

TEACHING
SAILING
AND CANOEING
TO THE BLIND
AND PARTIALLY
SIGHTED



Erasmus+



Working with visually impaired people is a challenge but, at the same time, a wonderful experience for each water sports instructor. Water sports require an effective sight analysing skills to assess the changes undergoing in the surroundings. After an appropriate modification and adjustment of the environment (sailing boat, canoe) and adoption of certain principles and behaviours, they allow a wide margin of independence and, in the future, may become a source of passion and interest for the visually impaired. In some cases they may also bring about economic benefits owing to the creation of new jobs.

A water sports instructor who starts working with visually impaired people should



be aware of the limitations resulting from the visual system disabilities. One of the most important factors making it difficult to teach them sailing and canoeing is their lack of ability to assess the surround-

ing environment. In sailing, this problem will be of particular significance when it comes to the assessment of the traffic on water, the changing sailing directions in water reservoirs, weather conditions and unforeseeable events. In individual canoeing, these problems mainly concern the spatial orientation. Both in sailing and in canoeing, the assistance of a sighted person is indicated but should be limited to an absolute minimum, allowing the most extensive possible scope of an independent activity of a person with a visual impairment.



This brochure is divided into two main sections – **sailing and canoeing**, and also contains an introduction. Due to its technical aspects, sailing has been described in more detail. Information about the sails and ropes were given and a short glossary containing descriptions especially modified for the blind was provided. When it comes to canoeing, you may find here basic data on the necessary equipment as broken down into particular stages of the learning process as well as some practical exercises.

We should start our adventure with both sailing and canoeing by reminding everyone a few basic safety rules:

- on a sail yacht, there is a firm rule: one hand for the yacht and the other hand for work,
- if you do not understand anything, tell this to the skipper immediately,
- nobody performs any activity without the skipper's command,
- never leave a blind person unattended,



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Before you come aboard a yacht or a canoe – **check the clothes of the crew**. The clothes should provide thermal comfort and should be impermeable. They should be loosely-fitted, comfortable and appropriate for the weather conditions. Also shoes are very important – preferably, they should be lace-up, covered and with a rubber sole to guarantee safe movements aboard the yacht or canoe. Slippers or high heel shoes are absolutely out of the question. It is also advisable to have something to eat or drink with you.

Please remember that the blind want to be treated on par with the sighted. Therefore, they should not be released from any activities but rather assisted and supported in their performance.

The first basic rule is to provide a succinct and illustrative presentation of the operation of the given item. Avoid garrulous speeches. Explain the given activity step by step. When working with visually impaired people, forget the use of colours as well as such words as **'over here', 'over there', 'hey you', 'look out to that branch', 'take the black dotted rope', 'the yellow canoe is yours'**. In certain situations, the blind need some more time. It is your job as a teacher to remember about this and take this into consideration. However at night, the blind do everything much faster than the sighted.

The second basic rule is the verification of the independence of course participants. You may be faced with a situation when one of your participants may need much more attention than the remaining ones. And there is nothing wrong with that. Each one of them wants to show their best. Therefore, before letting them go onboard, make a brief meeting during which you will explain what you will be doing. Do not forget to ask some basic questions concerning, for example, the safety rules. In this way you will know very soon who is more forthcoming than others.

People who lost their sight at some later stage in their life usually tend to remember the shapes and colours and have some spatial imagination. They find it much easier to imagine, for example, what a boat with a mast, looks like. People who were born blind, may have more problems with imagination and for that reason may need some more time to learn. You may facilitate this process, if you use in the teaching process a model of the sailing yacht so that your student can freely familiarise with it.



Determine the rules of operating and cooperation at the very beginning. We start from a visit at the pier. You must explain to the course participants what a pier is and what it is used for. For example: 'A pier, or a quay, is usually built from wooden boards and its surface may be slippery. Please note that some piers may be more wobbly than other and when someone walks on them vigorously, a delicate swaying may be felt.'



A quay is used mainly to moor yachts. Close to the edge there may be bitts or other mooring elements. They are usually located very close to the edge. At the pier, there may also be other infrastructural elements whose purpose is to supply technical utilities, but also lines, ropes, electric cables and other things. The main advantage of piers is the fact that they allow dry-shod access to the yacht. The disadvantage is the fact that they have no railing at the end, which, after a moment's inattention, may end in an inadvertent bath in water. Please note that every pier is different, therefore, it is always a good idea to ask about its particulars, paying special attention to the place where it ends.

1. SAILING

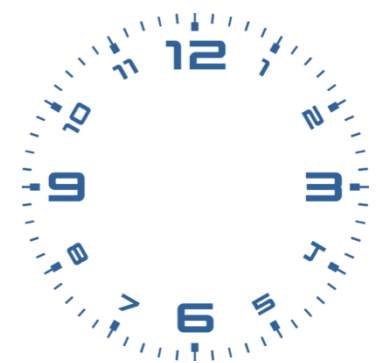


The basic rule is the good communication between the crew members, irrespective of the fact whether you are a sighted person or a visually impaired person,

and the captain/skipper. First of all, remember that you have to stress it to the visually impaired persons that each and every participant is a crew member and the correct yacht operations also depend on them. If someone has failed to understand the command or does not really know what he or she is supposed to do - they must say it out loud and clear. The communication must be standardised, short and clear. Any description of the location of the given item should be made with reference to the yacht or to the person, following the CLOCKWISE READING principle. By analogy, this means that the yacht's bow is at twelve o'clock and the stern is at six o'clock. All other elements of the yacht (shrouds, capstan, mast, sheet, etc.) and its surroundings (buoys, sailing yacht, port) are localised following this principle.

Examples:

- The wind is blowing from 9 o'clock. - This means that we are sailing on a close reach on a tack to port.
- At 9 o'clock there is a yacht, it tacks to starboard and is on collision course.





- When it comes to the location of items on the boat, we still follow the clockwise reading principle, however we do it with reference to the person the captain/skipper refers to, e.g. the jib sheet is at 9 o'clock.

In order to allow the participants to have an understanding of the sailing terms, below is a description of the basic yacht elements. In case of the blind people, it is helpful to use a smaller scale models that will allow them to build up an appropriate mental idea. In case of partially sighted people, it may be useful to resort to highly contrasting colours.

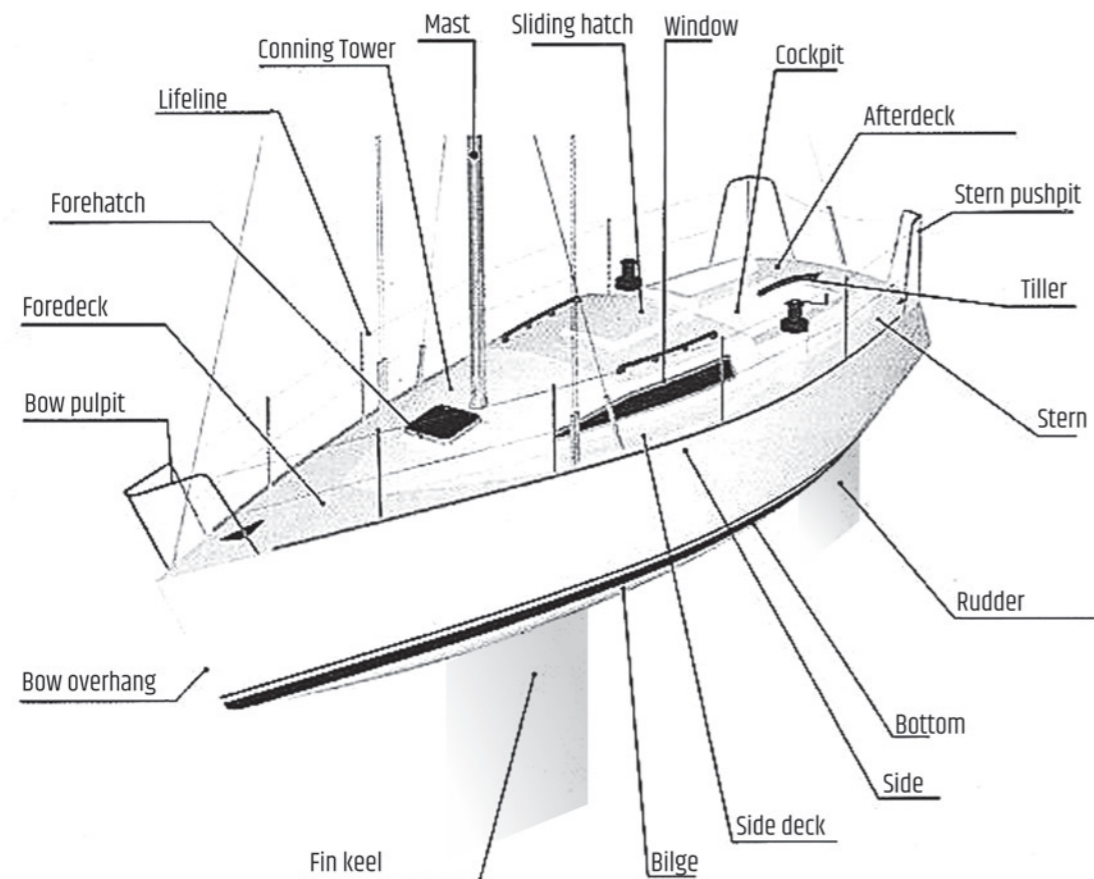


Fig. 1. Yacht construction

Bow - forward part of the hull of a yacht, most often in the form of an acute triangle, with its bottom part up

Stern - back part of a yacht, both in its above-water and underwater part;

Amidships - part of the hull that connects the bow and the stern

Sides - side parts of the hull, the right side is called the starboard side and the left side - the port side. All commands concerning the yacht that will contain references to the hours from 12 o'clock to 6 o'clock will concern the starboard side and from 6 o'clock to 12 o'clock - port side;

Mast - a vertical fixed pole, usually on the centre-line of the yacht, the main purpose of which is to carry the sail. Depending on the type of the boat, there may be one-, two- or three-masted yachts;



Boom - a moving pole attached perpendicularly by means of a joint (gooseneck) to the mast. The entire foot of the sail is attached to the boom

Cockpit - an open well in the central part of the yacht's deck. In larger boats, the cockpit may have seats and benches, entrance to the rooms below deck and even an appropriately equipped station for the helmsman with, for example, a steering wheel.



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Standing rigging – it comprises stays; forestays and backstays – connecting the mast with the bow (forestay) and the stern (backstay), their task is to stabilise the mast within the central line of the yacht, shrouds – connecting the mast with the yacht sides; their task is to stabilize the yacht in the transverse plane



Running rigging – ropes, most often synthetic, rarely from natural fibre, they are used to control the moving parts of the equipment; halyards are used to raise and lower elements (sails, keel, rudder blade etc.), sheets are used to control the

setting of sails, a topping lift holds the boom aloft and improves the sail trim. A sheet in a block – the purpose of which is to reduce the force necessary to control the sail – is called a tackle block. Hawsers are ropes used for mooring the yacht by attaching it to fixed elements on shore

Cleat – a device commonly found on boats, used to secure various ropes: hawsers, sheets, halyards, etc. temporarily.



Anchor – a device used to prevent yachts from drifting, depending on the boat size and the given anchor type, it may come in various sizes and shapes.

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Job – a basic headsail used in single-masted vessels.

Mainsail – the largest sail on the fore-and-aft rigged sail yachts.

Spanker – name of the aftmost sail set on at least two-masted vessel.



Fenders – fenders may come in various shapes, they may be spherical or cylindrical. They are mainly used to secure the vessel from damage when mooring or berthing in consequence of friction – they absorb the energy of impact of the vessel against a jetty or another vessel. Fenders may be fixed permanently in the docks on its structures or may be attached to the vessel's sides during the manoeuvres and when berthing.

Tiller – a profiled wooden or metal lever attached to the top of the rudder stock that is positioned vertically with reference to the yacht and is partially submerged in the water. The tiller constitutes its arm and is operated directly by the helmsman. It should be remembered that the operating a tiller is not like operating a car's steering wheel. It should be pushed in the direction opposite of the one you want to go, i.e. if you want to turn left, you have to move the tiller to the right. A whipstaff is a variant of the tiller.

Steering wheel – usually, it can be found on sea vessels or on larger inland water yachts. It has a shape of a hub. A helmsman uses it to control, by means of a system of ropes and blocks, the position of the rudder.



Points of sail

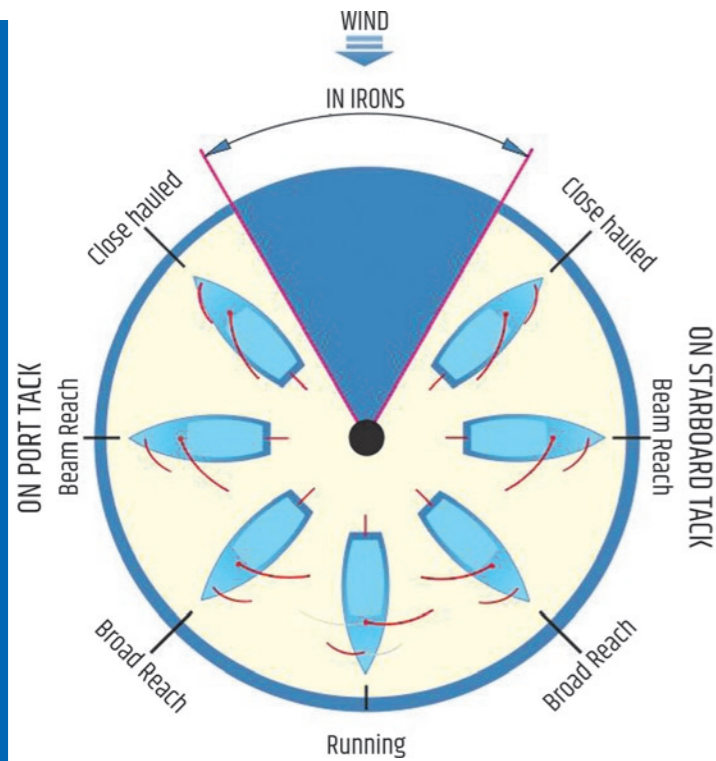


Fig. 2. Points of sail

The direction of the wind in relation to the central line connecting the bow and the hull of the yacht can be divided into: the starboard tack and the port tack. To determine the direction of the wind in relation to the yacht, special devices are used. One may also use, especially on smaller vessels, the tell-tales - pieces of string or yarn attached

to the standing rigging to indicate the wind direction. For obvious reasons, people with visual impairments must learn other ways of determining the wind direction, i.e. based on the sensation on their ears or face skin.

Points of sail depend on the angle at which the wind is coming to the boat:

Running this is the wind coming from astern, according to the clockwise reading principle = 6 o'clock

Broad reach this is the wind coming from astern at an angle, according to the clockwise reading principle = from 3 o'clock to 9 o'clock, except 6 o'clock

Beam reach this is the wind is coming from the side, perpendicularly to the central line of the yacht, according to the clockwise reading principle = 3 o'clock or 9 o'clock exactly

Close reach and close hauled these are the winds coming from ahead at an angle, according to the clockwise reading principle = from 9 o'clock to 3 o'clock, except 12 o'clock

To ensure efficient communication when specifying the wind angle, one should provide information about the tack, e.g. close haul - port tack or broad reach - starboard tack.

Manoeuvring in the wind - there are 2 basic sailing manoeuvres related to the wind:

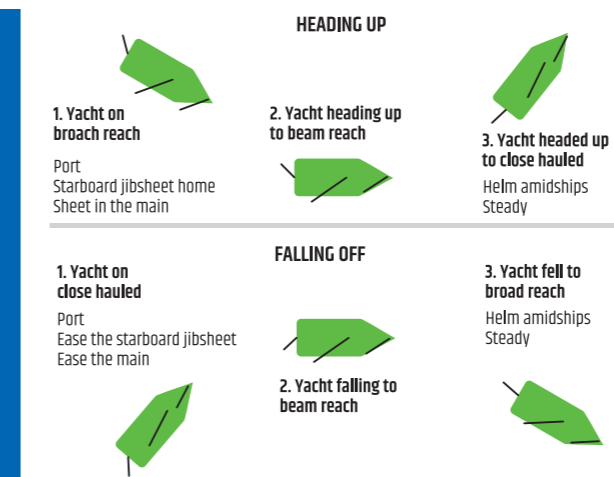


Fig. 3. Heading up and falling off manoeuvres

Heading up - decreasing the yacht's angle in relation to the wind (steering more toward the direction of the wind), and

Falling off - increasing the angle (moving away from the direction of the wind)

Tacking - the manoeuvre when the yacht, heading up or falling off, crosses the wind line, is called tacking. We talk about being on starboard tack, turning to windward, being headed into the wind, powering up on the new port tack and being on the port tack.

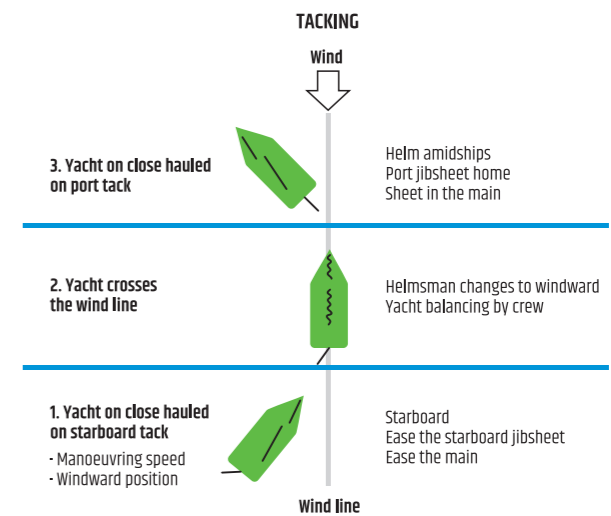


Fig. 4. Tacking manoeuvres in sailing



Navigation marks and signs – unfortunately, the sailing channels are marked by means of colours and figures, e.g. a red cylindrical buoy or a can-shaped marker with a red light on top stand to mean the port side of the sailing channel.

The navigational marks and signs are not adjusted to people with visual impairments.

The starboard markers are green and have a cone-shaped topmark or buoy.

A fork of the sailing channel is marked by a buoy with a sphere marked with red and yellow stripes.

Cardinal marks – these are marks used to indicate dangers:

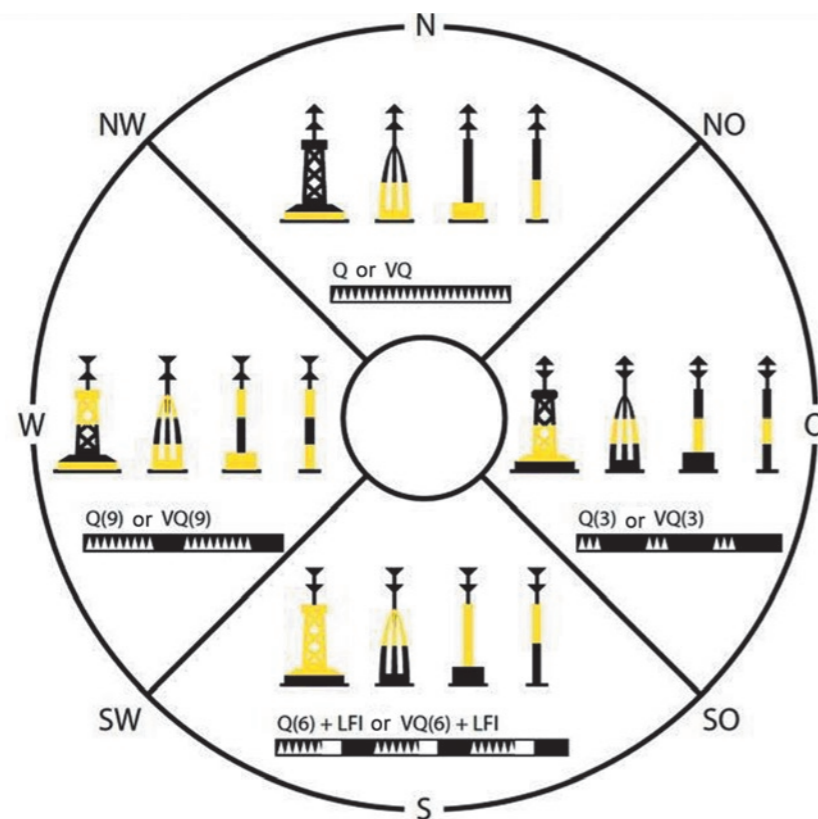
North cardinal mark – a column shaped buoy or marker that has yellow on the bottom and black at the top. It has two black cones pointing up.

South cardinal mark – a column shaped buoy or marker that has yellow at the base and black at the top. It has two cones pointing down.

East cardinal mark – a column-shaped buoy or marker that is black with a single yellow strip in the middle. It has two cones pointing away from each other.

West cardinal mark – a column-shaped buoy or marker that is yellow with a single black strip in the middle. It has two cones point to point.

Navigation rules – in relation with the ever growing traffic on waters and in order to prevent accidents, a number of navigation rules were developed for the sailors to observe when on collision courses:



- A vessel on the port tack should give way to a vessel on the starboard tack.
- A windward vessel should give way to a leeward vessel.
- A vessel which is overtaking another vessel must keep well clear of the vessel being overtaken.
- A power vessel gives way to a sailing vessel.
- When two power vessels meet head on, each must alter course to starboard.

Fig. 5. Cardinal marks

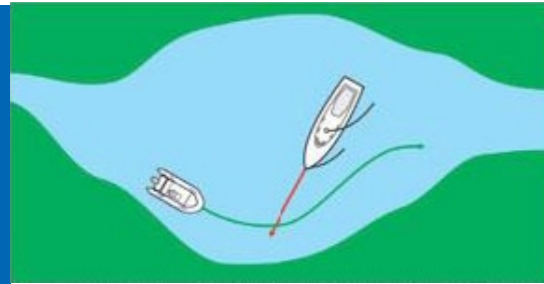


Fig. 1 The vessel on the starboard side of the channel should maintain her speed and course



Fig. 6 We are on the starboard tack - we should stand on



Fig. 2 We must give way, the other yacht is on our starboard side.



Fig. 7 We are both on the port tack, the other yacht is leeward - we must give way



Fig. 3 We stand on, the other yacht is on our port side



Fig. 8 It is difficult to see what tack the other yacht is on. We assume it is on the starboard tack - we must give way



Fig. 4 It is a head-on situation, we must both change course to starboard.

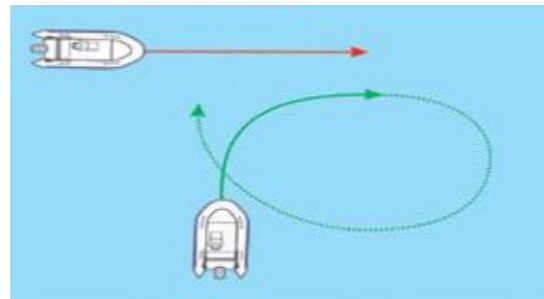


Fig. 8 A collision avoidance manoeuvre in a situation when we stand on. On the example of a power yacht

2. CANOEING

Waters are not only for sailing but also other water sports adjusted to the individual needs of water physical recreation fans.

A canoe is a small boat propelled by means of a hand-held double-bladed paddle

that is not supported by any devices connecting it to the boat (unlike in a rowing boat). The paddlers face the travel direction. Currently, there is a huge variety of canoes featuring different hull shapes and manufacturing technologies.



To practise canoeing, you must have a paddle, a personal flotation device (i.e. a life vest) and appropriate clothes. In Poland, most popular are two-piece polyethylene and aluminium paddles designed for two-person canoes. Their blades are relatively soft and are made from plastic. The personal safety is guaranteed by life jackets. According to the safety rules, they are a basic equipment each paddler should have. Certified PFDs have specified buoyancy and weight limits. When selecting the flotation aids, the body weight

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must be taken into consideration. The vest should be snug and allow the canoeist to move freely. At the same time, it should not be possible to take off the vest without opening the buckles.

The most important element in the equipment adjustment is the paddle position orientation. During paddling and other manoeuvres on water, the paddle position changes frequently. Similarly, the hand – in particular the forearm – position may also change. The oval pole allows a good positioning and proper blade orientation. Reflecting or contrastive colours on the hollow side of the blade allow partially sighted canoeists to keep the paddles correctly. Modern technology paddles are usually designed and manufactured so that the shaft is oval at least under one hand. This is a huge advantage for the blind.

In case of most common paddles with oval shafts, a piece of material with distinctive structure (e.g. a tape) can be attached to help indicate the proper paddle blade orientation.

Stages of teaching canoeing to the blind and partially sighted

When still onshore, the instructor must discuss the construction of the canoe and related accessories as well as the way of how to enter the water correctly. It is advisable that a few simple exercises should be made before getting into the canoe in order to gain some practice. Particular exercises should be done very carefully with each individual course participant. In this way, everyone will feel appreciated.

We recommend that during the first few canoeing practices, the visually impaired person should sit in the front and an experienced canoeist in the back. In this the latter will be able to steer the canoe and adjust the paddling pace to the rhythm of the former. Such sitting arrangement during the first few instances will facilitate the

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course participants to learn how to paddle, steer and behave when in the canoe. The seats can be changed only in a situation when the visually impaired person is able to manoeuvre by the ear and the person in the front can react in case of emergency to protect the canoe against any accident (collision, obstacle).

Sample exercises



Source: *Katarzyna Adamek How to Adopt Canoeing Practice to the Needs of People with Movement Impairments*

1. Use of canoe paddles – an exercise with the instructor standing behind or in front of the course participant. The instructor holds the paddle and works with it together with the blind person.

2. Balancing – you may get into the canoe only when it is on water. A blind person should first accurately verify the position of the canoe. The instructor secures and assists, but only when it is absolutely necessary.

3. Canoe manoeuvring – A blind person should start paddling exercises on water from getting the feeling of the paddle and the canoe rather than focusing on travelling in a specific direction. Only when this is mastered can the canoe manoeuvring exercises commence. In this case, the instructor can provide verbal feedback to help correct any possible errors, saying, for example, that more force should be exercised with one hand or that the paddling pace should be changed.

Projekt

May I help you - sport animator for blind people.

2014-2-PL01-KA205-013229



Project Partners:

- 1. Polski Związek Niewidomych, Okręg Opolski**
Polish Blind Association
ul. Kościuszki 25/1 / Opole / Polska



- 2. Federazione Nazionale Associazione Scuole di Danza**
Federation National Association of Schools of Dance
Ravenna / Włochy / www.fnasd.it



- 3. ENGELSİZ TOPLUM OLUSTURMA DERNEĞİ**
The foundation of barrier free society
Ankara / Turcja / www.etod.org.tr

Duration of the project: 01.02.2015-01.06.2016.

The project purpose was to prepare a group of young people – social sport animators – who would have qualifications to organise sports and recreational events for the blind.

Owing to the participation in the project, 24 young people familiarized with the specificity of work with blind people and will now be able to assist organisations supporting the blind in their work.

A group of 24 young people from Poland, Turkey and Italy took part in the project. Amongst them, there were persons who are blind, partially sighted and sighted.

The participants got to know the principles of safe organisation of canoeing, sailing, dancing and movement recreation events as well as indoor sports for the blind.



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