

The Leadership of the Special Educator in the Management of the Inclusive Classroom

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The specific nature of the education for hearing-impaired children requires implementation of support models within the learning process. This indicates the need of providing training for the teachers and leadership of special educators in the inclusive classrooms. Our aim was to determine if the leadership of the special educator affects the management of the inclusive classroom where a hearing-impaired student is included. Our quantitative-qualitative research showed that the support model provided by a peripatetic support teacher proved to be a theory that appropriately functions in real practice, according to the improvements in all the examined areas following the special educator's advising.

Keywords: classroom management, inclusion, hearing-impaired student, leadership in education

Introduction

All teachers are challenged when it comes to managing an entire classroom filled with variety of characters, needs and ways of learning of the students. However, being an effective teacher implies having good classroom management skills. Yet the situation slightly changes when a regular classroom becomes an inclusive classroom. Then the teacher has the need of upgrading his/her skills in order to maintain the classroom as a place suitable for learning. In such teaching scenarios the special educator leads the regular teacher through the specifics of hearing-impaired students' knowledge acquisition.

Taking into account that inclusive education is now established as the main imperative intended for the children with special needs (Geoff 2003), we wanted to address the role of special educators in the process of including a hearing-impaired student. Therefore we firstly elaborate the concept of inclusion and explain the theoretical support models for students with hearing impair-

ments and present our case study in all of its phases and results that we gained.

The inclusion of children with special educational needs in regular schools confronts society with serious requirements. It can be said the inclusion is technically simple, but socially complex (Jachova 2011, 451). The complexity of inclusion is fundamentally related to the reality of schools and other educational environments, especially the dimension of inclusion called ‘culture.’ Even though inclusion as a philosophy has existed for many years, today we still talk about the development of an inclusive culture.

It is a fact that the inclusion is a process (Jachova et al. 2002) that requires time and series of changes. According to this, we define inclusion as transformation of us, of the schools, the system and of the societies (Jachova 2004).

Some educators think that the terms *inclusion* and *integration* refer to the same concept however they are often used incorrectly. The concept of inclusion was drawn from the concept of integration when in the 1990s both, a new term and a new agenda were adopted (Lise 2005). In that time the advantages of the new concept were recognized.

Inclusion is a postmodern concept where the person is in the center of the system, due to the network structure of the institutions. In addition to being a modern concept, integration establishes a hierarchically connected base of institutions. When a person is integrated it means that s/he is assimilated in the new environment. That requires the person to change in order to match the setting. Inclusion, however, is not trying to achieve normalization, but respects the individuality of the person. It maintains the identity of the individual that means that the environment changes to meet the needs of that individual (Jachova 2008).

In summary, inclusion means (UNESCO 2000, 35):

- more than ‘being there;’
- taking part;
- valued for what you are;
- a process, not a state;
- involving everybody;
- efficient and effective;
- more than integration;
- participation and learning;
- identifying barriers in and out of school;

- mobility and human resources;
- network;
- partnerships.

It is a constant challenge applying theory to practice. When it comes to education, the prominent function of theory is providing an orientation base for reflection on practice (Willy 2009). In other words, the theory provides us with a frame for further practical action. The complexity of inclusion is evident, so the connection theory-practice for the children with special needs in regular schools represents an additional problem. The special educator takes the leading role in such situations.

The education of the hard of hearing children is specific. Hearing impairment affects the children's language, speech and communication (Kirk et al. 2009, 338). This has direct impact on their education and ways of acquiring knowledge. The language is always connected to the process of thinking. Because of their incomplete speech foundations, the development of child's thinking is also impaired (Savić and Ivanović 1994, 73–57). The teaching process is mainly a hearing oriented activity. The constant hypacusis during the lessons may cause frustration when the child is unable to hear everything that is said. This indicates that the hearing impairment, besides the other implications, may cause behavioral changes (Wills 1999).

All the stated characteristics of the hearing impaired children suggest the need of change in the traditional way of implementation of the teaching process. In the classroom where hearing-impaired students are included, adjustments should be made according to the needs of the students. The needs of these students should be a base for planning in the teaching process.

In theory, there are 5 possible support models for hearing-impaired students included in inclusive classrooms. The practice of support provision in regular elementary schools coincides with the inclusive practice where every student is fully included in the school setting. The support models exist to enable smooth communication between the hearing impaired student and his/her teachers and peers. The five models, which function in the education for hearing impaired students in the UK, are listed below. The applicability of one model over another may vary depending on many factors (age of the student, communication mode, teaching style adopted by the teacher) (Watson and Parsons 1998). Other countries in the world have determined one specific model

of support as a state policy for students with hearing impairments (Pritchard 2005).

- *Support within an oral approach.* This type of model enables full access to the curriculum, but the nature of support, the amount and the location should be determined by the teacher, according to the student's abilities and the current situation in the classroom.
- *Support within a total communication approach.* The support in this kind of approach is provided by a support teacher or assistant (support includes total communication, sign language, dactylology). The student is able to follow both of the teachers, but most of the time relies on the support of the special educator who provides assistance when explanation of unknown terms is necessary (Jachova 2008, 75).
- *Support in sign language.* Same as the previous model, the support provides the support teacher who interprets the lessons. A problem that may occur is the situation when the student follows only the support teacher while the regular teacher is addressing the whole class. Also, beside the interpretation of the lessons, the student may need further explanations during the teaching process.
- *Peripatetic support teacher.* The students with hearing impairment are supported by a peripatetic support teacher. Their duty is to provide additional support to these students by prepared activities according to the educational contents. Their visits are arranged together with the mainstream teacher and their collaboration is crucial for this kind of support to work.
- *The teacher of the deaf as consultant and agent of change.* The teacher of the deaf provides information to the school staff from all aspects of the deaf education, but according to the needs of the students (Watson and Parsons 1998).

All of the above models of support represent a model that the teachers might implement in their practice. Because of the many decisions that need to be made in order for the models to be properly implemented, it is best for the regular teacher to provide them under the leadership of the special educator. Successful implementation requires commitment, creative thinking and effective classroom strategies (Villa and Thousand 2003, 19) appropriate for hearing impaired students.

Methodology

Our main aim in this research was to determine if the leadership of the special educator affects the management of the inclusive practice in the classroom involving:

- the participation of the hearing-impaired student during classes;
- the choice of didactic strategies of the teacher (as basic parameters in choosing the support model);
- the management of the inclusive classroom. The classroom management skills of the teacher were observed including noise regulation and clear classroom rules for the hearing impaired student.

Set as a case study, the research sample consists of a student with moderate hearing loss, 2nd grade in regular elementary school in Skopje. The hearing loss of the student is congenital, since birth, and causes the student to miss speech sounds at normal conversational level (Kirk et al. 2009, 331). This is very important considering the school setting and the way the student receives information during lectures.

In order to have a broader insight into the research phenomenon, we decided that the research would have a quantitative-qualitative character. Using the mixed method, the quantitative data were enriched with qualitative interpretation (Koller-Trobović and Žižak 2008). Such a complex phenomenon, as a part of the inclusion process of hearing-impaired student, will not be fully covered if only numerical data are involved.

Our effort in finding solution for applying a complex theory to a practical problem in the field of inclusive education makes the research applied. We followed the direction of determining the current classroom situation and trying to improve it by proper implementation of the before mentioned models of support.

This is also an action research, due to the observation of the phenomenon in its natural context (in the inclusive classroom) (Angeloska-Galevska 2003). We used participative observation as a research technique. We obtained the data through observation, but we as researchers and special educators had an active role in the observed phenomenon and influenced it (Angeloska-Galevska 1998).

Two video cameras were used as technical resources. The first one had a closer focus on the examined hearing-impaired student,

and the second one had a broader focus on the classroom as a whole. The student was observed from December 2011 to May 2012. During a period of six months we made two observations in the classroom. We observed all the lessons (total six) that the subject has in the classroom twice.

Phases of the Research

In order to start our research, first we solved all the ethical issues concerning the video recording of minors. After the gained written consent of the subject's parents and the parents of all peers, the preparation phase began. This was an inevitable part especially because the researchers were in close contact with the examined subject and the other individuals included in the teaching process. The aim of this phase was for the subject and the teachers to get used to the researchers' presence and avoid seeing them as strangers who assess the teaching process and to encourage all the participants to act freely and naturally.

Next was the initial observation. After we collected the data, analyses were made according to all indicators contained in the research instruments. Next and very important phase was the instructional work with the teacher. Considering that a period of three months is sufficient for the teacher to incorporate the given advices into his/her work, the second observation occurred. Then analyses were made of both observations and again instruction work with the teacher was conducted.

Instruments

For the purpose of the research we used two instruments. The first one is a checklist for observing classroom participation of hearing-impaired students. That is a standardized test that enables researchers to observe the academic and the social behavior of hearing impaired student in regular classrooms (Nevins and Chute 1996, 199). It also assists in identifying the strengths and weaknesses of particular students in their educational settings. Each test question consists of several possible options of student's performances that gradually change from worst to best. Questions from the test considered for the research which gave answer to the research questions regarding the student's reactions in the inclusive classroom were the following three: general response to environmental sound, general response to speech and attention to classroom instructions.

As a second instrument we used the indicators for video guidance. For obtaining the data, we considered only a part of the didactical indicators and the indicators for classroom guidance. The level of difficulty and the differentiation of the teaching were examined as didactical indicators. Indicators considered for the classroom guidance were the silence in the classroom, clear and in sight rules and the mingling during lessons.

Research Questions

We set six research questions as guides in reaching our aim. The questions were the following:

- To determine whether the general reaction of the student to environmental sounds is improved, after the provided advices to the regular teacher;
- To identify the student's general response to speech;
- To determine the amount of time the student pays attention to classroom instructions in both observations;
- To determine whether the regular teacher changed the teaching preparation, regarding usage of differentiation and level of difficulty of the contents;
- To determine if the regular teacher manages the classroom noise better in the second observation;
- To recognize if the regular teacher gives clearer and more evident rules than before and how he managed the mingling in the class.

The hypotheses of the research were set following the research questions:

- H_0 *The leadership of the special educator affects the management of the inclusive practice.*
- H_1 *The hearing impaired student will recognize familiar sounds more frequently in the second observation.*
- H_2 *The student's general response to speech will be improved.*
- H_3 *The student's attention to the instructions will increase in the second observation.*
- H_4 *The teacher will use the differentiation strategies more often and appropriately.*
- H_5 *The regular teacher will provide more silent environment for the hearing-impaired student in the classroom.*

TABLE 1 General Response to Environmental Sounds

Observation	(1)	(2)	(3)	(4)
First	13	6	6	2
Second	5	9	13	5

NOTES Column headings are as follows: (1) appears unaware of environmental sounds, (2) responds to some sounds, (3) looks for source of sound, (4) appears to recognize familiar sounds.

H_6 *In the second observation, the classroom rules will be clearer and in sight and the mingling during the lessons will be reduced.*

The data that we obtained were presented graphically where we made comparison between the results from the two observations. They represent the situation in the inclusive classroom before and after the special educator's advising. All the results are represented in frequencies. The use of chi square as a statistic measure, as planned before, was impossible due to the nature of data we gained. This is the reason why we do not talk about statistically significant difference between the results of the two observations. Anyhow, we as researchers and direct participants in the process, can indentify when the increased frequency of the indicators represent significant improvement.

Results

Table 1 matches the first research objective. In this research question we wanted to identify if the student reacts appropriately to sounds that are significant for the school life. For example, school bell, door knocking, public speaker, falling of writing tools, accidental sounds meant to attract attention and etc. The improvement in this indicator is evident. The most important change is that the frequency of the best option, when the student recognized the familiar sounds, rose from 2 to 5 in the second observation. It is also important to note that the second best option, looking at the source of sound, is more than doubled from that in the first observation ($f_1 = 6, f_2 = 13$). It is also very important that the frequency of the worst option, when the student is unaware of the environmental sounds, is significantly lower in the second observation in the classroom ($f_1 = 13, f_2 = 5$).

In table 2 the results for the indicator 'General response to speech' are represented. This indicator helps us to determine in which situations the student reacts to speech and in which he has

TABLE 2 General Response to Speech

Observation	(1)	(2)	(3)	(4)	(5)
First	7	14	8	7	10
Second	1	5	9	12	15

NOTES (1) no apparent response to speech, (2) occasional response to speech, (3) must be prompted to listen, (4) understands when able to look and listen, (5) understands speech through hearing alone.

TABLE 3 General Response to Speech by Subjects: First Observation

Subject	(1)	(2)	(3)	(4)	(5)
Language	5	5	5	1	5
Math	2	5	1	0	0
Science	1	5	0	2	1
Art	1	1	1	2	1
Music	0	1	0	1	0
English	0	5	5	1	5

NOTES (1) no apparent response to speech, (2) occasional response to speech, (3) must be prompted to listen, (4) understands when able to look and listen, (5) understands speech through hearing alone.

difficulties. Here improvement also exists, due to the fact that the frequencies in the second observation rise gradually and the best option has the highest frequency. In the second observation there were 15 situations when the hearing-impaired student understood the speech through hearing alone, and only 10 in the first one. The worst option, when the student had no apparent response to speech, from frequency 7 fell to frequency 1 in the second observation.

In table 3 the results from the first observation about the indicator 'General response to speech' are represented. From the table we can see that both, the best and the worst options, appeared in 4 out of 6 lessons. The highest frequency of the worst option, when the examined student had no apparent response to speech, is 5 and happened in the Language lesson.

If we compare these results with the results from table 4, we can see where the improvement on this indicator happened. The worst option in the second observation appeared only once, again in the Language lesson. But the best option, when the student understood the speech through the hearing alone, happened in all the subject lessons. Also the frequencies for this option rose in classes of Math and Art (Math $f_1 = 0, f_2 = 4$; Art $f_1 = 1, f_2 = 5$).

In figure 1 the results from the first observation about the indicator 'Attention to classroom instructions' are presented. This

TABLE 4 General Response to Speech by Subjects: Second Observation

Subject	(1)	(2)	(3)	(4)	(5)
Language	1	2	3	2	1
Math	0	1	1	0	4
Science	0	0	2	3	1
Art	0	0	0	1	5
Music	0	1	1	2	1
English	0	1	2	4	3

NOTES (1) no apparent response to speech, (2) occasional response to speech, (3) must be prompted to listen, (4) understands when able to look and listen, (5) understands speech through hearing alone.

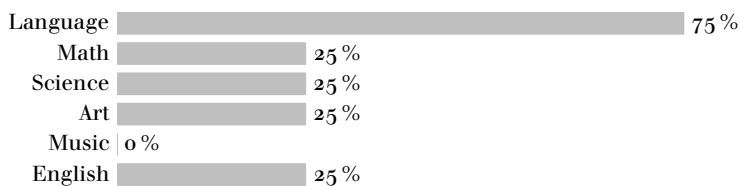


FIGURE 1 Attention to Classroom Instruction by Subjects: First Observation (amount of time the student pays attention to the instruction)

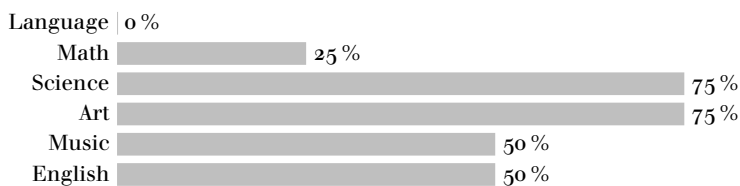


FIGURE 2 Attention to Classroom Instruction by Subjects: Second Observation (amount of time the student pays attention to the instruction)

indicator shows the amount of time the student pays attention and also helps in spotting the differences in his attention on different subjects. From the figure it is evident that in the first observation the student paid most attention to the lessons Language and English. The attention in the other classes is very low (less than 25% or 0%).

The situation on figure 2, where the results for the same indicator from the second observation are presented, shows some differences. In the second observation the student paid most attention in Science and Art, 75% and half of the time in Music and English.

In table 5 the differences about the same indicator between the two observations are represented. In three out of six lessons the amount of time the student paid attention to the classroom instruc-

TABLE 5 Attention to Classroom Instruction: Comparison First and Second Observation (%)

Subject	First observation	Second observation
Science	25	75
Art	25	75
Music	0	50

TABLE 6 Didactical Indicators

Observation	Level of difficulty	Differentiation
First	0	2
Second	2	3

tions rose. The best option, that of students paying attention 100% of the time, did not appear, but we did not expect this option to be present, due to the student's age and his condition.

Table 6 shows the results on the didactic indicators for both observations. The didactic indicator 'Level of difficulty' indicates if the teacher adapts the tasks for the hearing-impaired student according to the difficulty level. This is a traditional view of differentiation where every student gets a task according to own abilities. The second indicator from the same group is 'Differentiation.' We observed if the tasks were adapted according to the speed level of the student.

It is evident that in the first observation the teacher did not adapt the tasks according to the level of difficulty. But in the second observation, after the given instructions, this indicator appears twice. There is also a slight increase in the indicator for differentiation, from frequency 2, to frequency 3 in the second observation.

When using differentiation strategies in the teaching process, it is very important where these strategies are used. The student may not have the need for differentiated tasks in all the subjects, but only in some which require greater competencies. That is why the use of didactical strategies by subjects is represented in the table 7 and table 8. In the first observation, the lessons where the teacher used differentiation of tasks according to the speed level of the student are Language and Math, and as mentioned above, there is no differentiation on the basis of level of difficulty. But, when it comes to the second observation (table 8), it is clear that the teacher not only started using the indicator 'Level of difficulty,' but she also knew how to implement it appropriately. In the second observation, tasks were adapted twice by the difficulty level (in Language and Math) and three times by the speed level (in Lan-

TABLE 7 Didactical Indicators by Subjects: First Observation

Subject	Level of difficulty	Differentiation
Language	0	1
Math	0	1
Science	0	0
Art	0	0
Music	0	0
English	0	0

TABLE 8 Didactical Indicators by Subjects: Second Observation

Subject	Level of difficulty	Differentiation
Language	1	1
Math	1	1
Science	0	1
Art	0	0
Music	0	0
English	0	0

TABLE 9 Classroom Guidance

Observation	Silence	Clear and insight rules	Allowed mingling
First	11	16	14
Second	15	21	12

guage, Math and Science). The last indicators presented are for classroom guidance (table 9). For these indicators we observed if the classroom is silent or noisy, if the classroom rules are clear and in sight and if mingling is allowed during the lessons.

According to the obtained results, there is improvement in all the three indicators. The classroom was silent more often in the second observation ($f_1 = 11, f_2 = 15$) and the rules were clearer as well ($f_1 = 16, f_2 = 21$). The frequency of the mingling indicator slightly decreased ($f_1 = 14, f_2 = 12$) which represents a mild improvement.

Shown separately by subjects, the result indicate that in the first observation (table 10) the Silence indicator does not have a frequency higher than 3 and the rules were never clearer than 4 times in one class. But, the table 11 outlines the improvement in relation to these two indicators. In the second observation, the frequency of the Silence indicator is 4 in two different classes (Science and English). The highest frequency about the indicator for clear rules increased to 6.

TABLE 10 Classroom Guidance by Subjects: First Observation

Subject	Silence	Clear and insight rules	Allowed mingling
Language	2	2	1
Math	2	3	5
Science	2	1	3
Art	3	2	4
Music	0	4	0
English	2	4	1

TABLE 11 Classroom Guidance by Subjects: Second Observation

Subject	Silence	Clear and insight rules	Allowed mingling
Language	2	3	0
Math	2	3	1
Science	4	2	5
Art	2	4	4
Music	1	4	1
English	4	6	1

Verification of the Hypotheses and Discussion of the Results

- H_0 *The leadership of the special educator affects the management of the inclusive practice – confirmed. All the areas that we examined have improved in the second observation.*
- H_1 *The hearing impaired student will recognize familiar sounds more frequently in the second observation – confirmed.*
- H_2 *The student's general response to speech will improve – confirmed.*
- H_3 *The student's attention to the instructions will increase in the second observation – confirmed.*
- H_4 *The teacher will use the differentiation strategies more often and appropriately – confirmed.*
- H_5 *The regular teacher will provide more silent environment for the hearing-impaired student in the classroom – confirmed.*
- H_6 *In the second observation, the classroom rules will be clearer and in sight and the mingling during the lessons will be reduced – confirmed.*

Conclusions

Trying to find a way to make the inclusive process of a hearing-impaired student more effective, we researched the role of the special educator in the successful teacher's management of the

inclusive classroom. In other words, we wanted to explore which one is the best model to be implemented for this student in order to facilitate his participation in the teaching process.

According to the results presented here, the model where a peripatetic support teacher provides the support, proved to be a theory that functions in actual practice. According to this model, the special educator has the leading role in the realization of the inclusive practice with hearing-impaired students. This type of model does not only provide support to the student, but to the regular teacher as well. The special educator guides the regular teacher on how to manage situations in the inclusive classroom where the needs of the hearing-impaired child should be met. In order to achieve that, the communication between the special educator and the regular teacher is crucial. All the improvements that appeared in the second observation represent the smooth communication that we had with the teacher in implementing such a complex theory. The importance of communication and establishment of good relationship between special educators and teachers has been confirmed in the research of Antia (1999). In the same research it was also stated that the special educators had the role of advisors or demonstrators of all adaptations needed for the hearing-impaired children. The teachers were supposed to implement those adaptations in their teaching, the same as our advisory function in our research.

The main outcomes of the longitudinal case study conducted by Jachova and Karovska (2009) overlaps with our research findings. In their study, a student with cochlear implant was examined over a period of three years in the inclusive classroom. Many different aspects of the student's participation in the classroom were examined, including those that we examined as well. Even though in their research they were not trying to implement a specific support model, their presence and teacher advising during the period of three years showed improvements in the overall process of inclusion for the particular subject.

Appropriate management of strategies in the teaching process requires construction and implementation of Individual Educational Plan (IEP) for the student with hearing impairment. The IEP represents an action plan and gives the teacher a short overview of the student's abilities. This plan should contain all the strategies that the teacher will use in the teaching process for the specific student, including differentiation. In this research, the teacher was advised when and how to use differentiation strategies for the subject. What is more important, he/she started planning the

strategies for the purposes of the IEP. Constructed together with the special educator, the regular teacher with the IEP will also have a plan for evaluation.

Regarding the classroom management, we indicated to the teacher the importance of acoustics in the education of hearing-impaired students. An acoustically good environment is crucial for effective classroom listening (Maltby and Knight 2000, 54). Inadequate acoustics affects the speech perception, attention, concentration and academic achievement (Doyle and Dye 2002). Noise in the classroom affects the intelligibility of the speech of the teacher. Unintelligible speech causes frustration and affects the process of knowledge acquisition. The special educator should introduce the regular teacher with the basic strategies for management of the acoustic environment. Those strategies include:

- Removal of all noise-making machines in the classroom;
- Carpet placement on the floors;
- Limitation of movement during lessons;
- Constant wearing of the hearing aid and use of amplification systems; the teacher should check if the aid is working appropriately.

Whether the classroom will be a comfortable place for listening depends also on its physical organization. The special educator provides the mainstream teacher with information about:

- Best location of the hearing impaired student in the classroom. The student should always sit near the teacher;
- Removal of all visual barriers between the student and the teacher. It is very important for the student to see the face of the teacher while she is talking;
- Semicircular way of sitting in the classroom during discussions; this way it is easier for the hearing-impaired student to follow all the participants in the discussion.

For the proper functioning of the inclusive classroom with a hearing impaired student, the communication strategies that the teacher uses are of great significance. The special educator gives advices about which strategies the teacher can use to facilitate the communication with the student with hearing loss. These strategies include:

- Usage of visual support in instruction giving;
- Gaining of student's attention by auditory means. Not by tapping or waving;

- Establishment of eye contact;
- Standing still when talking;
- Introduction of buddy system, if necessary;
- Writing of keywords, dates and homework assignments on the board;
- Communication with the parents of the student (Graber and Nevins 2009).

Taking into account all the results, the research raises the question of national policy creation regarding the hearing-impaired children included in the regular education system. The number of students with some kind of hearing loss in the regular schools is increasing. We are obligated to provide them education with high quality and full access to the learning contents. Existence of a national policy will ensure successful inclusion of these children by giving them the appropriate support and defining the professionals who will provide it.

References

- Angeloska-Galevska, A. 1998. *Qualitative Research in Education*. Bitola: Kiro Dandaro.
- Angeloska-Galevska, A. 2003. 'Research Methodology in Special Education and Rehabilitation.' Mimeo, Skopje.
- Antia, S. D. 1999. 'The Roles of Special Educators and Classroom Teachers in an Inclusive School.' *Journal of Deaf Studies and Deaf Education* 4 (3): 203–214.
- Doyle, M. and L. Dye. 2002. 'Mainstreaming the Student Who is Deaf Or Hard-of-Hearing.' http://www.handsandvoices.org/pdf/mainst_cal.pdf
- Geoff, L. 2003. 'Inclusive Education: A Critical Perspective.' *British Journal of Special Education* 30 (1): 3–12.
- Graber, A. S., and M. E. Nevins. 2009. 'Hope Tips: Time for School!' http://www.cochlearamericas.com/PDFs/HOPE_Tips_for_School.pdf
- Jachova, Z. 2004. 'Inclusive Education of Children with Special Educational Needs in Republic of Macedonia.' *Journal of Special Education and Rehabilitation* 1 (2): 35–46.
- Jachova, Z. 2008. 'Inclusive Education of Children with Impaired Hearing.' *Journal of Social Politics* 1:68–75.
- Jachova, Z. 2011. 'The Role of Parents in the Building of School Inclusive Culture.' In *The Modern Society and Education: Proceedings of the 6th Balkan Education and Science Congress*, edited by T. K. Mojsovska, 451–456. Skopje: Ss. Cyril and Methodius University.
- Jachova, Z., L. Samardziska-Panova, I. Leshkovski and M. Ivanovska. 2002. *Manual for the Project Inclusion of the Children with Special*

- Needs in the Regular Schools in Republic of Macedonia*. Skopje: Bureau of Education Development.
- Kirk, S., J. J. Gallagher, N. Anastasiow, and M. R. Coleman. 2009. *Educating an Exceptional Child*. Wadsworth: Cengage Learning.
- Koller-Trobović, N., and A. Žižak. 2008. *Qualitative Approach in Social Sciences*. Zagreb: University of Zagreb.
- Lise, V. 2003. 'From Integration to Inclusion: Focusing Global Trends and Changes in the Western European Societies.' *European Journal of Special Needs Education* 18 (1): 17–35.
- Maltby, M. T., and P. Knight. 2000. *Audiology: An Introduction for Teachers and Other Professionals*. London: Fulton.
- Nevins, M. E., and P. M. Chute. 1996. *Children with Cochlear Implants in Educational Settings*. San Diego, CA: Singular Publishing Group.
- Pritchardt, P. 2005. 'Provision for the Education of Deaf Pupils in Norway.' <http://www.batod.org.uk/index.php?id=/international/models/norway.htm>
- Savić, L. M., and P. M. Ivanović. 1994. *Surdopedagogy*. Belgrade: Faculty of Special Education and Rehabilitation.
- UNESCO. 2000. 'Sub-Regional Workshop Central and Eastern Europe.' UNESCO, Bucharest.
- Villa, R. A., J. S. Thousand. 2003. 'Making Inclusive Education Work.' *Educational Leadership* 61 (2): 19–23.
- Watson, L., and J. Parsons. 1998. 'Supporting Deaf Pupils in Mainstream Settings.' In *Issues in Deaf Education*, edited by S. Gregory, P. Knight, W. McCracken, S. Powers and L. Watson, 135–142. London: Fulton.
- Wills, R. 1999. 'Children with Mild and Moderate Hearing Losses.' In *Hearing Impaired Infants: Support in the First Eighteen Months*, edited by J. Stokes, 80–97. London: Whurr.
- Willy, O. 2009. 'Theory-Enriched Practical Knowledge in Mathematics Teacher Education.' PhD dissertation, Leiden University, Leiden.