Inclusion for Deaf and Hard of Hearing Pupils in the School System of the Republic of Slovenia

Damjana Kogovšek, Martina Ozbič and Stane Košir

Project findings

To study inclusive practices means to explore and analyse educational practices in view of what inclusion is – what the normative for inclusion is.

In accordance with the general concept of inclusion defined and described in this project, we define inclusive education as the system where all children can learn together and have equal rights in mainstream schools. Such schools welcome all children with their unique individual characteristics, interests, abilities and learning needs; all children with and without special needs and disabilities; a school combating discriminatory attitudes, and offering a meaningful and individually adapted education to every pupil within the community of the class" (Frederickson & Cline, 2002; Johnsen, 2000; UNESCO, 1994 in Johnsen, 2007). The UNESCO (2009) definition states that inclusive education is:

> "... an ongoing process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination" (p. 3).

It is thus clear, that thinking has moved on beyond the narrow idea of inclusion as a means of understanding and overcoming a deficit and it is now widely accepted that it concerns issues of gender, ethnicity, class, social conditions,

health and human rights encompassing universal involvement, access, participation and achievement (Ouane, 2008).

The denial of one single truth is one of the basic postulates of the post-modern era. While the modernists were striving for the objective truth, the objective of the post-modernists was the shift from the explanatory towards the plural approaches to discussions, trying to identify the multitude of small things, which influence the opportunities of the individuals with special needs. The post-modern era raises moral standards, such as the ethics of concern and the ethics of justice. While we have been aiming at the truth so far, the modernists are striving for the best practices. Consequently, also the paradigm of the system of education and schooling for children with special needs has changed due to the raised awareness and respect for the rights of every human individual. In this connection, we can say that the education of the deaf and hard of hearing population has significantly changed. This is a particularly deprived group of people with special needs, which encounters many problems in building up knowledge, getting professional education as well as insufficient employability due to communication problems. At the same time this is a very heterogeneous group due to a) different hearing remains, b) the time period in which their hearing started to deteriorate, c) their narrower and broader social environment, which may enhance or inhibit the individual in his communication development and consequently in his social realisation as an individual human being.

Following the doctrine (the international principles of human rights as stated in UNESCO documents, UN Convention on the Rights of Persons with Disabilities,…), the school system in Slovenia has been significantly changed. People with special needs of different levels and types of impairment were integrated in a uniform school system. Different programs, which were introduced, should be adapted to these different needs, further systemic professional assistance, the possibility of adaptation of the organization of work, and internal differentiation within lessons should be provided.

Several studies showed the positive impact of the environment in the sense of empathy and devotedness. However, individual differences do emerge, yet the process of performative integration of the deaf pupils is most effective; differences are observed between the emotional and social integration of individual deaf pupils. Compensatory therapeutic programs and programs adapted to their individual disabilities contribute largely to their performance. The inclusion of deaf pupils in the mainstream schools did not have negative impacts on their hearing peers. (Schmidt & Čagran, 1998). Regarding the social situation of

deaf individuals, the research results proved to be contradictory. Peršolja (1997) established that there are no differences between hearing and deaf pupils in their social inclusion in the classroom community and further, no differences between both genders at both the lower and the higher primary school level were observed. However, the trends of weaker social inclusion of deaf pupils than their hearing peers at the higher level are recognized.

Schmidt (1997) considers the attitudes of the teachers toward the integration of children with special needs as an important element of their successful inclusion in mainstream primary school. The author identified six important factors contributing to successful inclusion, such as the presence of special education teacher in school, forms of schoolwork, emotional and performative characteristic traits of children with special needs, assistance of parents and special education teachers, the volume of knowledge, communication of children with special needs, and the social status of children with special needs.

We can also see inclusion as a global policy prescribing development towards a local regular school that welcomes all children with their unique individual characteristics, interests, abilities and learning needs; all children with and without special needs and disabilities; a school combating discriminatory attitudes,
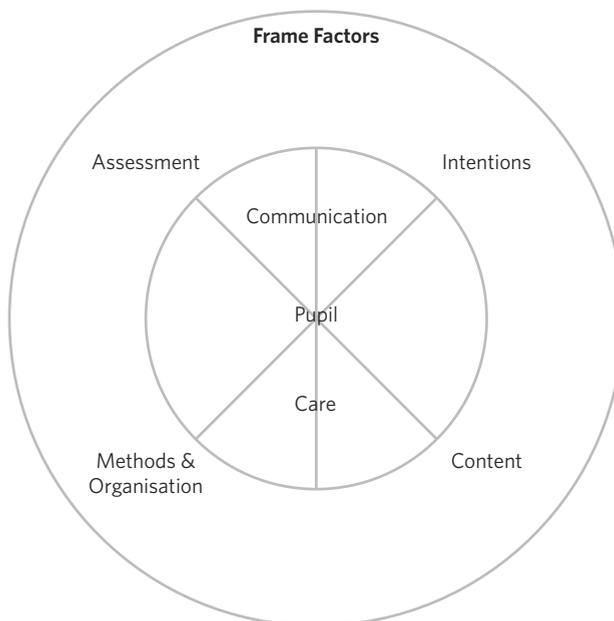

Figure 1. *The Curriculum Relation Model* revised in Johnsen (in press 2007)

and offering a meaningful and individually adapted education to every pupil within the community of the class (Frederickson & Cline, 2002; Johnsen, 2000; UNESCO, 1994; WB 04/06 in Johnsen, 2007).

Figure 1 illustrates the main interest of the international research project this study is a part of, with an overview of eight focus areas of the research. The areas or frame factors are knowledge about the pupil/s, the four classical didactic aspects – educational assessment, intentions, content and method & organisation, communication and care.

Inclusion for deaf and hard of hearing students

We all live in one world, persons with special needs and persons without. We could name the world an inclusive world. The aim of this inclusive policy is to include the deaf and hard of hearing persons in the local environment, meaning inclusion in the local kindergarten or school, where the deaf or hard of hearing person lives. This raises the question: «Are the teachers ready for this challenge?" The fact is, that some schools are ready to accept deaf and hard of hearing pupils and other not. Teachers in mainstream schools are very well educated for such work, but less competent and educated in a field of deafness, communication strategies and related knowledge and skills. Consequently, they may not be able to recognize the need of deaf and hard of hearing pupils and give them relevant support and help. Inclusion is a process for all, whatever the hearing status is. Inclusion needs to be between deaf, between deaf and hard of hearing and between hearing and deaf and hard of hearing as well as all other persons. Inclusion consists of communication and interaction, but for deaf and hard of hearing individuals inclusion can be perceived as a problem due to lack of relevant communication. Communication is a two-way process with the aim of including all participants in a society, community or class. Communication is not only important for education, but primarily means of social interaction. Accordingly, it is obvious that the use of false or unsuitable approaches of communication and unmodified teaching is far from inclusive practice and it leads to misunderstanding and disharmony.

This study presents reflections about current educational system, asking whether it is ready for an inclusive school and able to offer educational inclusion – not only on paper, but also in practice – for traditional minorities when it comes to communication, such as deaf and hard of hearing pupils. We also look globally and in lifelong perspective. That means that the inclusive school

and inclusive society does not finish at the age of 18, but it is present the whole life of deaf and hard of hearing people and therefore should become a way of their and our living.

The study is not constructed as a critic to mainstream teachers, because their work is mostly oriented towards pupils without special needs. The intention with the study is to be a reflection on current educational system and on a society, which is mostly oral and auditory oriented. Inclusion for the deaf and hard of hearing is therefore a very big challenge for our society.

Research description

The project is a combination of different research approaches. We have focused on the deaf and hard of hearing population. Within this group, we discuss cultural diversity and different approaches in working with deaf and hard of hearing persons. We have tried to include as many deaf and hard of hearing persons as possible (trying to analyse the complete Slovenian deaf and hard of hearing adolescence population that was educated in mainstream and special schools). Because of different research aspects, the samples varied from one research to another, depending on which aspect was covered. In the aspect of communication, there were 110 deaf individuals from 5 to 23 years, in the aspect of socialisation, inter-cultural communication and self-esteem there were 102 deaf individuals from 15 to 23 years and concerning the aspect of the inclusion process there were 67 teachers involved in the research. We mainly focused on the adolescent population where we have tried to get as much relevant data from deaf and hard of hearing adolescents as possible. We have been interested in data that represent the essence of deaf and hard of hearing people in a hearing world, such as the importance of sign language, well-being, living together in the same world, teaching methods and strategies.

Aspects of the inclusion process

The aim of the study was to analyse what kind of adaptation the schools implement and mainstream teachers apply in schools where deaf and hard of hearing pupils are (deaf and hard of hearing persons can attend different educational programmes). We were interested in teaching processes, were didactic aspects such as level of communication, language and material were adjusted to the needs of deaf and hard of hearing pupils. Our purpose was to define and evalu-

ate educational conditions for or considerations about mainstreamed deaf and hard of hearing children. We have analysed educational environment including didactic and methodical considerations, acoustic environmental classroom considerations, supporting teams and timing considerations, where the deaf and hard of hearing children participated or were involved.

The sample represented 67 mainstream teachers from 25 to 59 of age (61 women, 5 men). Each of them had one or more deaf or hard of hearing pupils in their class. There was 60 educational workers, teachers, pre-primary teachers and professors. In addition, different specialists were available for extra help, three speech and language therapists, one special educator, two psychologists, one social worker and one teacher. The research focus was on exploring important classroom-interaction adaptations such as communication adaptations, language/cognitive considerations, curriculum considerations, instructional considerations, special adaptations and use of technology. We gathered basic data about teachers and about specific considerations. These data represented independent variables, while dependent variables was oriented into specific considerations concerning school content.

Conclusions and implications. Summarising the findings, the conclusion was that beside the rehabilitation content of additional professional help, deaf and hard of hearing pupils need educational support. That means that deaf and hard of hearing pupils need extra time and support to understand some of the tasks within the educational content, such as interpretation of some tasks, more instruction and language interpretation, in order to reach the academic aims and standards. If additional professional help is implemented only once per week per pupil and if the education process is more orally and hearing oriented and less visually and multi-sensory, there is reason to expect that deaf and hard of hearing pupils will have serious problems with attending education as well as the social life of regular educational institutions. The need for social identification with deaf culture and the sign language is crucial. Hence, the findings raise doubt as to whether educational practice has been properly adjusted to deaf and hard of hearing pupils. We can say that only academic achievement or academic aims should be evaluated and they are part of additional help. However, also the rehabilitative aims should be as important as educational ones, because the rehabilitative achievement are prerequisite. Based on the frame factors illustrated above as the main research interest, the discussion about inclusive practices for the deaf and hard of hearing people contain the following topics:

- Deaf and hard of hearing pupils are members of a very heterogeneous population, each of them has their own needs and can attend different educational programmes. As a heterogeneous group, they are included into a variety of schools with from 14 to 1200 children or more explicit as one deaf in a group of 7 or 33 other pupils in the class. The class is often acoustically inappropriate, meaning that the level of noise ratio is too high and disables the receiving of the direct speech signal.
- The communication process in the schools is based on verbal communication (listening, speech reading, writing and reading). Non-verbal communication is present on a small amount and it is conditional with the expression of individual – teacher or pre-primary teacher and not with the aim to increase understanding for all. Neither sign language nor usual gestures are used. The verbal direction come from the hypothesis, that deaf and hard of hearing people master the Slovenian language, which is only partly the case, because they need to create the language in specific conditions and circumstances.
- Teachers do not use visual material much. Their average use are schemes, films, models, pictures and photos. However, several teachers in the elementary grades (1-6 grade) use visual materials. In lower and upper secondary school, the teaching process is mostly based on verbal communication and because of that, visual material is not used much. Some of the educational aims are oriented towards reproduction of word (-speech) messages.
- According to social care, deaf and hard of hearing pupils can attend different educational programmes in Slovenia. The programmes are more academically than rehabilitative oriented. Our suggestion is that they should be more sensitive concerning rehabilitative aspects. The care consists of organised additional professional help for deaf and hard of hearing pupils, and is given relatively often, depending upon choice of programme, and it covers all who are involved in the educational process – the pupil, the parents and the teachers.

The results indicate that there is no clear vision concerning supporting deaf and hard of hearing pupils based on their potentials and independent ways of learning and living that is the aim of being included into the broader society. However, the results represented, insist on a past system and process of integration, where deaf and hard of hearing individuals adjust their lives to the hearing population. Thus, the realisation of the principle of inclusion (UNESCO, 1994) does currently not represent benefits for deaf and hard of hearing pupils or represent a social answer to actual needs of deaf and hard of hearing individuals.

Communication

The Most's study (2007) emphasized the importance of good speech intelligibility not only for basic communication but also as a factor that affects the child's social and emotional development. The results in the Polat's study (2003) revealed that speech intelligibility as an index of communication ability, was positively associated with all dependent variables of the Meadow/Kendall Social and Emotional Adjustment Inventory (1980). The author claims, that as long as the communication mode of communication used enables deaf students to express themselves, it will result in a healthy overall development, both academically and psychosocially; the positive feedback from others may result in positive self-esteem and the deaf person may feel part of a larger social network. Considering that disorders of both speech and voice occur in the speech of hearing-impaired speakers, we focused on the communication process of deaf persons. The aim of the research was to stress that the intelligibility of speech does not depend only on articulation but also on some other voice, speech and respiratory factors. The speech production of 91 deaf subjects was analysed. Speech, voice and acoustic parameters were assessed and a rehabilitation programme was constructed.

In early infancy, hearing loss significantly affect the development and intelligibility of speech in children with hearing impairment. Assuming that both speech and voice disorders occur in the speech of hearing-impaired speakers, the study analyses the speech and the overall intelligibility of 91 hearing-impaired speakers (5 to 23 years, 44% female and 56% males). We have recorded the subjects' speech with a Sony (DAT) digital recording device; model number TCD-D8, using a Sony microphone, model number ECM-719, and digital tapes. We have placed the microphone at a distance of 30 cm in front of the subject's mouth. The sound samples consisted of 5-10 minutes of reading/naming a closed set of words/pictures from the Slovenian three-position test for evaluating articulation of first-grade students. The CoolEdit96/CoolEdit2000 program was used to prepare the recorded material and Praat and Speech Analyzer programs were used for analysing the resulting sound files.

Conclusions and implications. The results of the study are useful in general speech therapy and not only for hearing-impaired speakers, since the training in one of several elements of speech can bring improvements in overall speech production. In speech therapy, articulation is not the only goal. Correct breathing, good phonation, overall good chaining of segments, velopharyngeal func-

tion and good control of the larynx can lead to intelligible speech. By developing and improving all the elements of speech production, the goal of sufficiently intelligible speech in deaf or hard-of-hearing subjects can be achieved. Speech does not only mean good articulation, but rather a coordinated pneumo-phono-articulation-hearing system. All of these segments can affect a child's psycho-social wellbeing. If there is a good communication between hearing, deaf, and hard of hearing people, the effect of successful communication is achieved. The concluding thought is that good speech intelligibility is important not only for the basic communication but also as a factor that affects the child's social and emotional feelings.

Socioemotional wellbeing

This study has dealt with risk factors for health and socialisation that are characteristic of the deaf and hard of hearing adolescent population in Slovenia. One aim of the research was to examine and describe difficult periods of adolescence and to identify possible connections between the individual areas of health and socialisation. The research included 102 deaf and hard of hearing youth in the ages from 16 to 24 years, who attended mainstream or special secondary schools.

Different authors described the adolescence as a period in which the individual has to cope with a series of developmental tasks. It is a time of exploration and testing. Therefore, we could consider risk taking to a certain extent as a natural form of behaviour (Tomori, 1995) for the hearing as well as for the deaf and hard of hearing adolescents.

Because of their specific way of communicating and because they belong to a specific minority culture, the deaf and hard of hearing represent a special group of people. In the socialisation process, our goal is to integrate deaf or hard of hearing youth into the hearing environment. This should be done as naturally as possible and in harmony with others. The process encompasses several objective and subjective factors that contribute to different levels of social development. One of the most important is without doubt the right kind of communication (Schirmer, 2001).

In Slovenia, little research has been carried out in the area of health and socialisation risk factors of the deaf and hard of hearing. In spite of the fact that extensive knowledge of these factors pertaining to the hearing world in Slovenia and abroad is gained from research and in depth studies, the findings cannot simply be transferred to the area of deafness and hearing impairment.

Our research covered the deaf and hard of hearing adolescent population as the first of its kind in Slovenia and at the same time the only one, which has provided an insight into the deaf population of adolescents.

Conclusions and implications. The results established that deaf and hard of hearing adolescents have lower self-esteem and higher degree of depression compared to results concerning hearing adolescents. The difference in self-esteem, between the groups is statistically significant concerning the impact of hearing loss, sex, school programme and code of communication. All of these results show that it is necessary to consider the specific needs of the deaf and hard of hearing while inviting them into the mainstream schools. For some of them it is a great opportunity, but for other not. Deaf persons should be together so that they can develop their culture, values and behaviours. Culture is a pattern of beliefs, values, arts, behaviours, social forms, institutions and knowledge that are characteristic of a community. That is very important for deaf persons.

References

Johnsen, B. H. (2007). *The Classroom towards Inclusion – Good Examples and Difficult Dilemmas*. Report from a series of workshops in Bosnian schools. Sarajevo: Connectum.

Meadow, K. P., Karchmer, M. A., Petersen, L. M., & Rudner, L. Meadow/Kendall (1980). *Social-Emotional Assessment Inventory for Deaf Students*: Manual. Washington, D.C: Gallaudet College, Pre-College Programs.

Most, T. (2007). Speech Intelligibility, Loneliness, and Sense of Coherence among Deaf and Hard-of-Hearing Children in Individual Inclusion and Group Inclusion. *Journal of Deaf Studies and Deaf Education*, 12(4): 495–503.

Ouane, A. (2008) *Creating education systems that offer opportunities for lifelong learning*. Paper presented at UNESCO International Conference on Education 'Inclusive education: the way of the future' 48th session. Geneva, 25–28 November 2008.

Peršolja. P. (1997) Socialni položaj integriranih učencev s slušno motnjo v slišečem razredu. *Defektologica Slovenica* Vol 5, No1, april str.52.

Polat, F. (2003). Factors Affecting Psychosocial Adjustment of Deaf Students. *Journal of Deaf Studies and Deaf Education*, 8(3): 351–361.

Rehabilitation (4th Ed) (pp. 183–218). Boston, MA: Allyn & Bacon.

Schmidt M., Čagran B. (1998). Kako poteka vzgojno izobraževalna integracija otrok z motnjo sluha v osnovno šolo: evalvacija in spremljanje modela integracije. *Defektologica Slovenica*. Vol 6, No 2, September str.16.

Schmidt. M. (1997): Vpliv stališč učiteljev na vzgojno – izobraževalno integracijo. *Defektologica Slovenica* Vol 5, No 3 december, str 18.

Schmidt. M. (2006): Zaznavanje integracije/inkluzije v osnovni šoli, *Sodobna pedagogika*, letnik 57, posebna izdaja, 320–337.

Shirmer, B. R. (2001). *Psychological, Social, and Educational Dimensions of Deafness*. Needham Heights, MA: Allyn and Bacon.

Tomori, M. idr. (1998). *Dejavniki tveganja pri slovenskih srednješolcih*. Ljubljana: Psihiatrična klinika Ljubljana.

UNESCO (1994) *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris, UNESCO. Ministry of Education, Spain

UNESCO International Bureau of Education (2009). *International Conference on Education. Inclusive Education: The Way of the Future*. The 28th Session Geneva 25–28 November 2008. UNESCO Paris. http://www.ibe.unesco.org/fileadmin/user_upload/Policy_Dialogue/48th_IC E/ICE_FINAL_REPORT_eng.pdf Accessed 08/06/2010.