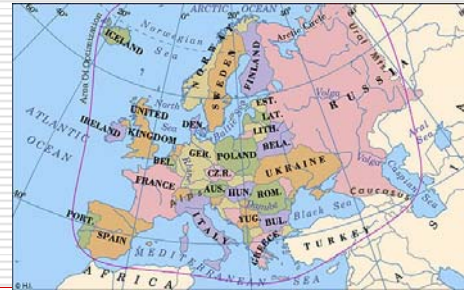


The Use of Communication Technology by Deaf and Hard of Hearing People

- Venetta Lampropoulou, Professor; DSU University of Patras, Greece
- Christos Panagiotakopoulos, Assistant Professor, University of Patras, Greece
- Kika Chatzikakou, Ministry of Education, Cyprus
- Suzana Padeliadu, Professor, University of Thessaly, Greece

The Use of Communication Technology by Deaf and Hard of Hearing People

Greece is a part of Europe



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The Use of Communication Technology by Deaf and Hard of Hearing People

Greece: Acropolis is in Athens



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The Use of Communication Technology by Deaf and Hard of Hearing People

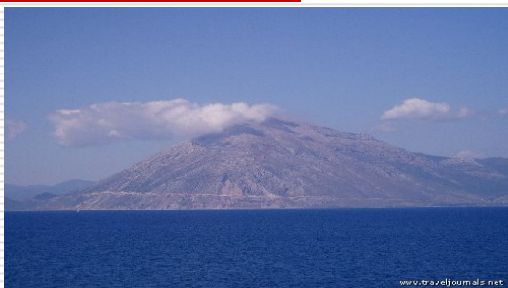
Patras: a City of Greece



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The Use of Communication Technology by Deaf and Hard of Hearing People

Antirio: the View of the UPatras



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You Can Go There By Boat



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Or by Car



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Deaf Education in Greece

- 1932 First Residential-Oral School for the Deaf- NID Ministry of Health
- 1984 Public-Day schools-Ministry of Education (oral) and NID Schools (TC)
- 1986 Early Intervention Centers (NID)
- 1988 University Training for teachers and Research in Deafness (University of Patras)
- 2000 Recognition of Greek Sign Language (PL.2817/2000)
- 2008 TC- Bilingual Education- Cochlear Implants- Mainstreaming-special units and schools

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Deaf Studies Unit-Department of Primary Education, University of Patras- Greece

ICT Developments since 1992



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Deaf Parliament Member

- <http://www.youtube.com/watch?v=fCFVx2MMrRI>

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Technology: The Consumer's Needs

2004 Needs Assessment Study

- a) To identify the needs as perceived by teachers and deaf students of using effectively the technology for educational purposes
- b) to establish priorities among the identified needs

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Conclusions of Needs Assessment

- Teachers and Deaf Students value especially the technology that provides opportunities for distance learning and communication with the world outside the classroom (videoconferencing, email, internet, typing interpretation).
- Teachers and Deaf Students will benefit more, if the school curricula was devoted to computer and technology training and if teachers had more specialized training in the subject.

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The Use of Technology by Deaf People

The Aim of the Study:

To examine the use and benefits of different communication technology (ICT) such as mobile phones, faxes, computers-internet, email by deaf and hard of hearing individuals.

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Method

Subjects:

50 deaf or hard of hearing people from Athens and Thessaloniki

Instrument:

Survey Questionnaire 71 questions (2 parts) Adapted from the Questionnaire of V-Project Research Consulting (VPRC) Institute of Greece used in National Research of the Use of New Technologies and the Information Society of 2004

Collection of data:

April-March, 2006
Interviews by GSL Interpreters and Deaf researchers

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Results

Table 1. Characteristics of the Participants

	N	%
Sex		
Male	28	56
Female	22	44
Total	50	100
Age		
Under 20	3	6
21-25	19	38
26-30	11	22
31-35	7	14
36-40	5	10
41-45	5	10
Total	50	100
Hearing Status		
Deaf	37	74
Hard of Hearing	13	26
Total	50	100

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Results

Table 2. Characteristics of the Participants

	N	%
Educational Level		
University	9	18
Students (Un-Tech)	9	18
High School (Deaf)	28	56
Junior High (Deaf)	2	4
High School (Hearing)	1	1
Junior High (Hearing)	1	1
Total	50	100
Working Status		
Unemployed	26	52
Employed	24	48
Total	50	100

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Results

Table 3. The Kinds of Technologies Used by the Deaf

Kind of Technology	Deaf	General Population (VPRC2003)
	%	%
Mobile Phones	100	80
PC	64	35.8
Internet	44	20
Email	50	15.6
Fax	40	-
Video	74	-
DVD-player	62	-

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Results

Table 4. Mobile Phone Use by the Deaf

Type of Functions used	%
Ready phrases	32
Email purposes	8
SMS	100
MMS	6
Purpose of Use	
To communicate with:	
Deaf only	18
Hearing only	6
Hearing and Deaf	76

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Results

Table 5. PC Parameters' and Usage by the Deaf

	Deaf	General Population (VPRC)
Have Computers at home	64%	35,8%
<i>Where Learned:</i>		
School	34%	24%
Work	6%	11%
Special Courses	20%	18,8%
Alone-Home	24%	35,5%
From Friends	20%	7,5%
Other	6%	1%

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Results

Table 6. Email & Internet Use by the Deaf

Email account	44%	
Email users	50%	
Internet account	44%	
<i>Reason for using</i>		
	<i>email</i>	<i>internet:</i>
Communication	40%	14%
Work	6%	6%
To get information	4%	30%
Other	2%	6%

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Results

Table 7. Hours per week spent in ICT by the Deaf

<i>Kinds of Technology</i>	Deaf	General Population (VPRC2005)
	Mean	Mean
PC	17,5	15,1
Internet	10,7	7,5

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Results

Table 8. Frequency & Reasons of Using the Different ICT by the Deaf

<i>Kinds of Technology</i>	Frequency	Percentage
Mobile phone	46	92
Email	3	6
Fax	1	2
Total	50	100
<i>Reasons for Using:</i>		
Mobile phone- easy to carry	22	44
Email- easy and fast communication	22	44
Fax- accessible	1	2
Missing	5	10
Total	50	100

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Results

Table 9. Overall Benefit from the Use of Mobile Phones & Email

<i>Mobile phone benefits</i>	%	To the greatest degree (%)
Communication Accessibility	92	66
Improvement of Written Language	66	30
<i>Email</i>		
Communication Accessibility	44	30
Improvement of Written Language	34	12

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Results

Association Among the Variables:

Sex, Age, Education and Knowledge of PC

- **Men** spend more time in the Internet (twice as much) than **women** ($t(31) = -2.64$; $p < 0.05$)
- Deaf of **older age** seem to make more use of the fax than **younger age** Deaf people ($\chi^2 = 21.2$; $df = 5$; $p < 0.05$).
- The Deaf **students** seem to use more the mobile phone to send email messages than all other categories ($\chi^2 = 19.99$; $df = 8$; $p < 0.05$).

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Results

- The **graduates of High School** for the Deaf seem to benefit more than all other categories in their written language by writing messages through the mobile phone ($\chi^2=18.38$; $df=8$; $p<0.05$).
- The **University graduates** seem to have more Internet connection than all other categories ($\chi^2=16.35$; $df=8$; $p<0.05$).
- **University graduates** and **students** seem to spend more time in the Internet than all other categories ($F(6.26)=4.44$; $p<0.05$).

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Results

- The ones who **know well how to use a computer** seem:
 - to send more messages through the mobile phone ($\chi^2=9.95$; $df=3$; $p<0.05$)
 - to make more use of the fax ($\chi^2= 8.18$; $df=3$; $p<0.05$)
 - to have more Internet home connection ($\chi^2=8.88$; $df=3$; $p<0.05$)
 - to make more use of the Internet ($\chi^2=19.57$; $df=9$; $p<0.05$)
 - to use more the email of any other category ($\chi^2=12.16$; $df=3$; $p<0.05$)

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Conclusions

- New Technologies seem to have changed the life and broadened the communication opportunities of Deaf and hard of hearing people.
- Mobile phones have provided an easy access to communication not only between Deaf people but also between hearing and Deaf and seem to be the most popular and promising ICT for the Deaf.
- The level of education and especially computer knowledge seem to be necessary in order for Deaf and hard of hearing people to take a full advantage of the new technologies.

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Thank You!

Greetings from Greece



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