

Art, Art Education and Art Pedagogy for Brain Health

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ABSTRACT - The field of art, art pedagogy and art education is changing and has found its place in the area of social and healthcare education and its work practices. Art education practices comprise teaching that uses art methods, materials and tools. In this process, pedagogically guided means-ends art activities play a significant role. The operations are assessed in relation to the set objectives and in view of their outcomes. The purpose of this paper is to describe the double meaning of this approach in education and in practice. Examples are based on two studies carried out through the practical action research strategy and narrative approach. The qualitative data of the process (1. N=31, 2. N=17) were analysed using the narrative method. The results show that art and means-ends art pedagogy, based on sociocultural learning practice, are means of learning to build and create life by expanding the consciousness, by shaping new perspectives, constructing meaning, creating and establishing social interaction with others, and sharing a common culture. It is also shown to be a proactive process to enhance brain health, when brain health is examined and as people themselves experience it.

Znanstveni članek

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KLJUČNE BESEDE: starejši, umetnost, umetnostna vzgoja, umetnostna pedagogika, zdravje možganov

POVZETEK - Področje umetnosti, umetnostne pedagogike in umetnostne vzgoje se spreminja in tako je našlo svoje mesto na področju socialnega in zdravstvenega izobraževanja in znotraj njegovih delovnih praks. Umetnostna vzgoja vključuje poučevanje, ki uporablja umetnostne metode, materiale in orodja. V tem procesu pedagoško vodene t.i. »sredstvo-cilj« umetnostne dejavnosti igrajo pomembno vlogo. Delovanje je ovrednoteno glede na dosego zastavljenih ciljev in dobljenih rezultatov. Namen prispevka je predstaviti dvojni pomen tega pristopa v izobraževanju in v praksi. Primeri temeljijo na dveh študijah, izvedenih s pomočjo praktične akcijske raziskovalne strategije in metode pripovedovanja. Kvalitativni podatki (1. N = 31; 2. N = 17) so bili analizirani z metodo pripovedovanja. Rezultati kažejo, da sta umetnost in umetnostna pedagogika »sredstvo-cilj«, na podlagi sociokulturne učne prakse, načina učenja za grajenje in ustvarjanje življenja s širjenjem zavesti, z oblikovanjem nove perspektive, z oblikovanjem pomena, z vzpostavitvijo socialne interakcije z drugimi in z deljenjem skupne kulture. Prav tako se je ta pristop izkazal za proaktivni proces pri spodbujanju zdravlja možganov, ko se zdravje možganov pregleda in kadar ljudje sami izkusijo napredek.

1 Towards a new multidisciplinary learning and working culture

The aim of the paper is to describe the possibilities of art, art education and art pedagogy when changing the frame and work practices to more multidisciplinary manner in social and healthcare education and services. It is important when chancing the work practices with older people, to develop proactive and preventive work practices and services. The frame was earlier developed through research within the arts education framework in the degree programme in Social Services of Oulu University of Applied Sciences. The studies in arts subjects within the Degree Programme in Social Services provided the students with relevant knowledge and skills for mastering

the work of Bachelor of Social Services. In the doctoral thesis research (Malmivirta 2011), art, art education and art pedagogy are linked with postmodern art education, which implies commitment to pragmatist aesthetics and Dewey's theory of pragmatist art education, with special reference to the principles of means-ends action and the sociocultural learning practice. The research results from the students' diaries (N=31) and the analysis of the contents justify a conclusion to the effect that instruction in arts subjects, linked with this frame, can support the personal and professional growth of the student. Moreover, engaging in the art enhances the student's social interaction skills as well as reflective and visual thinking. The students had also enhanced their sociocultural expertise.

2 Combining art, health and well-being

Cultural activities and art improve people's well-being and health, when health is examined with a holistic and integrated approach and as people themselves experience their health (Small and Hughes, 2007). According to Gadamer (1996), the perspectives of phenomenology and hermeneutics define health as a kind of presence with other people and active participation in whatever people value as significant in their lives. Health and illness are related to cultural change and existence. Therefore, the health aspect of well-being would not be measurable only with medical criteria, but it would also need a wider understanding of human existence (Honkasalo et al. 2012, p. 7). Cultural experience and health – The coherence of health and leisure time activities (2001) by Konlaan is regarded as one of the ground-breaking cornerstone studies on the visibility of art, culture and their effects on health and well-being in the Nordic countries. The study has had a significant role in the Finnish discourse on art and well-being. The results of Konlaan's extensive research (2001), which examined the health data and cultural pastimes of some 25,000 Swedes, indicate that consuming culture and art activities promotes health and prevents memory disorders. According to the study, those engaged in cultural activities live longer than those who do not.

Art in its different forms (visual arts, dance, music, drama, story-telling, photos and films in all their forms) have been proven to activate sensory functions and to promote the maintenance of flexible brain operations. Brain research shows that the stimulation of both short and long term memories has a significant role in brain well-being. Brain imaging techniques show that new connections between neural networks are created when stimulated with visual, auditory, verbal and kinaesthetic sensory stimuli. Engaging in pleasing and meaningful activities and learning and developing new skills moulds the brain and keeps it fit (Diamond, 2000; Cohen, 2006; Müller, 2003; 2007; Zeki, 1999; 2001; 2009; Powers, 2010; Malmivirta, 2011; 2015a, b). Art and art activities increase the sense of social belonging and participation reduces blood pressure and eases stress and, therefore, reduces the need for medication (Cohen, 2006).

When working with older people, combining art and culture and promoting brain health, constructing the pedagogical frame for guiding and teaching is needed, taking earlier research studies into account as well. Firstly, it is a question of how we see older people as learners. Then the teacher, artist and caregiver of the art activities operate in the role of an art educator in supporting life-long human growth. The actors create, using art, diverse situations with increasing depth, in which the older persons can examine their personal life histories with each other. The actors act in creating spaces, which may lead to moments of enlightenment in the examination of one's personal life course. In art activities that apply pragmatist means-ends art pedagogy, the participants may explore their life worlds, their human and historical worlds, which become apparent from their experiences (Dewey, 1934/1980; 1997; Malmivirta, 2011; 2015a, b). Accordingly, human beings exist through their choices and their self-awareness. Art touches the mind and it is also a means of creating life by expanding the consciousness, by shaping new perspectives, constructing meaning, creating and establishing social interaction with others and sharing a common culture (Eisner, 2002, p. 3; Bateson, 1987, pp. 128–156; Malmivirta, 2011, pp. 76–77).

3 Art, art education and art pedagogy bridging brain health

As an example of using the developed pragmatist means-ends art pedagogy and noticing the findings in terms of the important links to brain health, in the following paragraphs we will describe a research and development project, called Methods and tools for promoting brain health to complement the service structure in the Turku region, later called as Art and Culture – Keys for better Brain Health. This research and development project was a subproject of the TEHU Pumpu project, Citizen Centric Welfare Services with Multiple Service Providers. It was funded by the European Regional Development Fund and Southern Finland ERDF Programme Unit and operated by the Faculty of Health and Well-being of Turku University of Applied Sciences in Finland. It was carried out together with a senior lecturer and project planner of TUAS and seven different partners and associations with four artists and four other actors in the two cities within the region, Turku and Salo. The overall aim was to develop the regional welfare service structures with a citizen-centred approach by packaging welfare services into new service concepts and products (Malmivirta and Kivelä, 2015).

The tasks of the Art and Culture – Keys for Better Brain Health research and development (hereinafter RD) work were 1. Planning and enacting four different service models within in the framework of art and culture, carried out through the practical and emancipatory action research strategy, and 2. Describing the keys for promoting brain health and memory functions developed in the Art and Culture – Keys for Better Brain Health enactments. The development of the service models was executed with the following themes and objectives:

1. What do I want to remember from my life? The objective was to create illustrated stories of significant life experiences and memories by utilizing the customer's

personal childhood photographs, stories and means of visual arts, while at the same time activating brain and memory functions.

2. Yellow Cottage and a Patch of Potato. The objective was to activate brain and memory functions by studying the architecture of the childhood home and environment with the means of photographs, personal stories and visual arts.
3. The stage of memories. Here, the objective was to activate brain and memory functions with the help of old photographs, magazines and other visual material that were important to the participants, as well as with the means of paper theatre.
4. Genius Body. The objective was to activate brain and memory functions with the help of creative movement and self-expression exercises by moving, dancing, observing, listening, meeting and encouraging the participants to discover something new and to do things differently.

The target group of the development activities were 65–75-year-old citizens (N=17) who were interested in their brain health and activating their memory functions. The health and self-care behaviour of this age can be influenced by using new kinds of citizen-centric service models. When participatory art and culture activities are put into practice in the spirit of pragmatist means-ends art pedagogy and sociocultural learning practices, health and well-being can be promoted with existing resources in the immediate cultural environment of the people targeted. The important topic in any address related to old age is how to prevent and postpone the need for services and also save the costs. For this reason, people are challenged to take responsibility for their health and well-being. In the citizen-centric approach, reinforcing the citizen's sense of agency is essential, putting individuals in the key position for caring for their brain health through their lifestyle choices. A shared concern is how to keep our memories functional, our brains flexible and thereby prevent memory disorder related service needs (Malmivirta, 2015, pp. 25–116, 178–191).

4 Research strategy

The Art and Culture – Keys for Better Brain Health RD work was based on the practical action research strategy aiming to develop best practices and service models for better brain health. The RD work took the shape of a self-reflective circle, in which the process was continuously examined from a holistic perspective. The actions and the participants, the actions of the multiprofessional team, as well as the suitability and usability of the chosen forms, methods and materials of the art activities, were all observed. The Art and Culture – Keys for Better Brain Health RD project was depicted as a spiral which progresses in time in cycles (Kemmis and Mc Taggart 1988, pp. 5–6; Malmivirta, 2011, pp. 80–82; 2015, pp. 29–31). The research data was gathered during individual and group interviews based on the narrative method (Lieblich, 1998), using also the observations, photos and videos from the art activities (Glandinin and Connelly, 2007, p. 78; Bruner, 1996, p. 41; 2002, p. 17; Malmivirta, 2011, p. 156; 2015a, pp. 70–71).

The life experiences of the participants were at the very heart of the citizen-centric approach and planning. The objective during the development process of the service models was to create various kind of spaces with different artistic means, methods and tools and to learn from experience. Another objective was to create situations which provide opportunities for discovering development opportunities related to one's personal experiences, as well to find resources for promoting one's brain health. The starting point was the concept of an active, functional and essentially value-based human being who, as a cultural being, is attached to his social environment through various practices (Dewey, 1951, pp. 111–112; Malmivirta, 2011, p. 54). The key is how the individual is able to utilize the growth potential and opportunities of his experience and to use these as resources. The ultimate objective is an emancipated individual who determines his own path. In the life-long growth and learning process, people become critical actors or a community of actors, who, through their actions, realize the importance of their health and well-being and especially their brain health.

In sociocultural activities, work takes place in various everyday contexts by using the cultural tools of the members of that working context. Cultural tools are connected social interaction and activities: technical tools and psychological tools, such as words and concepts. Counting systems, mnemonics, works of art, writing, plans and established signs, icons, symbols, codes, non-linguistic signs and gestures, all are examples of psychological tools which get things done and heard (Vygotsky, 1934/1980, p. 137; Malmivirta, 2011, p. 254). Also non-verbal language in which all expression acts as a means for improving the understanding between the parties in a conversation, and dialogic communication taking place on the borders of the self and the other (Bakhtin, 1981, p. 293).

5 Description of the means-ends art activities and the bridge between brain health

Autobiographical time travel related to the life stories of the participants put childhood experiences in motion, being aware of them as significant and even key experiences of life during the pedagogical guided means-ends art activities. Life-size stories were woven into symbolic paintings and visual narratives: colours of the fields, lines, brush strokes, bright images of houses and gardens and hidden playgrounds. When describing the paintings, the memories revealed plenty of information which became visible as different customs, routines, practices and feelings. Visual perception, visual thinking, reflective thinking, locating places and distances in time and in the course of events in the participants' personal life course all took place when creating visual stories, childhood maps with personal stories, drama scenes from the younger age and creative dance movement of the participants. It was as if the events from the time of the photographs became more vivid when the images were enlarged and processed with colours.

From the perspective of brain and memory activation, the fact that every participant in the participatory means-ends art activities has had the chance to tell the others things they themselves consider important, has been significant. Everyone reminisced about the course of their life together during the process, making hidden childhood stories heard and seen by telling and visualizing them through art. By putting one's life into words, it is possible to simultaneously mediate spoken and unspoken messages. The stories needed an audience, and by identifying with someone else's story, the interaction becomes significant. The reflection process enables presence in the places constructed based on our perceptions. In order to make mental representations visible, processing perceptions into something visual is achieved with the help of conscious active thinking and utilizing the tools and materials of art. Perceptions obtained through sight are important, but they alone are not sufficient to organize what is perceived. Mental processes, thought and imagination are also present in active seeing (Dewey, 2010; Zeki, 2009; Malmivirta, 2015c).

6 Summaries and conclusions

Every service model lasted two months, and consisted of weekly two-hour sessions. According to the participants, participation in the art activities activated their memory, allowed them to learn something new and examine things from different perspectives. The participants described having learned something new about art and having a new kind of approach to art. The participants report about art having a positive effect on their vitality and positive changes in their mental alertness. The different forms and methods of art in the art activities were experienced as interesting, even surprising. The art activities activated the participants to return to the past in their memories, and then back to the present moment, challenged them to think differently and in general, consider many things much more closely. The sharing and telling of stories in the group has also enriched the participants' thought processes. Participatory art activities unearthed long forgotten things, buried deep in the memory, allowing them to be shared with others as a part of history common to all participants in the group.

Being part of the group and a community were experienced as particularly meaningful, and according to the group's accounts, working together has led to an improved sense of vitality. Learning something new and sharing experiences was experienced as easier when done in a group setting. The support and appreciation of others were also meaningful elements. The participants reported recognizing the target-oriented dimension in the art activities, although they did not always have a clear idea of what would happen next. Uncertainty increased their interest. The participants did not think of the art activities as twiddling or dabbling; rather, they were experienced as significant, target-oriented action. Furthermore, the activities were experienced as an important and meaningful way to organize one's life experiences. In addition to this, the art activities have allowed difficult issues to be processed and brought a new

kind of understanding to, for instance, war-time experiences, events and the distance between one's parents (Malmivirta, 2015a, pp. 50–88; pp. 92–123).

7 Keys to prevent brain health

A significant aspect seems to be that the possibilities in the brain are activated by our own action. By engaging in activities we like, developing and learning new skills, along with a healthy diet and exercise, we mould the brain and keep it in shape. Brain health Nussbaum (2011, pp. 6–12) is a result of a dynamic process in which an individual commits him/herself to a behaviour and a behavioural environment that enhances better brain health. The focus is on finding and identifying the behavioural models and operating environments which promote brain health. In addition to intellectual effort and reinforcing cognitive skills, nutrition and emotional, psychological, social and physical activity all affect brain health. The multifaceted brain healthy lifestyle contains social, physical and psychological activity as well as mental stimulation, which are all significant environmental or environment-based factors in promoting brain activation (Diamond and Hopson, 1998; Nussbaum, 2010; Nussbaum, 2011).

With cognitive skills (Michelon, 2006), we solve both simple and complex tasks in our lives. Cognitive capability affects our learning, remembering, problem-solving and perception. According to this view, activities that contain cognitive, intellectual challenges are defined as promoting brain activity and therefore, brain health. Not only the participatory art activities based on target-oriented art pedagogics but also the instruction and construction of art activities, based on sociocultural learning practices, executed in the participatory Art and Culture – Keys for Better Brain Health service model activities have succeeded in promoting cognitive capabilities. The different layers of memory were in active motion, as the photographs and life stories were transformed into visual narratives, portfolios and the stage, with the means of arts and theatre. In addition to this, the story-telling process inspired linguistic talent. Visual thinking as well as visual and mental processing took place in watching the photographs and art and combining and processing the photographs with the stories in the personal history of the participants, with the means of visual arts and paper theatre. Similarly, visual perception and imaging in following one's own and the others' movements took place in the Genius Body project. The body was activated with diverse movements, each of which contained elements of problem-solving and decision-making. The art activities of all of the service models provided the opportunity to learn something new of the cultural environment of the participants' childhood and their daily cultural habits and history.

The significance of social interaction was emphasized in the group activities of all four service models. A sense of belonging to the community, a sense of participation, sharing stories and experiences and, as a result of sharing, the deepening of one's own understanding and experience were regarded as important outcomes of the project. For all participants, the forms, means and methods of the participatory art activities

were brand new and, when learning them, the participants developed their skills into an art. Brain health is a lifelong, proactive process in which the brain is moulded by the stimuli in the environment. The brain feels well when the environment promotes activation and involves social interaction. From the point of view of promoting brain health, it is important that the brain is occupied with new and complex tasks throughout our lives: this way, the unused reserve of our brain may also promote brain health and delay the emergence of memory disorders (Nussbaum, 2011, pp. 6–12; Howard-Jones, 2007, pp. 27–33; Kramer et al., 2004). In the Art and Culture – Keys for Better Brain Health service models, each participant discovered new skills and talents to cultivate with the means of art and culture. The unused reserve of the brain was put to use. The following keys for promoting brain health were developed in the four service models: creative thinking, visual perception and visual thinking, reflective thinking, tacit knowledge, mental activity, creativity, understanding of art, making art in different ways and methods, lifelong learning and social interaction.

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Pomen umetnosti, umetnostne vzgoje in umetnostne pedagogike za zdravje možganov

Namen prispevka je predstaviti dvojni pomen uporabe umetnosti, umetnostne vzgoje in umetnostne pedagogike na področju zdravstvenega in socialnega varstva ter delovnega usposabljanja za bolj multidisciplinarni pristop pri izobraževalnih aktivnostih za spodbujanje in vzdrževanje funkcije možganov. Povečevanje incidence bolezni povezanih s pešanjem spomina, kaže potrebo po novih vrstah preventivnih modelov za izboljšanje zdravja možganov. Predstavitev temelji na dveh študijah, izvedenih s pomočjo praktične akcijske raziskovalne strategije in metode pripovedovanja. Okvir je bil predhodno razvit v doktorski disertaciji znotraj študijskega programa Socialne Storitve na Oulu University of Applied Sciences na Finskem. V raziskavi so umetnost, umetnostna vzgoja in umetnostna pedagogika povezane s postmodernim izobraževanjem o umetnosti, kar pomeni zavezanost k pragmatični estetiki in Deweyevi teoriji o pragmatični umetnostni vzgoji, s posebnim poudarkom na načelih dejavnosti »sredstvo-cilj« in sociokulturnih učnih praksah. Ugotovljeno je bilo, da pouk umetnosti, povezan s tem okvirjem lahko podpira osebno in strokovno rast študentov. Poleg tega vključevanje v umetnost krepi večšine socialne interakcije, kot tudi refleksivno in vizualno razmišljanje študentov. Prav tako so študenti izboljšali svojo »družbeno-kulturno strokovnost«.

Več študij kaže, da kulturne dejavnosti in umetnost izboljšujejo dobro počutje in zdravje ljudi. Ljudje ocenjujejo zdravje kot pomembno v njihovem življenju, saj jim omogoča aktivno sodelovanje in povezovanje z drugimi ljudmi. Zdravje in bolezni so povezane s kulturnimi spremembami in obstojem, zato zdravstveni vidik dobrega počutja naj ne bi bil merljiv zgolj s kriteriji iz medicine, pač pa bi potreboval tudi širše

razumevanje človeškega obstoja. Umetnost v svojih različnih oblikah (vizualna umetnost, ples, glasba, drama, pripovedovanje zgodb, fotografije in filmi v vseh oblikah) se je izkazala za aktivatorja čutnih zaznav in stimulatorja prilagodljivih možganskih operacij. Stimuliranje tako kratkoročnega in dolgoročnega spomina ima pomembno vlogo za dobrobit možganov. Tehnike slikanja možganov kažejo, da se znotraj nevronske mreže ustvarjajo nove povezave na podlagi slušnih, verbalnih in kinestetičnih čutnih dražljajev. Vključevanje v prijetne in smiselne dejavnosti ter učenje in razvijanje novih znanj oblikuje možgane in jih ohranja zdrave. Umetnost in umetnostne dejavnosti povečujejo občutek socialne pripadnosti, zmanjšujejo krvni tlak in lajšajo stres ter posledično zmanjšuje potrebo po zdravlilih.

Pri delu s starejšimi ljudmi je za gradnjo pedagoških okvirov poučevanja in vodenja potrebno kombinirati umetnost, kulturo in promovirati zdravje možganov. Učitelj, umetnik ali skrbnik umetnostnih dejavnosti deluje v vlogi edukatorja umetnosti pri podpiranju vseživljenjske rasti ljudi. Z umetnostjo se da ustvariti različne situacije, v katerih lahko starejše osebe med seboj pregledujejo zgodovino osebnega življenja. Akterji delujejo tako, da ustvarjajo prostore, kateri privedejo do trenutkov razsvetljenja v pregledu osebnega življenja posameznika. V pedagoško vodenih umetnostnih dejavnostih lahko udeleženci raziščejo svoje lastne življenjske, osebne in zgodovinske svetove, ki izhajajo iz njihovih izkušenj. Na ta način ljudje obstajajo na podlagi svoje odločitve in samozavedanja. Umetnost se dotakne uma in je tudi sredstvo za ustvarjanje življenja s širjenjem zavesti, z oblikovanjem novih perspektiv, z gradnjo smisla ter z oblikovanjem in vzpostavitvijo socialne interakcije z drugimi in delitvijo skupne kulture.

Na Turku University of Applied Sciences smo v sodelovanju s sedmimi različnimi regijskimi združenji na podlagi obstoječih izkušenj vplivanja uporabe umetnostne pedagogike na zdravje možganov razvili štiri različne storitvene modele za izboljšanje zdravja možganov. Splošni cilj je bil razvoj struktur regionalnih socialnih storitev strukture s pristopom usmerjenim v prebivalce tako, da se socialnovarstvene storitve uokvirijo v nove koncepte storitev. Naloge projekta »Art and Culture – Keys for Better Brain Health« sta bili: 1. Načrtovanje in potrditev štirih modelov storitev v okviru umetnosti in kulture, izvedenih skozi praktično in emancipacijsko raziskovalno strategijo, in 2. Opisovanje »ključev«, predpisanih za spodbujanje zdravja in spominske funkcije možganov v projektu »Art and Culture – Keys for Better Brain Health«. Razvoj storitvenih modelov je bil izveden na podlagi naslednjih tem in ciljev: 1. »Česa se želim spominjati iz mojega življenja?«; cilj je bil ustvariti ilustrirane zgodbe o pomembnih življenjskih izkušnjah in spominih z uporabo fotografij iz posameznikovega otroštva, zgodb in vizualne umetnosti ter hkrati aktivirati funkcije možganov in spomin. 2. »Rumena koča in greda krompirja«; cilj je bil aktivirati funkcije možganov in spomin s študijem arhitekture doma iz otroštva in okolja s pomočjo fotografij, osebnih zgodb in vizualne umetnosti. 3. »Stopnja spominov«; pri tem modelu so bile za aktiviranje funkcije možganov in spomin uporabljene stare fotografije, revije in drugi vizualni material, ki so bile udeležencem pomembne, kot tudi z uporabo papirnatega gledališča. 4. »Genialno telo«; cilj je bil aktivirati možgane in spominske funkcije

s pomočjo ustvarjalnega gibanja in samo izražanja z vajami, premikanjem, plesom, opazovanjem, poslušanjem ter s spodbujanjem udeležencev, da odkrijejo nekaj novega in delajo stvari drugače.

Ciljna skupina omenjenih dejavnosti so bili prebivalci, stari od 65 do 75 let ($N = 17$), ki so bili zainteresirani za zdravje možganov in aktiviranje spominskih funkcij. Vsak model storitev je trajal dva meseca, po dve uri tedensko. Ko se participativna umetnost in kulturne dejavnosti izvajajo v praksi v duhu pragmatične »sredstvo-cilj« umetnostne pedagogike in sociokulturnih učnih praks, je zdravje in dobro počutje ciljne skupine mogoče spodbujati z obstoječimi sredstvi v njeni neposredni okolici. Pomembna tema naslavljaajoč starost je navadno, kako preprečiti ali zmanjšati potrebo po storitvah in prihraniti stroške. Zaradi tega so ljudje izzvani, da prevzamejo lastno odgovornost za zdravje in dobro počutje. Na prebivalce osredotočen pristop, ki krepi njihov občutek aktivnosti je nujen, saj v osrednje mesto za skrb za zdravje možganov postavlja njihove izbire življenjskega stila. Ključno je, da je posameznik sposoben izkoristiti potencial rasti in priložnosti na podlagi svojih izkušenj in ga uporabljati kot vir. Končni cilj je emancipiran posameznik, ki sam določa svojo pot. Znotraj seživljenjskega učenja in osebnostne rasti, bi naj ljudje postali kritični udeleženci ali skupnost udeležencev/akterjev, ki se skozi svoja dejanja zavedajo pomena zdravja in dobre počutja in predvsem zdravja možganov.

Sodelovanje v umetnostnih dejavnostih je aktiviralo spomin udeležencev in jim omogočilo, da se naučijo nekaj novega in preučijo zadeve iz različnih perspektiv. Udeleženci so opisali, da so se naučili nekaj novega o umetnosti in tako imajo tudi nov pristop do nje. Prav tako so povedali, da je umetnost pozitivno vplivala na njihovo vitalnost in prinesla pozitivne spremembe k mentalni osredotočenosti. Različne oblike in metode umetnostnih dejavnosti so doživeli kot zanimivo. Dejavnosti so jih aktivirale, da so se lahko vrnili v preteklost, v svoje spomine, in nato nazaj na sedanji trenutek, kar jih je izzvalo k drugačnemu načinu mišljenja na splošno in k bolj natančni obravnavi posameznih stvari. Delitve in pripovedovanje svojih zgodb v skupini je prav tako obogatilo miselne procese udeležencev. Dejavnosti participativne umetnosti so odkrile že pozabljene stvari, pokopane globoko v spomin, in udeležencem omogočile, da so jih delili z drugimi kot del skupne zgodovine vseh v skupini. Pomen socialne interakcije je bil poudarjen v skupinskih aktivnostih skupini pri štirih storitvenih modelih. Občutek pripadnosti skupnosti, občutek za sodelovanje, delitev zgodb in izkušenj, in kot rezultat delitev, tudi poglobljanje lastnega razumevanja in izkušenj, se štejejo kot pomembni rezultati projekta. Oblike, sredstva in metode delovanja participativnih umetnostnih aktivnosti so bile popolnoma nove za vse udeležence in so pripomogle k razvijanju spretnosti udeležencev v pravo umetnost. Skozi storitvene modele v okviru projekta »Art and Culture – Keys for Better Brain Health« je vsak udeleženec odkril nove sposobnosti in talente za negovanje umetnosti in kulture. Tako je navadno neuporabljena rezerva možganov bila uporabljena. Ključni za spodbujanje zdravja možganov, ki so bili razviti v štirih storitvenih modelih, so bili naslednji: ustvarjalno mišljenje, vizualno zaznavanje in vizualno razmišljanje, refleksivno razmišljanje, implicitno znanje,

mentalna aktivnost, ustvarjalnost, razumevanje umetnosti, ustvarjanje umetnosti na različne načine, vseživljenjsko učenje in socialne interakcije.

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