

Evaluation of the Support Services Provided to Deaf Children Attending Secondary General Schools in Cyprus

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Deaf children have been integrated into secondary schools in Cyprus since 1990. This article reports the results of a major study carried out in Cyprus, the aim of which was to evaluate for the first time the support services available for deaf children receiving their education in secondary general schools. For the purposes of our study, four types of questionnaires were designed and administered to all deaf children integrated into secondary general schools, as well as to their parents, teachers, and head teachers. All participants stressed that the support services are vital for the children's academic success and social integration. The main support services identified by the participants in our study were: one-to-one and group sessions; presence of co-coordinators (special teachers of the deaf); "acoustical treatment" of the classrooms; provision and management of personal amplification, psychological support, and counseling; and in-service training for designated teachers. The majority of the participants expressed satisfaction with the support services offered to them. They also made some suggestions for the improvement of the integration of deaf children into secondary schools in Cyprus.

Inclusion of Deaf Children in General Schools in Cyprus

Wood and Lazzari (1997) stress that "inclusion involves students receiving an education to the same place as their peers, bringing needed services to the student and individualizing the information as appropriate for each student" (p. 31). The main aim of the inclusion of children with special needs in general schools is to ensure that such children have equal access to education.

As a result of financial pressure, legislative changes, changing social attitudes, parental expectations, and

technological developments that have enabled early detection and hearing-aid fitting, more and more children with hearing impairments are now integrated into general schools (Webster & Wood, 1995).

As recently as the 1980s, nearly all deaf children in Cyprus were attending the School for the Deaf. Only hard-of-hearing children were encouraged to attend general schools, where individual educational plans and academic and psychological support were unavailable to them. The only help they could obtain was private, individualized instruction at home, paid for by their parents.

Innovative educational and philosophical ideas about the integration and inclusion of deaf children, which have come to the fore worldwide during the last two decades, have had a far-reaching effect on educational policy in Cyprus. Cypriot parents have also begun to be a force to be reckoned with as they have come into contact with developments outside Cyprus and appreciate that children like theirs enjoy many educational opportunities in other contexts. With their unwillingness to accept segregatory practices for their children, they have become the driving force behind instances of integrative programming (Phtiaka, 2000). Specifically, in 1989 the Cyprus Parents' Association of Deaf Children demanded that the Ministry of Education integrate their children into general schools because they felt that the School for the Deaf was a place of isolation for the children, offering a low level of education. By the end of the 1980s, the integration of deaf children in primary schools in Cyprus had begun. After 2 or 3 years, the integration of deaf children in secondary education was also a fact.

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The official inclusion of children with special needs began in 1999 when the Cyprus Parliament approved the [113(1)99] Special Education Law, which stresses among other things the responsibility of the State to provide the least restricted environment possible for children with special needs. This law also stipulates that the general school is the most appropriate educational environment for children with special needs, unless otherwise stated. In July 2001, the regulations of the law were also ratified by the Cyprus Parliament. Thus, there has been a powerful effort to change the State's "policy to one of full inclusion rather than preserve the continuum of placement options" (Mangrubang, 1995, p. 57). Five years after the implementation of the Special Education Law, the majority of deaf children in Cyprus are being educated in general schools.

Hardy and Kachman (1995) stress that by "attempting to include students in the ideological classroom in which all students are treated equal, we may be unintentionally widening the cracks through which a particular group of students may fall" (p. 108). Those responsible for providing support services should therefore ensure that the needs of all children are satisfactorily met.

It was decided to carry out a study investigating the support services offered to deaf children attending general schools in Cyprus because these children have been integrated into the general schools of the island for more than 15 years, but not a single study has been carried out to evaluate the resources provided to the children and their families and their degree of satisfaction. It was decided that the results and suggestions derived from this study should be submitted to the Cyprus Ministry of Education and Culture to be taken into consideration by policy makers in the Island of Cyprus for the improvement of the integration of deaf children into its secondary schools. Cyprus is the third largest island in the Mediterranean, with an area of nearly 3,600 square miles.

Method

Individuals in each of the following groups received a questionnaire designed for that group: all deaf children receiving their education in secondary general schools ($n = 69$), their parents ($n = 61$), their teachers ($n = 367$), and their head teachers ($n = 34$). In Cyprus

at the time of this writing, there are 77 deaf children aged between 12 and 18 years old. The deaf children attending general secondary schools in Cyprus constitute 89.6% of this population ($n = 69$). The questionnaires consisted mainly of closed questions for the convenience of the participants. Once the questionnaires had been completed, a pilot study was carried out, the aim of which was to examine the structure and efficiency of the questionnaires in gathering information. Six parents, six teachers, six children, and three head teachers pretested the final draft by filling out the questionnaires as they would if they were part of the survey. The participants were asked to comment on the design and the content of the questionnaires, discussing with the researcher any problems they had and giving suggestions regarding the wording, meaning, and ordering of the questions. Minor changes were then made, mainly in terms of meaning and wording.

The questionnaires were sent out 1 month later to all secondary schools in Cyprus that had deaf children on their rolls. A cover letter to head teachers requested them to distribute the questionnaires to all deaf children, their parents, and their teachers, and to fill in the head teachers' questionnaires themselves. Strategies employed to encourage response were an explanatory note on the first page of the questionnaire emphasizing the importance of the research and ensuring anonymity and confidentiality, and reminder telephone calls.

Some questionnaires were returned within 21 days. One week later, reminder telephone calls were made to all heads, resulting in a substantial number of questionnaires being returned. All data were coded and subjected to statistical analysis using the SPSS system. Descriptive statistics were applied to analyze the questionnaire data.

The response rates were quite high. All deaf children attending secondary schools in Cyprus ($n = 69$) filled out the questionnaires.¹ This was a 100% response rate. Regarding the parents' questionnaires, of 69 parents with deaf children attending secondary schools in Cyprus, 61 parents filled out and returned the questionnaires, resulting in a response rate of 88.4%. Of 35 head teachers, 34 filled out the questionnaires distributed to them, resulting in an exceptionally high response rate (97.1%). As far as the teachers were concerned, 500 questionnaires were sent to them, and 367 returned their questionnaires. This was a response

rate of 73.4%, which is considered to be high because teachers in Cyprus receive questionnaires regularly and are frequently asked to participate in research studies.

Results

There are eight major types of support offered to deaf children in Cyprus.

1. One-to-one or group sessions. Most deaf children are present in the age-appropriate classroom for some of the day but also receive special educational services (one-to-one or small group sessions) in a withdrawal room for between 3 and 12 periods per week (offered by the class teachers) for subjects that are examined at the end of the school year (e.g., modern Greek, history, physics, mathematics) and for English as a second foreign language.

2. In-service training for designated teachers.

3. Modification of normal classroom delivery.

4. Presence of co-coordinators (special teachers of the Deaf). Deaf children in secondary schools in Cyprus are visited by three peripatetic teachers of the Deaf (who are employed as co-coordinators) between once a fortnight and four or five times a week, depending on the children's needs.

5. Psychological support and counseling.

6. "Acoustical treatment" of the classrooms.

7. Provision and management of personal amplification.

8. Provision of technological devices (e.g., flashing alarm clock, fax, mobile phone, and computer).

Each child follows his or her individual educational plan (IEP), and all children follow an auditory-oral approach.

One-to-One or Group Sessions

Children's views of the pretutoring sessions. In Cyprus, the Ministry of Education and Culture offers approximately 535 special sessions, or "teaching hours" (each of 45 minutes' duration) per year for one-to-one or group sessions for the 69 deaf children. This study was designed to investigate whether these one-to-one or group sessions are of benefit to the deaf children. The majority of the children stated that both one-to-one and group sessions are helpful to them because they

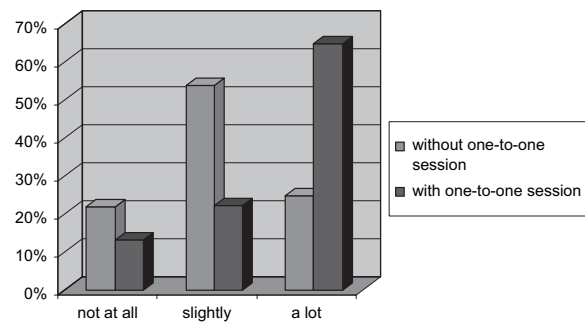


Figure 1 Comparison between the degree to which deaf children can understand the lessons when one-to-one or group sessions are provided and their understanding of lessons when one-to-one or group sessions are not provided.

have a better understanding of those lessons in the classroom for which pretutoring is provided (e.g. modern Greek, math, history, physics) than other lessons for which no pretutoring is available (e.g., religion studies, geography). Fifteen children (21.7%) stated that they cannot understand at all those lessons for which they have received no pretutoring, and nine children (13.2%) stated that they cannot understand any lessons in the classroom, even though they attend one-to-one or group sessions prior to the class lessons. Thirty-seven children (53.7%) stated that they can understand to a limited degree the lessons without the one-to-one or group sessions, and fifteen children (22.1%) stated that they can barely understand the lessons even when pretutoring is offered. Only seventeen children (24.6%) stated that they have a good understanding of the lessons for which one-to-one or group session are not provided, whereas forty-four children (64.7%) stated that they can fully understand the lessons in the classroom if one-to-one or group sessions are provided (Figure 1).

Many deaf children stress that the one-to-one or group sessions are vital for them. During those sessions, they find lip-reading easier and understand the lessons better. The degree to which the deaf children were able to participate in the one-to-one or group sessions and the degree to which they could participate in lessons in the classroom were compared. Not a single child stated that he or she cannot participate in one-to-one or group sessions, whereas 20 children (29%) complained that they cannot participate at all in the class lessons. Fifteen children (21.7%) stated that they

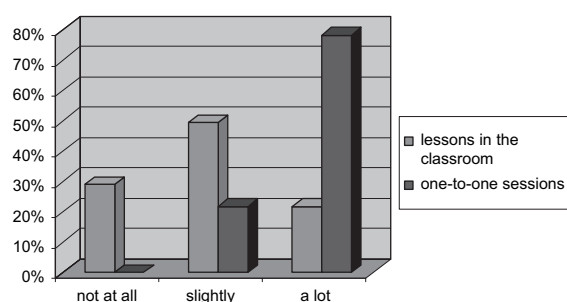


Figure 2 Comparison between the degree to which deaf children can participate in class lessons and in one-to-one or group sessions.

can participate to a moderate degree only in one-to-one or group sessions, compared with thirty-four children (49.3%) who can participate only to a moderate degree in class lessons. Fifty-four children (78.3%) said that they can participate “a lot” in one-to-one or group sessions, in comparison with fifteen (21.7%) who can participate “a lot” in class lessons (Figure 2).

Finally, we investigated the degree to which the one-to-one and group sessions enable the deaf children to understand the class lessons. Five children (7.5%) stated that the one-to-one and group sessions do not help them at all to understand the class lessons; twelve children (17.9%) stated that they help a little; and fifty children (74.6%) stated that they help a lot.

Parents' views of the one-to-one and group sessions. The overwhelming majority of the parents in our study were pleased with the pretutoring sessions offered to their children by the Cyprus Ministry of Education and Culture. Specifically, 65% ($n = 39$) of the parents stated that they are very pleased with the pretutoring sessions, and 23.3% ($n = 14$) of the parents are quite pleased. Some parents (3.3%) are not sure of their degree of satisfaction; only one parent (1.7%) is not pleased at all, and 6.7% ($n = 4$) are only slightly pleased with the one-to-one and group sessions offered to their children.

Teachers' views of the one-to-one and group sessions. The teachers were also asked to evaluate whether the children are able to respond to the academic engagements deriving from the one-to-one and group sessions. Of the teachers, 35.7% ($n = 86$) stated that the deaf children can respond quite well to the engagements deriving from the one-to-one or group sessions, and 43.6% ($n = 105$) said that they respond very well;

11.2% ($n = 27$) were not sure of the degree to which deaf children respond to the engagements deriving from the one-to-one and group sessions, and 3.3% ($n = 8$) stated that the children are able to respond only slightly to the engagements deriving from the one-to-one and group sessions, whereas 6.2% ($n = 15$) stated that the children cannot respond at all.

In-Service Training for Designated Teachers

In-service seminars for designated teachers are organized by the Cyprus Ministry of Education and Culture on 3 days a year, and further seminars (each lasting a few hours) are organized by the coordinators at the schools throughout the year. Microteaching with the deaf children is also undertaken by the coordinators or by experienced teachers to assist the teachers in their work. During microteaching, the coordinators or experienced teachers teach small groups of deaf students, and general teachers watch them to learn appropriate teaching strategies. In this study, we investigated the degree of awareness of or knowledge about deafness of the persons engaged in this program.

Children's views of their teachers' awareness of deafness. The children are pleased overall with their teachers' degree of awareness of deafness. Forty-three children (62.3%) believe that the teachers are very aware of deafness; twenty-two children (31.9%) believe that the teachers are quite aware of it, and four children (5.8%) believe that their teachers are not aware of deafness at all.

Parents' views of the teachers' awareness of deafness. The majority of the parents (79.7%; $n = 47$) stated that the teachers of their children are quite or very well aware of deafness. Only 3.4% ($n = 2$) of the parents stated that the teachers seem not to be aware at all, and 1.7% ($n = 1$) that they are slightly aware, whereas 15.3% ($n = 9$) of the parents were not sure of the degree of deafness awareness of the teachers.

Head teachers' views of awareness of deafness. The majority of the head teachers in this study stated that deaf awareness is very important in the effective teaching of deaf children. Only one headmaster (2.9%) stated that in-service training is not important at all. Two head teachers (5.9%) stated that deafness awareness is barely important; ten head teachers (29.4%) stated

that awareness of deafness is quite important; and twenty heads (61.8%) stated that it is very important.

Awareness of deafness among teachers is achieved in a variety of ways, the most popular being participation in the in-service seminars organized by the Cyprus Ministry of Education and Culture. Most head teachers (97.1%; $n = 31$) encourage the teachers' participation in these seminars. Other ways of promoting awareness of deafness, according to the head teachers, is through discussions with the coordinators; 79.4% ($n = 17$) of the head teachers encourage their teachers' contact with the coordinators. Awareness of deafness is also achieved through seminars organized in the schools; 11 head teachers (34.9%) organized frequent seminars at their schools.

Teachers' awareness of deafness. An investigation was made into the teachers' awareness of deafness. The majority of the teachers stated that they are aware of deafness, with 47.8% ($n = 172$) stressing that they are fully aware and 40.6% ($n = 146$) that they are fairly aware. Another 4.4% ($n = 16$) were not sure of the degree of their deafness awareness; 3.6% ($n = 13$) said they are slightly aware and 3.6% ($n = 13$) that are not aware of deafness at all.

The teachers were also requested to state whether in-service training had enabled them to teach the deaf children more effectively. The results of our study underpin the importance of in-service training. Among the teachers, 141 (39.5%) stated that in-service training is very important in helping them teach the deaf children more effectively; 147 (41.2%) said that the in-service training is quite important to them; 28 teachers (7.8%) stated that they were not sure; and 21 teachers (5.9%) replied that the in-service training helps them "slightly" in their teaching. Another 20 teachers (5.6%) disclosed that in-service training is not important at all in their work with the deaf children.

Modifying the Classroom's Normal Delivery and Differentiating the Curriculum

Teachers attending hearing impairment seminars are given advice and information about modifying the classroom's normal delivery to meet the deaf students' needs and about differentiating the curriculum. An aim

of this study was to investigate whether teachers apply in their work the information gained in the seminars.

Despite the fact that most teachers believe they have a good awareness of deafness, some of the children complained that their teachers do not modify their normal classroom delivery to meet deaf children's needs, for example, speaking slowly and distinctly. Eleven children (15.9%) stated that the teachers do not modify at all their normal classroom delivery. Forty-one children (59.4%) stated that the teachers modify their normal classroom delivery quite a lot. Only 17 children (24.7%) said that the teachers modify their normal classroom delivery sufficiently to meet their needs. One reason some teachers fail to adapt their normal classroom delivery to the deaf children's needs, despite their awareness of deafness and the fact that they want to help the deaf children in their class, is possibly because they teach many children with different educational needs, and they may forget the presence of the deaf children because their disabilities are not immediately apparent.

Some children and their parents also suggested that the curriculum should be modified to meet the children's special educational needs (differentiation of delivery, differentiation of lesson content, modification of text). The deaf children and their parents (in their answers to the open questions of our questionnaires) asked for a reduction in the number of lessons, modification of the teachers' normal classroom delivery (that is, they would like clear, slow, natural speech), less homework, modification of the language of tests, language modification of the textbooks, and written follow-up material). Similarly, some teachers asked for a curriculum developed for deaf children to be used in the general school. The teachers also asked that general schools be provided with visual aids to facilitate their work with the deaf children. Finally, a number of teachers also requested the Cyprus Ministry of Education and Culture to modify textbooks for all subjects and to send this material to the schools.

Coordinators

Three teachers of the Deaf visit schools as co-coordinators. In this study, their role was investigated and evaluated.

Table 1 Persons with whom deaf children discuss their problems

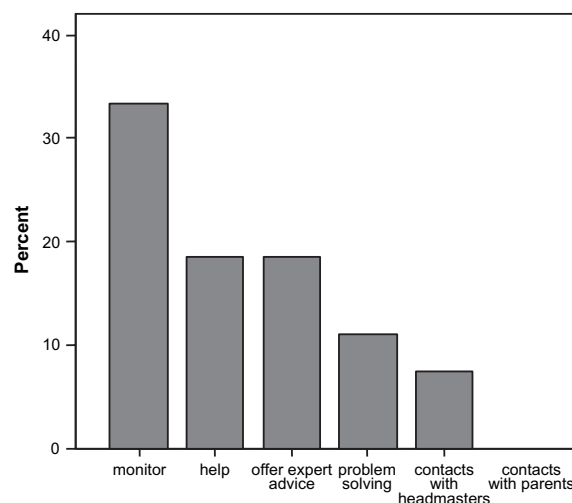
	Always (%)	Sometimes (%)	Never (%)
Parents	62.7	31.3	6.0
Coordinators	52.3	30.8	16.9
School counselors	12.3	49.2	38.5
Educational psychologists	0	8.3	91.7

Children's views of the coordinators' role. The children were asked to state whether they discuss their problems with the coordinators (teachers of the Deaf). A majority (52.3%) of the children said that they always discuss their problems with the coordinators, and 30.8% of the children sometimes discuss their problems with the coordinators. Only 16.9% of the deaf children stressed that they never discuss their problems with the coordinators (Table 1).

Parents' views of the coordinators' role. The overwhelming majority of the parents (94.9%; $n = 55$) stressed that the coordinators consult them "quite often" or "very often" before making any decisions concerning their children. Only two parents (3.4%) stated that the coordinators "sometimes" or "never" ask their views before making decisions concerning their children. One parent (1.7%) was not sure.

Head teachers' views of the coordinators' role. Head teachers were asked to evaluate the role of the coordinators in the effectiveness of the inclusion of deaf children in general schools. No head teacher stated that the coordinators do not contribute at all to the success of the inclusion of deaf children in general schools. Eight head teachers (24.2%) believe that the coordinators slightly contribute to the success of the inclusion of these children in general schools. Seven head teachers (21.2%) said that the coordinators contribute "quite a lot," and eighteen head teachers (54.6%) thought that the coordinators contribute "a lot" to the success of the inclusion of the deaf children in general schools.

The head teachers were asked to describe the ways in which the coordinators contribute to the success of the inclusion of the deaf children. A majority (33.3%) of the head teachers mentioned that the coordinators monitor closely the effectiveness of the inclusion of the deaf children; 18.5% stated that the coordinators offer

**Figure 3** Contribution of the coordinators to the success of the inclusion of the deaf children, according to the head teachers.

their help to the teachers; 18.5% of the heads pointed out that the coordinators are experts and share their knowledge with the teachers; 11.1% said that the coordinators cooperate with them in solving problems associated with the inclusion of the deaf children; and 11.1% mentioned that the coordinators have contact with the children and their families and are thus in a position to make the school aware of any concerns, worries, or ideas the families may have. A small percentage (7.5%) of the head teachers said that they and their assistant heads regularly discuss with the coordinators the education and welfare of the deaf children in their schools (Figure 3).

Psychological Support and Counseling

This study sought to evaluate the degree of cooperation between the deaf children and their parents, and the educational psychologists and school counselors. In Cyprus, there is an Educational Psychology Service (EPS), which comes under the auspices of the Cyprus Ministry of Education and Culture. Educational psychologists occasionally visit the schools and offer psychological support and help to the children and their parents who have been referred to the EPS. In addition, a school counselor is employed at each secondary school and offers support to the deaf children and their families.

Parents' views of the educational psychologist and the school counselor. In this study, 30.2% ($n = 16$) of the parents stated that the educational psychologists are not involved at all in the inclusion of their children into general schools; 13.2% ($n = 7$) stated that the educational psychologists are "slightly engaged"; 9.4% ($n = 5$) stated that they are engaged "quite a lot"; and 26.4% ($n = 14$) thought that the educational psychologists are engaged "a lot." A high percentage of the parents (20.8%; $n = 11$) were not sure of the degree of involvement of psychologists.

In contrast to the educational psychologists, the school counselors were regarded by the parents as having a higher degree of involvement with the education of their deaf children, the majority of the parents stating that they are helped "quite a lot" or "a lot" by the presence in the school of the school counselor. The figures were: 67.8% ($n = 38$) stated that they are helped "quite a lot" or "a lot"; 10.7% ($n = 6$) stated that the school counselors are only slightly helpful; only 5.4% ($n = 3$) stated that they are "not helped at all"; and 16.1% ($n = 9$) stated that they were not sure.

Children's views of the role of the educational psychologists and the school counselor. The deaf children in this study, surprisingly, do not seem to have much contact with the educational psychologists or the school counselors and do not often discuss their problems with these individuals. As mentioned above, they prefer to discuss their problems with their parents and teachers of the Deaf (coordinators). Only 12.3% of the children "always" discuss their problems with the school counselor, 49.2% "sometimes" discuss their problems with the school counselor, and 38.5% of the deaf children said that they "never" discuss their problems with the school counselor. As far as the educational psychologists are concerned, only 8.3% of the children "sometimes" discuss their problems with the educational psychologists, whereas 91.7% of the children stressed that they "never" discuss their problems with the educational psychologists (Table 1).

Teachers' views of the role of the educational psychologists and the school counselor. The teachers were asked to evaluate whether and by how much the educational psychologists are involved in the inclusion of the deaf children in the general school. Of the teachers, 16.5% ($n = 40$) stated that the educational psychologists are

Table 2 Building adaptations made by head teachers for the deaf children in general schools

	Yes (%)	No (%)
Acoustical treatment of the classrooms	70.6	29.4
Special rooms for one-to-one or group sessions	52.9	47.1

engaged "a lot" in the inclusion, and 34.7% ($n = 84$) of them replied that the educational psychologists are engaged "quite a lot." A smaller percentage (15.3%) ($n = 37$) of the teachers were not sure. On the other hand, 13.2% ($n = 32$) of the teachers believe that the educational psychologists are "slightly engaged" and 20.3% ($n = 49$) that the educational psychologists are "not engaged at all."

The researchers also wished to investigate the degree of involvement of school counselors in the inclusion of deaf children. The majority (38.3%; $n = 111$) of the teachers believe that the school counselors are engaged "a lot" in the inclusion of deaf children; 27.6% ($n = 80$) stated that they are engaged "quite a lot"; and 13.1% ($n = 38$) were not sure. On the other hand, 10.3% ($n = 30$) of the teachers believe that the school counselors are only slightly engaged in the integration of the deaf children, whereas 10.7% ($n = 31$) believe that the school counselors are not engaged at all in the inclusion of the deaf children.

Adaptation of School Buildings

The Special Education Law in Cyprus states that general school buildings should be specially adapted to meet the needs of the deaf children who attend them. In response to the questionnaires, 88.4% ($n = 28$) of the head teachers in our study said that they made some building adaptations. Only 17.6% of the heads ($n = 6$) said they had not adapted their school buildings at all. More than 70% had improved the classrooms in which the deaf children are taught. They had brought in carpets and were using curtains to cover large plate-glass windows. Deaf children definitely need access to better listening conditions for part of the school day, especially when they are withdrawn for one-to-one or small group sessions. Nearly half of the heads had built or adapted special rooms for these sessions (Table 2).

Other Accommodations

It is specified in the Special Education Law that special arrangements should be made for deaf pupils undertaking examinations and tests (e.g., extra time, language modification of the tests and exams). Generally, the head teachers are aware of the need for special arrangements for deaf pupils undertaking examinations and tests. Only seven head teachers (21.3%) said that they are unaware that they were requested by the law to make these arrangements, whereas twenty-six head teachers (78.7%) are aware of the arrangements.

Another accommodation for deaf students is a reduction in the number of the pupils in the deaf children's classrooms to facilitate the adaptation of teaching methods by the teacher. No more than 24–25 children should be placed in the deaf children's classrooms. This study sought to investigate the head teachers' degree of awareness of the regulation concerning the maximum number of pupils in the deaf children's classroom. Twenty-six of the head teachers (76.5%) stated that they are aware of the regulation regarding the reduction of the number of the hearing classmates in the classrooms that deaf children attend, whereas eight head teachers (23.5%) are not aware of this regulation.

Amplification Technology

Deaf children in Cyprus who are in regular schools are all trained orally. Most deaf students—thus using oral language—rely on their amplification systems for gaining access to as much of the speech signal as possible. In our study, it was revealed that 54 of the 69 children in secondary general schools are wearing hearing aids. Those that are not aided ($n = 15$) are either profoundly deaf (and hearing aids are of no use for them) or have conductive hearing impairments or unilateral hearing losses. Parents are given an amount of money every 3 years to buy the hearing aids that best suit their children's needs from a variety of private audiological centers. In addition, all deaf children attending secondary schools in Cyprus have access to free audiological services provided by the educational audiologist employed at the audiological clinic of the School for the Deaf.

The Ministry of Labor also provides each child with technological devices (e.g. fax, mobile phone,

computer, flashing alarm clock). A personal computer is a form of technical resource for hearing and deaf students alike. It can be used by deaf students for the writing of their assignments or for improving their written Greek by taking advantage of the specialist software. The fax machine and mobile phone enable deaf children to achieve better communication.

The coordinators inform parents about the free technological devices and amplification systems to which their children are entitled and refer them to the relevant departments in the Ministry of Health and the Ministry of Labor.

Discussion

Deaf children in Cyprus included in general schools, are provided with a variety of support services: one-to-one and group sessions, in-service training for designated teachers, modification of normal classroom delivery, presence of co-coordinators (special teachers of the Deaf), psychological support and counseling, acoustical treatment of the classrooms, and provision and management of personal amplification.

All participants seemed to be generally pleased with the support services provided to the deaf children. It emerged from the study that there is in Cyprus good coordination between the different bodies (e.g., the School for the Deaf, the Ministry of Education, the Ministry of Health, the Ministry of Labor, the Cyprus Parents' Association of Deaf Children) and the persons involved in the inclusion of deaf children in secondary education (parents, teachers, head teachers, coordinators, audiologists, educational psychologists, school counselors) offering a variety of resources to deaf children. These resources are vital to ensure their successful academic and social inclusion in the general school.

The participants in our study have come upon a number of problems, and they made some suggestions that should be given serious consideration by policy makers in the Island. Blackburn and Everton (1995) suggested that "placing a deaf child in a classroom in physical contiguity with hearing children does not automatically provide equal access to information" (p. 142). Alternative teaching methods and curricular modifications and adaptations should be developed to meet the needs of deaf children in an integrated

environment. The profile of deafness should then be within the school, the curriculum, and the teaching approaches. It was emphasized by many of the deaf children in our study that they are unable to follow the curriculum without one-to-one or small group sessions prior to the class lessons that prepare them for the lesson content that is coming, and they asked for an increase in the hours of one-to-one or group sessions. The children and teachers also suggested that the curriculum be modified to meet the children's special educational needs (differentiation of delivery, differentiation of lesson content, modification of text). Specifically, the deaf children asked for a reduction in the number of lessons, modification of the normal classroom delivery (i.e., they want clear, slow, natural speech), less homework, modification of the language of the tests, language modification of the textbooks, and written follow-up material. Similarly, some teachers asked for a curriculum designed specially for deaf children to be used in the general school. The teachers also asked for the introduction of new methods and visual teaching aids to make it easier for them to work with deaf children.

Sixteen of the children participating in our study were in the position of being the single deaf person their schools, and they had never previously met other deaf children or adults. All 69 children in the study were taught exclusively orally. General schools in Cyprus should provide everyday interaction with deaf peers, have deaf adult role models (teachers or aides), offer links to social organizations for deaf people, and provide access to Greek Sign Language. Finally, members of the Deaf community must become dynamic collaborators in the process of educating deaf and hard-of-hearing students at all levels of public education.

This study points out important issues in deaf education that should be addressed. The major findings of our study may have implications for support service developments for deaf children attending general schools in other countries as well. According to Thoma et al. (2004), the variety of support services and resources provided to deaf children in Cyprus ensure their academic and social inclusion. Consequently, the policy makers in those countries where deaf children attend general schools may emulate the resources offered for more than 15 years in Cyprus, which have been evaluated as effective and adequate by the

participants in this study, in order to design and implement effective support services for deaf children in their countries. Similar studies may be also used in other countries to improve the education of deaf children in mainstream and segregated settings and others.

Note

1. The questionnaires administered to hearing-impaired children were linguistically modified by the researchers to meet their needs. The questionnaires were filled out by the children themselves. An "independent teacher" (not involved in the research team) was also appointed at each school to explain difficult words found in the questions whenever he or she was asked by those children with linguistic limitations.

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