

A blind child in my classroom Methods of teaching

A handbook for Primary Teachers (Summary)

A blind child in my classroom: A Handbook for Primary Teachers (Summary)

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Approaches to Teaching

Are there any special teaching methods which I should use with the blind student in my classroom?

There are some teaching methods which you will use more often. They are not exclusive to blind students but rather, they are an adaptation of well established teaching methods, most of which you would have used before with sighted students in one form or another.

I have heard from many teachers that a blind student in the classroom has brought a heightening of awareness of teaching methodology and this has meant a more enriched program for the other students.

When instructing the blind student you may find yourself employing the following general methods:

Allowing more time for "hands-on experience"

Sighted children have a visual image related to many of the words they use and the new concepts they encounter, so whenever possible blind children need to be able to touch and hold what is being spoken about. Lessons about ducklings and worms will be made more meaningful if he can hold the real thing. Learning about mud pies, painting fences and growing vegetables can be better understood through the experience itself. In some subjects like mathematics you will notice that you will use more concrete materials with your blind student in establishing computational and applied number skills. During "Show and Tell" and Natural Science activities you will need to allow the student to handle all of the objects being discussed.

Allow more opportunity for symbolic understanding

Much of what a blind student hears about, is not able to be held to be understood (a mountain, a giraffe, a bubble, a country, a river), so his understanding is aided by symbolic representations. This may be in the form of models (aeroplanes, animals, cars. trains); dolls (body parts and body movement); sand trays (mountains, rivers, roads, forests); thermoform raised-line drawings, stereo-copies, scrap materials (tactile drawings, diagrams, maps and graphs); blocks and shapes (mathematical and geometric understanding); toys, old clothes, boxes (representational and socio-dramatic play). Symbolic representation will allow the blind student to better understand appearance, function, size and scale of objects.

Do not assume that two dimensional representations of an object or an illustration via thermoforming, stereo-copying or scrap materials can always give the blind student clear understanding of three dimensional form. Tactile imagery, if there is such a thing, is not a replacement for visual imagery and blind students need to be trained in the area of tactile interpretation.

Complexity of representation increases the degree of difficulty of interpretation through touch. You will notice that graphs, bar lines and simple shapes are initially easier for the child to interpret than tactile representations of illustrations of people, animals and objects

Allow more opportunity for verbal understanding

Much of what blind students learn is acquired through listening, so adults need to ensure that the language they use is as relevant to them as possible. When describing objects or concepts to the blind student try to use language that will build on his knowledge. Use questions to discover how much he knows about a subject already. Use more descriptive words than usual; try to give impressions of comparative size and scale; talk about function and relate the new objects or concepts to the student's own experience: Do you have one at home? Have you ever done this?

If the student asks you the meaning of a word, give the "group" name before the description. For example if you are asked the meaning of "exasperated", begin. "It's a feeling...."; and then continue. Similarly, "What's a yak?" - "It's an animal"; "What's a hexagon?" - "It's a shape" and so on.

When sound cues alone do not provide the blind child with an understanding of what you are doing, describe your own activity but in a way that is as informal as possible. For example: "I think I'll water the pot plant - now where did I put the watering can?" is much more natural than, "I'm over by the pot plant watering it with a watering can!" and conveys exactly the same kind of information. Basically, you are thinking aloud, and imparting information through language modelling, rather than instruction: "I think I'll mix some play dough. Now how much flour will I need for a big batch? Maybe I'll use six cupful!"

When you are writing on the blackboard speak as you do so, this will provide an auditory message to the blind student which will help compensate for the visual message available to the sighted students. Some of the sighted students may, in fact, also benefit when you read or spell aloud the words you are writing. It may be easier for the blind student to comprehend longer sentences if you say the whole sentence after you have written it rather than as you write it. Similarly, longer words can be spelt after they have been written to provide a more useful auditory pattern.

Describe group activities, classroom incidents or unexplained sounds so that the blind students will grasp what is happening. Competitive games for the blind student may merely be the sound of his classmates cheering, so provide a "race call" to keep him aware of the state of the game as it occurs.

You may also need to question the blind student more thoroughly than your other students, as it is possible that his oral language may not always be related to his experience. You will notice, that the words used by young blind children may not always be a reflection of true understanding, but merely a repetition of the language of others.

You may also use the following more specific methods

Task Analysis

Break down new tasks into separate steps and teach the student in that order. Some steps will be able to be managed without help, but he will need more help with others because of his blindness, for example, he will easily be able to remove the brush from a paste pot, but will have more difficulty with those steps involving cutting and pasting. It

may also be helpful to have him self-verbalize the steps of a task, before or as he attempts each step of a task.

Reverse Chaining

With some fine motor activities it may be useful to assist with every step initially, then leave the student to do the last step independently; then the last two steps, three steps and so on until the task is completed without help.

Showing the finished product of what you want to be achieved may be helpful in this regard. Show a completed puzzle or construction toy model, then remove and replace an increasing number of its components until the student can do it alone. The alternative is to use a "trial and error" approach by laying out all of the different elements of a puzzle and asking the student to assemble them. This is a more creative approach to learning, but it may be more difficult for many blind students who do not have a prior visual image of the intended result.

Using the same approach, it may be easier to teach the reverse of a skill before the skill itself. Generally it is easier to undo, unfasten, unzip, unfold, unscrew, and "knock over" than it is to do, fasten, zip, fold, screw, and build.

Direction Giving

Because the blind student does not have a visual image of the task, you need to give an overview of what is to be achieved before commencing the task and then give verbal directions and prompts as the task is undertaken. If the overview is not given the blind student will proceed through the stages without really having an understanding of the end result. An example, for an overview could be, "This morning we're going to do some fraction work and we'll be dividing some objects into quarters - we'll be folding paper, breaking a block of chocolate and cutting an orange into quarters and then doing some drawings and ruling lines on the raised line drawing board."

Similarly, if a student asks the whereabouts of an object, don't direct him to it in the following fragmented way: "Stand up, take three paces forward, turn right, take three more paces forward, feel on the bottom shelf." Rather, tell him where it is and then offer verbal assistance only if necessary: It's on the bottom shelf of the cupboard, under the right hand corner of the blackboard".

In lessons when you are demonstrating a new technique to the class, for example, how to tear up small pieces of paper, how to fold, how to paste or how to use a stapler, use the blind student as a model. This can be particularly helpful in physical education lessons when demonstrating a movement. By standing behind him, and moving with him the blind student will feel the action of your body, and will hopefully be able to attempt it himself when the other children do, without requiring a separate lesson by himself.

In physical education lessons, too, when a visual demonstration to the class will have no meaning to the blind child, break down the action into component parts and verbally describe each movement as you do so. For example, "We're now going to learn how to do star jumps: everybody jumping on the spot... now legs apart then legs together (repeat); now arms and legs apart, arms and legs together".

When giving directions from the front of a physical education class, directions like "Move that way", and "Run over there" will be meaningless. "Move to the right", "Run to your left", will be more helpful. It may take some practice in adjusting to the fact that your right direction is the student's left. Laterality knowledge is very important to blind students for both gross and fine motor tasks and orientation and mobility, and they can be introduced to this concept earlier than sighted students, even during their pre-school years.

Stabilise and Confine the Activity

Blind students will have more control over materials in their working space if the materials are confined in some way, especially in activities which include a number of objects, for example, in a mathematics lesson which uses a range of counters; an art lesson in which a range of adhesives, scrap materials and tools are used; a word study lesson which has a number of brailled words and sentences on "Braille-on" or magnetised strips. Trays of varying sizes with small lips help to confine the activity and stop objects from spilling or rolling out of arms reach. Many visiting teachers have found metal scone trays ideal for this purpose - they are also useful for magnetised materials.

To further control work materials, "anchor" them in some way to prevent slipping and to stabilise the difficult elements of some tasks. Non-slip mats, masking tape, cloth tape and adhesive gums, can be helpful, especially for unwieldy objects like staplers and bowls.

Cutting can initially be a difficult task for blind children to manage because of the difficulty of controlling the paper being cut. Stabilise one end of a strip of paper by attaching it with blue-tac to the left side of the desk (if the student is right handed). This leaves the student free to grasp the left side of the paper with his left hand and to cut the now firm piece of paper with his right.

Use "firm" versions of a material before using a softer, less manageable one. For example, use pipe cleaners, straws or cane for threading, before using wools, shoelaces or string. Similarly use card rather than paper when teaching folding for the first time; sew on card before fabric; spread butter on toast before advancing to bread.

Body Reference

When teaching new concepts, the student's own body may provide an initial point of reference before generalising the concept through concrete objects, representational or written form. In this way the student can find the "centre" of the palm of his hand or his forehead before locating the "centre" of a page, a tabletop or a tray. By moving his arms, or having them moved co-actively, he may begin to understand the important concept of "parallel" and "right angle".

In leading the blind student to an understanding of comparative height, length, width and scale, use his body as a reference: "Can you feel the top of the chair, it's the same height as your waist?"; "I think the ladder is three times longer than you are, let's find out if I'm right!" Hand gestures to describe width or length of objects are obviously of no help to blind students, so a co-active movement on the top of the student's desk may give some indication. For shorter lengths, some teachers trace their finger on the students back and say "It's this long". Similarly, the touch of a pencil point in the palm of the student's hand may indicate, "It's this tiny".

After acquiring basic body image it can take longer for blind students to relate that knowledge to the bodies of others. After "Where's your nose?" comes "Where's Mummy's nose, dolly's nose and the nose of the tactile drawing?" To check that more advanced body concepts like laterality are understood you may need to give directions like "Put your left hand on your partners right shoulder" or "Put the pencil in the container on my left".

Directed body movement can, of course, be used to explain more basic concepts like "through", "under", and "between". More difficult concepts like "expand", ricochet", "deflate", "topple", can also be acted out. The student's movement of his own body will help him understand the nature of the concept.

Some blind children have some difficulty in responding to directions which require them to position their body parts in space, especially whilst standing. (Hold one arm out straight from your body and the other on an angle and pointing upwards). These students may gain a clearer idea of body positions if they attempt them whilst lying on the floor. In this way, the floor provides a tactile reference and removes the element of spatiality which may be causing the difficulty.

Some fine motor movements may need to be preceded by a larger or gross motor version of the same activity. For example, if a student is having difficulty in drawing straight lines with a pencil he may need to practice drawing straight lines in sand with a stick; if he is not managing using a spoon to measure sugar, he may not have mastered using a toy shovel in a sand pit for the same purpose. If he cannot use a small paste brush, he may first need to acquire the skill of a broader paintbrush on a larger piece of paper.