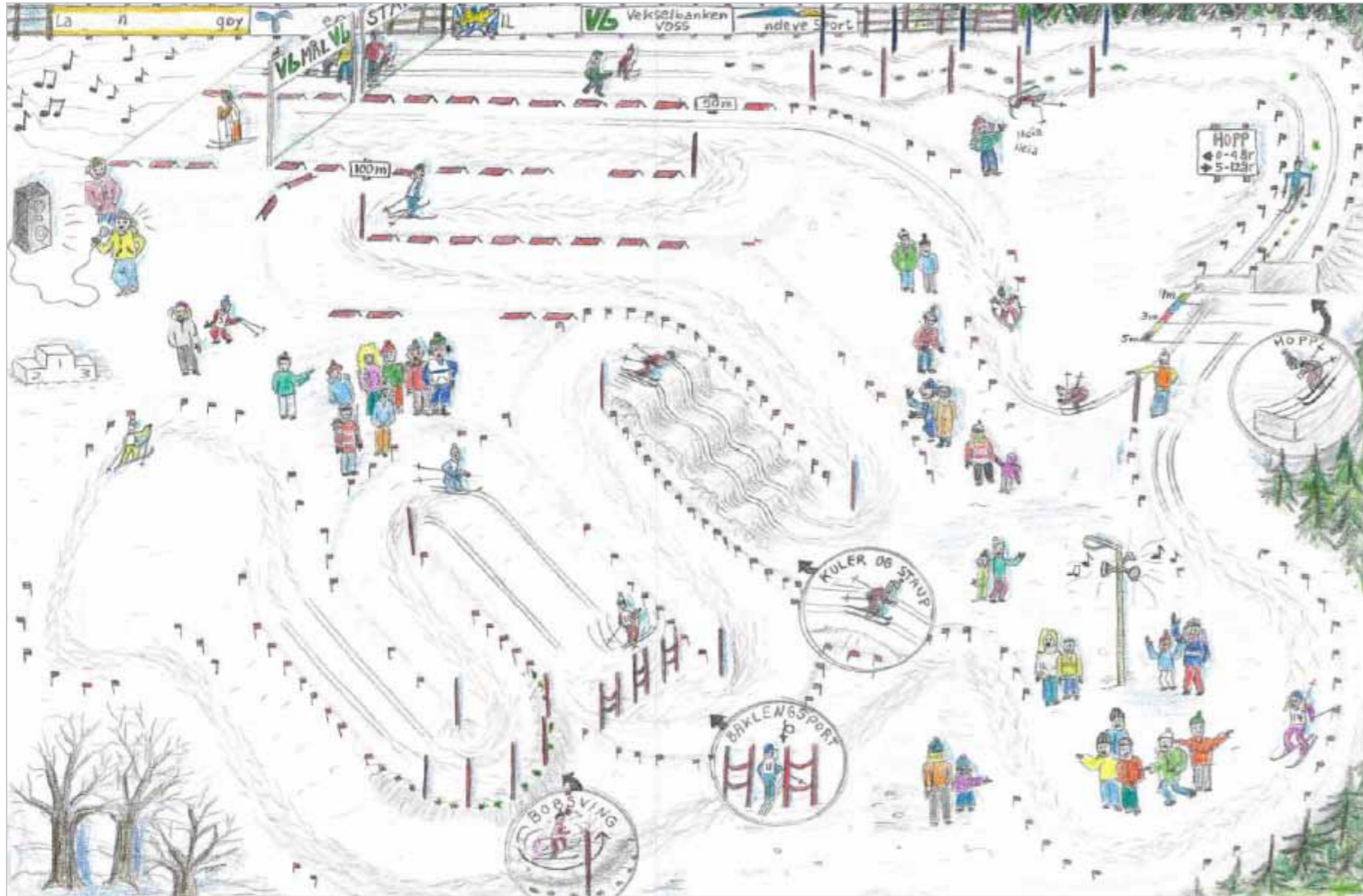# Cross-country cross courses, examples

Example 1 – Cross-country cross arena. Drawing by Berit Sæten

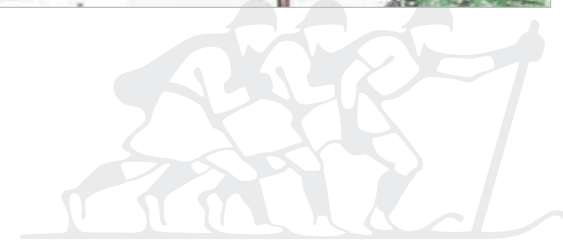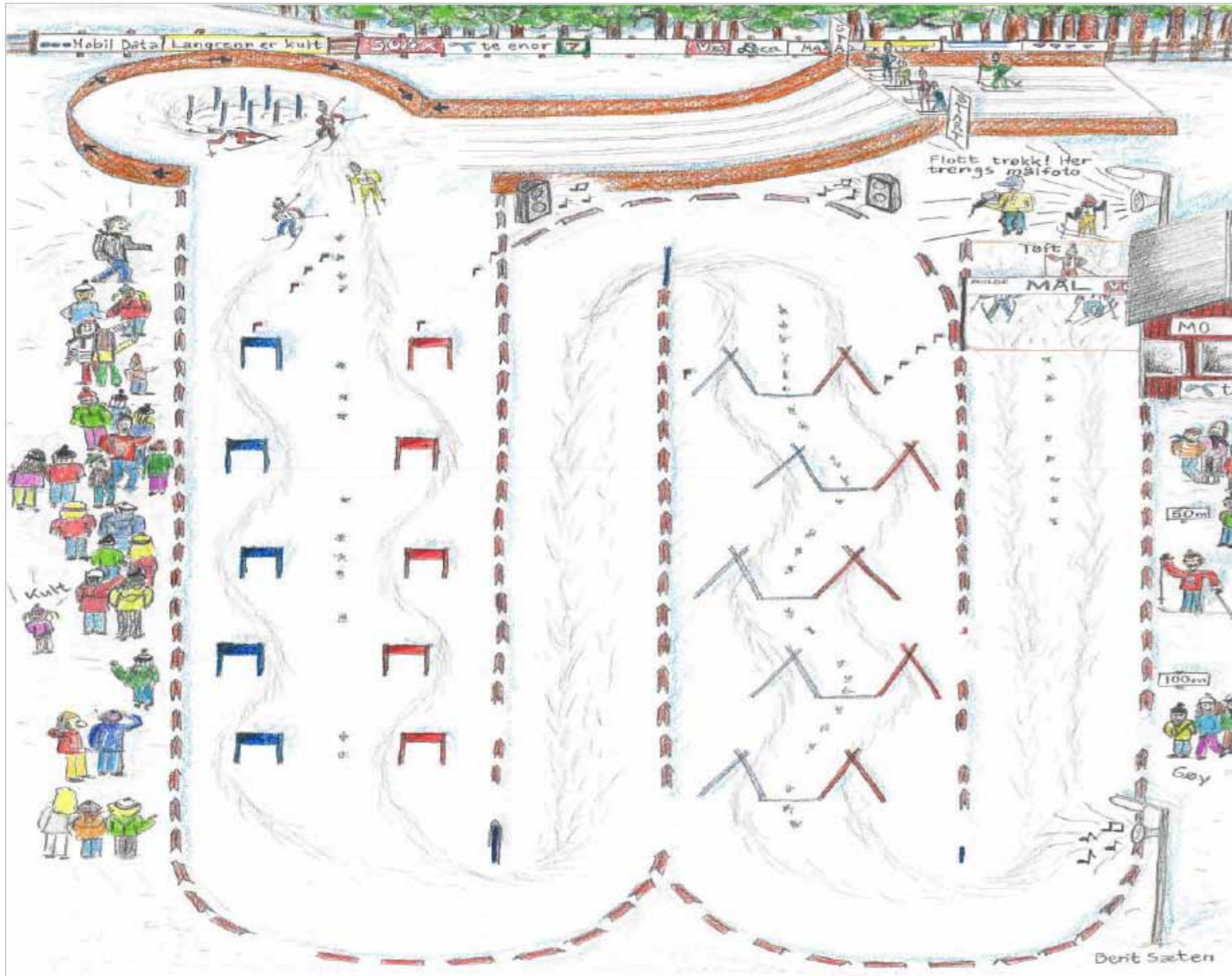Example 2 – Cross-country cross arena. Drawing by Berit Sæten

Example 3 – Cross-country cross arena. Drawing by Berit Sæten

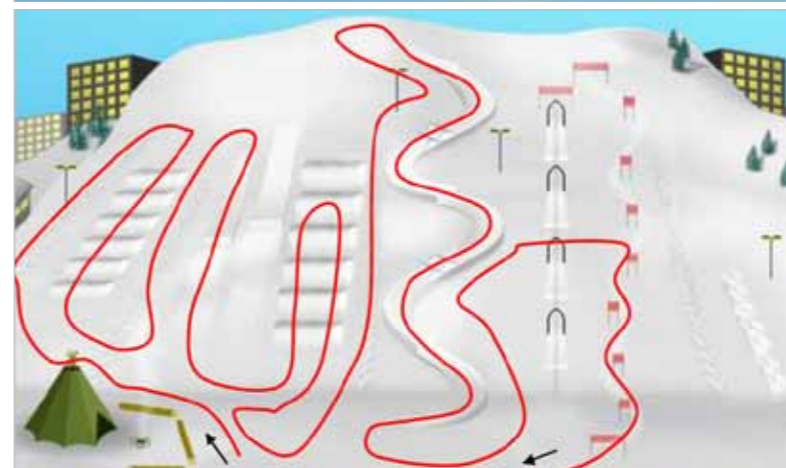Example 4 – Cross-country cross arena. Drawing by Berit Sæten

Example 5 – Cross-country cross arena. Drawing by Berit Sæten

Cross-country cross course in a ski play area consisting of a section with humps, jumping hills, kickers in series, pump organ and an unprepared section.

Cross-country cross course in a ski play area consisting of a section with humps, jumping hills, cross course with kickers, contored turns, kickers in series, slalom course and pump organ.
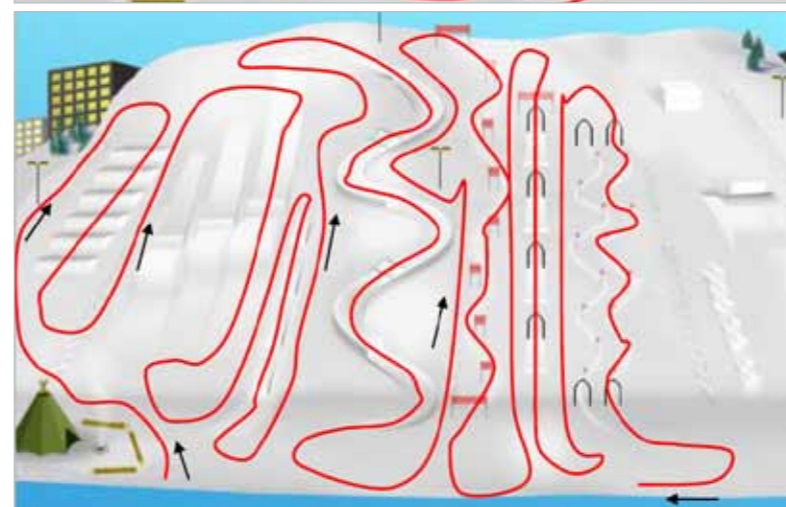
Cross-country cross course in a ski play area consisting of a section with humps, jumping hills, cross course with kickers, contored turns, kickers in series, slalom courses, pump organ and bigjump.

Cross-country cross, course example.

Various elements. Illustration by Atle Ingebrigtsen