



# Information and Communication Technologies as a media to support and training individuals for adopting ARA in schools

Thinking in new perspectives

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Firsts concepts



Firsts concepts

## Information and Communication Technologies



Information and Communication Technologies (ICT) are the computer and telematic tools created by human in order to represent, transmit, create and communicate knowledge.



Firsts concepts

## Information and Communication Technologies



### Networks

Telephone line,  
Internet, TV,  
radio,...



### Devices

Smartphone, Tablet,  
computer, screens,  
cameras,...



### Services

Softwares, apps,  
websites, e-mail,  
videogames,...



Firsts concepts

## ICT functions for



**T**rainning



**S**upport



**E**valuation



## Firsts concepts

# Training, support and evaluation



**Training** is a learning process in which individuals are exposed to improve their knowledges or skills about a topic.



**Support** involves communication actions in order to exchange information and resources about a topic.

**Professional support:** Individuals receive support from professionals.

**Peer support:** Individuals exchange information and resources with others in the same situation.



**Evaluation** involves all processes to follow-up the educational practice with the aim of knowing what works or what must be improved.



## Firsts concepts

### People involved in social and educational actions



**U**niversities or other institutions



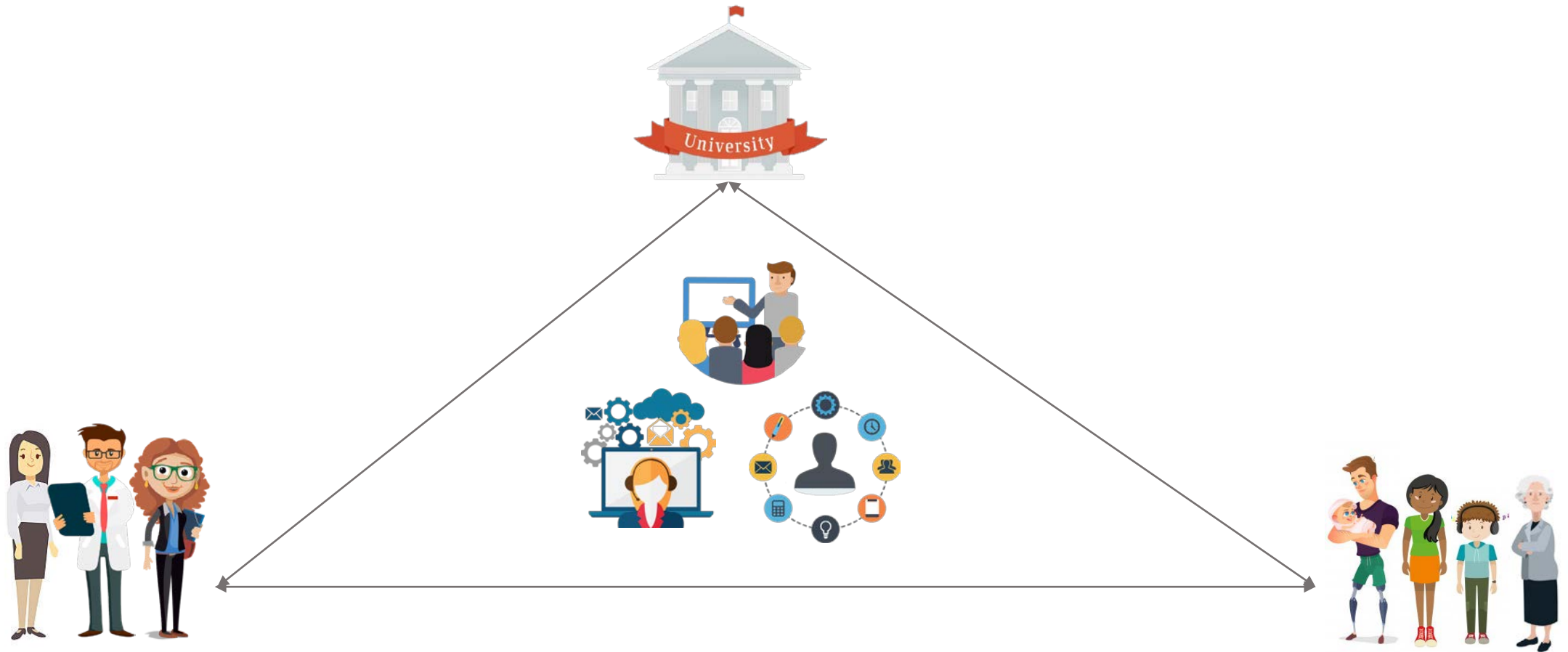
**P**rofessionals



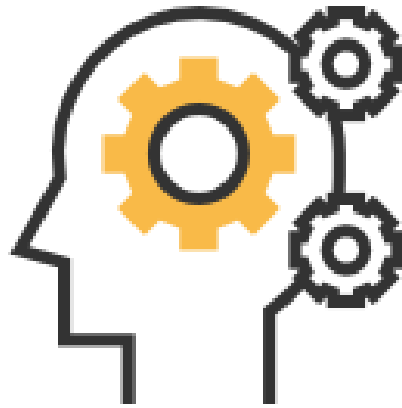
**U**sers of the intervention or the action



# Firsts concepts







Let's think



Let's think...

Could you think in **good practices** you do through ICT for training, support or evaluation in education?

(They can be related with the training in ARA or not)

Please, write 1  
practice per  
post-it.



Models of learning through ICT



## Models of learning through ICT

Technology facilitates new teaching and learning processes in formal and non-formal education.

In this sense, we can contextualise educational practices through ICT taking into account next models.





## Models of learning through ICT(1/4)



### **e-learning**

Or electronic learning, is a model in which ICT are used in general to facilitate the access to learning resources and services in distance learning processes.

The knowledge does not take place in a face-to-face and traditional classroom. Each subject can access to a virtual and learning space through Internet anywhere and at any time through a device.



## Models of learning through ICT (2/4)



### **b-learning**

Or blended learning, is the model in which distance learning through ICT and face-to-face learning are mixed.

It is associated with semi-attendance education or training.





## Models of learning through ICT (3/4)



# m-learning

Or mobile learning, it allows to learning in any place.

The learning is given with the support of mobile devices, referred to mobile phones, smartphones, tablets or laptops.





## Models of learning through ICT (4/4)

### **u-learning**

Or ubiquitous learning, it allows to learning in any place and through any device.

Also it involves the teaching and learning processes in the face-to-face education or training with the support of ICT.







## Models of learning through ICT (4/4)

### Context

### Formal education





## Models of learning through ICT (4/4)

# Context

## Non-formal education

Socio-educative programs

Professionals training

Extra-curricular school activities

Socio-educative projects

...

Language schools

Social services

Adult training courses

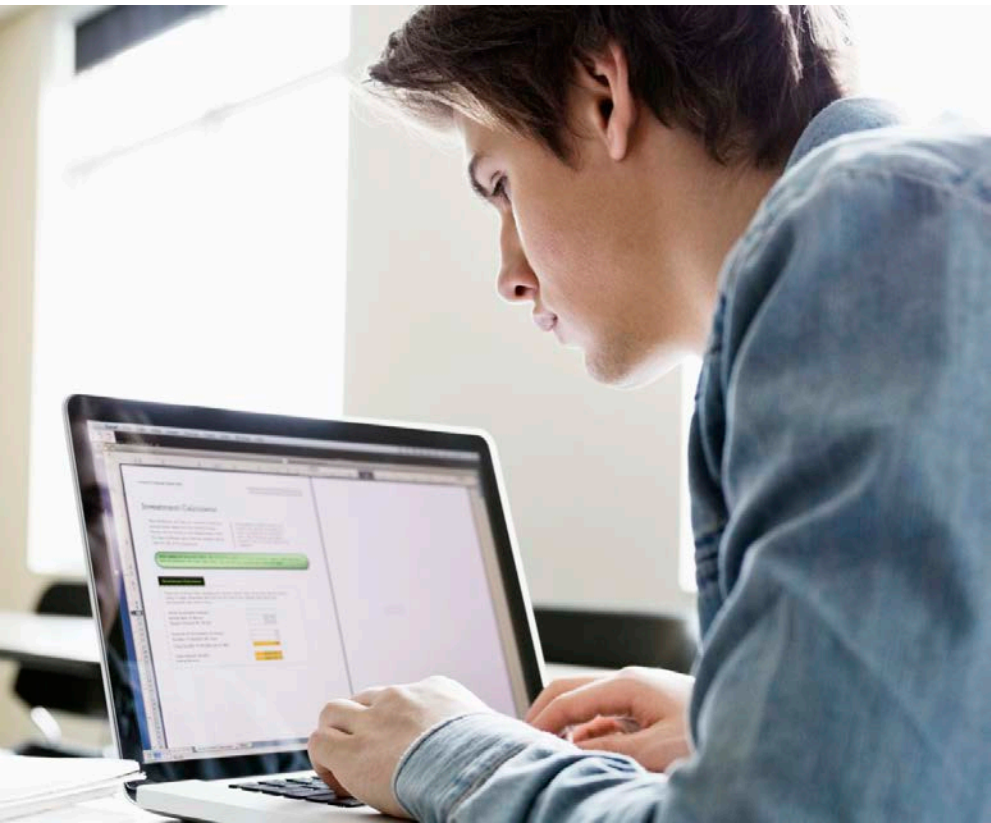
Interventions for people with disabilities or educational needs



ICT services for a virtual environment



## ICT services for a virtual environment



### **Virtual Environment**

It is the set of virtual tools that generates a process of teaching and learning.

Is the space where e-learning takes place. It is not a tool, but it is composed by ICT tools through which it is created a shared work environment for knowledge construction.



## ICT services for a virtual environment

### e-Learning Platforms

E-learning platforms or virtual learning platforms are technological tools hosted on the Internet that support the creation of virtual environments. The most common are:



Blackboard



These platforms integrate a high number of other applications for:

**The administration  
of students and  
other users**

**Communication and  
support**

**Accessing to learning  
resources**

**Self learning**

**Evaluation  
Managing**

**Sharing  
educative tasks**



## ICT services for a virtual environment

### Tools for



**T**raining



**S**upport



**E**valuation



ICT services for a virtual environment

## ICT Tools for Training:

Activities

- Assignments
- Choices
- Feedback
- Forums
- Glossaries
- Lessons
- Quizzes
- Resources
- Wikis
- Workshops





## ICT services for a virtual environment

### ICT Tools for Training: Games

#### Games based learning

It is needed specific games linked with the learning topic.



#### Serious games

They involve game's mechanics in learning something, not for enjoying.



#### Gamification

Elements of games are included in a learning process to engage students: badges, points and leaderboard.







## ICT services for a virtual environment

### Online tools classified in Bloom's Revised Taxonomy

<http://www.schrockguide.net/bloomin-apps.html>



CREATING	SPARK VIDEO	FOTOBABBLE	CANVA	PODOMATIC	SKYPE
EVALUATING	PADLET	GOOGLE+	AWWAPP	WEEBLY	TWITTER
ANALYZING	WUFOO	THINGLINK	AIRTABLE	GOOGLE SHEETS	WEVIDEO
APPLYING	SOUNDATION	HANGOUTS	PIXLR	SWAY	SPARK PAGE
UNDERSTANDING	FEEDLY	VOICETHREAD	ZOHO CREATOR	BEFUNKY	SPARK POST
REMEMBERING	SYMBALOO	WORDLE	SCREENCAST-O-MATIC	POPPLER	ONENOTE

Get the webpage in your Smartphone!





# ICT services for a virtual environment

## iOS Apps classified in Bloom's Revised Taxonomy

<http://www.schrockguide.net/bloomin-apps.html>



<b>C</b> CREATING	STORYTELLING	VIDEO EDITING	PRESENTING	DESIGNING	PODCASTING	ANIMATING
<b>E</b> EVALUATING	MODERATING	CONFERENCING	NETWORKING	POSTING	COLLABORATING	CRITIQUING
<b>An</b> ANALYZING	OUTLINING	STRUCTURING	ORGANIZING	SURVEYING	REWORKING	MASHING
<b>Ap</b> APPLYING	INTERVIEWING	SIMULATING	DEMOING	SHOWCASING	EDITING	EXPRESS ILLUSTRATING
<b>U</b> UNDERSTANDING	ORGANIZING	ANNOTATING	EXPLAINING	BLOGGING	SUBSCRIBING	LABELING
<b>R</b> REMEMBERING	RECALLING	LISTING	CURATING	DESCRIBING	MIND MAPPING	SEARCHING

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# ICT services for a virtual environment

## Android Apps classified in Bloom's Revised Taxonomy

<http://www.schrockguide.net/bloomin-apps.html>



Level	App 1	App 2	App 3	App 4	App 5	App 6
<b>C</b> CREATING	STORYTELLING	VIDEO EDITING	MIXING	DESIGNING	PODCASTING	ANIMATING
<b>E</b> EVALUATING	MODERATING	CONFERENCING	NETWORKING	POSTING	COLLABORATING	CRITIQUING
<b>An</b> ANALYZING	OUTLINING	STRUCTURING	ORGANIZING	SURVEYING	REWORKING	MASHING
<b>Ap</b> APPLYING	INTERVIEWING	SIMULATING	DEMONSTRATING	SHOWCASING	EDITING	ILLUSTRATING
<b>U</b> UNDERSTANDING	ORGANIZING	ANNOTATING	EXPLAINING	BLOGGING	SUBSCRIBING	LABELING
<b>R</b> REMEMBERING	RECALLING	LISTING	CURATING	DESCRIBING	MIND MAPPING	SEARCHING

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# ICT services for a virtual environment

## Google tools classified in Bloom's Revised Taxonomy

<http://www.schrockguide.net/bloomin-apps.html>



<b>C</b> CREATING	SITES	SLIDES	YOUTUBE	BLOGGER	STREET VIEW
<b>E</b> EVALUATING	FORMS	GROUPS	HANGOUTS	SHEETS	CHROME
<b>An</b> ANALYZING	SHEETS	PHOTOS	NEWS	SITES	EXPEDITIONS
<b>Ap</b> APPLYING	EARTH	DRAWINGS	MAPS	VOICE	DRIVE
<b>U</b> UNDERSTANDING	DOCS	KEEP	CARDBOARD	GOOGLE+	SCHOLAR
<b>R</b> REMEMBERING	ALERTS	SEARCH	DOCS	KEEP	BOOKMARKS

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# ICT services for a virtual environment

## ICT Tools for Support

### synchronous communication



Videoconference



Chat

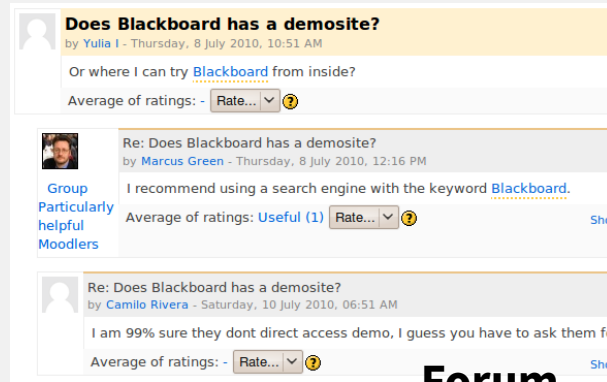


Telephone



Social media

### asynchronous communication

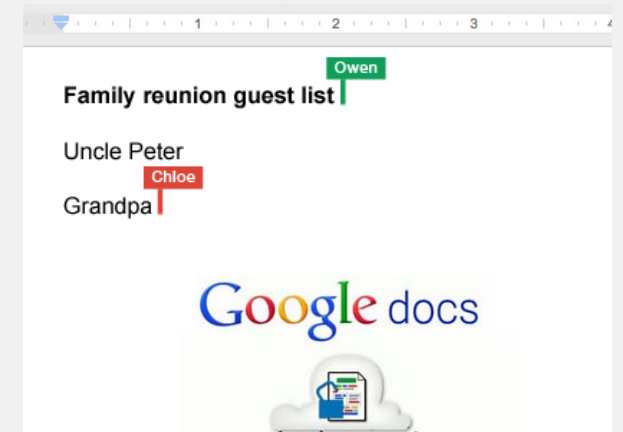


Forum



E-mail

### Collaborative working



Google docs





## ICT services for a virtual environment

# ICT Tools for Evaluation

**Your response**

Respondent: **John (Fitzgerald) Doe** Submitted on: Tuesday, 3 December 2013, 12:21 PM

**Human resource department (Fun Test)**

Section	John (Fitzgerald) Doe	All participants
Global Feedback heading	97%	86%

**Feedback Report**

You scored 97%.

Others see you as someone they should "handle with care" You're seen as vain, self-centered, and who is extremely dominant. Others may admire you, wishing they could be more like you, but don't always trust you, hesitating to become too deeply involved with you.

**1** \* When do you feel your best?

- In the morning
- During the afternoon and early evening
- Late at night

**2** \* You usually walk...

- fairly fast, with long steps
- fairly fast, with short, quick steps
- less fast, head up, looking the world in the face
- less fast, head down
- very slowly

**Surveys and evaluation systems in e-learning platforms**

**My Smartphone Survey**

A short survey to find out what consumers like about smartphones.

\* Required

Do you own a smartphone? \*

Yes

No

NEXT

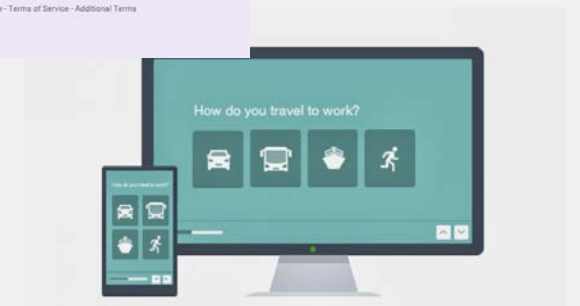
Page 1 of 3

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Google Forms

**Online questionnaires with Google forms, Typeform or other tools**





## ICT services for a virtual environment

### ICT Tools for Evaluation



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**My Smartphone Survey**

This survey to find out what consumers like about smartphones.

**Required**

Do you own a smartphone? \*

Yes

No

**NEXT**

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Page 1 of 3

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Google Forms

**Online questionnaires with Google forms, Typeform or other tools**

**Surveys and evaluation systems in e-learning platforms**





## ICT services for a virtual environment

**IMPORTANT**

To select ICT tools we must think in the aim of the educative or social intervention.

Sometimes we can use tools which are addressed to work for other tasks. But it doesn't matter if we achieved the educative goals.

*Why not use Facebook in a training course? Why not use a collaborative task in a virtual platform to share surveys in order to evaluate a program?*





ICT services for a virtual environment

**We must be creative and effective!**





Virtual Communities of Practice



## Virtual Communities of Practice

### **Community of practice (CoP)**

Is a group of diverse profiles of people who share a concern, a problem or a specific topic.

These people interact with each other to share their knowledge and experience on the subject.





## Virtual Communities of Practice

### **Virtual Community of Practice (VCoP)**

Is a group of diverse profiles of people who share a concern, a problem or a specific topic **through ICT tools.**





## Virtual Communities of Practice

### Functions of VCoP

#### CoP Functions

- Connect people from different environments: practitioners, researchers, professors, students and others.
- Creation of a learning environment.
- The strengthening of the university and community sectors to develop a joint work.
- The joint of different perspectives to consider a common problem.



#### Internet Functions

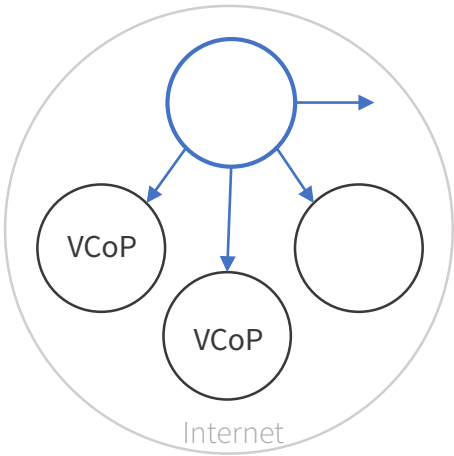
- Connect people in different places.
- People can exchange easily resources and information: events, opportunities, news, multimedia content.



# Virtual Communities of Practice

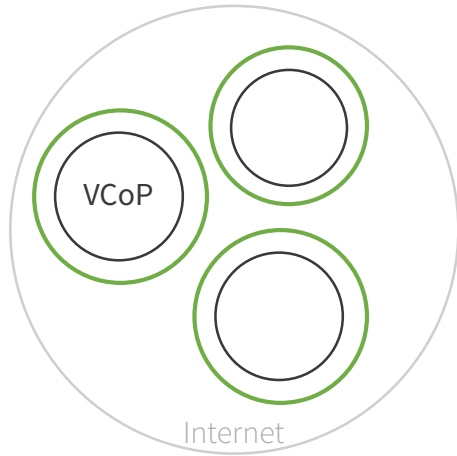
## Tools to create VCoP

### Generic platforms for private communities

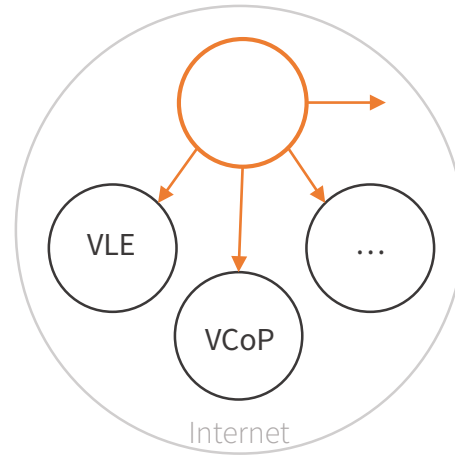


Ning, Spruz, Grou.Ps,  
Google Groups

### Specific platforms of institutions for private communities

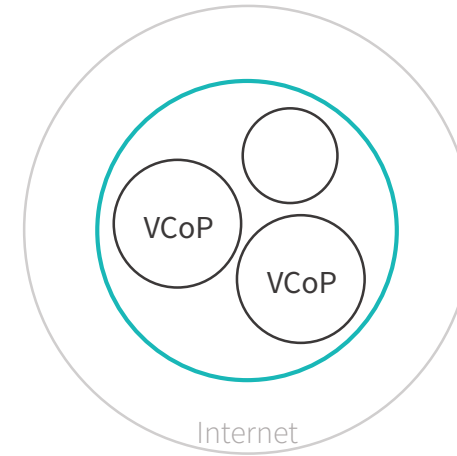


### Generic learning platforms



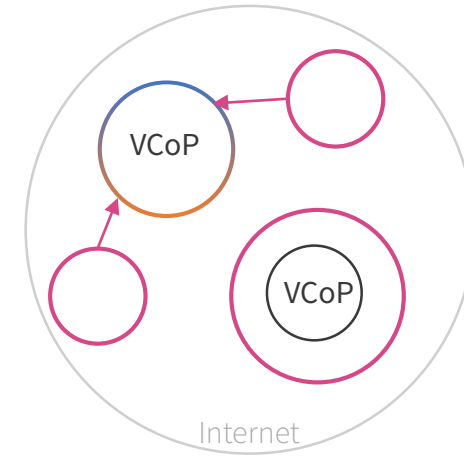
Blackboard, Moodle, Sakai.

### Social Media



Facebook, Twitter.

### Synchronous or Asynchronous Communication Tools



ListServ, chats, forums.



## Virtual Communities of Practice

# Types of users

**Coordinator/s**

**Participants**





## Virtual Communities of Practice

# Types of users

**Coordinator/s**

**Participants**



**Leadership team**





## Virtual Communities of Practice

### Types of users

**Active participants**



**Passive participants**





How to start?



How to start?

## Integration planning of ICT in educational practices

1. **Analysis of initial situation:** educative needs, skills of staff, expectations of the ICT use.
2. **Pedagogical design:** model of e-learning, collaborative learning, peer or professional support...
3. **Technical design:** which tool/s is/are the most adequate?
4. **Facilitator training:** Facilitators must have the enough skills to develop the educational practice through ICT. Sometimes is useful having a team of facilitators specialised in the technology use to support the other facilitators.
5. **Pilot test and first evaluation:** It is recommended to start only with a group and evaluate the implementation.
6. **Whole institution:** The project can be modified with the results of the pilot test, in order to adequate it better and start it in the whole institution.
7. **Continuous assessment and improvement:** It should be done a continuous assessment of the implementation to take measures and improve the project continuously.

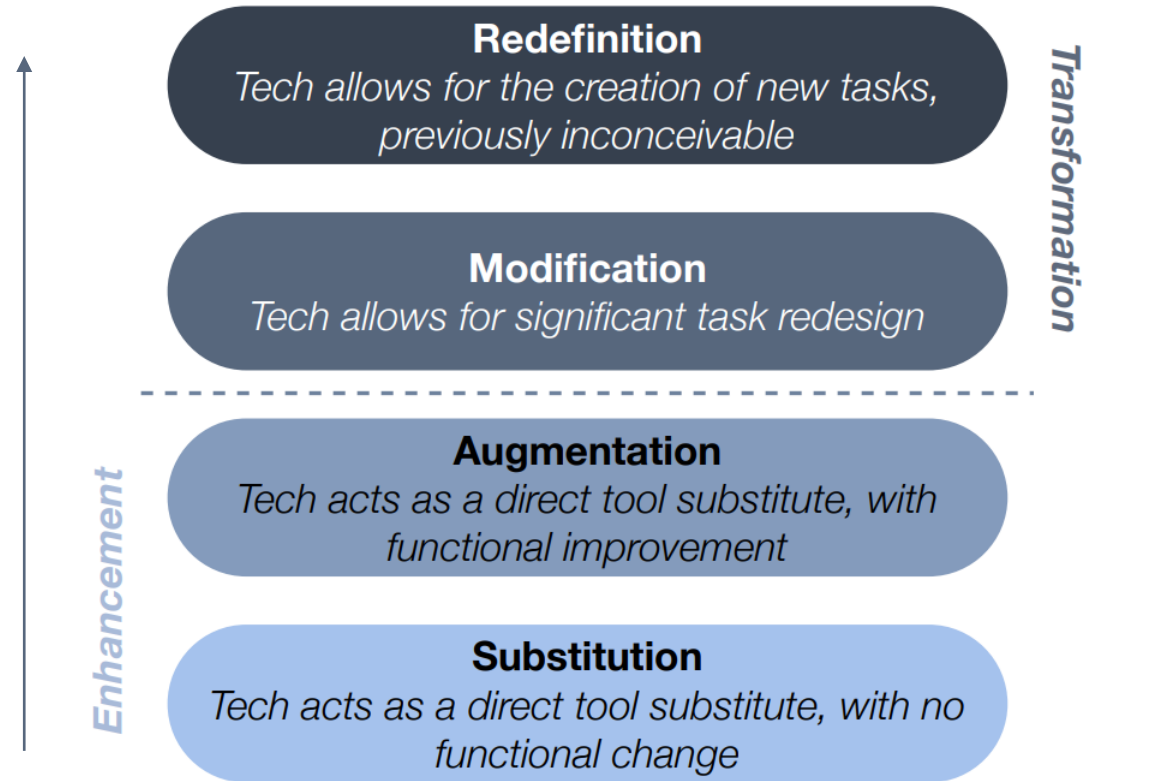


How to start?

## SAMR Model

<https://www.youtube.com/watch?v=ZQTx2UQQvbU>

How to evaluate the use of technology in educational and training practices?



For more information:

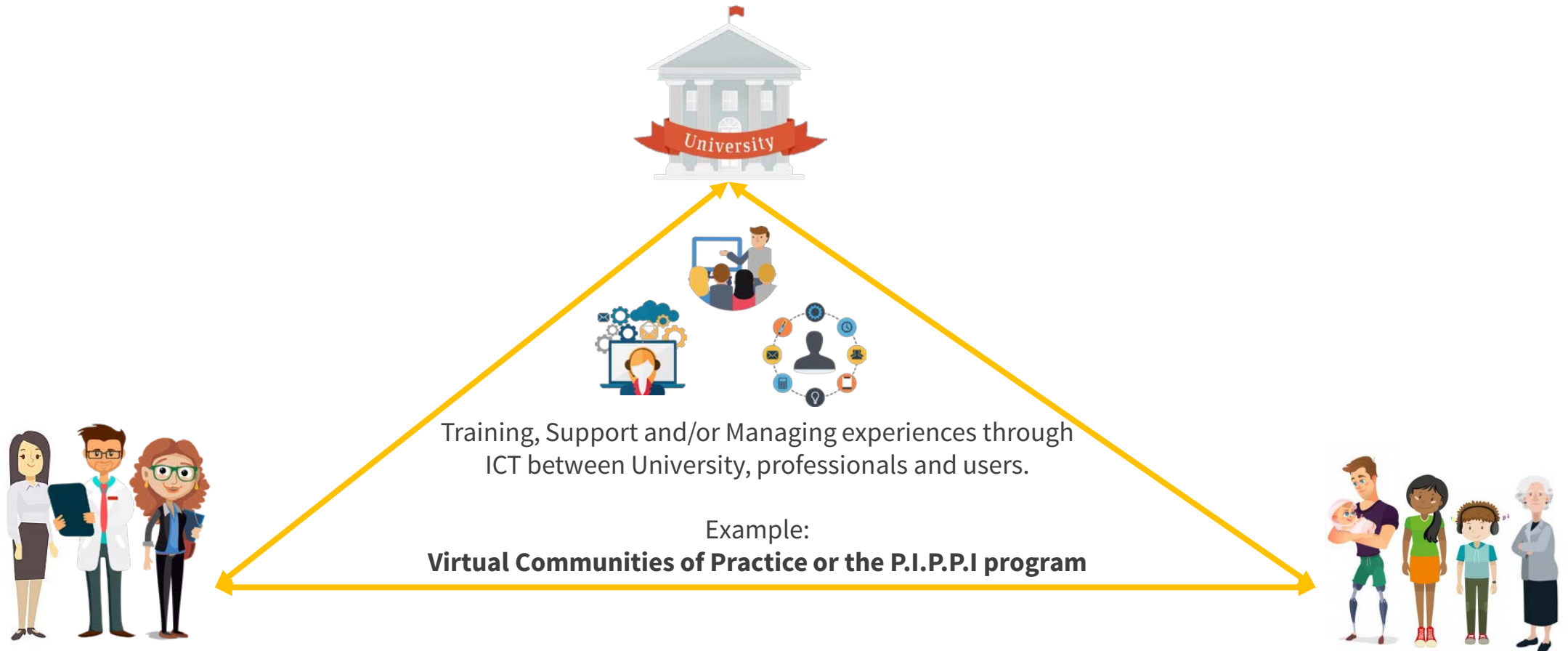




ICT as a media for social and educational  
actions and interventions

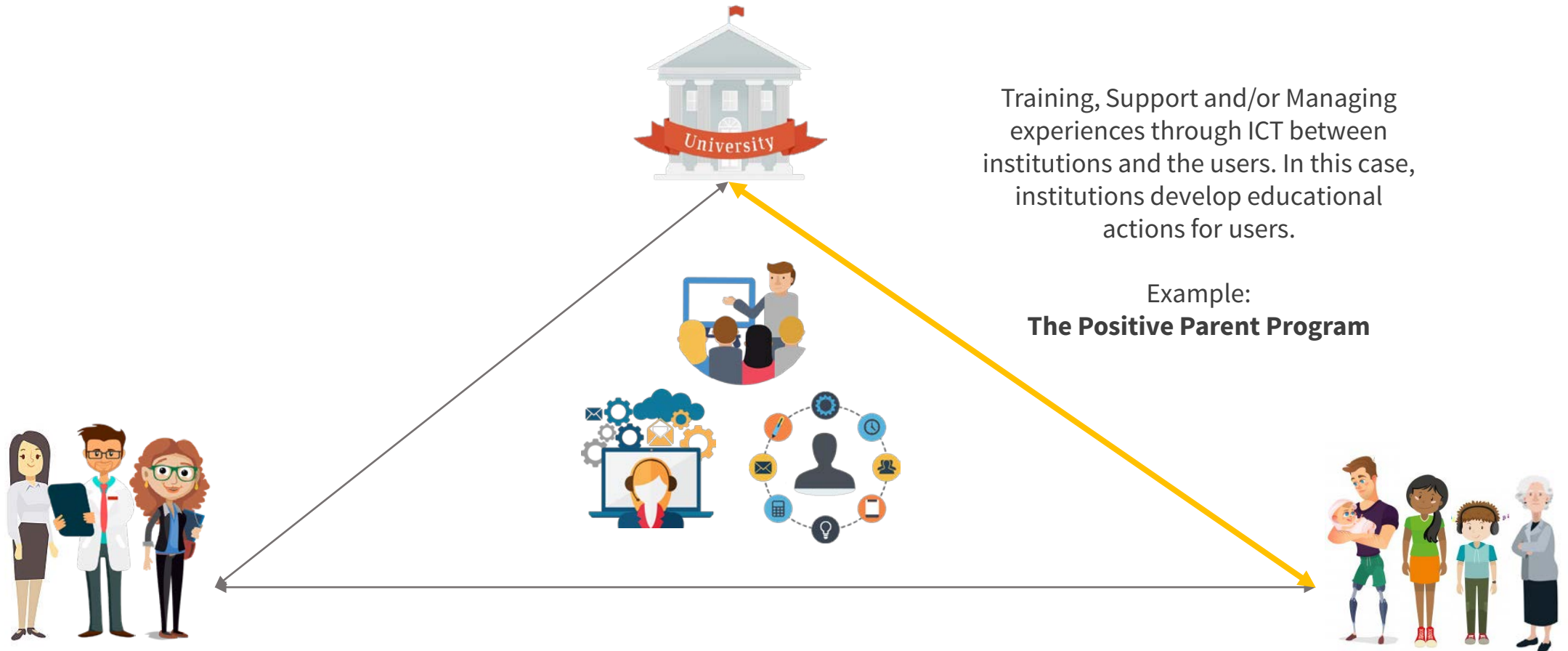


## ICT as a media for social and educational actions and interventions



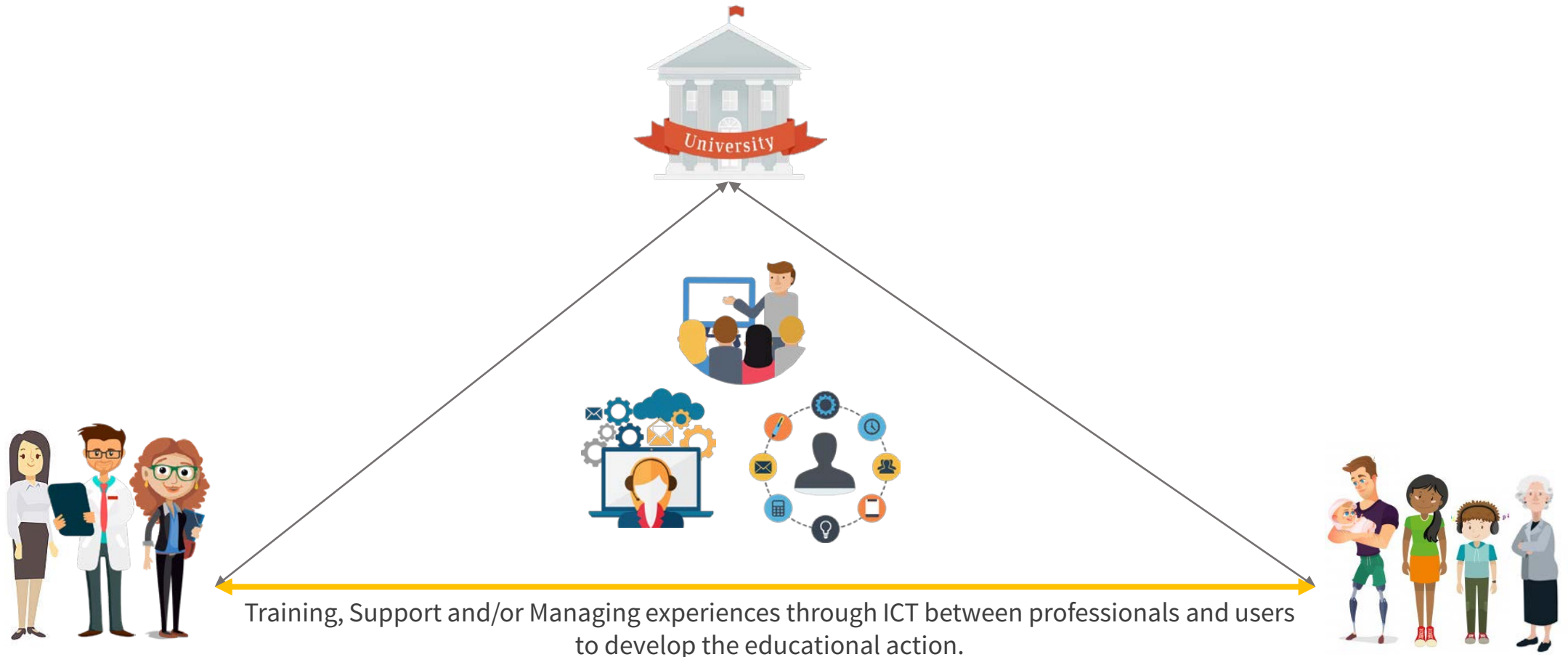


## ICT as a media for social and educational actions and interventions





## ICT as a media for social and educational actions and interventions



Example: **Usual activities in the environment: school, hospital or other centres.**





## ICT as a media for social and educational actions and interventions

Training, Support and/or Managing experiences through ICT between institutions and professionals to improve their practices with users.

Example:

**Walking Family socio-educative program**





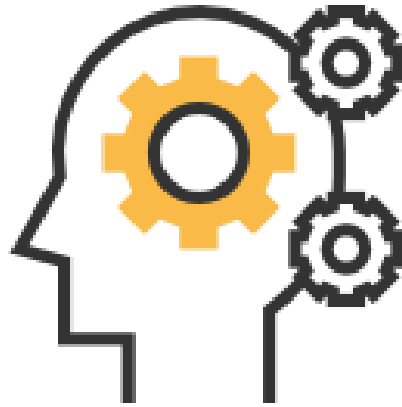
## ICT as a media for social and educational actions and interventions

### **An experience of practitioners training, support and the evaluation of the intervention through a Virtual Environment**

Walking in Family: Parental competency program during foster care and family reunification

<https://vimeo.com/168441600>





Let's think



Let's think...

Now, think about adopting ARA in schools.





Let's think...

What **needs** have you got to receive support and training to adapt ARA in your school?

Please, write  
1 idea per  
post-it.



Let's think...

How do you think that ICT can help in your performance of ARA in school? Could you propose **ideas of innovation** about it?

Please, write  
1 idea per  
post-it.



Thank you for your attention

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