

Education and Culture Lifelong Learning Programme



eHo

John Dennis, Michele Capurso University of Perugia

www.lehoproject.eu

Learning at Home and in The Hospital



Lifelong Learning Programme











Information Communication Technologies



You Tube



The Focus Groups



Countries: Belgium, Egypt, Germany, Italy, Spain, England.

People: Teachers (Home Education and Hospital); Medical staff (doctors, nurses, psychologists, social workers).

Aim: see how Key Educational Factors relate to the education of children with a medical condition.

Method: a general guide for the FG has been shared among the partners of the project; Partners from each country have conducted their own focus group and reported them on a preset report matrix. Results were analyzed inductively by 2 independent coders $(\alpha = .88)$.



The Report Matrix



A. Relationships ¤					
Key Educational factors ^µ	Practices / activities in place that allow following these factors in hospital / at Home ^{II}	What problems do you have following these factors in the hospital / school? ^{II}	What problems do you have following <u>these</u> factors in the home? [#]	Are there (have you used) any ICT tools which can help to fulfil this key educational factors? ^{II}	
Authentic learning always takes place within a system of interactions with others and with cultural artefacts. Shared cultural and relationships mediators can facilitate educational processes at all levels and in any context.	Books and notes go from class to pupil and back again. ¶ Provide tips for the class teacher on how to involve the pupil at home in class activities. An example: the class writes messages on a pillowcase. ¶	It takes a certain amount of time before each child has made a drawing or written a text message. ¶ This form of interaction is not every pupil's cup of tea.¤	It takes time for the result to reach the ill pupil. ¶	A more direct interaction is to send an e-mail to the pupil at home. ^{II}	



The Focus Groups



535 statements by FG participants were entered and then later categorized into one of 38 categories.

101 doctors and teachers participated in the focus groups (25 Health care professionals – i.e., HCP) and 76 teachers). The average age for focus group participants was 44.



Focus Groups





Results





Overall Results



Percentage distribution of answers per Key Educational Factor per issue.

KEY		ISSUES %					
EDUCATION	Ν	Practices		ICT		Hosp.	Home
AL FACTORS		-	+	-	+	-	-
Relationships	158	0	33.5	.6	11.4	32	7.6
Making sense & constructing knowledge	100	14	19	I	15	30	10
Assuming roles	114	13.6	30.7	3.5	8.7	24.5	12
Metacognition	75	0	40	0	10.6	30	5.3
Individualities	88	0	52.7	0	4.5	26.1	3.4

Lifelong Learning Programme

Overall Results:

Answers were well distributed among the five issues, except for Home tuition.

The less managed KEFs with educational practices (and also the most problematic) appears to be **Making sense and Constructing reality,** followed by **assuming active roles for the children.**

Individualities seems to be well covered by appropriate educational practices (given that most of the educational activities within HHE are individualized).

ICTs: perceived as a tool of choice in **Making sense and Constructing knowledge** (which is the KEF less covered with other educational practices).

> Lifelong Learning Programme

eHn

Relationships (158 stmts, 71+, 65-, 22n)					
Positive statements (71)		Negative statements (6	Negative statements (65)		
ICT learning tools	20	Isolation	п		
integration and school re-integration	17	External psychological factors	9		
teamwork	4	Stigma	5	Lifelong Learning Programme	

KEF: Relationships



Some questions emerge:

Are the solutions adopted (ICT, integration) effective? Why the above solutions are also associated with problems of isolation and difficulties related to the child's psychological issues?.

Suggestions:

Stigma needs to be addressed with human and social mediation (need of school re-entry and mainstream school Educational Programmes).

HHE needs to deal with psychological stressors, for instance with paths and awareness of building meaning in the eyes of the child, long term educational planning, etc.



Making sense and constructing knowledge



Positive statements (34	•)	N state	Negative statements (55)		
ICT learning tools	10	Isolation	11		
	4	External psy factors	chological 6		
Adaptive	4	HHE not va	lued 6		
Virtual community	3	setting	4		

Making sense and constructing knowledge



It's ironic that a **communication technology** is not able to effectively solve problems of **isolation!**

Suggestion:

The management of the educational setting in hospital can not be sustained only by teachers. We need a coordinated policy in general among those who manage hospital wards and those who manage the educational process.

Lack of communication at this level is probably the real problem to be addressed.

lifelong Learning Programme





Positive statements (45)		
teamwork	7	
integration	5	
ICT learning tools	5	
Generic ICT use	5	

Negative statements (61))	
intrapersonal psychological factors	6	
External psychological factors	6	
stigma	6	
Awards	5	
Isolation	4	ong ning

Assuming roles



Working in an integrated educational environment, through forms of cooperative learning seems to be the ideal choice to allow sick children to take active roles in front of their peers. ICT is indicated as an aid to these methodologies.

The presence of stigma and problems related to intrapersonal psychological factors indicate the need to properly prepare the educational level of recipients (including the class and the teachers in the school to which the ill child belongs).







6

Positive statements (38)

experiential learning factors

ICT learning tool

adaptive

7

6

Negative statements (27) safety

cost factors



Metacognition



Metacognition appears to be **well connected with experiential learning tools and activities**, However the possibility to perform an effective metacognitive learning interacts with **contingent problems** related to the disease state (e.g., safety) or the **lack of economic resources**.

Suggestions: 2 pathways for ICT: 1. use of ICT **as a medium** for metacognitive processes. 2. ICT to facilitate the vicarious participation of the student with

concrete classmate experiences.







Positive statements (55)

communication	9
assessment	8
integration	6

Negative statements (26)



Individualities



The recognition of the individuality of each student seems adequately covered by appropriate pedagogical practices (adaptive teaching and guidance, communication, systems of self-evaluation and assessment, attention to integration).

The problems identified appear to relate to the sharing of practices and procedures with the school to which the children belong or are probably linked to the rigid use in the context of the hospital school of assessment procedures of the normal school.



The Focus Groups



Learning Programme

Countries: Belgium, Egypt, Germany, Italy, Spain, England.

People: Teachers (Home Education and Hospital); Medical staff (doctors, nurses, psychologists, social workers).

aim: see how Key Educational Factors relate to the education of children with a medical condition.

Method: a general guide for the FG has been shared among the partners of the project; Partners from each country have conducted their own focus group and reported them on a preset report matrix. Results were analyzed inductively by 2 independent coders $(\alpha = .89)$.

The Report Matrix



A. Relationships ¤					
Key Educational factors ^µ	Practices / activities in place that allow following these factors in hospital / at Home ^{II}	What problems do you have following these factors in the hospital / school? ^{II}	What problems do you have following <u>these</u> factors in the home? [#]	Are there (have you used) any ICT tools which can help to fulfil this key educational factors? ^{II}	
Authentic learning always takes place within a system of interactions with others and with cultural artefacts. Shared cultural and relationships mediators can facilitate educational processes at all levels and in any context.	Books and notes go from class to pupil and back again. ¶ Provide tips for the class teacher on how to involve the pupil at home in class activities. An example: the class writes messages on a pillowcase. ¶	It takes a certain amount of time before each child has made a drawing or written a text message. ¶ This form of interaction is not every pupil's cup of tea.¤	It takes time for the result to reach the ill pupil. ¶	A more direct interaction is to send an e-mail to the pupil at home. ^{II}	



The Focus Groups



485 statements by FG participants were entered and then later categorized into one of 38 categories.

74 doctors and teachers participated in the focus groups (14 Health care professionals – i.e., HCP) and 59 teachers). The average age for focus group participants was 45.



Focus Groups





Results



Categories by Focus Group Theme





How ICTs Are Used



How used	Frequency
Software as a learning tool	31.3%
Communication/information	
sharing	14.0%
Increase knowledge about	
illness	9.4%
Integration	9.4%
Active/creative learning	7.6%
Administration	6.5%
Distance relationship	5.0%
Personalized learning and	
training	4.0%
Unspecified	3.6%
Device as a learning tool	3.2%
Psychological factors	1.8%
Autonomy	1.4%
Monitoring	1.4%
Teamwork	0.7%
Orientation	0.4%
Privacy factors	0.4%



Overall Results:

A total of 278 ICT were mentioned by Teachers and HCPs during the 2nd round focus groups.

The top 10 ICTs mentioned were Email (14), Skype (14), Bednet (10), PowerPoint (8), Dropbox (7), Word (7), Excel (7), Publisher (6), Robotica (6), WhatsApp (6). These top 10 ICTs represented 30.2% of all ICTs mentioned. Interestingly specific ICTs were described as being used in multiple ways. For example, the most frequently used ICT – i.e., Email was described as being used in 6 separate ways (i.e., software as learning tool, communication/information sharing, distance relationship, increase knowledge about illness, integration, administration) by Teachers and HCPs during the 2nd round focus groups.

> Lifelong Learning Programme

Frequency of ICT use



	% of	Most
Frequency of Use	Total	used
Daily	33.5%	Robotica
Almost every day	32.4%	Bednet
		Simon en
Occasionally	11.2%	Odil
According to		
requirements	10.8%	Edu 365
		Google
NA	3.6%	Docs
Daily, depends on		
pupil condition	3.2%	Moodle
Weekly	2.9%	iPads
Rarely	2.5%	PhotoPeach



Problems emerging from ICT in HHE



Problem	Frequency
Technical factors	17%
Administration	16%
Equipment feature	13%
Connectivity	
factors	12%
Virtual assessment	8%
Cost factors	7%
Isolation factors	7%
Environmental	
feature	4%
Privacy factors	4%
Psychological	
factors	4%
Hospital	
limitations	2%
Time factors	2%
Training support	2%
Motivation	1%



Problems



Of the problems that were mentioned during the 1st round of focus groups – i.e., "isolation factors" "cost factors" and "psychological factors" – both external and intrapersonal, and "safety" were also mentioned during the 2nd round. The repetition of psychological and isolation factors in both focus groups helps underscore the fact that ICT, at least in its current form, is not able to resolve the fundamental issue of isolation. This aspect should be addressed with a deep pedagogical and psychological planning of the school activities before introducing any learning tool, and cannot be left alone hoping that some ICT will simply fix it. On the contrary, developing ICT solutions without taking into proper account the psychological aspects of the child with a medical condition can actually aggravate the problems.



Pedagogical aspect where ICT can make diff

Category	Frequency
Communication/	
information sharing	34%
Software as learning	
support	13%
Increase knowledge	11%
Personalized learning	9 %
Virtual assessment	8%
Unspecified	6%
Administration	4%
Technical factors	4%
Autonomy	3%
Increase knowledge	
about ill	3%
Creative learning	1%
Device as learning tool	۱%
Monitoring	1%
Teamwork	1%
Training support	1%



HO

Pedagogical aspects



Considering the results from the 1st round of focus groups where ICTs were perceived to be most useful in the KEFs Making sense and Constructing knowledge and what was found in the 2nd round of focus groups when the discussion turned to how ICTs can make a difference, ICTs are truly a tool of choice for creating a socioconstructivist path that respects the needs of the child.



Limits of ICT use



ICT cannot replace this	Frequency
Face to face interaction	45.50%
Personal relationship	18.20%
Competition between students	9.10%
Non verbal communication	9.10%
Physical sensory exploration of their surroundings	9.10%
Getting the full picture	6.10%
Taking an interest in the whole child	3.00%



Limits of ICT in HHE



Face to Face interaction encompass two crucial aspects of the educational relationship. The fist one is that the reality of the child with a medical condition in HHE is one where face-to face interaction with peers can really make the difference in reducing stigma associated with their illness. The second one is that education is only possible within a system of relationships, and such relationships can only be supported by ICT but cannot be created or maintained alone via ICT use. The real relationship tool is simply looking into the child's eyes.



Final Thoughts



The key role of KEF Relationships in HHE is one that similarly cannot be denied. Social bonds between students in the HHE are important as are those between the home institution and the HHE. The maintenance of these social bonds should be stable and fostered within the HHE. In practice this might mean that new social bonds between children in the HHE should be encouraged as these new bonds might help the child as the re-integrate into their home institution. At the same time, previously existing social bonds between children in the HHE and their home institution should be part of educational projects over the long term.





