Multisensory Work
Interdisciplinary approach to multisensory methods

Marja Sirkkola, Päivi Veikkola & Tuomas Ala-Opas (eds.)
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Local definitions and developmental projects
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Thanks to our international teachers: lecturer in occupational therapy, Chia Swee from University of East Anglia, UK, Special teacher Suzanne Little from Meldreth Manor School in Cambridge, UK, occupational therapist, Anders Ekmark from Rehabilitation Center Upplevelsen, in Sweden, and lecturers DSc. Jukka Jokiniemi, psycho- and family therapist, Marco Kärkkäinen, Professor Marion Ellwanger and MA student Marie Ledendal, from the Swedish School of Textiles – University College of Borås.

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Finally, we would like to acknowledge the hard work and efforts our students made during this process of specialization studies. Especially we are proud of their enthusiasm to express their ideas in another language than their mother tongues (Finnish, Swedish and Spanish). Lecturer Tuija Juvanen made an extraordinary job by proof reading the students' posters and handout texts for ISNA's Workshop.

Hämeenlinna, 28th November, 2008

Marja Sirkkola, Tuomas Ala-Opas & Päivi Veikkola
Introduction to Multisensory Work


text:

Interdisciplinary approach to multisensory work

Multisensory work is an umbrella term that derives from and applies recognized mediums like Snoezelen (Hulsegge & Verhuel 1987), Multisensory Environment (Pagliano 1999) and Sensory Integration (Ayres 1972). These mediums are often combined with creative methods and therapies like music, aroma, gardening, and body awareness therapies.

Publication ‘Interdisciplinary approaches to multisensory work - Local definitions and developmental projects’ includes eleven articles, which describe the aims, theoretical backgrounds, processes, and results of local developmental projects of multisensory work. These projects were conducted during the Multisensory Work - professional specializing studies at HAMK University of applied sciences, Hämeenlinna, Finland.

The international specialization studies’ students had different professional backgrounds and came from three countries. One student came from Spain, four students from Sweden, and eleven students were from different parts of Finland. Teachers of the specialization studies had different professional backgrounds and were from Great Britain, Germany, Sweden and Finland. The study had four modules which were held at various locations (Finland, Sweden, and Germany). Specialization studies used an e-learning platform Moodle and small local group meetings to facilitate dialogue and share information between teachers and study groups.

Multisensory Work professional specialization studies, 30 ECTS (European Credit Transfer System), were divided into four modules. Moodle, a learning platform, was used to support dialogues, to give information and to offer discussion forums for assignments. However, emails and telephone calls and small group meetings were arranged when needed.

The first module was held at HAMK, Hämeenlinna, Finland: Module began with an introduction to studies and to the learning platform Moodle.
This module included lectures about evidence based practices (EBP) in multisensory work and a seminar: ‘Sensitive design in multisensory environments’. Seminar had two lectures and discussion sessions. First session was held by Dr. Sc. Jukka Jokiniemi on the ‘City for All Senses – Accessibility and Cross-Modality in the Built Environment’ (Jokiniemi 2007). The second session was held by family and psychotherapist Marco Kärkkäinen who lectured about ‘The effects of sound based vibration treatment on the human mind and body The Physioacoustic Method’ (Karkkainen& Mitsui 2006). The first module included excursions to multisensory environments in Finland: Majakka in Hämeenlinna, Riistavuori, Sesam, and Kunnon Huone in Helsinki area.

The second module was an excursion in Sweden and it included study sessions in multisensory environments. Excursion started with a visit to multisensory center Lagunen & Korallen and PUFFA-training center in Stockholm. In these study sessions, local professionals presented their work in these locations. Secondly, excursion included a visit to multisensory center Upplevelsen in Örebro. First study session in Örebro was held by occupational therapist Anders Ekmark on ‘The treatment process in multisensory environment’ (Anderson & Ekmark 2005). Second study session in Örebro was held by professor Marion Ellwanger on ‘Introduction to smart textiles in multisensory environments’(Ellwanger 2007) and M.A student Marie Ledandal from University college of Borås made presentation about ‘Focusing on interior textiles for hospital environments’.

The third module was held in the International Snoezelen Association’s (ISNA’s) 6th Symposium in Neuwied, Germany, with the international lecturers and participants from forty-two countries. The professional specialization students held their presentations of their developmental projects in the workshop ‘Multiprofessional Snoezelen teams – local definitions and developmental work’ which included an workshop introduction, four PowerPoint presentations and an interactive poster session.

The fourth module was held in HAMK, Hämeenlinna, Finland, which consisted of conclusive seminar on ‘Multisensory Work’ with lectures by Suzanne Little from Great Britain, presenting ‘Multidisciplinary assessment work at Meldreth Manor School’ and presentation of the articles of local developmental projects to HAMK’s students and co-operators. The publication of articles was the last assignment for the whole team: students & Finnish and international advisors.

Students represented several professions and disciplines: education, art, social and health care. Therefore, the concepts of multiprofessional and interdisciplinary teams are central to our studies on multisensory work. One of the aims of the study was to give space for different professions and disciplines; to support their awareness of other disciplines and to encourage them to work together.

Multidisciplinary backgrounds of students and teachers can be seen in the multiple styles of writing as well as in the forms and contents of the articles.
For example, the reference lists are written in several ways. The articles are not edited into one form, because it is important to appreciate the various disciplines’ traditions on writing reports. Furthermore, it is important to note that all the students were writing in their second or third language and prepared their poster and handouts for the ISNA’s Symposium before writing these articles.

The student developmental projects of the Multisensory Work - professional specialization studies can be introduced under four topics:

1. Innovative wellness technologies

Speech therapist Jaakko Salonen has developed an interactive multisensory soundroom with Soundbeam equipment and other technical devices in Killinmäki, a residential care unit of Helsinki. In the article, he focuses on cause and effect of sounds and visual stimulation for clients with profound and multiple disabilities. His developmental project includes a small interview for staff members about challenges in the use of the interactive multisensory room.

Satu Selvinen, physiotherapist and rehabilitation co-ordinator, explains the importance of sensory processing and introduces some commercial multisensory games. For her project, she has designed a multisensory Valogame, which shows up the possibilities of the multisensory games in rehabilitation.

Physiotherapists Irma-Liisa Heiskanen and Sinikka Tamminen produced a developmental project called ‘Experience Walk’. This innovative project offers opportunities to promote facilitation and joy in the physical rehabilitation by using multimedia to activate children and adolescents in their physical training.

2. Multisensory environment design

Sari Hedman, a designer and artist, offers insights about the aesthetics in the multisensory environments for elderly. She explores what the elderly (with dementia) want to experience in these environments. In the article, she points out the importance of accessible art and visual and tactile contrasts in colors and equipments’ surfaces. She is designing a multisensory environment for elderly in a service center of Kontula, Helsinki.

Katariina Mehtonen is involved in planning multisensory environments to Virvelinranta, a new activity day center for individuals with profound and multiple disabilities. At Virvelinranta the staff members need to have a special focus on challenging behaviors, since several clients have symptoms of autistic spectrum disorders. Interdisciplinary planning and client participation are the keywords in this project.

Physiotherapist Filomena Martorell from Barcelona, Spain is planning multisensory environments to her future facilities. This project is still de-
veloping, since the national depression in construction work stopped also her project work. So far there are only a few multisensory environments in Spain and Filomena Martorell is educating herself to become a pioneer in Spain on this field.

3. Curriculum development

Vocational college teacher, Eeva Hallikas from Tavastia vocational college in Hämeenlinna, developed curriculum for the practical nurses concerning snoezelen, multisensory environments and multisensory work. In her project, the person centered planning (PCP) was introduced to students as a tool to improve the aims and practices in MSEs. The role of facilitators is important in this model.

Reetta Kauppi, an advisor at a vocational special school Perttula, used empowering photography with her students. The aim of her project was to increase interaction in outdoor activities and to teach basics of photographing and being a model for others. The exhibition of these photos was opened at HAMK during the last module of the specialization studies.

4. Local definitions and theoretical background of practical multisensory work

Birgitta Råstander Eva Rodziewicz, Ann-Sofie Friman, and Tina Modh, who work as occupational therapists and pedagogues at Lagunen Stockholm, Sweden. They produced a theoretical background for their practical multisensory work. They interviewed clients with their enablers and used qualitative content analysis to find their results to the question: What is a good moment at Lagunen?

Occupational therapists Joanna Holmlund and Matilda Friberg are working for FDUV, which is the Swedish-speaking association for the care of persons with intellectual disability. Their project work focuses on developing a theoretical background for their work, and it was included in to the DVD film ‘Calm and fun’.

Terhi Nehad, senior activity coordinator from Riistavuori service center for elderly people, wrote about Finnish sauna, a sociocultural multisensory environment. She focused on describing the multisensory experiences connected to old traditions of bathing. For elderly and their wellbeing, a sauna environment is an important weekly activity, which eases pain, relaxes and gives pleasure for them.

References:


Presenters workshop at ISNA 2008

Photo by Paul Pagliano
Marja Sirkkola, Päivi Veikkola & Tuomas Ala-Opas

Professional specialization studies in Multisensory Work

HAMK University of Applied sciences is an international and multidisciplinary institution of higher education in Finland that delivers professional education and is engaged in research and development (www.hamk.fi).

Multisensory Work

Multisensory work (Sirkkola, & Veikkola & Pagliano, 2007) is an umbrella term, which derives from recognized multisensory working methods like; sensory integration (Ayres, 1972), snoezelen (Hulsegge & Verheul, 1986/1987), multisensory environments (Pagliano (1999), and less known approaches like; space experience and body expressions (Sirkkola & Veikkola, 2007; 2008), and combine these with creative therapies like: gardening, music, aroma, dance, drama, photography.


The sociocultural approach to multisensory work appreciates the value of interdisciplinary teamwork in which disciplines share their own views and create common aims to work together. Therefore, it is important that various professionals from different disciplines define their own local multisensory work.

International professional specialization studies

Since 2001 there has been three professional specialization studies concerning multisensory work in Finnish. The international professional specialization studies in Multisensory Work (2008) was the first study arranged in English. There were sixteen students from various countries (one student from Spain, four from Sweden, and eleven from various cities in
Finland). The specialization studies were organized by the degree program of social services, which is part of the research and development center for Wellbeing at HAMK, University of applied sciences in Hämeenlinna, Finland. These studies took one year and had four modules, which took 2-3 days. Studies included dialogues, discussion forums, and small assignments.

Study provided thirty points of European credit transfer system (ECTS) after finishing developmental project, which formed a core of learning process during the studies. Eleven of sixteen students participated to the ISNA’s 6th World Symposium in Neuwied, Germany. Students introduced their developmental projects together with small presentations and a poster session in a workshop called ‘Multiprofessional Snoezelen teams – local definitions and developmental work’ (ISNA 2008).

The aims of the professional specialization studies of MSW were: (a) to gain a deeper and wider understanding of Multisensory Work (MSW), (b) to learn and use participatory developmental research methods, (c) to implement a local project and present the results in workshop and publication. (Curriculum for professional specialization studies in MSW, 2008)

In all new fields of applied studies, there is a need for more evidence. One of the most urgent developmental goals for the multisensory work is to find appropriate participatory research methods. Both local developmental projects and worldwide interdisciplinary research are needed to accomplish this goal.

References


HAMK University of Applied Sciecnes, Practical solutions in many fields, HAMK Viestintä 2007 retrieved 1011.2008 from http:/portal.hamk.fi/portal/page/portal/HAMKJulkisetDokumentit/In_English/2DFADD4892ACBF5CE04A8C0CA417E96


**Internet addresses**

American Association for Multisensory environments - http://www.aamse.us/


WorldWideSnoezelen - http://www.worldwidesnoezelen.com
Interdisciplinary approaches to multisensory work - Local definitions and developmental projects
Jaakko Salonen

Interactive multisensory sound room - How is the room being used by clients and staff?

Abstract

This article describes the development of an interactive multisensory sound room project for people with profound and multiple disabilities in Killinmäki, a residential care unit of Helsinki in Finland.

Six staff members were asked about their understanding of the use of the interactive multisensory sound room. Results showed that the frequency of the rooms use was low. The room serves its purpose for clients if members of staff know how to use it. One of the main conclusions is that there is a need to develop a personalized guiding system for every user, in addition to the annual two days of in-service education.

Key words: communication, interactive, multisensory, people with profound multiple disabilities, sensory room, Soundbeam, sound processor

Introduction and background

An interactive multisensory sound room is a specially built space where the visitor gets feedback from the sounds he makes. Sounds can be any kind, vocalized or instrumental. But, the feedback is different from the originally produced sound (movements, light or echoing voices)

Sounds are produced through a microphone which leads to a sound processor that changes the quality by for example adding an echo or changing the pitch. The sounds are amplified and reproduced by loudspeakers. The result is a soundscape that sounds as if someone is talking in a cellar or with a voice which resembles a cartoon character. There is no background sounds in the room; the visitor makes the soundscape himself by vocalizing, singing, humming etc.

The experience is likely to encourage visitors to start making sounds, to experiment and play with noises and to vocalize and use his voice. Sound-
Scapes can be funny and entertaining. Soundscape allows a visitor to produce different sounds to get various feedbacks while playing with the equipment.

Interactive multisensory sound room is a learning environment. It uses Montessori pedagogy’s ideas when the pupil actively explores different ways of using selected sensory materials. Learning occurs by playing or experimenting with immediate feedback. In this way of Montessori pedagogy pupils gain internal motivation to explore and learn new things. (Hayes, 1985)

Multisensory feedback is created by visual and auditory effects. Visual feedback is added to auditory stimulus as a cause and effect correlation (when a sound switch on the lights it turns on a fan which then moves a mobile). The room is thus visually responding to sounds.

This is done simply with a sound switch that controls a relay box. It turns on the electricity for visual effects when there is a sound and turns it off when there is no sound. The sound switch is adjusted to keep the electricity on for a few seconds, so that the lights will not switch off instantly.

Tactile feedback is added to auditory and visual feedback to provide more sensory input. Vibrations of the sounds are amplified and produced by a custom made bed with additional loudspeakers underneath the mattresses. There are also drums and percussive instruments and a drum seat to provide tactile feedback.

There should be facilities to develop early sensory and motor skills in interactive multisensory sound room. Jean Piaget describes a child’s intellectual development which includes active interaction with an environment. Early spontaneous reactions of a child start to develop into voluntary actions when the feedback from the environment changes the child’s understanding of the world outside him. By structuring the sensory and motor input a child is learning about himself in a relation to his environment. (Piaget, 1971).

The equipment used in the sound room is easy to use by the staff. It allows a visitor to control the environment by making sounds. It gives multisensory feedback which makes it a suitable environment for people with profound multiple disabilities. In an interactive multisensory sound room, a person with limited skills can control the environment by making something happen with sound and enjoy the feeling of doing it by his own.

Flow experience is something which people describe as a good feeling. Flow happens when something is done intensively, and the person forgets one self and leaves the world behind. In this kind of experience there are four elements: learning new skills, setting up goals, providing feedback and being able to control things. (Csikszentmihalyi, 2002). These elements can be present even when the person has very little skills, in an enabling environment like interactive multisensory sound room and with a sensitive staff member who gives adequate support but allows one to control things.
Sound processor and Soundbeam- device are combined in the same room. Staff education and practice are needed to use Soundbeam. However, Soundbeam is a versatile tool because it allows visitors to create sounds by moving the body positions. “Soundbeam... uses sensor technology to translate body movement into digitally generated sound and image.” (www.soundbeam.co.uk). Soundbeam creates an invisible keyboard in the air. It can be played simply by moving in front of the sensor. This gives various possibilities to give audible feedback for any movement a visitor makes. The multisensory feedback system of the interactive sound room reacts to these sounds as well.

A very similar sound equipment has been used in a method called ‘Sound Therapy’ by Phil Ellis and Liselotte van Leeuwen. In a pilot study in Kuwait Autism Center they described increased vocal responses, repetition of movements, smiles and an eye contacts etc. of severely autistic children when they had a chance to produce extraordinary sounds by themselves. (Ellis & van Leeuwen, 2000). There was no visual or tactile feedback, but they had an experienced therapist who planned and evaluated the intervention.

In a subsequent study Ellis added a dynamic visual feedback to the auditory and tactile feedback in a project called iMUSE. This study was conducted with a group of elderly people, who became happier, less depressed, participated more, etc. The results were very encouraging. (Ellis, 2007).

Quite the opposite results have been reported as well. In a recent Finnish graduate study of individuals with profoundly multiply disabilities, drum sounds with a Soundbeam were produced. A comparison was made with either the sound they made or both the sound and tactile feedback through a Physioacoustic chair. The result showed no difference in activity of these individuals in either ways of feedback. (Pyhäluoto, 2008). This is often the case with people with profound multiple disabilities, and therefore the staff may find it discouraging to take a client into a sensory room and see very little response during the visit. There seems to be very little success in measuring the outcome of the intervention.

Our interactive multisensory sound room was opened in 1999, It was the third sensory room in Killinnmäki after white room and black light room. Today there are several rooms for multisensory purposes, and about one hundred residents in Killinnmäki. Rooms are available for users by self service principle. Naturally, most of our clients use the rooms always with staff members. During the mornings, the rooms are reserved for activities run by instructors for day activities. The rest of the time the rooms are available for the wards to use, except Thursday afternoons which are reserved for visitors.

Because the self service system, we know very little about what actually happens in our multisensory rooms. We have no figures on the use of the
rooms; we do not know the number of visitors or the type of activities arranged by staff.

In this project, I wanted to interview the staff about their ways of using the interactive multisensory sound room with their clients. The clients who use the room are mostly people with profound and multiple disabilities. They are not able to answer the questions themselves. With this developmental project, I hope to get a better picture of the self service use of the special interactive multisensory room. This should give us valuable information on how to educate the staff, and it will hopefully focus the staff’s attention to find out the possibilities that are available in this particular room.

Methods

I asked superiors of the wards to identify users of interactive multisensory sound room so that I can interview the caretakers who visit the room with them. One member of the nursing staff was identified. I interviewed her. I also interviewed other people working with our residents; e.g. therapists or instructors for daily living. Six persons were interviewed altogether. I asked them fourteen questions (in an informal way) and encouraged them to talk anything about the interactive multisensory sound room. The questions were about the regularity of the use of the room, the main reason for using the room, the equipment, and the kind of help in using them, reactions of the client, etc.

Results based on staff member’s interviews

This project showed that there was presently little regular use of interactive multisensory sound room. Caregivers took their clients there occasionally, to explore the reactions of their clients and seek experiences for them. Active therapies were exceptions to this; there were two weekly therapies going on. The exact number of present users was unclear. Although the caregivers pointed out that there are no regular users, they could give some examples of their earlier experiences with clients. Three of the staff had regular use of the room with several of their clients.

A visit could last form 5 to 60 minutes depending on how long the client would be willing to stay in the room. There were one to four clients in the room during the visit. Reason to use the room varied: an activity in a weekly program, a chance to have a time with an individual client with no distractions, a possibility to introduce new activities to a client and observe his reactions. Clients could be active and happy in the room, take turns to sing to a microphone which was fun, aesthetic feel of the room, and more multisensory feedback than e.g. in a music therapy room, where there are too much distracting accessories at hand such as instruments and wires.

The most used equipment was the sound processor, Soundbeam and drum seat. All the respondents had used them. Next popular were instruments (drums, percussions) which were used by five users. Four had used the ball blanket and three had used the sound bed. Two reported using fiber optics
and one played with a hologram. (The hologram was earlier activated by sound but lately it is been constantly lit to increase the atmosphere of the room.)

The need for help was most urgent with the Soundbeam; three of the interviewed staff members would need more guidance. However, three of them felt that, there was no need for help in using the equipment. Two of them wanted to learn how to get good Soundbeam sounds and use them effectively with a client. One said the in-service training last year gave sufficient skills to use the Soundbeam, and one needed guidance with the sound processor.

Clients’ reactions were described as happy and active. There was a lot of smiling and laughter, playing with sounds, attempting to vocalize, interacting by singing and showing interest to grab the offered objects. Sometimes there was a “wow”-effect in the form of a visible expression of face, a gesture, or a still moment that suggested that the client had understood how his actions were affecting the environment. A sense of humor and joy was revealed through play; passive watchers started to observe the others’ activities with an interest. Visual effects were regarded as very important feedback, and for some clients this was the only place they could actively play.

There were many ideas on how to develop the room. Most wanted was a CD player, to get background music for singing and for playing solos on Soundbeam. A guitar was suggested, and a better tactile feedback on Sound bed and more visual feedback was also suggested. There was also a suggestion for switches to produce sounds; e.g. a Paletto.

**Discussion**

There is a need to explain why the nursing staff members do not use the interactive multisensory sound room. It is difficult to leave the ward with one client while the other clients would stay and have to be looked after by one or two nurses. We have a continuous shortage of nursing staff. It is a safety issue for clients not to be left on their own with minimum staff on the ward.

It seems that other explanations have to be considered too. In the interview, three persons needed help with the equipment. These are technical devices which require a user to learn to use, before bringing the client into the room. For a non technical member of staff this may cause distress especially if he/she does not know how to use the equipment which is not used regularly because of lack of practice.

All the respondents described many benefits for clients when using the room e.g. increased level of activity among clients such as, laughing, vocalizing, grasping at offered objects, interacting, observing others activities, playing, singing, etc. It seems that the room serves its purpose as an active sensory environment for clients if members of staff know how to use it.
Interactive multisensory sound room also fits perfectly in Paul Pagliano’s definition of a multisensory environment: “The MSE is for people who experience sensory input difficulties in their everyday surroundings. It is a space where multisensory stimulation is ethically controlled to make it more accessible, pleasant, and meaningful. This makes it a specially designed medium or method of communication.” (Pagliano, 2008).

It is important to realize that communication is in the center of all multisensory work. Some people need special help from other people and a special environment that allows them to communicate in the way they can.

The interviewed staff members would like to make the following recommendations:

1. Offer advice for each client
2. Teach staff on how to operate the equipment
3. Help them to develop a personal guidance for every client using the room

We do not have a system that would provide the staff with adequate skills for using interactive multisensory sound room with their clients. We have started an in-service education for staff, two days once a year. It gives an overall picture of the activities and good practical hints too, but more personalized approach might need to be elaborated.

Multisensory work is still a somehow loose element in our system since it is not a part of multidisciplinary assessment. It is a medium among others when arranging the daily activities. In advisor team we discuss about the possible usefulness of a sensory room for a client, but we suggest only the staff to go and test the room with a client. Instead, we should guide the staff how to use the room with each particular client.

These pilot interviews indicate that we need to get more feedback from the staff, to understand how the activities should be developed in the future to make them accessible for larger group of users than today.

References


http://www.soundbeam.co.uk
Satu Selvinen

The use of multisensory games as support for rehabilitation

The importance of sensory information

Sensory information is important for the development of the central nervous system in order to enable moving and learning and adaptation to the surrounding world.

Sensory processes and their contribution are essential in creating functional representations of the body, called body schemes. These are needed for movement control, to develop a concept of self and for feeling of body ownership, also called body awareness (1). It is well known that disorders in processing of sensory information disturb the development of functional body schemes (2). The ability of linking sensory information with motor activity is the foundation of posture control (3).

A healthy child is generally able to influence his environment by means of his own actions, thus securing his learning and development in a natural way. Children with special needs have often sensory and perceptual deficits. These deficits inhibit the child from exploring the environment in the same way as a healthy child, and this can result in abnormal body schemes, poor self-concept and poor body awareness (4).

Everyday information is multisensory, and the brain needs to process it to be able to utilize it. A good example of a multisensory integration is sitting in a train, while another train from the neighboring rail starts moving. The first to react is our visual system, which sends a message that the picture in our visual field is moving. This generates the interpretation that we have started moving ourselves. When the vestibular system starts contributing and the vestibular organ in the inner ear reports that there is no change in the motor state of the head, we realize that it is not we, but the next train, which is moving. Our visual system is not able to interpret on its own, whether we are moving ourselves, or whether it is the background, which is moving. For this judgement, we also need the information from the vestibular system. Controlling the upright position is another example of a task, which requires multisensory integration. Here, the information from our
somatosensory system, mediated by the sensory receptors of the foot soles on one hand, and via the proprioceptors of muscles, tendons, and joints on the other, is more relevant than the visual or vestibular information (5).

There is an integral connection between sensory information, perception, and motor activities. Moving generates new perceptions, and new perceptions activate further movements.

**Multisensory environments**

Multisensory work enables a person to receive, interpret, and integrate stimuli to be able to interact with the environment and other persons. In an especially designed multisensory environment the stimulation can be controlled, intensified or reduced (6). The rooms are designed and equipped according to the needs of the users, utilizing modern technologies.

The Chance for the Child Organization has created a multisensory fitness room for children with special needs. It is called Kunnon Huone, and it is situated in Helsinki, Finland. More than one hundred children every week take part in the activity groups of the fitness room. These activity groups are open for all children; at present some of the children have limited mobility due to Cerebral Palsy (CP) and some children are within the autism spectrum. The fitness room offers a motivating environment for activities and versatile equipment for rehabilitation and learning. I work as rehabilitation coordinator of the organization, and the project work of my study has been to create a new piece of equipment or training device for our fitness room.

**Multisensory games**

Most of the commercial multisensory games are designed for a computer or a Playstation. They are also called multimodal or interactive games, exergames or augmented toys.

According to a Finnish study, 69% of the boys and 20% of the girls between 13 and 18 years of age, are playing these games daily (7). In special groups, these percentages can be even higher. Autistic children, for example, are fascinated by the visual world of the PC. When computer games are a part of the daily life of children, we should also develop their utilization in the rehabilitation.

As video-game playing has become an everyday activity into today’s society, it is worth considering its potential consequences on perceptual and motor skills. Playing high-action video games for about an hour a day can help improve vision, according to a University of Rochester study. The improvement was seen both in the part of visual field where video game players typically play, but also beyond; the part of your vision beyond the monitor. The students’ vision improved in the center and at the periphery where they had not been “trained”. When people play action games, they’re changing the brain’s pathway responsible for visual processing. These games push the human visual system to the limits, and the brain adapts to it. That learning
carries over into other activities and possibly everyday life. (8)

Some commercial multisensory games also train motor abilities. The Wii is a video game console made by Nintendo. The Wii uses a controller, called the Wii Remote, which can be held with just one hand, and uses technology that senses the player’s movements; with Wii you can play games like golf or tennis. EyeToy is an accessory device with a camera and a microphone, aimed for PlayStation 2. The camera is filming the player and mediates his picture to the device. The game is controlled by movements - by playing an “air guitar,” washing windows or playing football. In the EyeToy Kinetic game player can exercise according to the guidance of the instructors on the screen. Like many other commercial games, these games as such are not suitable for children with special needs, as they require quick reactions and are visually demanding. They are also lacking important kinaesthetic feedback; for instance boxing does not cause any physical sensations in the body.

Dance games are excellent multisensory games, in which motor abilities are exercised according to visual and auditive stimuli. The commercial dance games are, however, rhythmically too rapid for children with special needs. The Finnish Science Center Heureka will open in February 2009 a “Move and Play” exhibition, where, among others, a dance mat for wheelchairs is going to be tested. There will also be other multisensory games, which are suitable for children with special needs.

The Finnish company Lappset has combined the latest technologies with traditional play elements and created an adaptive teaching aid with limitless possibilities. Their SmartUs playground takes computers to the outdoors and creates an interactive play experience. According to the concept of playground, people with all abilities can come together and share in the joy of learning and activity while children are both active participants and content designers.

Computer games can also be integrated to rehabilitation. A good example is the “Pelaa liikkeellä” (Play by movements) game, developed by Finnish company Tietovipu. It is controlled by a balance board, which acts as a mouse. The upright position and change of weight from one side to other in this game, can be trained almost unnoticed, while playing the interesting game.
VALO - a multisensory game

My multisensory work project has been to design a multisensory game called Valo, which is the Finnish word for light.

The Valo-game is made for children with special needs, but it can also be used with adults and elderly people. It is designed for the needs of rehabilitation and education and to improve sensory, motor and cognitive processing. The sensory goals are to improve visual, auditory, tactile and proprioceptive processing. Motor goals are to improve postural control, e.g., standing, reaching, and kneeling, hand-eye coordination, focusing and crossing the midline. Cognitive goals are to improve attention, e.g., alertness, orienting and executive functions, and to improve memory systems and learning.

The Valo-game is reliable, durable, safe, and simple, and gives immediate feedback, which are guidelines for designing traditional toys. The aim of its design is also to link the principles of integrating computer technology into traditional toys. Technological solutions need to bring some extra value, and the technique used needs to be both discrete and safe in action. The toys need to be durable and safe, and they need to generate immediate feedback. The focus of games and toys should be towards interactivity and user experience: fun, immersion, engagement, physical and mental challenges, emotional stimuli, socializing, and creativity have been identified as primary goals in game design. (9)

In the Valo-game, there can be as many programmes as there are lights. There can be variation in reaction time; the game will wait for the response for as long as it is needed or it can be set for a certain time, e.g. 15 seconds. There are programmes where you turn off the light or where you turn on the light. Lights will go on and off in random order, and even a very light touch activates the light. The lights can also vary in size; big lights can be set on the wall or on the floor, small lights on the table. You can easily change the place and the order of the lights. For a player in a wheelchair, they can be placed on the wall at a reachable distance, and for standing players they can be placed so that they need to squat and stretch when playing.

Examples of the VALO-programmes:

FOLLOW
You touch the light which is on, and it will turn off, and the next light turns on in random

MEMORIZE
The light turns on for 5 seconds, and then turns off. You need to memorize which light was on and touch the same light. When you touch the right light it is lit/it goes on.

NUMBERS
You touch the lights in numeric order 1-2-3-4.
COLOURS
You touch two lights of the same color, e.g., green and green, using both hands.

The technology of the game is based on Kirkoff’s law. The sensor behind the lamp reacts to the capacitive change caused by the human body. The game is controlled by identification circuit and micro processor.

Interactive products can help children with special needs to develop their language and communication skills, providing they are optimally tuned to the individual child. This has great consequences for design, since these kind of interactive products need to be adaptive to the child’s development, possibilities, interests, and needs. (10).

Feedback is very important in games as it increases the motivation to try and to go on with the activity. The feedback in the VALO game can be altered according to the users. It is possible to get visual (colored light), auditory (signal or music) and proprioceptive (vibration) feedback simultaneously or just one at a time. The sensory information provided must be meaningful for the person to be effective. Meaningful activity is accompanied with attention and motivation, which can enable functional plasticity to occur (11).

Neural plasticity refers to structural and functional changes in the brain that is brought about by training and experience (12). Neural plasticity is not only limited into childhood. The brain tissue maintains its’ structural and functional plasticity throughout the human life. The neural cells don’t divide, but the interneural contacts change in relation to cell activity.

Repetition is the condition for all learning, whether we are talking about the function of sensory systems, theoretical learning, behavioral regulations or skills. A good game maintains the attraction for a long period, and training is carried out almost unnoticed. With the help of games, we can achieve a sufficient number of repetitions in order to influence the plasticity of the brain.
REFERENCES


Interdisciplinary approaches to multisensory work - Local definitions and developmental projects
We are two physiotherapists working in Hämeenlinna in a multisensory and physical rehabilitation center. Our clients are children and adolescents with many diagnoses: CP, autism and multiple disabilities. Some of our clients have difficulties with moving, walking, or they have some other physical functional limitations. Many of them have difficulties with learning, with sensory perception and in cognitive development.

Our working place Majakka (Lighthouse) is a multisensory environment which has basic colors and simple shapes especially designed for children. We use equipments to facilitate physical exercises in many ways. In our project, we develop the usage of a treadmill for our clients’ rehabilitation purposes.

It is possible to assist and help our customers to walk on the treadmill, which improves the physical condition and endurance of the client. The problem is that after a few minutes on treadmill the training becomes boring.

To motivate long-distance walking we have created an activating treadmill exercise called “The experience walk”. We created a multisensory environment with visual and auditive effects for the client, who is training.
Our philosophy is that “If you cannot take the walker out to the landscape, you must bring the landscape to the walker.” The experience walk -exercise could help also individuals with severe disabilities, who cannot go outdoors to walk.

We arranged a video screen with a view of landscape and put it in front of the treadmill. Videos were filmed from a moving car or motorcycle in Hämeenlinna area. The view of the landscape changes quickly compared with normal walking speed, and it gives you a sensation of moving forward. Also, the sounds in the landscape are approaching and passing by while moving along on the treadmill. The auditive soundscape includes nature sounds, city sounds, and music.

The tactile aspect of the experience walk consists of different type of materials like stones, moss, cones, and apples. You can touch, smell, and even taste the materials from the natural environment after and before the walking exercise.

A video projector reflects the moving landscape to a big curved screen,
which is in front of the treadmill. The idea is that the walker is in the middle of the landscape. Sometimes during the experience walk we use hoists with individuals with severe disabilities.

Results of the experience walk training have been positive:

1) Children are motivated and able to walk for a longer time than before when we had this fast moving landscape in front of them. 2) The position of the walker is better than earlier. 3) Facial expressions show that the clients are delighted during the walk.

It is important that the therapy is fun and rewarding. However, this is not always measurable. In future we are going to create more moving landscape videos, and other surprises, and exciting multisensory equipments. Our idea is that the children can choose where they like to walk: on snow during winter, or on beaches in summer, or even in castles or in the zoos.

Bibliography of our project

Ala-Opas, T., & Sirkkola M. (eds.). (2006). *Sosiokulttuurinen multisensorinen työ – kokemuksia vammaistyöstä.* (In English: Sociocultural multisensory work – Experiences from disability work). Hämeen Ammat-
Interdisciplinary approaches to multisensory work - Local definitions and developmental projects


Unpublished study materials:

Professional Specialization Studies in MultisensoryWork (HAMK)

Excursions to Upplevelsen in Örebro, Lagunen & Korallen in Stockholm, Sensotek in Vaasa

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Building a multisensory room for elderly care

Background

A new service centre for elderly people will be opened in Kontula suburb in Helsinki at the end of 2009. It will give a homelike residence to 196 individuals. Most of these elderly people have dementia. The service centre offers activities also to those elderly people who still live at home. I have been working as a project coordinator in this project since August 2006. Being interested in multisensory environments I set up a plan to find new viewpoints and ideas to design a multisensory room in elderly and dementia care.

The meaning of getting old is to become well acquainted with your history and aware that your life is unique. This means processing through your past works if you grow old healthy (3). However, statistics tell that round 10% of the 75 – 84 year old elderly have dementia. Dementia encompasses cognitive, emotional and personality disturbances and declines memory related to orientation in time, personal circumstances, environment, events or persons (5).

Colour vision and perception

Ageing causes a gradual decline in physiological performance and this applies to vision, too. Age related changes include decreased visual acuity and retinal illuminance, weaker detection of contrast and colours and increased glare sensitivity. The elderly therefore need more light: it is difficult for them to see properly in dim conditions, whereas excessively bright surfaces cause a blinding glare. (11).

Colour research has made some conclusions and offers general advice about how colours affect people. These conclusions hold true not only for the elderly but for most people of different ages. There is not too much knowledge about how people with dementia experience colours. There are mostly assumptions about their colour perception. (4).
Interdisciplinary approaches to multisensory work - Local definitions and developmental projects

Dr. Helle Wijk and her group from Gothenburg University have examined colour perception, colour naming and recognition among the elderly with and without dementia. The results indicate that Alzheimer’s disease itself does not seem to have a conclusive negative effect on colour perception. It is likely that decreased faculty of seeing colours is caused by general weakening of eyesight. These results provide advice for both staff, designers and architects on how to adapt the environment to the normal sensory physiological changes that occur with aging. (10)

Recommendations regarding design of physical environment for dementia care

Design of the physical environment is increasingly recognized as an important aid in the care of dementia diseases.

Design guides written in 1980 – 90’s recommend to minimize the sensory over stimulation that afflicts many people with dementia (2). Dementia specific interior design in homes for elderly is about accessibility, safety and security. In addition, it is about dignity, privacy and autonomy. Contrasts, light, clarity and colours as a cueing strategy are keys for orientation (1). The environment should be accessible and interesting. Access to nothing makes passive (6).

People who suffer from cognitive disturbances caused by dementia get easily distressed which might lead to behaviour disorders which are a challenge to the personnel (5).

Multisensory work in dementia care is about how to communicate, how to be close, to support, to accept and to cherish senses. It is giving impulses to senses as well and making journeys with the elderly to the stories of their life histories.
Keys for pleasure

Multisensory environments offer a place for communication, relaxation, reminiscence and cherishing senses. It is a step to an active every day life. It is action supported by well designed environment and surroundings.

Are smoothness, music, mood lighting, multi coloured bubble tubes, warmed up waterbed and twinkling optical fibres keys for pleasure? Dr. Patricia Schofield from Sheffield University found out that people with chronic pain relax easier in sensory rooms (12).

How does the multisensory environment affect people with dementia? Does it confuse them? Does it frighten them? What does environment mean to elderly and people with dementia? Researchers advise us to build easy, accessible, plain, clear, light, colorful, homelike interiors.

Individual people have individual needs. To feel safe and secure means a lot. Aesthetic interior, visual, auditory and tactile impulses arouse interest to the surrounding world.

Building a multisensory room in elderly care

The feedback given by the relatives to the staff in elderly care is often about the lack of activities in the wards. Residents who suffer from dementia do not seem to pay any attention to the interior they live in.; it is easy to understand why they do not respond. The homelike ward interiors that are decorated (benevolently) with dozens of tastes, with pastel colours and little ornaments do not give the residents anything interesting or clear enough to look at, to listen to or to touch.

On the other hand if you tear out all the decorations and impulses and make the home stress free it will lead to the same passive atmosphere. A dementia ward in a new Elderly Centre in Central Finland has used the stress free area concept ® (9) in interior design. In dementia ward it means that colours do not irritate, materials are warm, lightning indirect, loud sounds deaden and so fort. Practically it means that walls are painted warm pink
and light yellow, door frames and edges of the floor are wooden, curtains match perfectly to the colour tune and lightning is carefully designed indirect. Nearly all the decorations are lifted so high up that it is impossible to reach for them. This is ‘For safety’s sake!’ Even the personnel melt into the walls with their pastel coloured clothes. Stress free and accessible yes, but boring.

Lack of stimulation on the wards does not arouse interest; access to nothing makes residents passive. Life without sensory stimulation speeds up the decline. Senses stay even if you grow old.

**What would a multisensory room be like?**

Multisensory environments are well known and generally used in environments for people with disabilities. Since the 1980’s sensory stimulation has been gradually used in care for elderly. Excursions abroad proved to us that design represents culture. Multisensory work is beautifully implemented in some countries e.g. In Holland some wards link multisensory work with communication and interaction with demented residents.

Excursions to some sensory rooms in dementia care units gave us inspiration and led us start thinking about this matter. Was the equipment not a bit too childish and even kitsch on some wards in Europe? Some of them looked like kindergartens. Multisensory rooms offered opportunities to play with interactive sound and touch responsive tools. Horse hair and brushes hang in the walls for tactile stimulation, but had been loosened from the context. We thought it was not even aesthetic.

That was not exactly what we thought about sensory rooms. I decided to find out what the elderly want. And what do we (staff members) want?

**Open group discussions with the elderly about their favourite places**

People experience positive feelings and relaxation in their favourite place. It is generally known that water element and green nature surroundings make people happy. (7) Group of 6 elderly women (all of them with Alzheimer diagnose) discussed with a nurse about their favourite places. Main topics were written down word by word.

“I wish I could dip my toes into warm, smooth sand once more!”

“...green grass, smell of meadow flowers, water, fountain, smooth stones to touch, rain drops, sounds of nature, birds ...”

“...music calms me down...”

The outcome was clear: Finnish elderly people long for their childhood and
sensual pleasure that nature has given them: smell of meadow flowers, green grass, water, fountain, shower, no bright colours, smooth stones to touch, sounds out of nature, birds, cosy chair to sit, sofa to lie down. Multisensory room should activate reminiscence, relax and cherish senses.

Interviewing the personnel

Personnel have used the multisensory room (Shangri la) in Riistavuori Elderly centre since 2002 for various purposes. The room is modifiable and multipurpose. It offers a relaxing experience. The atmosphere differs from the ordinary ward atmosphere and cherishes senses. The room is demarcated with white curtains to soften the acoustics. A heated waterbed belongs to the basic sensory room equipment. Old people relax on its swinging lap. A rocking chair is a familiar and safe seat for most Finns. Pillows and blankets lure to touch. You can listen to your favorite music in the room. The sound world includes also silence, babble of water, and singing of birds or murmur of winds. Primitive instruments produce images. The sound of the rain stick can also be felt as movement of seeds inside the trunk. The ocean drum on the lap leads us to a journey. Ribbons of optical fiber glow as the room’s door curtain. Six tall bubble tubes bring extra light into the room. It is nice to watch bubbles running. The starry sky twinkles on the ceiling. Both summer and winter views are reflected on the screen, flowers, berries and fruit, but also views of cities and people and attached sound to them.

I theme interviewed 4 staff members (one from the day care unit for people with dementia, one from dementia ward, one from the short-term-care unit, and one from the day activity centre) from Riistavuori Elderly Centre. The interview was carried out individually in Shangri la, focusing on the meaning of visiting the multisensory room with the elderly. All interviews were tape recorded. I picked out some of the main topics and used them as basic ideas.

The opinions of a relaxing atmosphere, where you get pleasure and positive feelings, do not differ much between thoughts of the elderly and those of the staff members.

“I wish there was a quiet place where you could experience something you had never even dreamt about...the wow!”
“...I would like to see resident relaxed and happy...”

“(Multisensory) Interior is so different from the one up wards that you really get a feeling of something special here.”

“Residents like quite calm effects though...“

“They love the twinkling stars in the ceiling...“

Sensory room is used regularly 4 - 8 times a month for various purposes especially in the long and dark wintertime. The personnel emphasized the importance of going outdoors in the summer time as often as possible.

“In the wintertime I try to visit the multisensory room with clients twice or three times a week. In the summer time we go out to the nature as much as possible. Sun and light is very important to the elderly. It is really empowering. But when it rains outside I often organize activity in Shangri la.”

“Sometimes I come here with only one client, sometimes with a group of even 10 clients. In that case we are two nurses.”

Sensory room is usually used for the group sessions, even if the clients are demented. Lack of nurses, attitude and the (caring) culture does not encourage nurses to take residents to the sensory room in private (yet). Activity lasts about an hour and is depending on client’s feelings and well-being.

“ If you feel like you would like to stay longer it has to be all right. Sometimes you need more time to reflect things, like in Christmas time when old people sometimes feel lonely and want to talk about it and memories. You just cannot stop to the minute.”

Personnel come to offer a resident/client multisensory activity first time quite intuitively.

“I normally choose the residents/clients who I think need some peace and quietness”.

Some residents suggest themselves activity in multi sensory room after visiting it once or twice. When visits are regular, activity in sensory room becomes more target-orientated and is documented carefully.

Activity coordinator in Service Centre visits the sensory room every second week with the literature club. They use to listen to the recorded poems and short stories read by famous Finnish actors.

Personnel that use multisensory room regularly see the benefits of the visits for residents/clients.
“Even a demented person recognizes the room. Hey, I have been here before... Both resident and nurse concentrate here. People become sensitive here. They sometimes are moved to tears here.”

Personnel named some things that prevent visits in Shangri la as well. One the interviewees mentioned that clients who have severe mental problems get easily distressed and feel restless there. She thought that the room might bring the clients too close to their problems and they just cannot relax. Client’s epilepsy prevents the use of light effects because they might be a trigger factor. In any case personnel have to be sensitive enough to read client’s feelings.

Attitude and caring culture are key words in implementing multisensory work in units and the support of management is important.

“Oh some nurses do not think this is any work at all. Personnel can sometimes be really stupid.”

“Attitude of personnel is the biggest hinder. Some of the nurses think that you are just lazy and that it is not work at all to go there with clients. Nurses need an open mind and the right attitude for to try new things.”

“It would be fine if the management encouraged personnel and offered education where they get an opportunity to try multisensory stimulation themselves.”

Staff members who regularly use multisensory room assure how it enriches their work and adds well-being.

“Using this room empowers me! After a relaxing session with esidents I feel like I had a rest my self as well. I think I am lucky to share the experiences here with the elderly.”

“You get immediate feedback here. I call it communication.”

Conclusions

Dr. Paul Pagliano (associate professor of James Cook University’s School of Education in Townsville, Australia) says that a multisensory environment is a powerful way to communicate with people with disabilities. Instead of communicating at an abstract level through language people interact at a concrete level directly through the senses. The multisensory environment is for people who experience sensory input difficulties in their everyday surroundings. It is a space where multisensory stimulation is ethically controlled to make it more accessible, pleasant and meaningful. This makes it a specially designed method of communication. (8)

Multisensory work in dementia care is most of all about communication,
being close, support and acceptance. The Multisensory environment in care for elderly is a place for sensory experiences, reminiscence, pleasurable moments and relaxation. Elderly people love effects that remind them of nature. Starry sky, bubble tubes, pictures of flowers, lakes and sun sets. Music is important for reminiscence. The equipment does not always have to be artificial. We can smell cinnamon or fresh flowers, taste rye or lemon and dip our toes into warm, smooth sand.

Elderly who have dementia do not get confused in multisensory rooms if personnel make interaction safe and secure. A successful session empowers residents, clients and staff members. It is worthwhile to design sensory rooms in elderly care to enrich the lives of demented people and empower both residents and personnel.

Questions to personnel

1. How often do you visit multisensory room with resident/client?
   Do you visit the multisensory room regularly? With how many residents/clients do you visit multisensory room? (group size/ individual)
2. Is the visit written down in resident’s care plan? What kind of aims do the visits have?
3. How do you come to offer the resident/client specially this activity?
4. What kind of activity do you offer a resident/client in multisensory room? How does a resident/client control the activity in a multisensory room?
5. Which things prevent, which support the visit to multisensory room?
6. What do the clients like most, what least in the multisensory room? Comments?
7. What do you think are the benefits of the visit in multisensory room for residents/clients?
8. What do multisensory activities give you? (How does it affect your interest in work?)
References


3. Dunderfelt, Tony: Elämänkaaripsykologia: lapsen kasvusta yksilön henkiseen kehitykseen (WSOY, Porvoo 1997)


7. Korpela K & Hartig T: Restorative Qualities og Favorite Places (Journal of Environmental Psychology 16, 221-233)

8. Pagliano Paul: Lecture MSE definition in ISNA’s 6th International Snoezelen Symposium in Neuwied, Germany 2008

9. Sjöroos Margit: Stress free area ® concept

10. Wijk Helle: Colour Perception in Old Age (Göteborg 2001, Department of Geriatric Medicine Göteborg Univeristy, Sweden)


Katriina Mehtonen

Virvelinranta - A new day activity center for people with severe disabilities

Abstract

In Hämeenlinna in 2010 a new Day Activity Center will be provided for people with severe disabilities. It will be a part of a Resource Center and there will be many co operators. The Day Activity Center is owned by the city of Hämeenlinna, and its main partner is ETEVA (Pääjärvi Institution and Uusimaa Special Services). The Finnish name means in English; Services for people with disabilities in South Finland. There will be a HOTIAT center (support and care for the clients with challenging behavior) in the same building area and we will have common permits with them. Our third main partner is going to be so called third sector - Kehitysvammaisten Tukiliitto (The Finnish association for persons with intellectual disabilities).

Keywords: Day activity center, multisensory work and environment, work with people with severe disabilities, Personal Centered Plans (PCP), premises of Day Activity Center

Introduction

Multisensory work is well known in the Hämeenlinna area. The beginning for local multisensory thinking was a place called Pilvipeili in 1995-2004. It was established by the teachers of the institute of Social- and Healthcare (now divided to HAMK and Tavastia); Marja Sirkkola, Tuulikki Karesvuori, supervisor Virpi Kesti, and their students. In the Pilvipeili visitors such as; people with disabilities, and school children, could enjoy and spend time in multisensory environments. Pilvipeili was a success, but it was closed because of organizational and financial reasons (Sirkkola, 1998). The Day Activity Center is now functioning in an old wooden house, built in 1886, and located in the middle of the city of Hämeenlinna. We have twenty client places and twenty-four clients and six and half facilitators. The clients are adults, aged between 18-60. They come to the Day Activity Center 1-5 times a week, from 8.00 to 16.00 o’clock. Our clients live with their families or in residential houses. We want to create multisensory work and an environ-
Clients in the Day Activity Center are people with profound and multiple disabilities (PMD). They all need a high level of help and support in their daily life. Many of them have communication problems; autistic traits, and they use wheelchairs, or other devices. The Day Activity Center is small, and we have not enough space and resources to meet the needs of all the clients who require meaningful activities. Facilities are not functional enough, even though they are comfortable and colorful. The demands for more space and the need for places for our clients were the reasons why the question about building a new Day Activity Center became activated. In January 2008, a new law reform was given, which guarantees day activities for all people with severe disabilities.

**Background for the project**

During the year, 2006/2007 we started to develop a new idea about building a new house for people with severe disabilities. The first thought was to build a Day Activity Center, but then the need to build a resource center became relevant. At the same time Pääjärvi institution started to plan small living-units and HOTTHAT centers.

Pääjärvi’s joining with UEP (Special Services for Uusimaa) also started simultaneously. An agreement between the City of Hämeenlinna and Pääjärvi was made about building a resource and development center for people with disabilities within the same area. A national center for services for people with disabilities will be constructed in Virvelinranta, Hämeenlinna. The center will offer services of social care for individuals with disabilities and for special education it will offer activities for educational institutions. In addition, it provides facilities for associations, business and research institutes. (www.virvelinranta.fi)
In this article I will describe the aims and the activities provided by the Day Activity Center. I will explain why the Day Activity Center is important to our clients, our thoughts about multisensory work and environment and how we can enrich our client’s life. I will give information about the current plans about new Day Activity Center and staff member’s opinions about multisensory work and environments, which are quite similar to my own.

Discussion

The work with people with profound and multiple disabilities is challenging and interesting. As Supervisors/facilitators we know our clients well and work closely them on a 1-1 interaction basis, which enables us to be sensitive to their needs.

Term Multisensory work and environment are very suitable to describe our work. “Multisensory environment is a dedicated room/space designed to block out noise, control space, temperature, and lighting. It is an artificially created venue that utilizes multi-sensory equipment to stimulate the senses and promote pleasure and/or feelings of well-being,” says Linda Messbauer (WWW-pages). We think similarly, but we also think, that any room can be a multisensory space. What is important is what you do there with your client. The other important definition is from Paul Pagliano. He has said; “Multisensory Environment is a powerful way to communicate with people with profound disabilities. Instead of communication at an abstract level through language, we are trying to communicate at a concrete level through the senses.” (www.multi-sensory-room.com)

We have a safe place; where clients can feel secure and important. We offer them meaningful days and activities. The Day Activity Center is a many sided place, where we pay attention to our clients' hopes and try to facilitate things they want to do. Our location in the middle of the city of Hämeenlinna gives us possibilities to use culture services, shops, the library, market place etc. Our main aim is working closely to get to know our clients to be aware of their needs and support their own skills. Communality and togetherness are important and valued in our center, also the clients take care of each other and they try to help staff too.

We do Personal Centered Plans for our clients. In the first instance, we start with the clients who are living with their families. The Personal Centered Plan (PCP) gives us a tool to understand our clients in a better way, because the PCP is done with the client and their closest care givers. The PCP is a “story” about the person (using also pictures and drawings). This plan makes it possible for clients to take control of their own lives. (Marke Helin)
What is happening?

We are in the middle of a big changing process now. A New Development and Resource Center will be ready at the beginning of the year 2010, and the Day Activity Center is going to have new environments there.

Construction papers are ready for building. We have been part of the construction process all the time. First, there were some workshops for different kind of issues about the new buildings, and a participatory workshop for our clients.

We have had an opportunity to design the buildings with two architects, and they have listened our needs and vision. We have had meetings with ETEVA- workers, and we have created common premises together.

The whole Day Activity Center with its surroundings is going to be a multisensory environment, not only the specially designed rooms, but the whole area. The aim is that when one opens the main door, you are aware of something very special.

The new building will be located by Lake Vanajavesi, 1.5 km from the city center of Hämeenlinna. There will be more space to enable us to increase our number of clients to fifty clients every day. We will have more workers too and we will have our own premises and common premises with the ETEVA and HOTHAT.

We want to transform our good practises to the new environment, and we have to be aware of new methods and ways to work. Sustainable development will be one of the main themes all along the project. Our ambition is to avoid plastic and other hard materials and instead use materials that feel and look natural. We have many co operators and with them we hope, that our new space is comfortable, gives emotional responses, and where our clients get more opportunities to practise their skills and learn more.
References

Alaopas, T. & Sirkkola, M. (Eds.): Sosiokulttuurinen multisensorinen työkokemuksia vammaistyöstä, 2006, HAMK

Helin, M; YKS = yksilökeskeinen suunnitelmatyö (PCP; Person Centred Plans) Tavastia koulutuskeskus; Tavastia Vocational School, Finland.


Appendix

Premises in the New Day Activity Centre Virvelinrant

For our own use will be:

1) Three sections: two of them will include three activity rooms combined kitchen-living rooms and two resting rooms. Resting rooms are going to be a combination of Snoezelen and our own ideas. Final one includes two activity rooms, two resting rooms, combined kitchen-living rooms. This is a space for other people with severe disabilities like Cerebral Palsy (CP), autism, mental health problems, and those who have become unexpectedly disabled through a trauma etc.

2) Several toilets; Our clients need to be assisted in the toilet, so these spaces should be bigger than normal to allow wheelchairs, and other support items.

3) Teaching- kitchen; we want to bake and cook, and it is better to have our own space for that.

4) Court yard; it should be a large area to provide access for gardening, gardening therapy, playing games, and for walking and wondering around.

5) Premises for workers; We will have two rooms for facilitators, one conference room and a manager’s room, social premises in the bottom floor.

6) Combination of kitchen and living room: Perttula Special Vocational School offers us a teacher to our clients, and it provides further education for our clients.

Facilities shared with ETEVA
- Smaller sensory space; some elements of snozelen (White room for relaxation)

- Bigger sensory space; it should be an interactive space with something old, and something new, a transformable space for new ideas

- Sport hall /auditorium
- Physiotherapist’s room
- Large dining hall
- Sauna and Jacuzzi
- Open fireplace - room
- Music room
- Wood work room
- Hobby room

- Main entrance hall; place with a water-element; even if you cannot see, you can feel and hear water and know where you are (Virvelinranta is rod and reel shore in English). Outer space and social premises are in common use.

We and our co operators;

Day Activity Center is owned by the city of Hämeenlinna, www.hameenlinna.fi

ETEVA = Pääjärvi, federation of municipalities www.paajarvenky.fi

Uudenmaan erityispalvelut, federation of municipalities, www.uep.fi

HOTTHAT service system www.hothat.fi


HAMK University of applied sciences, www.hamk.fi

Perttula special vocational school, www.perttula.fi

Kettuki, Finland’s nationwide art centre for people with learning disabilities, www.kettuki.fi
Introduction

A practical nurse can be a very important part of a disabled person’s daily life. That is why a practical nurse has to be aware of the impact of her behavior on person’s functioning and well being. The qualities of life of a client and the quality of a care giver’s behavior are one of the most significant elements of daily care. According to National Core Curriculum for Upper Secondary Vocational Education and Training (2001, 15), practical nurse students who have completed the Study Programme in Care for the Disabled shall master basic care, education, and rehabilitation for disabled people. Practical nurses can work at home, in community care services, in institutions, and in disabled people’s organizations. They shall be able to provide day and family care for disabled people.

Multisensory work can take place in many practical nurse’s working environments. Practical nurses shall know how to work in multisensorial way both independently and as part of multidisciplinary teams. They can work both in Multisensory Environment (MSE) and in Normal Life Environment (NLE) using MSW-ideology. In daily care with disabled people, a practical nurse has wide opportunities to have an effect on a disabled person’s sensory experiences and well being.

The aim of this developmental project is to define MSW in specialist vocational studies of Care for the disabled at Tavastia Vocational College. This project is focused on how to teach MSW to practical nurse students. The aim is also to define the theoretical framework that helps a practical nurse to understand the meaning of sensory experiences in daily care. The most important theoretical issues are the theory of sensory integration; Gunnar Kylén’s theory of cognitive functions and the theory of empowerment which the Person Centred Plan –method is based on. The Person Centred Plan –method is used in teaching students in Care for the disabled-studies. PCP-method offers some tools for teaching the role of a facilitator to students. This project is focused on MSW-theory and PCP-theory and on how...
to use these theories in teaching the role of a practical nurse as a facilitator in daily care.

**Care for the disabled - studies at Tavastia Vocational College**

At Tavastia Vocational College we award the students with the vocational qualification in social and health care, practical nurse (120 credits). The vocational studies consist of common vocational studies and specialist vocational studies (also core subjects and free-choice studies). After successful completion of the common vocational studies of the qualification (growth and development, nursing, and care, rehabilitation supports) the students may start the specialist vocational studies. At Tavastia Vocational College there are six different programmes of specialist vocational studies: Emergency care, Care and education for children and young people, Mental health and substance abuse welfare work, Nursing and care, Care for the disabled and Care for the elderly. During the common vocational studies, there are eighteen credits of on-the-job learning and during the specialist vocational studies fourteen credits of on-the-job learning. The competence tests in the competence-based qualification system are arranged to demonstrate vocational skills.

The study programme in Care for the disabled includes the following studies: Ethics and social status of care for the disabled, Meeting disabled people and Individual care for the disabled. All these studies can also be connected to the Multisensory Work. There are some examples from the curriculum text that can especially be connected to Multisensory Work ideas. All these elements can somehow be found in the definitions of Multisensory Work.

- Students shall promote disabled people’s full opportunities for a good and meaningful life.
- Students shall apply knowledge of the sensitive periods in growth, development, and learning and of holistic nature of individual development, growth, and education.
- Students shall take an account of nonverbal communication and be able to become sensitive to its interpretation.
- Students shall be able to plan individual care and services for disabled people (network).
- Students shall be able to evaluate the effect of living and residential environments on disabled people’s functional abilities and quality of life. They shall be able to design pleasant and safe living environments for disabled people, which are tailored to suit individual needs. Students shall know how to arrange stimulating activities. (Vocational Qualification in Social and Health Care 2001, 122 – 125.)
Theoretical framework for MSW in practical nurse’s work

Person Centred Planning

At Tavastia Vocational College’s specialist vocational studies of Care for the disabled, students learn the theory of working method called Person Centred Planning (PCP). Students also learn some practice of using PCP during their on-the-job learning. PCP is based on theory of empowerment. The Person Centred Planning is rooted in the belief that people with disabilities are entitled to the same rights, opportunities, and choices as other members of the community.

The facilitator is the person who is sensitively communicating with a person and using PCP-tools. A facilitator can enable people to develop a shared understanding of the person, find a shared sense of direction and work together for change. A facilitator must have a commitment to the values of inclusion and is skilled in finding ways to keep the person at the center of the planning process. The Person Centred Planning tools are: Essential Lifestyle Planning (ELP), Map Action Planning System (MAPS), Planning Alternative Tomorrows with Hope (PATH) and Personal Futures Planning (PFP). With these tools it is possible to have a better understanding about person’s needs, hopes, wishes, and dreams. All these tools can be used creatively.

Multisensory Work in Multisensory Environments and in Normal Life Environment

Individuals with profound intellectual and physical disabilities have difficulties in maintaining their awareness of environmental events. They also have difficulties with communication. In the literature MSE is presumed to facilitate mental and physical relaxation, reduction of challenging behavior, increased awareness, environmental exploration, enjoyment, social skills, choices, and feelings of restoration and refreshment. Also, MSE being a specific material environment, the relationship between the participant and the support staff created within the MSE is seen as an additional benefit. The intention in the MSE is that respect is shown for the individual’s personal space, materials are provided only with the participant’s approval, and a sense of security created. The staff must ensure that these effects occur. More frequent personal interactions should occur in MSE. There is not much evidence on how well MSEs increase the level of interaction and alertness. However, it is obvious that for individuals who are dependent on others and whose disabilities often make them passive, any activity which increases alertness or interaction is very important. (Vlaskamp 2003, 136.)

According to Vlaskamp et al’s research of the effectiveness of MSE it is important that a key worker identifies the reasons for using the MSE for the
particular person in question. The second aim is to identify the stimulus that is used to attain the goal. The staff was also asked to distinguish between an increase in alertness (’self directed’) and an increase in interaction (’directed at the environment’). It is also necessary to make a distinction between sensory and motor activity, as individuals with profound multiple disabilities are sometimes incapable of showing motor reactions. (Vlaskamp, C. et.al. 2003, 137.) These observational categories might also help a practical nurse to understand the reasons for using Multisensory Work either in MSE or in Normal Life Environment (NLE). As a facilitator for a disabled person, a practical nurse must be very sensitive to any reactions of a person or to any interaction efforts. In this work, a practical nurse cooperates with other professionals by changing information and observations. A practical nurse may not be a leading expert of sensory integration theory or MSW, but anyhow she can be ’an expert’ of both the behavior of person with disabilities and the behavior of staff.

There seems to be substantial individual differences in participant’s behavior when MSEs are compared with NLEs. Some participants were more active in the MSE than in the NLE. There were also participants who were more active in the NLE than in the MSE. For some participants, there seemed to be no difference whether they were in MSE or in NLE. The role of staff becomes more important. If the environmental stimulation is similar in both MSE and in NLE, then the effect of non-continuous stimuli (for example a key worker talking to the person, giving a massage, touching, playing with material) becomes more significant. Stimuli offered by staff were more effective than stimuli offered by material only; that is the case in both environments (MSE and NLE). The use of MSEs is no guarantee that the set goals are actually met. This happens for example, if an individual who is taken into the MSE-room, stays there in the same position throughout the whole session. The staff should more effectively recognize the potential for sensory stimulation in everyday environments. The use of MSEs may even divert the attention of staff from recognizing the potential of everyday environments. The MSE on its own does not guarantee that the reasons for using the MSE are identified and the goal is attained. (Vlaskamp 2003, 141.)

Multisensory stimulation in daily care

Multisensory stimulation can be defined as a psychosocial intervention that might improve the quality of caregiver behavior, by combining a person-centered approach with the integration of sensory stimuli in daily care. Multisensory stimulation (at multisensory work) can be defined as the explicit use of visual, auditory, tactile, olfactory or gustatory stimuli to make contact with the resident and/or elicit a response from the resident. For example briefly mentioning how nice the soap smells does not count as a sensory stimulus. Letting a person smell the soap, talking about the smell, and waiting for a response can rate as one olfactory sensory stimulus.

The sensory stimulus can be counted in daily care situation if a caregiver enables a client to use one’s senses (using more than one sense simultaneously), talks about the sensory stimulus in that situation and waits
for a response that is rated to sensory stimulus. Also, the use of distinct sensory stimuli, a caregiver can also use one’s body (body movement) to apply multiple sensory stimuli at one time. One way of giving the resident sensory information is the use of more than one sensory channel. Sensory information can be firmed by accompanying a physical demonstration with words in a daily care situation. For example, a physical demonstration accompanied with words on how to put a pullover on gives a person sensory information. Also, the use of affective touch, eye contact, and smiling are multisensory stimulation. (Van Weert 2006, 657, 662.)

In van Weert et al’s research (2006, 665) in the dementia care, the visual stimuli used often by nursing assistants included the explicit use of the mirror, talking about colors or design of a resident’s clothing or looking at something in the immediate environment with the resident, e.g. out of the window or at a photograph. Olfactory sense can be stimulated by having scented soap, cream, body-lotion, perfume, or aftershave. Auditory stimuli can be the use of individual music. A tactile stimulus means for example encouraging a person to feel the heat of the water or the softness of towels, clothes, and cuddly animals.

Using PCP-tools in teaching Multisensory Work to practical nurse students

Two different methods were used in teaching the role of a facilitator to practical nurse students. The first method was Drawing. Students were asked to draw their very meaningful sensory experience. Students started with memorizing and then deciding to choose one particular experience. Students worked two together using drawing as a PCP-tool. The other student was telling about her sensory experience while the other one was drawing it. The idea was to learn the role of a facilitator by being a drawer. A drawer has the same functions as a facilitator has: she shows a lot of interest in other student’s experience, is willing to know more details and to know what is important for another person. Another student was told to first tell only a subject of her very meaningful sensory experience to a drawer. A drawer’s task was to ask “the right questions,” so that she could draw the other student’s sensory experience as authentic as possible. Drawing-method increases communication between two persons. A drawer has to be sensitive and wait for another person’s response before she can draw on.

The second method of teaching Multisensory Work was named “Diary of my sensory experiences.” The instruction for the students was that they were asked to concentrate on their own senses and sensory experiences in their every day life. Aim of diary was to think about the meaning of sensory stimulus for students and for their own wellbeing. Students wrote their diaries for two weeks. This method was that through concentrating on their own experiences students could reach also a better understanding of what sensory experiences (or the lack of sensory experiences) can mean to their disabled clients. This understanding makes the very important part of the role of a practical nurse as a facilitator in nursing and care work. Students were asked to pay attention to their seeing, olfactory and
gustatory senses. They were also asked to pay attention to their tactile, vestibular and proprioceptive senses. They were asked to describe the meaning of the sensory experience and sensory stimulus for themselves. The observational attributes given to students were: like / dislike; feel pleasant / feel unpleasant; eager to get more / try to avoid; the role of other people, activating / stimulating, inhibiting, calming, relaxing, helping to concentrate.

After writing Sensory Experience Diaries for two weeks students were asked to work in small groups chairing the information from their diaries. They were asked to demonstrate a client’s Sensory Experience Map by using their own sensory experiences in daily life. The aim of this demonstration was to make the students think, how they could be more sensitive for a disabled person’s needs and hopes in sensory experiences, and how they could offer more possibilities for sensory information in daily life. The map of Sensory Experiences can be a part of a person’s PCP-folder. A practical nurse as a facilitator can draw a person’s Map, she can also use photos or some materials to illustrate the things that matters to a person’s senses. The map is a concrete thing for a disabled person and helps her or him to communicate more and ask a practical nurse to do things in daily care that offers more personal sensory experiences. If a person cannot speak or communicate with symbols, then it is important that a caregiver is even more sensitive and gains information to the Map with observations. Observations (look at Vlaskamp 2003, 138) on for example, eye contact, body movements, self-stimulatory movements, stereotypical motor movements, or using voice to attract attention may give important information for the Map.

Conclusions

The developmental project showed evidence for the importance of teaching Multisensory Work to practical nurse students. Several vocational skills as occupational ethics, occupational interaction, nursing and care work, and support, and guidance of growth can be connected theoretically to
Multisensory Work. For practical nurses, it is important to develop their vocational skills throughout their lives. Multisensory Work -skills should be a part of their vocational development process. It is important that a practical nurse at care for the disabled knows some basic issues about MSW-theory. They can work either independently or as part of multiprofessional teams. Practical nurses can work both in Multisensory Environments and in daily care. Obviously, practical nurses can develop themselves in Multisensory Work far more in future. It will be our challenge to recognize the potential for sensory stimulation in every day life and in daily care.

In educating practical nurses in the specialist vocational studies of Care for the disabled it is important that they will apply knowledge of the sensitive periods in growth, development, and learning and of holistic nature of individual development, growth, and education. That is why the education is started by teaching the theory of sensory integration. Another aspect is to get the understanding of a mentally disabled person’s reality. Gunnar Kylén’s theory of cognitive functions is taught to students. In this theory a person’s reality is formed of sense of space, sense of time, sense of quality, sense of quantity, and sense of cause (Andersson 2000). Multisensory Work can be a way of widening and enriching a person’s sense of reality and organizing the knowledge from senses. The idea is that a student needs to know the theory of sensory integration and understand something about mentally disabled person’s reality before she can use Multisensory Work -ideas in her work.

The Person Centred Plan -tools were used creatively to teach practical nurse students the idea of the role of the facilitator in Multisensory Work. It showed up that these tools were useable. Drawing the very meaningful sensory experience showed up to be a motivating and interactive learning method. The discussion with the whole group after drawing session increased the understanding of individually different kinds of sensory experiences. Students understood their role in offering sensory stimulation in every day life (or in Snoezelen- room). They realized that every client can have his or her own needs and hopes according to senses.

The diary of my Sensory Experiences was not that successful a method than Drawing was. Students did not write their diaries as much as was suspected. There should have been more specific instruction for the students to concentrate on particular daily activities when writing the diary. With more specific instruction students could have had more meaningful material from their diaries when they were practising how to make a Map for a client. With sharing their daily sensory experiences in small groups, students could make a Map for their illustrated client anyway.

On the base of this developmental project, it seems that connecting the theory of Multisensory work and the theory of PCP-method is the useful way of teaching Multisensory work to practical nurse students. Both theories are based on empowerment of an individual and are that’s why very good theories for the nursing and care work for the disabled. Obviously, there is a need to make individual plans (PCP) for clients of how their sensory needs
and hopes should take place in daily care in everyday life. Multisensory Work and PCP together offer a better way of qualitatively high and person-centered care.

References


Excursion to 13-16 March 2006 Surrey and Borders Partnership NHS Trust.

<table>
<thead>
<tr>
<th>What matters to me with my senses</th>
<th>So you need to do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like good smells of spicy tea sorts; I like to drink warm tea in the evenings before sleep.</td>
<td>Let me to smell the scent of tea and describe the scent for me. Let me touch the warm tea cup and enjoy the warmth.</td>
</tr>
<tr>
<td>I like to have a long bubble bath once a week on Wednesdays.</td>
<td>Make sure that my bath time will be relaxing without hurry. Help me feel the softness of foam and let me smell a good smell of honey soap. Light up candles. Let me see the color of a towel and feel the texture.</td>
</tr>
<tr>
<td>I like the sound of water and rain.</td>
<td>Open my window for a while when it’s raining. Let me smell the scent of rain, hear the sound of rain and feel the wind. Take me out sometimes when it’s raining so that I can feel the raindrops on my face.</td>
</tr>
<tr>
<td>I do not like hard noises or sounds when I’m tired.</td>
<td>Do not turn the lights on, when you come into my room in the morning. Just open the curtains a little bit. Put some silent music on and leave me for ten minutes alone.</td>
</tr>
<tr>
<td>I would like to learn things through my senses.</td>
<td>Help me to widen my sense of reality by using my senses. Let me feel the opposite things with my senses (warm, cold, darkness, lightness, and so on).</td>
</tr>
</tbody>
</table>

Table 1
Reetta Kauppi

Empowering photography in Perttula vocational school

Background and the developmental project

I work as a supervisor in Perttula special vocational school. There are nine students that I supervise; they are all studying logistics. Each student has individual needs, different kind of learning difficulties and disabilities. My responsibility is to help and facilitate their living in a dormitory in the school area. This work includes daily tasks, social situations, and spare time.

Perttula special vocational school has a long, over one hundred year old history behind it. During that time it has had different kind of phases, and now it has had an educational viewpoint in the work for three decades. In the beginning of 2009 things shall change quite a lot, because the Finnish government has decided to stop financing all the special educational schools that it owns and provides. Then Perttula special vocational school will be connected with another institute (Kiipula, owned by a foundation) which provides education for students with special needs. Although there will be some changes in the work, it also brings many possibilities to our work.

The school year is usually quite busy. In each autumn, new students start their studies and it takes a lot of time before supervisor and students get to know each other. Usually, it takes weeks to form a functional group. For student to find his own role and place in a group, it is not always easy and self-evident. Usually, the most hectic periods of time are before summer holiday, before Christmas holiday, and right after starting school on autumn. During those times, the supervisor needs to spend much time with basic things and there is not much time to concentrate on individuals and their new activities. Part of the activities, described in this project report, happened during the autumn term 2008, social interaction and participation were the most important themes.
We make a special study plan for each student, which is planned with the student. An individual plan makes it easier to see the development through the studies in Perttula. Often, one of the aims is to find a suitable hobby during the studying period which lasts usually 3 years. The last year is important for students to start processing their future: work, living and free time. Usually, the students have a workplace when they leave the school, and during the third year the aim is to focus on more independent living as well. In the third-year, there is usually too little attention given to find something pleasant to do in free time. I think that it is extremely important to motivate students to find their own ways to spend their spare time as a part of their studies in Perttula.

In their free time at school students often go to town, or spend their time in school area hanging out with other students. They have a vivid imagination, but somehow during their time in Perttula, they start to have a really small range of things they want to do. Maybe we who work there also lack an ability to see how many opportunities we actually have, and the possibilities the environments offer. The beautiful nature around us is totally forgotten, and students do not necessarily even know what kind of activities we could arrange. How could they ask for something they do not know, the large range of possibilities?

When I started to plan my project work, it was obvious from the start that I wanted to develop something which was not with a particular space or any particular way of doing things. That is why I did not want to create a space for relaxation or activation as a so called multisensory environment, because we have plenty of space to get the same results without any kind of special equipments. Simultaneously I did not want to spend any money in this project. I feel that this study means for me a better quality in doing things in work. It means that I am reflecting on my work and giving students an opportunity to tell me how to do it in a safe environment.

According to my earlier observation, students do not particularly enjoy outdoor activities. One reason for that can be that usually when they spend
time outside in the school area it is something to do with exercise. The aim in my project was to help students to start perceiving the surroundings around them. Instead of doing things, that they normally do outdoors there is plenty of other possibilities and we could just spend time together talking about casual things. I think that it is necessary for students to relate positive images to outdoor activities to be able to enjoy them. This is one important aim in my project.

Theories, frameworks and keywords that I used in the project were;

* Participation / motivation
* Empowerment
* Social interaction
* Empowering photography

**Empowering photography**

Empowering photography is a method which was created by a Finnish woman, Miina Savolainen. She organized a photography project (“The loveliest girl in the world”- project) with ten girls, who were taken in custody. The aim in that project was to give the girls a positive image about themselves. They had a possibility to take and show themselves to people in different roles that they had in everyday life (Savolainen 2004, 131.)

Photography is a really powerful tool. It is possible to build a personal story through pictures. The person in the picture can memorize situations and actually remember more than the picture tells to other people. When watching old pictures a person has a possibility to return to the past and relive situations which have been ordinary. When you watch pictures, you work with many of your senses. From my point of view as a supervisor in a school where some of the students do not use words in a same scale that I use, this is the most important benefit (compare to Savolainen 2002, 36.)

In her project Savolainen (2004, 129-130) found out that she managed to create a feeling that each one of the girls who took part in the project was unique and had a chance to affect things which happen in her life. A good experience can affect positively to other aspects in life as well. Daily tasks and demands in everyday life can make people unhappy and tired. These kinds of good experiences can bring much joy and ease to everyday life.

One requirement in empowering photography is that all people who take part are equal. The feeling of inner power can enable the person who is participating. Photography can also be a way to dominate one another. That is why it can offer an important role for everybody to be/perform in the pictures; in that situation a person can experience and gain an understanding about true equality (Savolainen 2004, 131.)
Nowadays many workers in the social field use photography as a tool to get closer to the clients they are working with. It is an easy way to get an image about the life that the clients are living. Recently, I read an article in a local newspaper which described how social workers had helped immigrants to adjust themselves to a new culture and town, by giving a camera for everyone and a chance to go sightseeing with it.

Developmental project’s activities

I planned to arrange at least 4-5 times for the student group to meet each other and spend time in outdoor environments around Perttula. I planned to use photography during the activity, because I knew that is one thing which motivates students. Many of my students are not used being photographed, but they have taken pictures at school. Another reason, to use photography is that in Perttula we had another project which focused on students who use pictures and words in their communication and we wanted to make this interaction more understandable for them. I think our project could also be a good way to help students to get used to seeing pictures as a part in teaching and supervising in dormitories and creating those themselves.

We managed to arrange four meetings, two during the springtime and two during the autumn time. The first time on springtime we just talked and learned to use camera. Students told me if they had been photographed sometimes before. Most of them had experiences of photography just from the time they had been in Perttula. In their studies, teachers use many pictures and take pictures when students are working. While being photographed by teachers, students had felt that it was intrusive and was bothered by the experience. During our project, I noticed that they did feel uncomfortable when they were photographing each other. I think it had something to do with the roles they have at school.

I wanted to give the students an opportunity to photograph as they wanted. I did not advise on when and where they should take photographs; I was just the one to give the opportunity to do it. I believe they could have done it in a same way without me as well, but it was good to be present, because spending time together in a different kind of activity facilitated good discussions.

In empowering photography it is important that the one in a picture has a feeling of having a role in one’s life (Savolainen 2004, 129-130). It was not always self-evident in our project. Our students have usually many dreams, but rarely those dreams come true. Our students are “victims of the system”; they should always be happy for their job, studies and life. Sometimes the dreams that they have, are a bit unrealistic, but sometimes the system makes them unrealistic as well. That is the reason I did not want to tell them what to do, I wanted to be there if they needed, but my role was to be ‘invisible’.
Results

During the times, that we worked together in Perttula’s surroundings all the participants learned to use the camera. They became aware of the things that happened around them and the surroundings in nature where they were working. They started to look around also at those times that we were not having the cameras with us. “That would be a nice place to take a picture” was a phrase that I heard often when I was in town doing different things with students. Although students did not want to be in the pictures as models themselves, towards the end it was easier for them to take the camera and photograph to make pictures.

I noticed that in a nature it was easier for students to talk about things they found difficult. In a school like ours, it is common to have social problems between students. In a relaxed environment, it was easier for students to tell about problems and deal with them patiently. Few times we had really deep conversations for example about religion. One student was interested about all the sceneries and wanted to know how they were formed. Soon, we were in the middle of the conversation about God, history and personal beliefs.

The change in school system in the beginning of the year 2009 was also one subject that we talked through. Students did not feel that the coming change was a threat. One time when we photographed at Perttula, we had a special theme “The history of Perttula.” Students photographed mainly the buildings and nature surrounding it. At that same time we talked about the things that are going to change.

One of the first-year students has had many problems to find his place in a group. He has been quite lonely during the first two months. He had previous experiences in photography and in that activity he was the one to teach other participants. He enjoyed his new role, and later I heard that he had bought a camera of his own. Now we have plans to start a photography club in Perttula as a free time activity.

A goal for a photography activity for the future could be, helping the students see themselves in a picture. It would be good for our students to get documents with pictures about their study time in Perttula. Although our
students are living through challenging age and life, which is full of changes and decisions, usually they remember their time in Perttula as a pleasant time, full of activities and life.

References


Good moment at Lagunen

Background

Lagunen is a multisensory center offering stimulation for persons who have difficulties in perceiving as well as taking part in the experiences of daily living activities.

Lagunen is a division of Handikapp & Habilitering within Stockholm’s Läns Landsting (Greater Stockholm Council) which has within its wide sphere of activities the task of making it possible for people with profound disabilities to take part in society.

The task of Lagunen is to provide as good conditions as possible for the clients visiting, in order to bring them good moments of activities or leisure, according to the needs of the individual.

Clients who come to Lagunen are people with multi disabilities at ages between twelve, and sixty-five. This group of people includes persons born with multi disabilities, acquired brain dysfunctions, and those with progressive diseases.

At Lagunen we have eight different rooms which can be adapted depending on the needs of the clients. The aim of the visit at Lagunen is to offer sensory stimulation to clients, in the company of someone with whom they feel confident. This person is called the enabler. “Enabling is a sensitive and considerate, not determining way of relate to the person” (Kewin & Hutchinson; 1994).

The enabler might be a relative, an attendant, a friend, a person at school, or activity center or home of the client. Since the enabler is the person who is most familiar with the strengths and needs of the client – we at Lagunen consult him or her always. When the enablers visit Lagunen for the first time, they receive a presentation about the background and theories on Snoezelen and sensory stimulation. There also experience the sensory-
rooms in practice.

The various rooms are furnished and designed to stimulate the senses and provide a safe, relaxed and inspiring environment. The rooms are important, but even more important is the interaction between client and enabler. “The aim with snoezelen is to promote communication, increase concentration, build relations, make the person feel that is his/hers and to reduce stress” (Bosaeus & Mossberg; 1997).

For the staff at Lagunen it is very important to give feedback to the client and the enabler and to confirm their interaction. During the period in which the client comes to Lagunen we have a continuing dialogue with the enabler about the experiences made from the visits.

It is noted that the visits differ a lot, depending on the attitude of the enabler and if the enabler dares to enter the interaction. The enabler needs courage and self confidence to meet the client in an equal way. “To improve the quality of the interaction, the motivation of both partners must emerge from a positive experience of togetherness” (A. Nafstad and I. Rödbroe; 1999).

Through the interviews we would like to collect the enablers views on what a good moment is, and to find out what contributes to creating them, to enhance our knowledge for the benefit of our future presentations.

Aim

Getting to know more about what makes up a good moment at Lagunen. Our issues;

- In what way can the multi sensory environment influence the good meeting?

- What influence does the enabler have in the process?

- How can we (staff) at Lagunen take part to make it easier to support the experience and the interaction between clients and enablers in the sensory room?
These questions constituted the starting point of our study.

**Method of Study**

We opted for a qualitative study of interviews with enablers of four of the clients visiting Lagunen. These four clients have poor nonverbal communication, and they are therefore in need of enablers who know them well and who are able to decipher their body language and other non verbal communication.

We also wanted to find out more about the enablers' own views of their visits. We focused on how the interviewed person experiences his or her world, in this respect the interaction in the room.

The qualitative interview is a sensible and a forceful method when it comes to grasping the experience and meaning of the daily world of the individual. We use a semi-structured interview.

**Selection**

We selected four clients who have been coming to Lagunen regularly for the last three years. All of them have enablers who have accompanied them at several occasions and who know them well. The enablers were invited to participate, and they were given a letter.

The letter informed about the study, voluntary nature of the participation, choice to withdraw at any time and the anonymous nature of the interviews. One of the enablers was not given the letter but was invited on a face to face basis when they visited Lagunen. All four agreed to participate.

**Collection of data**

The interviews which were an hour long, took place in one of Lagunen’s rooms. They were tape recorded. As an introduction the interviewer asked the length of time client and enabler had known each other etc in order to make them feel relaxed. The interviews were then performed according to a guide that focused on the theme “Relating a positive experience in the room,” the significance of being an enabler and the importance of the environment.

Initially two pilot interviews were made, with enablers not taking part in the study, in order to get an idea whether the guide was clear. These interviews were made by two different interviewers. Some corrections of the guide were made, and we also decided that only one member of our staff should carry out the interviews with the intention of making all four as similar as possible.

**Analysis**
For the analysis we used Qualitative content analysis (U.H, B.Lundman; 2003). We started by listening to all the recorded interviews altogether, and then each was individually transcribed. Each of the staff took a transcript. Each transcript was then read separately to give us an overall feeling. We listened to the interviews having the texts written out in front of us, marking out important parts in the form of sentences or paragraphs. Together we discussed them and noted down those particularly important statements.

In our discussion we associated various codes for important units, for instance; "knows the client well," "closeness," "permitting attitude." After further discussions we agreed to put the codes into seven categories:

- Effects in the sensory rooms
- Remaining effects
- The enabler's own points of view
- The multisensory environment
- The Enabler
- The staff
- The interaction.

Three of those categories answer the question "what is a good moment?" The remaining four categories appeared to constitute "elements making up a good moment."

Therefore our two themes were: "What is a good moment?" and "What creates a good moment?" At the time of the study, we listened to the interviews in their entirety again to see that the meaning behind the codes did not escape us.

The Results

What is a good moment at Lagunen?

A good moment was described from several points of view.

Effects in the sensory room: From the interviews, we learned how communication found expression in different ways. Since communication
was wordless, the enabler sometimes didn’t perceive it.

- She put her hand out and patted me.

Finding an opening in the relationship and new ways of communication was important factors. The clients showed manifestations of joy with sounds and body language.

- He gets very happy and excited.

The enabler describes the sense of confidence as a basic factor. One dares trying new things.

- He feels confident in my company to relax and enjoy the situation.

Discovering a “new” faculty or sense which has not been deliberately stimulated before.

- When he lies singing in the music room. I wish that other people could see it.

So tells us the enabler of a deaf client who has never experienced music before.

One enabler spoke about the sense of togetherness which was felt between her and the client.

- You can be together without the necessity of speech and feel the company anyway.

The enabler discovered a new aspect of the client.

- I have disclosed another side of her that I’ve never caught sight of, up till now. A great improvement in our communication.

The enabler was feeling good too. As one remarked;

- You get all soft afterwards. It can be an inspiration for the rest of the day.

The visits at Lagunen were compared by one enabler to a very specific outdoor experience. Even the inferior moments were mentioned as being of value and one enabler said;

- Here you find a sort of mini version of life.

The good moment may also bring sadness and low-spiritedness.

- Sometimes it is good, sometimes it is bad. No matter what state
of mind that you experience, it is felt in a special way, not the usual one.

The possibility to adjust the stimulus of senses to various needs meant opportunities for relaxation and/or activity.

- There simply are no other occasions when he lives so intensely.
- He might go to sleep or find the relaxation he never gets otherwise.

**Remaining effects:** The enablers also described effects that were not directly observable in the room but arose later and endured after the visit. They told us about having received a new view of the client, which affected their relationship in the ordinary daily environment.

They also mentioned that the client expressed expectations before the next visit to Lagunen.

**The enablers own point of views:** From the interviews, we could also find expressions of enablers own engagement.

- She has loved every, every minute.
- More important to him than we ever imagined.
- I wish other people could watch.
- It means a lot to him.
- I know it is good for her.

**What creates a good moment?**

From the interviews, we have noted down four different aspects / categories for the process of making up a good moment.

These are:

- The Multisensory Environment
- The Enabler
- The Staff at Lagunen
- The Interaction

**The Multisensory Environment:** We have had descriptions about how the design and atmosphere of the rooms create opportunities for closeness and interaction. The rooms bring opportunities to offer stimulus adjusted
Interdisciplinary approaches to multisensory work - Local definitions and developmental projects

There is the description of how the design of a specific room has meant new types of stimulus; for instance the discovery of music through vibrations and beat, by a deaf person. The rooms have also influenced the enabler in a positive way, something which has gained the interaction. The design of the rooms has also brought a sense of equality to the client and enabler, it is said;

- You have created a good atmosphere in the room.
- The sitting in a wheelchair mean being an outsider in some ways, in the rooms we lie beside each other, we become equals, so to speak.
- He is deaf, and the bed of vibrations has brought music to him for the first time, there are no other occasions in which he lives as intensely.

**The Enabler:** It is of utmost importance that the enabler knows the client well, this has already been said. Since the client has limited powers of communication, it is the enabler who can most easily interpret the various signals and other means of communicating that the client might possess. This fact brings confidence to the client. The ability of an enabler to show a positive attitude is important when making up a good moment.

- I show a positive attitude, and so he gets positive too.
- He feels confident in my company, and he, therefore, can relax and enjoy it all.

**The Staff:** A client as well as enabler must feel welcome when they arrive at Lagunen. A warm approach and an allowing attitude without heavy demands, laced on client and enabler, make up the prerequisites for the making up of good moments in the rooms. One relative describes how this allowing attitude makes him relax, and to let go the demands on him to prove abilities of communication as the client is concerned.

- I can feel relaxed when I know there are no demands on me to have mother say something, so everything can be all right.
- You are open-minded and very natural towards her, that’s very important.

**The Interaction:** From all the interviews, we can draw the conclusion that interaction is basic for the making up of a good moment in the rooms. Descriptions of how this works is differing, but key words like closeness, equality, and the reflection of each other, are near at hand all the time.

- The visits at Lagunen have meant a lot for communication.
- We can relax and be in company in some respect. Just like real friends with whom one may stay quiet.

- The visits are for both of us.

Discussion

The interviews have given us many examples of what a good moment can be like, and how it arises. The elements making up the good moment are the environment, the enabler, the staff at Lagunen and the interaction. Interaction is the most important one, which has to imbue all three aspects so that the good moment might develop. A problem that we can see is that sometimes enabler does not dare to believe that the client can interact and communicate.

But we knew that all human beings need to be confirmed by others and to participate. It is through others we exist. Winnicot means that it is by meeting others the individual get the notion of his “self”. (L.Gullberg; 1997). J. Bauer (2007) describes mirror neurons embodying the perceptions; “I feel what you feel.” A mirror neurons constitute the neurological basis for spontaneous, intuitive understanding, the foundation for what is called the Theory of Mind.

Many people have written about the human ability and need to interaction and communication, relevant both to children and adults with or without disabilities (T.Eide & H.Eide 2004 et.al.).

When one gets confirmation and a sense of participation, it leads to a motivation to interact with those around. A lack of confirmation leads to overactivity or inactivity or helplessness. A.Nafstad & I.Rödbro (1999) wrote: “The most powerful motivation is not the one that comes from outside and outer reward but the one which arises from being together.”

The multisensory environment at Lagunen wants to provide the enabler with the opportunity of being with the client in an one-to-one relation in order to communicate with and confirm client. Hopefully, this will help enabler to leave at least temporarily everyday life; all this brings the oppor-
tunity to see a person with new eyes. Very small signals can be lost, easily neglected when a person has very poor communication.

“Normally we hardly ever notice that glances of other people, taking much of our attention, can trigger surprisingly spontaneous reactions in ourselves. This leads to the establishing of a continuous, and to large extent shared attention between people who are in contact with one another, a phenomenon called ‘joint attention’ in a technical term. Here too, we have to do with mirror neurons” (J. Bauer; 2007).

The environment in the sensory rooms at Lagunen are made to give the opportunity to adjust the stimulus according to the client’s needs for action and relaxation. G. Kielhofner (2002) and M.Czikszenmihalyi (1992) talk about the importance of to be able to be active in line with the person’s ability. Mihály says that “we get the optimal experience when we have the possibility to act” (M.Czikszenmihalyi; 1992).

To be able to participate in the rooms is important. We try to furnish the client with the proper tools to choose and be able to influence. It may be the switches for the light regulation, the selection of music etc. P. Pagliano (1998) stresses the necessity for a adjusting stimulus of senses to individual. Pinkney (1997) describes the inability to get new impressions in the daily environment, but that the sensory room is designed accordingly.

With the enabler we as staff at Lagunen go through the various interests and needs of the client. In order to properly prepare the visits to the sensory rooms, this discussion takes place at the presentation. We also stress the factors in relation to interaction and participation.

Most of the clients at Lagunen have physical disabilities as well as a poor communication. Therefore, their participation is hindered if they are not provided with adequate conditions. The communication and interaction which arise between client and enabler form a quiet dialogue which in its turn is based upon the capacity for intuition and courage as far as the enabler is concerned. If this is the case, the process may be conducive for the client and enabler to gain positive experiences. The enabler becomes a true benefactor.

T.Eide & H.Eide (2004) writes about Stern who means that the child is in need of a “self-regulating other self,” someone who might satisfy basic necessities such as safety, stability, and stimulus in order to develop. They conclude that this is relevant for people with weak cognitive and verbal abilities as well.

Consequently, we as staff at Lagunen must welcome client and enabler in a positive way, so both parties can feel comfortable in their interaction and in our environment.

Käcker (2007) and Hautaniemi (2004) underline the importance of confidence as basic for the interaction being realized when a person has poor
communication. To have the enabler feeling confident in the actual environment is helpful, when it comes to adjusting to the needs of the client, but also to make him or herself to relax and to stay present.

The enabler too, becomes harmonious by the environment according to Verheul (2004), and this is what the Snoezelen philosophy is all about.

Most enablers know their clients well enough, but not everyone, unfortunately. Some of them might feel insecure about communicating with the clients, and they do not pay attention to the non-verbal communication. We must be patient to watch for any attempts to develop communication and interaction.

Despite all the research being made, and all the knowledge collected in this respect, clearly we do not consider a multi disabled person to be in possession of abilities of participation and interaction. We are often in a rush, and focus too much on the care-taking aspects. This is a fact noticed already in the seventies by Verheul and Hulsegger, who developed Snoezelen. They realized the needs for a conducive environment and for changed attitudes among personnel.

The interviews have highlighted that it is considered liberating for clients visiting Lagunen because of no demands placed on the visitor. One person describes how she has felt the pressure of having to make her father conform at the hospital. We think that it is important that Lagunen may continue to be a place one can visit, and where to stay at ease. “An oasis of daily life” as one of the enablers put it. In that area cleared of pressure or claims, there is space for visitor and enabler to interact in an equal manner with more room for both parties to feel good and to develop.

“Achievements are what society values and measures. A person who cannot make himself useful through doing things easily perceived by others, that person is considered less valuable. But, the value of every single human being is not measurable; it exists within every individual. Your idea of what man is and your views on what is valuable give great impact on your confrontation with disabled people” (B.H Trygg ; 2008).

The literature often propounds the difficulties in evaluating any remaining effects of the visits to the sensory rooms. J.Hogg et.al (2001) write in their report about the need for further studying the social interaction of client and enabler and how it may influence life, even outside the Snoezelen room.

We are convinced through our work that several visits at Lagunen have brought new attitudes towards the client, and have left changes in his or her daily life. One of the enablers says: “I’ve noticed a completely new side of her that I’ve never seen before; it’s a big opening in our communication.

Hope (2004) writes about how the staff used the metaphor of seeing the person in a “new light.” We look upon the good moment as something seri-
ous and important in itself, not necessarily measurable. “Do we justify our own leisure pursuits in terms of their therapeutic value?” (Hutchinson & Haggar; 1994).

In our consulting role, it is sometimes difficult to know when to be active in the sensory rooms with visitors and enablers. How can we give the enablers the best tools? Many enablers need more basic education, they often work alone and they have not much support in their job with the visitor at home.

We have thoughts, and plans about developing our presentations and introductions into training programmes for entire days, when we might go deeper into the interaction formed in the sensory rooms, and on the reflecting over ones own experiences in order to better enjoy the good moments together.

References


Bosaeus M & Mossberg A, 1997; ”Med öppna sinnen – vita lekrummet” Lycksele: Nya tryckeriet

M. Csikszentmihályi 1990 ; Flow The psychology of optimal experience Svensk utgåva Bokförlaget Natur och kultur 1992

T,Eide& H,Eide, 2004; Kommunikation i praktiken-relationer, samspel och etik inom socialt arbete,vård och omsorg översättning : Bo o Ethel KärnekullGyldendal Akademiska,Oslo, Norge Svensk copyright 2006 Liber

L. Gullberg, 1997 Upplevelser i vita rummet Sinnesstimulering för patienter med psykiska funktionshinder Två fallstudier Högskolan I Örebro Institutionen för vårdvetenskap och omsorg Arbetsterapeutprogrammet ] Examensarbete 10 poäng

B.Hautaniemi, 2004; Känslornas betydelse I funktionshindrades barns livsvärld Pedagogiska Institutionen Stockholms Universitet

Roger Hutchinson, Joe Kewin Rompa, 1994;”Sensations & Disability – Sensory Environments for Leisure, Snoezelen, Education and Therapy .” ROMPA

J.Hogg, J Cavet,L Lambe & M.Smeddle, 2001; To use the “Snoezelen” as multisensory stimulation with people with intellectual disabilities: a review of
the research University of Dundee Institute of Social Work & Applied Social Studies, Staffordshire University


A. Nafstad & I. Rlodbroe, 1999; CO-CREATING COMMUNICATION Publisher: Forlaget Nord-Press, Drønninglund, Denmark, E-mail: basistryk@email.dk

G. Kielhofner, 2002; A Model of Human Occupation Theory and Application, Third edition, Lippincott, Williams & Wilkins Copyright

S. Kvale, 1997; Den kvalitativa forskningsintervjun och Studentliteraturöv ersättning: Sven-Erik Torholl

P. Kacker, 2007; Nycklar till kommunikation. Kommunikation mellan vuxna personer med grav förvärvad hjärnskada och personernas närstående anhöriga och personal Linköpings universitet The Swedish Institute for Disability Research at the Department of Behavioural Sciences and Learning


B. H. Trygg, 2008; Kommunikativ omvårdnad Hjälpmedelsinstitutet Södra regionens Kommunikationscentrum

Ad. Verheul 2004; Snoezelen – active or passive? – A discussion in the Netherlands Internationales Snoezelen-Symposium

Ad. Verheul 2008; “Mirror to the World” Internationales Snoezelen-Symposium Neuwued

Literature


M. Andersson, 1999; Sinnesstimulering för personer med grav utvecklingsstörning Lärarhögskolan I Stockholm Instution för specialpedagogik

A. Antonovsky, 1987; Unraveling the mystery of health Svensk utgåva 1997; Hälans mysterium Natut och Kultur

W. Bryant, 1991; British Creative group work with confused elderly people journal of occupational therapy 54 (5): 187-192


Å. Carlsson, VT1996; Sinnesstimulering för personer med grav utvecklingsstörning HÖGSKOLAN Örebro Institutionen för vård och omsorg Enheten för arbetsterapi

C. Crafoord, 1994; Människan en berättelse Natur och Kultur

K. Dahlberg, 1997; Kvalitativa metoder för vårdvetare Studentlitteratur


B. Englund, 2004; “Skapande kroppsbasera komplementära terapier” studentlitteratur

E. Eriksson & T. Hildingsson, 2004; Occupational therapy and Snoezelen – the use of Snoezelen in Occupational therapy Örebro universitet Instution för vårdvetenskap och omsorg arbetsterapi c-nivå

H. G. Thwaites, 1997; The Sensory Modality Assessment Rehabilitation Technique – A tool for assessment and treatment of patients with severe brain injury in a vegetative state Royal Hospital for Neuro-disability, West Hill London

N. Hansson & E. Henriksson, vt 2001; ”Några arbetsterapeut erfarenheter av Sensory integration och Snoezelen”: c-uppsats 10 p LULEÅ TEKNISKA UNIVERSITET Instution för HålssovetskapArbetsterapeutprogrammet 120 p

M. Hägg & C. Söderlind, 2002; Sinnestimulerande aktivitet i anpassad miljö. Karolinska institutet Institutionen Neurotec sektion arbetsterapi Examenarb. I arbetsterapi 10 p C-nivå

K. Mertens, 2003; Sensory stimulation and relaxation in special interior rooms Humboldt-University of Berlin
L. Pinkney, 1997; A comparison of the Snoezelen Environment and a Music British journal of occupational therapy

L. Pinkney, 1999; Sensory therapy School of Occupational Therapy and Physiotherapy Southampton University

C. Renlund, 2007; Doktorn kunde inte riktigt laga mig Gothenburg University Press

K. Ryberg, 2007; “Ljusterapi & Färörgdesign” Komikapp Rehatek AB

C. Söderlind, 2002; Evidensbaserad verksamhet Individuell skriftlig uppgift KAROLINSKA INSTITUTET Institutionen för klinisk neurovetenskap, Arbetsterapi och äldrevårdsforskning Sektionen för arbetsterapi Arbetsterapi Teori II, 5 p


H. Wijk, 2004; Goda miljöer och aktiviteter för äldre Studentlitteratur

G. Winlund & S. R. Bennhagen, 2004; Se mig! Hör mig! Förstå mig! Ala FUB forskningsstiftelse
Overview

This paper describes “Calmness and fun” - the practical model which was created in a project at the multisensory center “Sensoteket” in Vaasa, Finland. The model describes how a special teacher and an occupational therapist work with children and adults with profound multiple disabilities at Sensoteket to develop the practical model: “Calmness and fun”.

The aim of this study is to describe the core concepts - “enabling,” “participation” and “accessibility,” that are central to the practical model: “Calmness and fun.”.

The study is based on a literature review of selected papers on occupational therapy, special education, and multisensory work.

Despite there is a lack of practical models for occupational therapist and special education teacher working in multisensory environments, the literature review has identified theories which are linked to the core concepts: “enabling,” “participation” and “accessibility”.

Keywords: occupational therapy, special education, multisensory environments, enabling, participation, accessibility

Introduction

Sensoteket developed a project called ‘Sens-IT’ in Vaasa, Finland, during the years 2004 to 2007 (www.sensoteket.fi). The project developed a praxis model for students with special needs. The main ideas behind the praxis model at Sensoteket are illustrated in a DVD called “Calmness and fun.” These ideas are developed further in a report and used to inform and educate staff and parents.
Background

SENSOTEKET – a center for persons with special needs Förbundet De Utvecklingsstördas Väl (FDUV) rf. (www.fduv.fi) is a national organization working with Swedish-speaking persons with intellectual disability and their relatives in Finland. This organization began to run multisensory environment centers “Sensoteket” in Vaasa in 2000 and in Helsinki in 2006. The idea behind these two centers is developed through Sens-IT and the SESAM projects (Sesam Project Report, 2008). Today these centers are called Sensoteket and run like polyclinic services.

People with special needs from all age groups, and their assistants visit Sensoteket. Another visitor group is the people who are working at schools, day activity centers and service houses for people with special needs and they visit Sensoteket to get inspiration and ideas how to use Multisensory Environments in their work. Eight hundred users and professionals visit Sensoteket every year. A special education teacher and occupational therapist work in the Sensoteket in Vaasa while there is only an occupational therapist working in Helsinki center.

There is no need for referral to visit Sensoteket. Visitors have to pay for the visit. It’s very important that the visitors are accompanied by people who they know well to benefit from the experience; e.g. to feel safe and relaxed and share their experience.

“Calmness and fun – a model for work at Sensoteket”

In 2004, a project began to create a praxis model for special education teacher and occupational therapist who work with children and adults with profound multiple disabilities at Sensoteket in Vaasa. The model will be also valuable when the staff has to justify their work to financiers and politicians.

With a researcher and occupational therapist with a PhD., the staff at Sensoteket defined three core concepts in their work; enabling, participation and accessibility Based on that cooperation developed a practical model that is called “Calmness and fun – a model for work at Sensoteket”. The model was illustrated in the DVD.

In our initial work, we could not identify the practice model for occupational therapists and special education teachers who work in multisensory environment. This study describes the theoretical framework of the praxis model which is based on special education, occupational therapy, and multisensory environments.

Background for the project

Practical details about making the movie “Calmness and fun – a model for practical work at Sensoteket”. The aim of the movie was to be an introduc-
tion of Sensoteket to other staff members. The movie described the cooperation between the special pedagogue, the occupational therapist and the visitors, and is an inspiration’s source to other to work in similar ways.

Staff at Sensoteket wrote the manuscript with guidance from an occupational therapist with a PhD and with support from a group that consisted of a lecturer in pedagogics at Åbo Akademi University, a preschool teacher from Kärkulla (Kärkulla care for service for Swedish speaking individuals with intellectual disability in Finland) and an occupational therapist from Tutoris Oy (private clinic for habilitation and rehabilitation).

The manuscript explains the working methods used (special pedagogy, occupational therapy, and multisensory work) in the Sensoteket.

In the movie, there are four persons aged between 5-45 years who participate with their parents or personal assistant. The participants were contacted among visitors coming to Sensoteket regular, and the days for filming were reserved. The choice of the participants was based on selecting from a wide group with participants in different ages, different degrees of function and types of activity to show a varying and flexible way to work with visitors.

The staff planned and prepared all the activities that are seen in the movie. All scenes were filmed in three days, and just few of the scenes were written, directed or taken more than once. The film company Sus Production took care of all the technical arrangement. The final product is a 14 minutes long movie. The first Swedish edition was made in 300 copies and after feedback from the visitors and staff working with MSE, the decision was made to translate the movie into Finnish and English with the subtitle in all three languages (Swedish, Finnish and English). Second edition was also 300 copies. The second edition offered the opportunity to change some pictures in the movie, as well as some changes in the speaker’s text to make it easier to understand.

To produce a movie and developing a model requires much work. The professionals helped with theoretical, technical, and practical aspects, and trade people guaranteed a better outcome even though they cost much money.

A good idea was to list what activities to be filmed and act on those plans. However, it was difficult to arrange scenes and one can easily lose the spontaneity in the process if arranging and taking these scenes more that once. We did the activities which we wanted, and the film-maker followed us with the camera rolling.

We have had both positive feedback and criticism for the movie. Good things were the length of movie. Fourteen minutes was enough for a presentation movie ‘Calmness and fun’. We managed to capture happiness and joy among the visitors and give facts about our work. Criticism is that movie had too much information in such a short time and as result one can-
not manage to take in everything just by watching the movie once. Furthermore, we were aware of this aspect. Unfortunately, the speaker’s text was already done before filming and we didn’t have more illustrations to make the speech match the film.

**Aim of the study**

The aim of this study is to describe the core concepts enabling, participation and accessibility that are central in the praxis model “Calmness and fun” to make the understanding of the model more explicit and highlight the evidence in the praxis model.

**Method**

In this section, there is a description of the methods and procedures that were used to collect the data. A literature review forms the basis for the study.

A literature review examines scholarly articles, books, and other sources relevant to a particular issue, area of research, or theory, providing a description, summary, and critical evaluation of each work. The review is to offer an overview of significant literature published on a topic. (University Library University of California, Santa Cruz, 2008) This literature review was based on the occupational therapy, special education, and multisensory work literature.

Data were collected from books, articles, and the internet. Keywords were enabling, participation, accessibility, and multisensory environment. The gathered data were systemized upon the core concepts enabling, participation, accessibility, and multisensory environment. The study is based on data which consist of seven books, three articles, and three publications on the internet, and these texts were published both in Swedish and English.

**Results**

In this section, the results of this study are presented. The results are based on the literature review that was carried out to enable readers to understand the core concepts: enabling, participation and accessibility that are central in the praxis model “Calmness and fun.”

A multisensory environment (MSE) is any environment where stimulation of a multisensory nature is precisely engineered to match more closely the exceptional needs of the user. A stimulus may be controlled, manipulated, reduced, presented in isolation or combination, in passive or active forms and modified to suit the person’s interests and motivation. Activities may be for recreation, therapy, or education. (Pagliano, 2001, 34).

Multisensory environments are established for those people who cannot partake in the natural environment and find a meaningful occupation. For some people, the natural seems chaotic and unpredictable. The person will
require an environment which is individually tailored to meet his or her particular needs. (Pagliano, 2001, 1, 6).

Snoezelen is derived from the words “snuffelen” (to sniff, to snuffle) and “doezelen” (to doze, to snooze). It was developed in the Netherlands in the seventies by institutions caring for severely disabled people. Behind the term Snoezelen is a multifunctional concept: in a purposely designed room (mostly a white room) the use of light and sound elements, scents, and music initiate intensive sensations. These have both relaxing and activating effects on the different perception areas. The specific design directs and arranges the stimuli; it creates interest, brings back memories and guides relationships. Snoezelen induces wellbeing, in a calm atmosphere fear will be taken away, people feel secure. Snoezelen is therapy as well as facilitates learning and is used to support all developmental stages (from toddlers to old people). (International Snoezelen Association, 2008).

Sensoteket has created rooms for relaxation and activity according the principles of MSE. The technical equipment and decorations in the rooms are chosen to support and activate the seven senses that are vision, hearing, sight, smell, taste, touch, balance, and joint and muscle sense.

All our senses are important in relaying information about what is going on in our surroundings. The nervous system needs a sensory diet to maintain attention (Williams & Shellenberger, 1996). By being aware of how people react to different stimulation of the senses, teachers, and therapists can learn how to interpret behavior or understand nonverbal communication from their clients. Sensory Integration Theory describes the relation between the neurological process and the way how people react and interpret stimulus from their environment (Ayres, 1979). The most important senses for humans are so called inward senses; they help the brain organize and structure the signals from the other four senses and pave the way for further development. The inward senses are touch, balance, and proprioception (joint and muscle sense).

**Accessibility**

Accessibility problems occur in relation between an individual or a group of people with functional disabilities and details in the physical environment. (Iwarsson & Slaug, 2000, 21) By being aware of these aspects one can anticipate problems and make solutions when one builds up multi sensory environments. Environments can be a barrier to anyone. Steps, heavy doors, poor lighting, or any number of variables can limit our ability to do what we need to do. (Blesedell Crepeau et.al. 2003, 384). In Sensoteket, staff has planned and designed an environment which is appropriate for everyone. One important thing is to make the interior design transformable. Only the big and heavy equipments such as the ball-pool and waterbeds, and some of the swings are permanently in a fixed position. This freedom and ability to transform will enable you to make the environment conducive for all groups of users.
The new devices can increase functional abilities and offer independence for clients of all ages at with various levels. The prime purpose of the assistive device is to increase, maintain, or improve the functional capabilities of individuals with disabilities. (Blesedell Crepeau et.al. 2003, 659-660). At Sensotetek we have various types of technological equipment to facilitate feedback to the users. With the technology, it is relatively easy to arouse curiosity, motivate people to take the initiative and draw on their own abilities. It’s a matter of understanding cause and effect, and sometimes realizing that one, as an individual can affect one’s surroundings.

To enable

Unless the environment is carefully engineered, a person with sense impairment will experience difficulty making sense of the world (Pagliano, 2001, 12). Engineering the environment involves choosing the right environmental resource to create an appropriate environmental compensation, adaptation, adjustment, or modification to suit the particular needs of a particular person at a particular time. (Pagliano, 2001, 10) Staff members at Sensoteteket are called enablers. To enable means to support the visitors both physically and mentally. By making the physical environment accessible, interesting, and inspiring one enables and creates opportunities for the visitors to take initiatives. One of the Sensoteteket’s fundamental principles is that everyone feels good when they are active and can participate with their own ability. It is similar to the ethical code for Occupational Therapists who maintain that it’s everyone’s right to choose their own activities (www.fsa.akademikerhuset.se). Staff members at Sensoteteket are there to support and access the environment.

Participation is collectively influenced by performance capacities, habituation, volition, and environmental conditions. Thus, participation is both personal and contextual. It is personal in the type of participation in which a person will engage, and participation is influenced by the individual’s unique motives, roles, habits, and abilities, and limitations. It is contextual in a sense that the environment can either enable or restrict participation. A disability may alter, but need not prevent participation if adequate environmental supports are in place (Kielhofner, 2002, 116). The staff in Sensoteteket can be enablers by influencing attitudes and supporting both other staff members and visitors to see what is possible and how one can develop activities together.

Participation

In the broadest sense, participation refers to doing. Participation refers to engagement in a work, play or activities of daily living that are part of one’s sociocultural context and that is desired and/or necessary to one’s well-being. (Kielhofner, 2002, 114-115) An important stand point in Sensoteteketis that everyone feels good and becomes happy by being available to participate in activities they understand and feel are meaningful to them. Visitors at Sensoteteket are called joy-seeking participants and the individual goal
for everyone is to provide experience in a secure environment. Through experience, you involve the participants in their own life by providing them activities that are important and manageable for them.

According to the World Health Organization, participation is an individual’s involvement in life situations to health conditions, body functions or structures, activities, and contextual factors. Participation restrictions are problems an individual may have in the manner or extent of involvement in life situations. (World Health Organization, 2008).

Participation or involvement in everyday occupations is vital for all humans. As described by the World Health Organization, participation has a positive influence on health and well-being. The presence of disability has been found to lead to participation that is less diverse, is located more in the home, involves fewer social relationships, and includes less active recreation. (Law, 2002). In Sensoteket, we provide a secure environment that the individuals know well and with activities that challenge them on the right level. With these conditions they become involved and can experience the situation meaningful, comprehensible, and manageable. Pagliano says that good teaching involves making matches between the person’s ability and the task difficulty. (Pagliano, 2001, 6). We provide the experience of success for the participants to enable them to deal with difficult, demanding situations in their everyday lives also outside Sensoteket.

Pagliano (2001) writes that a user-friendly environment, which facilitates learning and development, in the beginning of the learning process is constant and predictable for the person, however eventually there need to be changes in the environment. At the Sensoteket, the environment can be adjusted by regulating the stimuli from lights, sounds and tactile effects. The staff can see how the visitors react, and they start to read the signals already when the visitors enter the door. By using pictures and, alternative communication staff enables communication to take place naturally.

Every person develops and learns in his or her unique way through interaction with the particular environment he or she lives in (Pagliano, 2001, 1). When visitors at Sensoteket experience meaningful and manageable situations, their engagement grows which is the condition for participation which then leads to wanting and doing more activities which in turn leads one to learn. To illustrate the connections between knowledge and accessibility, and between enabling and participation Sensoteket has created two pictures to visualize it.

Step 1. When competence and accessibility are high it enables participation.

Step 2. When enabling and participation are high it leads to doing and learning.
Interdisciplinary approaches to multisensory work - Local definitions and developmental projects

Calmness and fun... step 1.

To Enable Participation

Calmness and fun... step 2.

Dång Learning
Discussion

During the development process of the praxis model “Calmness and fun,” we noticed that few research studies have been done in MSE. Despite the lack of research, we could find theoretical references that support our praxis model within occupational therapy and special education perspective. It is important to theorize our practical work and to ensure the interventions with our clients. Many use MSE in their work with people in different ages and with different types of disabilities, but they don’t always call it multisensory work, since this word is created and so far used only at HAMK. Multisensory work can be practiced inside or outside in the nature, in the different type of activities like listening music, having a good time at the service house or taking a sauna at Friday night. We have to define what Multisensory Work is as well as its value and importance. In the DVD, one can see that Sensotetet is more than nicely decorated rooms. The important aspect is that the joy-seeking visitor is always in focus. We use known methods which are anchored in theory in both special education and occupational therapy. Visions we have with the praxis model “Calmness and fun...” is to inspire others to use it and evaluate it in different types of environments and situations.

By identifying the three core concepts we have become more aware of the value of the work which we do everyday at Sensotetet. Accessibility is important but how does one make the environment accessible for every visitor at Sensotetet. Sometimes it is not just the physical environment we have to adapt; it can also be attitudes among staff or visitors. Our competence is based on our professional framework with topics of accessibility and increasing participation among our visitors. When the joy-seeking visitor experiences participation in an enabling surrounding with theirs assistance or staff at Sensotetet, we can see an increase in engagement and creativity. Genuine engagement means the visitors want to do activities and continue to learn. By using the term enabler, staff expands the understanding of their work into something which is more than before when they met the visitor as a therapist or pedagogue. As an enabler one meets the person at his/her level and one uses oneself and the accessible environment to create an optimal situation. By calling oneself enabler one becomes more creative and engaged and which influence the persons around. When we call our visitor’s joy-seekers, we do not see their disabilities and cognitive level. With this perspective, we see visitors as active and curious and give them opportunities to make their own choices and challenge their senses with joy-filled experiences.

To those of you planning to do similar projects we want to say, go ahead! It is a creative process, and you learn a lot about your own work and get concepts for how to describe it is importance to politicians and staff groups.
References


University Library - University of California, Santa Cruz 2008. How to write a literature review? http://library.ucsc.edu/ref/howto/literaturereview.html


World Health Organization. 2008 http://www.who.int/classifications/icf/site/onlinebrowser/icf.cfm?parentlevel=1&childlevel=2&itemslevel=1&ourdimension=p&ourchapter=0&ourblock=0&our2nd=0&our3rd=0&our4th=0 (27.8.08)
Sauna as a multisensory environment

Background

For Finnish people a common place to take a bath has been a sauna. Finnish sauna differs from other cultures' saunas. Sauna has been the best defense against the barren nature and diseases for the forefathers. Different cultures have their own cultural habits of bathing, however, these meanings cannot capture the cultural meaning of sauna for Finnish people. (Compare to Hongisto & Pihlajamäki, 2006, s 4.)

Historically people used saunas as a place to treat illnesses. For example, folk healers used saunas as peaceful and quiet working environment. There were many beliefs of health effects of sauna. These beliefs remain affective even today.

Sauna bathing does not prevent or cure long-term illnesses, but it can improve persons’ wellbeing generally and be beneficial to the health. Sauna speeds up the heartbeat, improves the breathing and circulation, raises the body temperature, stimulates the metabolism, and may, at least temporarily, lower blood pressure. In folk medicine, it is believed that sauna has considerable health benefits. Sauna bathing toughens the body and pacifies the mind. An old Finnish proverb says: “If sauna, liquor, and tar don’t help, your condition’s fatal.” (Virtual Finland 2008).

Many people use sauna for cleansing, but it is also a very comfortable place for relaxing, and discussions. In the old days, the most important place for healing was the sauna. The most difficult ailments were washed and bathed away in sauna. The massage and cupping were also done in sauna.

Six things which make sauna a multisensory environment

1) Lights

Usually, the lights in sauna are quite dim. Many people like to use candles
in sauna. Nowadays people in apartments use little electric stars or colored lights on the ceiling of the sauna, this gives soft atmosphere to the environment.

2) Warmth

People like to sit or lie on the benches to relax and enjoy the heat of sauna. Temperature in sauna is approximately between +80 and +110.

3) Touch

People use whisk of birch twigs (vihta), and rough brushes and linen towels in the sauna.

4) Humidity

When water is thrown on the stove, you can feel hot steam around your body. The humidity and sweating help to cleanse body. Afterwards it is common to take a cold shower or swim in a lake.

5) Aroma

It is common to use natural aromas in sauna (honey for facial massage, whisk of birch twigs, soaps, fire in the stow creates a flavor of tar, candles with herbal aromas)

6) Taste

Beer and sausage belong to a sauna nowadays. Drinking pure water is also essential.

Furthermore, it is possible to have massages, herbal baths, clay and peat treatment and cupping during sauna experience.
**Process of sauna bathing**

Sauna bathing begins with heating the stove. When living on the countryside, sauna is heated with wood. Ritual is started with chopping the firewood. Some people experience the work of chopping logs as relaxing. It is a great moment to sit down in front of the fire, and to smell the burning wood and feel the heat coming from the stove.

In the sauna there can be natural aromas, for example, tar and honey. Nowadays people use few drops of aromatic oil in water, thrown on the hot stove. The use of whisk of birch twigs used in sauna gives feeling of pleasure and the smell of the birch reminds of the summer. People stay in the sauna from a few minutes up to few hours. It is important that persons feel good in sauna.

**Interview**

In Riistavuori (center for services for elderly) I have made a theme interview for residents. Results indicate that the sauna is very important for the elderly. They see sauna as an environment for cleansing. The sauna cleanses and heals the body, soothes the mind, and provides multisensory sensations. It is where you are allowed to touch another person’s back with a brush or with a whisk. Elderly see that sauna works as alleviation of pain and the warmth relaxes the muscles. Furthermore, sauna has positive effects on sleeping. Sauna reminds elderly about their families, childhood’s environments. All ceremonies and smells are important for the elderly. Sauna is seen as a warm and pleasurable place, and it reminds the elderly of their old customs.

**Christmas sauna**

In Finland, Christmas feeling is linked with sauna. It is important that people are clean both in- and outside when the Christmas celebration starts. Tradition of Christmas sauna has a long history. It is a transitional ritual which helps people to orientate themselves from everyday routines to Christmas celebration.

Traditionally, heating of the sauna started very early in the morning, sometimes a day before the Christmas Eve. Everybody was supposed to go sauna during the day. There are many beliefs connected to Christmas sauna. For example, if people were quiet in the sauna the mosquitoes would not disturb them next summer. It was believed that after the sunset, the so called invisible people, who had lived in a house before, took the sauna for themselves. Throwing beer on the stove of the sauna meant that the barleys would grow better next year.

The Christmas sauna has been the most important happening for Finnish people. It was prepared with piety and meticulous care. The Christmas sauna has always belonged to Finnish farmer’s celebration as well as in other
Scandinavian countries. Sauna was also a place of birth, and therefore the birthday of Jesus made sauna extremely sacred place. (Compare to Hongisto ja Pihlajamäki, 2006, s 9)

The sleep and the sauna

We know that the sauna relaxes physically and mentally. Also, it gives pleasure and a peaceful feeling. The sauna gives more depth to the sleep, which has positive for memory. That is why it is so important for older people to go to sauna.

The favorable effect of the sauna upon falling asleep and the quality of night’s sleep is described to be connected partly to the change of body’s temperature. The rise of the body temperature expedites falling asleep and sleeping deeper. (Vihavainen 2008)

References

Hongisto Mervi, Pihlajamäki Merja, Saunan salaisuus, 2006

Vihavainen Raili: Sauna 1/2008


Vesi- ja kylpyhoitojen historiaa, Joh A Roiha, Kylpy ja vesihoido-opas

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