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INSTRUCTIONAL PLAN REPORT
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Author(s):	Maria Ranieri (University of Florence)
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1. Background

The overall background of the ENSEMBLE project is provided by the European immigrant integration policies and by the recent Communication "European i2010 initiative on e-Inclusion - to be part of the information society" in which the Commission underlines the role of ICT to enabling the conditions for everyone to take part in the information society by bridging the accessibility, broadband and competences gaps, accelerating effective participation of groups at risk of exclusion and improving the quality of life. In the last five years, the political approach to immigration has put emphasis on measures of integration of newly arrived migrants and their families as second generation member states citizens.

1.1 Citizenship and digital inclusion

Social inclusion and cohesion are two objectives, which the European Union has very often proclaimed in its documents, in the past ten years, while referring, among other things, to the role ICTs can play. In fact, if ICTs are used within projects that take into account the ethical and social implications of technologies, they can increase participation and integration opportunities for disadvantaged citizens. This theme, which in European institutional lexicon is referred to as e-inclusion (electronic inclusion), was the subject of the 2006 Riga Ministerial Declaration on “ICTs for an inclusive information society”[1] and of the “i2010” initiative – Participation in the Information Society” (European Commission, 2007). Generally speaking, these declarations solicit to support everybody’s participation in the information society, even in situations of social or personal disadvantage. Digital inclusion is considered as a necessary condition for guaranteeing equity and social justice, because, today, impossibility to access digital information resources constitutes a strong discriminatory factor.

The various initiatives promoted on an international level regarding the digital divide (Warschauer, 2003), also fall within the e-inclusion perspective. They derive from the idea that improving technical and social access to ICTs is a necessary condition for guaranteeing a cognitive citizenship essential today to live in a knowledge society. Such aspects have been also emphasized on several occasions by UNESCO, particularly during the first World Summit on the Information Society (Geneva 2003 and Tunis 2005).

1. 2 Mobile learning and disadvantaged groups

What benefits can m-learning offer for the training of subjects at risk of exclusion? Are there any? Or are we faced with another utopia in the world of technology applied to education?

It is certainly still early to come to conclusions about the matter. It is, however, true that the proliferation of devices, such as mobile phones and MP3 players, has reached very high percentages in a few years exceeding the proliferation of the Internet. For example the ISTAT (National Institute of Statistics) annual research on the life conditions of Italians shows that in Italy, in 2007, only 47.8% of families had a computer at home. Home Internet connection is even less

[1] Cfr. in the Internet: http://www.pubbliaccesso.it/notizie/2006/riga.htm.

widespread (38.8%), while the percentage of the population owning mobile phones is very high (85.5%). This data is in line with the tendencies generally found on a European level[2].

The steadily increasing availability of these devices, their versatility and mobility are heightening interest towards the use of such instruments in disadvantaged contexts (Kim, 2009), where there is no Internet, but there are mobile phones. Today low-cost mobile devices can hold and send great quantities of information, thus offering promising opportunities for reducing inequalities on a global level. Moreover, m-learning can also reach isolated populations.

2. Ensemble aims and purposes

In the above mentioned framework, the purpose of the ENSEMBLE project is to provide an answer to the search for new ways to favor the integration of social groups which are at risk of exclusion by combining the development of an innovative didactic methodology with the use of very common mobile technologies.
The target group of the project is represented by group of migrant of first and second generations. Despite the socially disadvantaged conditions of wide sectors of the immigrant population, tools such as mobile telephony and MP3 devices show that there is a high capacity for penetration even in these cases. Therefore our aim is to explore the possibility offered by mobile devices to favor training and integration processes. The envisaged two-year ENSEMBLE Project aims to produce and experiment some training modules related to topics of European citizenship, labor rights etc, delivered in the language of the host country, at an elementary language level (CEF levels A1-A2).
The innovative aspect of the ENSEMBLE Project lies in the research and experimentation of mobile technology interaction methodologies. The experimentation is to be undertaken in two municipalities in Italy and France on a sample population of different national/ethnic extraction. The methodology adopted can subsequently be transferred to other content areas as well as to other target populations. We will use short, segmented modules for training through the simplest and most widespread low cost technology available today: phone and MP3 device.
Innovative Information and Communication Technology represents a potential instrument to promote an active participation in public services and training for groups at risk of exclusion. In particular we identify SMS and MMS to take advantage of the wide distribution of mobile phone, podcast service for its economic nature, wide-spread usage and high impact in young people, web learning object and social network platform for their capability to offer high effective learning experiences. The SMS is mainly used to convey information content (such as news services available in the territory or related events, while MMS is used for short instruction video clips as well as short multimedia tutorial. Pod cast are used for a wide variety of format and content: from distribution of lessons, language training, audio tours of cultural heritage, conference meeting recording and so on. Web LO (learning object) are used for complex and more structured courses based on combination of media, text, images, sound, assessment objects and other data.

[2] Refer to the International Telecommunication Union (ITU) data, on the Internet: http://www.itu.int/ITU-D/ict/statistics/ict/index.html.

2.1 Deliverables

ENSEMBLE produces:

- Weekly training based on short modules, delivered by SMS (short message service) and MMS (multimedia messaging service) about European and Intercultural Citizenship;
- Audio lessons delivered via Podcast and e-learning environment;
- Short multimedia lessons (via WAP/GPRS/UMTS), on specifically requested issues;
- Guided thematic net surfing (Web Platform or mobile tool) on information data bank (health, public services, access to training and working procedure, civil rights);
- On line community (web platform and mobile tool) to support: exchanging of present and past experiences, self-help support, sharing informative knowledge.

3. State of art

3.1 Current approaches to Mobile Learning

Mobile learning, or m-learning, is the new term that is gaining ground in the educational technology vocabulary. Over the last years a number of pilot projects have tried to find out how mobile devices could be integrated into learning settings (Chen, Myers & Yaron, 2002; Roschelle & Pea, 2002; Lundby, 2002; Danielsson, Hedestig, Juslin & Orre, 2004), which testifies the growing interest in the field.
However, given the novelty of the phenomenon, it is difficult to outline an exhaustive picture of the current trends. Generally speaking, we can distinguish four main perspectives (Winters2007):

Techno-centric: this is still the dominant view that interprets m-learning as learning based on the use of mobile technologies such as PDA, mobile phone, iPod, mobile PlayStation ect. Here the focus is on technologies and the adjective ‘mobile’ refers to the mobility of the learning device.

E-learning-oriented: in this approach, m-learning is considered as an extension of e-learning, that is, as a form of e-learning based on the use of mobile technologies and wireless transmission. For example, Stone (2004) defines m-learning as a “special type of e-learning, bound by a number of special properties and the capability of devices, bandwidth and other characteristics of the network technologies being used”. Milrad (2003) defines m-learning as “e-learning using mobile devices and wireless transmission”. Quinn (2005) defines m-learning as the intersection of mobile computing (the application of small, portable, and wireless computing and communication devices) and e-learning. However, such a comparison between mobile learning and e-learning does not help to understand what m-learning specifically is nor does it help to grasp its singular/unique characteristics (Traxler, 2005).

Complementary to formal education: in the literature on m-learning, formal education is often identified with traditional learning, i.e. with a type of learning which happens in specific space and time. On the contrary, informal learning would be a form of learning which happens anywhere at any time. As m-learning can take place anywhere at any time, it is considered as a kind of informal learning (Cavus and Ibrahim, 2009). Although it might be true that mobile devices enable to go through informal learning experiences more than other tools, this is not enough to differentiate m-learning from other forms of distance education, which, by definition, are based on the possibility of placing a learning relationship in a setting free from space-time constraints.

Student-centered: another line of research has gradually shifted its focus from the mobility of the devices to the student's mobility (Sharples, 2005), leading to more elaborate reflection on the concept of mobile learning and to the following definition: "Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies" (O'Malley et al., 2003). The emphasis, here, is not so much on the possibility of consulting resources, but on the fact that this can be done within a life "context" potentially interwoven with the learning subject itself, and by using the potentialities of interpersonal communication. This approach is based on theories such as the Activity Theory by Engeström (2001) and the Conversational Framework by Laurillard (2002).

3.2 The pedagogical peculiarities of Mobile Learning

If we consider the pedagogical dimension, research is questioning the benefits of mobile devices as opposed to other technologies. For example, Laurillard (2007) emphasizes the fact that on this issue there is still a lot to be done and she proposes her own understanding of the pedagogical added value of mobile devices. According to this researcher, the innovative character of m-learning is not to be found so much in aspects like the spatio-temporal flexibility or the constructivist nature of the learning experiences, but rather in the fact that mobile technologies render *digitally-facilitated site-specific learning* activities possible, that is, they can teach about the world while you experience it in a completely contextual manner.

The thesis of Laurillard grounds on the reflections of Price and Winters. On one hand, Price (2007) maintains that the fundamental difference between mobile devices and others technologies lies in their own capacity of digitally representing physical objects in the same place as the student. The reality of physical objects is thus augmented through their digital representation (*augmented reality*). On the other hand, Winters (quoted in Laurillard, 2007) suggested to distinguish between three types of mobility in m-learning, taking into account students, technological objects and information, and proposed to consider that objects can be differentiated according to their position in three different types of spaces:

- regional space – 3-dimensional physical space;
- network space – the social space of participants and technologies; or
- fluid space – learners, relations, and the object of learning.

In this perspective, the object has to adapt itself to the context where it is placed. This means that it has to be changing in the regional and network space, and keep the same in the fluid space.

According to Laurillard, both proposals capture something more than flexibility, social relation or constructivism. They hint of the pedagogical peculiarity of m-learning, that is the opportunities it gives to get knowledge about the world while doing experience of it in a completely contextual manner. As Laurillard (2007) underlines: “The emphasis here is more on the nature of the physical environment in which the learner is placed, and hence the ‘digitally-facilitated site-specific’ learning experience that is now possible with mobile technologies, that was not possible with a desktop and landline” (p. 156).

Another aspect, which this scholar points out, is the positive impact that m-learning can have on motivation. This allows a higher degree of control on learning, it is based on the possession of a device, it allows learning experiences within a context and it facilitates continuity between contexts.

3.3 Criticalities in Mobile Learning

The literature review generally presents a positive picture of mobile devices in education. However, mobile computing is still at its infancy and can be considered to be in its first generation. This explains why although many educationalists see great potential for the use of mobile devices, there are currently very few successful implementations to consider as the best practice (Cavus and Ibrahim, 2009). In particular, there are several constraints which could have an impact on choices to be taken at the design stage. For example, mobile devices like mobile phones have small screens. This affects the amount of content that can be viewed as well as the time spent viewing (e.g. viewing an object on a very small screen can be tiring, thus reducing willingness to watch for a long time). The content must, therefore, be short and direct. These characteristics, in turn, may condition choices related to the type of content that can be dealt with, which, typically, is information, facts, essential concepts, concrete examples, rather than theories, explanations and so on.
Moreover, when people access information via different tools, there is still much usability, compatibility and accessibility related questions that hinder seamless mobility and m-learning. Jackson (2002) and Perry (2003) warn about the physical fragility of palmtops in the rough environment of schools and the likelihood of theft, but reports from actual trials suggest that these are not significant problems in practice. The importance of keeping batteries recharged is also important, otherwise work could be lost (Perry, 2003). Mifsud (2003) suggests that the new types of mobile phones and PDAs offering extra functions, such as voice and image recording, can also act as a disruptive technology.
Another critical aspects that can have an impact on the methodology choices are the costs. Sending messages involves costs, which, if paid by the participants, particularly the ones in a disadvantaged position, can became an obstacle to intense interactions.

Briefly, there are several open issues in m-learning, which can be summarized as below:

What is really unique about mobile learning?

What is the added value of mobile devices for learning?

What course content is suitable for transmission to mobile devices?

What level of communication and interaction is actually enabled by mobile tools?

Will the use of mobile devices increase the gap between the haves and the haves-not?

4. The ENSEMBLE target

Initially the target group of the project was represented by young people and adults of migrants of first and second generations without any other specifications. During the first transnational meeting in Florence in December 2008, all the partners agreed to address students and their parents as target population, and to involve also schools as context for the experimentation. In the following we will provide more details about the criteria of the target selection and on the current situation.

4.1 Young people target group, i.e. students

- Taking the school as context can facilitate the organization of tutorship and scaffolding activities, both in Prato and Yvelines. Prato can involve cultural mediators who are already working in the schools, Yvelines can involve teachers.
- As far as the age is concerned, students aged 11- 16 will be part of the target group.
- Both in France and in Italy schools with a high percentage of immigrants will be selected and whole classes will be involved, thus including not only immigrants, but also Italian or French students. This is a multi-cultural approach which should guarantee a less discriminatory attitude among students.
- As regards Yvelines, the classes that could be involved are composed mainly by second generation immigrants (students born in France), while in Prato classes there is a high percentage (60%) of first generation immigrants.
- Due to local characteristics, African population will be mainly involved in Yvelines, Chinese population will be the main ethnic group in Prato.

4.2 Adult target group, i.e. parents

The adult target group will be composed by the parents of the students composing the young people group. The involvement of adults as parents could enhance their motivation. At the same time it could improve their participation in their children's school life. Particularly with immigrants, teachers have difficulty contacting them and they do not go to parents day.

The nationality of parents will be mixed. As with students, African population will be the main ethnic group in Yvelines and Chinese population the main ethnic group in Prato.

It can be presumed that the level of linguistic competence of immigrant parents is lower than basic. This is particularly true with Chinese parents who probably are not even able to read the Latin character.

It can also be presumed that the participants' personal technological devices, particularly those owned by the immigrant citizens, are mainly, not "latest generation" mobile phones.

4.3 Selection

The criteria for the selection of the individuals of the target group

- Classes with a high percentage of immigrants (first or second generation).
- A basic knowledge of the French/Italian language is required, both for young people and adults.
- A minimum of two schools (two classes for each schools) has to be involved in the project.

5. The model of courses deployment

5.1 The 3ISFP model for Students

The structure of the course is organised in 4 learning modules. Each module combines the use of traditional learning materials such as printed learning guides with the delivery of learning content through a learning environment or by podcast. The integration of different types of tools should provide a more complete learning experience, where information are received by podcast and opportunities for practice are available in the web learning platform. What is crucial at this macro-level is to find the best way of blending between different types of content and tools.

The structure of the course is summarized below:

4 Modules.
Each Module:
- 2 Learning Objects (1 of introduction and 1 of synthesis),
- 1 Learning Guide,
- 4 Units.

Each Unit:
- 5 Podcast (4 produced by staff and 1 produced by students itself).

Totals:
- 80 podcast + 8 LO,
- 4 Learning Guides.

Each unit starts with an introductory podcast which has the function to get attention on the unit subject. The second podcast provides core content, the third one integrative content and the last one a final synthesis. Students participate in the process not only receiving learning content by

podcast, but also producing their own podcast. They are asked to achieve a creative task and share their productions in the virtual environment. In order to increase the opportunities for practice, interactive learning content will be available on line with additional contents, examples, exercises etc.

The structure of the unit is represented in the graphic below:

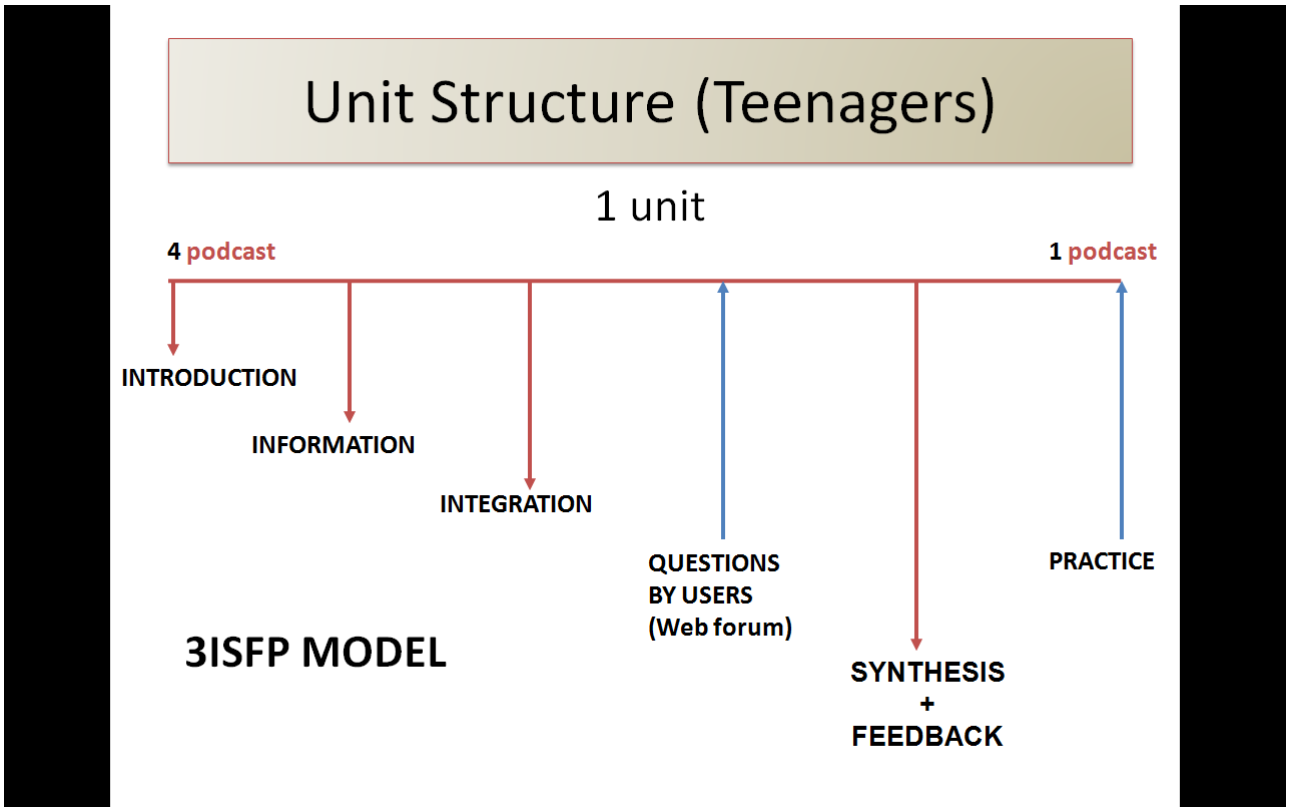

Fig. 1 – The 3ISFP Model for Students

More precisely, each content unit consists of one series of 4 podcasts types described in the table below:

Table n.1 – A typical sequence of 4 podcasts

Order	Type of message	Pedagogical-communicative function
Podcast 1	**Introduction**	Setting the context and stimulating interest, through the use of a short Radio-Drama. Activation of preexisting knowledge.
Podcast 2	**Information**	Presentation of the key issues of the unit supported by essential information on the topic.

Podcast 3	**Integration**	Additional information which provides more specific information. Stimulating questions to be discussed by the students in the web forum and/or in the classroom.
Podcast 4	**Synthesis and Feedback**	Summarizing concepts and information previously provided and helping students to focus their attention on the main issues of the unit.

As noted in the table, the first podcast is based on a short Radio-Drama, where teenagers or adults – it depends on the situations - are involved in dialogues or conversations about the topic of the unit. This should help students to grasp the general meaning of the unit in a more informal style. After the forth podcast, a podcast produced by students is expected (Podcast 5). This podcast will be uploaded by the students in the platform.

For further details on the model for podcast see below, Paragraph 7.

5.2 The 3IQA model for Parents

The structure of the course is organised in 4 learning module. Each module combines the use of traditional learning materials such as printed learning guide with the delivery of MMSs. The integration of different types of tools should provide a more complete learning experience, where short information are received by MMS and additional information are delivered through printed material. Also in this case, what is crucial is to find the best way of blending between different types of content and tools.

The structure of the course is summarized below:

4 Modules.
Each Module:
- 1 Learning Guide,
- 4 Units.

Each Unit:
- 5 MMS + 5 MMS from Institution to User,
- 1 SMS from User to Institution.

Totals:
- 160 MMS,
- 4 Learning Guides.

Each unit starts with an introductory MMS which has the function to get attention on the unit subject. The second MMS provides core content, the third one integrative content and the last one asks parents to give a feedback by sending an SMS.

The structure of the unit is represented in the graphic below:

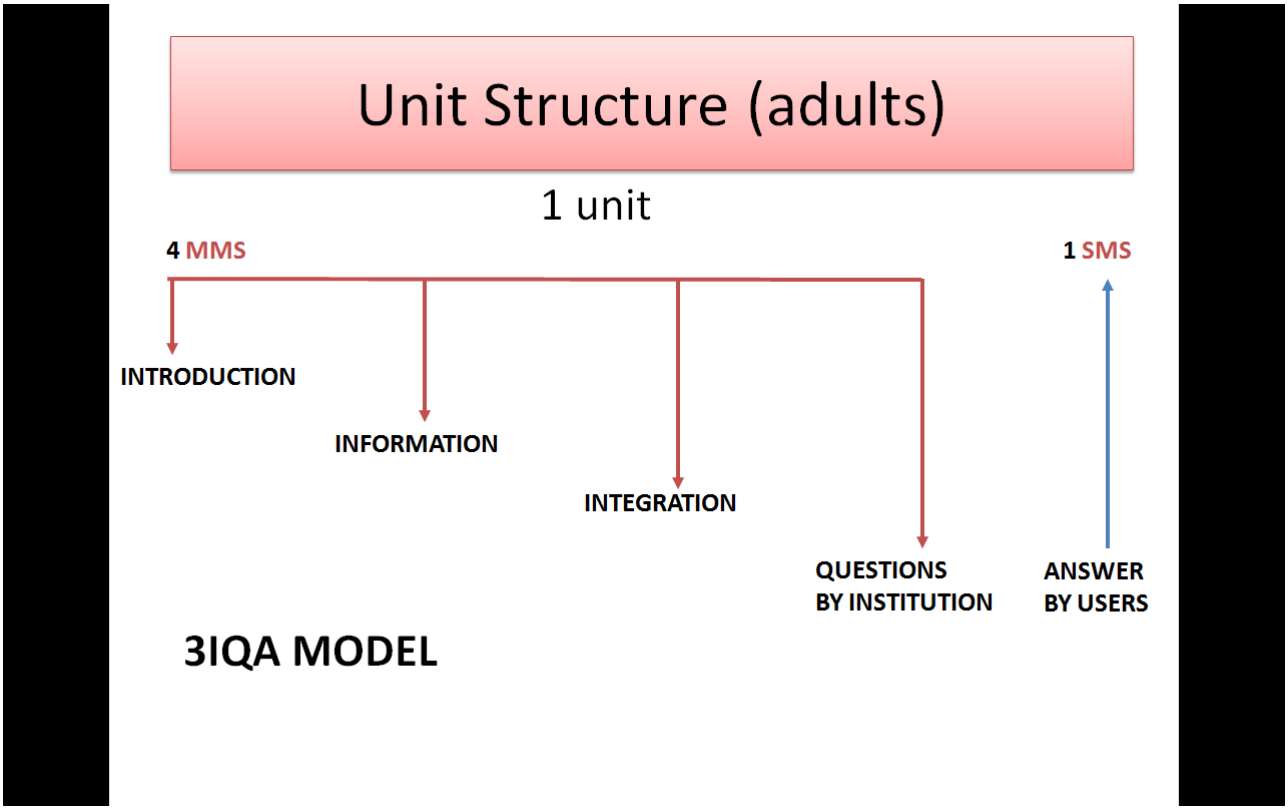

Fig. 2 – The 3IQA Model for Parents

(3I stands for Introduction, Information, Integration, Q for Question, A for Answer)

More precisely, for every content unit two cycles of 5 MMS messages follow each other, each of which consists of the message types described in the table below:

Table n. 2 – A typical sequence of 5 MMS messages

Order	Type of MMS message	Pedagogical-communicative function
MMS message 1	**Introduction**	Introduction, stimulating interest and involvement, activation of preexisting knowledge
MMS message 2	**Information**	Presentation of the theme, definition of the general concepts that will be revised and integrated later
MMS messages 3 e 4	**Integration**	Additional information which provides more specific information or which illustrates particular aspects or which gives concrete examples through short stories

MMS message 5	**Question**	Creating interest in further study, interaction with people and context.

As can be observed in the above table, two MMS messages (MMS messages 3 and 4) have the same function, that is, giving additional information on the same subject/concept. While, after the fifth MMS message (Question), an answering text-message from the participant is expected (Answer).

The essential features of the 3IQA Model are to be recursive, open and contextualized, i.e.:

recursive: the information flow follows a cyclical path, that is, the same content is progressively integrated with adaptations and additional information focusing on a concept or a fact from different perspectives. “Repetition” and “variation” are alternatively used as levers in the same cycle of MMS messages;

openness/interaction: at the end of the cycle, the “last word” is left to the participant who interacts with a tutor, giving feedback on the viewed contents, thus allowing a certain degree of interaction and regarding the content itself as susceptible of being discussed and reconsidered;

context/control: the information flow falls into context insofar as the participant can choose, among the range of available resources, the ones he considers interesting and useful for the specific life situation he is in.

5.3 The model for the delivery

Each course consists of four learning modules focusing on the following subjects (for more details see also WP5-2 Course Catalogue):

A. **European citizenship**
B. **Intercultural education**
C. **To be parent of/to be children/students**
D. **Food, health, drugs and alcohol problems**

The educational content was structured in four didactic modules. Each module has two versions, one for the parents, with a series of 160 MMS messages, and one for the students, based on the delivery of 64 podcasts, the production of 16 audio-video podcast by students. and also on the Moodle environment with learning objects and other educational resources.

Each module is organised in 4 units as in the table below:

	Full event	*Module*	*Unit*	*Object to be produced*
Adults	**4 Modules**	**4 UD**	**5 MMS + 5 MMS**	**4*4*(5+5)= 160 MMS**
Students	**4 Modules**	**4 UD**	**5 Podcast**	**4*4*5= 80 Podcast** **+ 8 LO** (2 for each module)

Day			*10 days*	
		40 days		
	160 days (tot.)			

Each unit will be run at the same time for students and adults as in the following timetable:

		Adult	**Student**
Typical unit	day 1	MMS1a (Introduction)	Podcast 1 (Introduction)
	day 2	MMS 2a & MMS 3a (Information)	*Pause*
	day 3	MMS 4a (Integration)	Podcast 2 (Information)
	day 4	MMS 5a (Question)	*Pause*
	day 5	*Pause*	Podcast 3 (Integration)
	day 6	MMS1b (Introduction)	*Pause*
	day 7	MMS 2b & MMS 3b (Information)	Podcast 4 (Question)
	day 8	MMS 4b (Integration)	*Pause*
	day 9	MMS 5b (Question)	Podcast 5 (User's podcast)
	day 10	*Pause*	*Pause*

The whole course delivery will require 6 months:

3 months (better, 80 days) for th**e pilot** phase,
3 months (80 days) for the **replication** one.

	Module A				**Module B**				*pause*	*pause*	**Module C**				**Module D**			
Unit	A1	A2	A3	A4	B1	B2	B3	B4			C1	C2	C3	C4	D1	D2	D3	D4
Day	10	10	10	10	10	10	10	10			10	10	10	10	10	10	10	10
Month	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6		

Here the modules to be delivered:

	Prato	**Yvelines**
Pilot phase (3 months)	Modules **A+B** (for Students and for adults)	Modules **C+D** (for Students and for adults)
Replication phase (3 months)	Modules **C+D**	Modules **A+B**

	(for Students and for adults)	(for Students and for adults)

6. The model for MMS

When designing and developing the multimedia content delivered through MMS messages, both visual design rules (Clark e Lyons, 2004) and multimedia learning principles, as defined by Mayer (2001) were kept in mind. According to Mayer, learners learn better when: 1) they can associate different sources in a coherent manner, because these provide more elements for the memory (multimedia); 2) different stimuli (e.g. words and pictures) are close to each other or are presented at the same time to encourage a more immediate integration (spatiotemporal proximity); 3) irrelevant words and figures are eliminated, given that working memory has a limited processing capacity (material coherence); 4) oral explanations are associated to illustrations rather than text to pictures, thus avoiding the overload of the visual information channel (multi-modality); 5) unnecessary different formats are not used; illustrations and oral presentations, rather than written texts, audio and pictures, are preferred (redundancy); 6) an informal, conversational style is used (personalization).

Generally speaking, we have followed/ the above principles with some adaptations due to the nature of the device. Mobile phones have small screens (e.g. 128x128 pixels) which are not standardized. One of the main problems, when designing MMS messages, is the existence of several types of screens and the fact that vector graphics formats cannot be used to produce/ messages. Thus, the choice of the point matrix for the message design is a tricky issue. In this sense, we are certainly not dealing with a facilitating device. So, when designing the content, the written text on each page has to be reduced to the minimum to be also able to use a big enough font which can be read even on the smallest screens. Moreover we have avoided pop-ups and particular transition effects between the screens to ensure compatibility with less recent devices.

To summarize, we have considered the following elements:

the use of very short sentences (about 150 characters on each page) with highlight key terms;

essential graphics, able to give/prompt an immediate idea of the page content; very limited use of scrolling;

elimination of redundant information; attention to maximum coherence between delivered information and unit content;

absence of redundant background noise;

use of an informal/conversational style.

Fig. n. 3 – Three example pages of an MMS message

[Screenshot 1: In 2007 a young cook from Bordeaux, Screenshot 2: received Leonardo programme funding; Screenshot 3: to work for three months in an agritourism company in the Chianti region]

An example of the storyboard for the MMS' content is available in **ANNEX I**.

7. The model for podcasts

In the designing of audio-content, some emerging principles for educational podcasting design were considered and adapted. One research source was the Podcast Development Model, worked out by Salmon et al. (2008) within the project IMPALA- Informal Mobile Podcasting and Learning Adaptation. According to this model, ten factors should be regarded during the podcasting design process in education, i.e.:

1) **Pedagogical Rationale** – Although technical concerns or interest for the novelty are often the driven factors for developing podcasts, the starting point to design educational podcast should always be the teaching or learning issues that they can help to address.
2) **Medium** – Podcast can be developed by using only audio (audio-podcast) or integrating audio with visual material such as video, still images, and graphical illustrations (audio-vision podcast). The choice of using only audio or even video will depend on the purpose of developing podcast and on the way students will use them.
3) **Convergence** – Salmon et al. (2008) suggest that it is a good practice to integrate podcasts within the overall teaching and learning program so that students could perceive them as an integral part of their learning activities.
4) **Authors & Contributors** – Podcast can be produced by different authors, i.e. the teachers, the students or also a mixture of them. The choice to involve students or not will depend, of course, on the purpose of podcast. Salmon et al. (2008) propose to integrate into the podcasts voices of students or non academic people, because this increase their motivation and involvement.
5) **Structure** – Podcasting can be structured in different way according to the educational objectives. It can be a single session podcast or a multiple sessions or also a targeted podcast for specific session such as exams or assessments. If podcasts are going to be delivered as a series, one has to decide if the series will be weekly, or monthly ect.

Generally speaking, if podcasts are delivered on a regular basis (e.g., weekly, on a particular time of the day), students will become used to accessing and using podcasts in their own learning activities.

6) **Reusability** – When developing podcast, the partial or total reusability of the audio-content has to be planned from the beginning.

7) **Length** – Research about the length of podcast that students prefer shows different results, but almost all agree that 10 minutes are the maximum length that students are willing to listen to. It seems that the shortest the podcast is, the biggest the students' interest is. Moreover, the probability of using podcast on the move is higher, when podcasts are shorter. Of course, if the length of podcast is limited, it has to focus on the essential information of the learning content.

8) **Style** – It refers to the degree of formality adopted and the genre (i.e., interview, dialogue etc.) chosen. The style has a relevant impact on the level of attention that students will reserve to the content. Educational podcasts have to be at the same time informative and appealing.

9) **Framework** – For each podcast it is important to provide students with a context for fruition. If a text file can be quickly scanned to have an idea of the content, an audio file has to be listened to in order to capture the sense of the audio-content. So, to help students in their use of podcasts it is fundamental to tell them at the beginning what is the topic that will be covered.

10) **Access System** – In contexts such as school or university and when a virtual learning environment (VLE) is available, it is recommended to allow students to access podcasts through the VLE. This facilitates students' access because it is the same as uploading a text or a power point file in the area content of a platform.

Table n. 3 – Design Factors in Ensemble Podcast Development

Design Factors	Description
Pedagogical Rationale	There are several benefits in using podcasts in education. Ensemble Podcasts will be designed considering the following advantages: "the spoken word can influence a learner's cognition (adding clarity and meaning) and motivation (by conveying directly a sense of the person creating those words)" (Foon Hew, 2009); auditory learning is one of the most portable form of learning, and can be used anytime and anywhere; with podcast students have the opportunity to listen to lectures more than just once. This is particularly advantageous for students with learning difficulties such as our targeted adolescents;
Medium	Only audio-podcasting is used. This is to encourage students to use podcasts on the move and to facilitate access for students who do not have "last generation" mobile devices such as iPhone.

Convergence	The use of podcasts is completely integrated into the regular teaching and learning activities, which will run in a blended way, i.e. in the classroom and through a virtual learning environment.
Authors & Contributors	Teachers and experts will be the authors of the audio-content, with the technical support of a multimedia editorial staff. However, for each unit also students are asked to produce one podcast on the topic of the unit by working in small group and playing in turn different roles (editor, reviewer, speakers, audio-technicians etc.).
Structure	Multiple sessions of podcasts, weekly delivered on a regular basis. Students will be told of the schedule of the course at the beginning.
Reusability	Podcasts will be reusable. Thus, there will be no direct references to specific situations or temporal information about delivery in the podcasts.
Length	The length of podcasts will be from 3 to 6 minutes.
Style	Each session will start with a rather informal podcast based on a dialogue in order to set the context, get attention and raise curiosity. The next podcast in the same session will provide informative content in a more formal way. However, sound tracks will accompany students during the process so rendering fun and familiar the podcast's listening.
Framework	At the beginning of each session an overview of the content of the unit will be provided.
Access System	Students will download podcasts from the virtual learning environment, where all the podcasts will be archived at the end of the course. Each week four podcasts will be delivered by the staff of researchers/teachers, while the fifth podcast will be produced by students and uploaded in the platform.

An example of the storyboard for Podcast is available in **ANNEX II**.

8. The model for LOs

On the students side, the ENSEMBLE project also foresees the design and the implementation of n. 8 learning objects (n. 2 LOs for each module) which will be available in the virtual learning environment. They are considered as additional learning materials that should provide further information on the topic and opportunities for practice. They will be delivered at the end of the module.

The general structure of the LOs is described in the table below (Tab. n. 4).

Table n. 4 – The LO's structure in ENSEMBLE project

Assets	Pedagogical functions
Introduction	Providing an overview of the learning content and activities. Activation of pre-existing knowledge through open questions or using different entry-points (e.g., pictures, illustrations, graphic, stories, diagram and so on). For example, when talking about students' participation in the life school, the LO may start by showing a short excerpt from the film "Entre les murs" (2008) followed by questions such as "What do you think about the situation in the film" and "If you were the teacher, what would you have done?", or "If you were the math-class, how would you have reacted?" and so on.
Key concepts	Definition of terms and explanation of the key concepts of the module through examples, short stories etc. in a multimedia format. For example, when talking about the European citizenship explanations about the concept of human rights will be provided, with appropriate examples.
Core content	Revising the essential information of the module by focusing on the main topics dealt with in the podcasts. For example, synthesizing the core concepts by using graphical organizers.
Short Activity	Involving students in learning activities based on active learning models such as inquiry-based learning. For example, asking students to search for information on the Internet (visiting suggested web sites) about a specific topic and produce a multimedia presentation.
Assessment	Combining the use of traditional test with multiple choices questions or drag and drop, with more complex assessment tools depending on the level of learning to be assessed.

9. The use of UMPC as learning mobile tool

The main assets of the UMPC notebook are its small size (10' display), its low cost, its long range battery and the flexibility of its operating system. These help teachers in their practice by enabling them to work with various media (audio, video, pictures, texts, internet...). The philosophy is to lend students the UMPC at home and at school for the whole school year, in order for them to get familiar with ICT. This kind of learning tool complements traditional teaching by breaking the limits of time and space invested in studying.

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Annex I – An example of storyboard for MMS

1° Modulo: "La cittadinanza europea"
2° Unità: "Diritti umani"
1 batteria (5MMS)

MMS 1 **Introduction**	**Funzione pedagogica:** Introduzione, attivazione di interesse, coinvolgimento, recupero di preconoscenze
Invio	**La sera del primo giorno**

	Immagine	**Testo**	**Tempi / priorità testo -immagine**
1	Uomo con punto interrogativo	Hai mai sentito parlare della "Carta europea dei diritti"?	1) Immagine: 3 secondi 2) Testo: 4 secondi
2	Immagine dei valori (dignità, libertà, uguaglianza, lavoro, cittadinanza, giustizia) legati tutti insieme come un fascio di grano	Questa Carta si fonda su valori indivisibili e universali	1) Immagine: 3 secondi 2) Testo: 4 secondi
3	Muro blu di mattoni. 3 mattoni centrali recano scritta dignità, libertà, uguaglianza	Dignità, Libertà, Uguaglianza	1) Immagine: 3 secondi 2) Testo: 4 secondi
4	-	sono diritti umani fondamentali.	Testo: 4 secondi
5	Icona standard	In questa unità parleremo di alcuni dei diritti stabiliti dalla "Carta" dell'Unione europea (UE).	Testo e icona standard: 4 secondi

MMS 2	**Funzione pedagogica:**
Introduction	Presentare il tema, esplicare il concetto che verrà ripreso e integrato successivamente
Invio	**La sera del primo giorno**

	Immagine	**Testo**	**Tempi / priorità testo -immagine**
1	Uomo su sedia elettrica	Guarda questa immagine…	1) Immagine: 3 secondi 2) Testo: 4 secondi
2	La mano che sta tirando giù leva della corrente elettrica	Quest'uomo sta per essere giustiziato…	1) Immagine: 3 secondi 2) Testo: 4 secondi
3	Mano blu che ferma mano della slide 2	Lo sapevi che nell'UE nessuno può essere	Testo: 4 secondi
4	Immagine di una sedia elettrica con croce sopra o scritta "No"	Condannato a morte	1) Immagine: 3 secondi 2) Testo: 4 secondi
5	Uomo che piange torturato su sedia con croce sopra o scritta "No"	Torturato	1) Immagine: 3 secondi 2) Testo: 4 secondi
6	Due braccia viste dall'alto incatenate – con croce sopra o scritta "No"	Ridotto in schiavitù?	1) Immagine: 3 secondi 2) Testo: 4 secondi
7	-	La dignità di ogni uomo è inviolabile. Va rispettata e tutelata	Solo testo: 4 secondi

MMS 3	**Funzione pedagogica:**
	Riprende e integra con informazioni aggiuntive
Invio	**Il secondo giorno, al mattino**

	Immagine	**Testo**	**Tempi**
1	-	“Disapprovo ciò che dici…	Solo testo: 4 secondi
2	-	…ma difenderò fino alla morte il tuo diritto di dirlo”	Solo testo: 4 secondi
3	Volto di Voltaire	E’ una frase di Voltaire, un famoso filosofo francese	1) Immagine: 3 secondi 2) Testo: 4 secondi
4	Uomo con punto interrogativo	Cosa ti fa pensare questa frase…?	1) Immagine: 3 secondi 2) Testo: 4 secondi
5	Uccellino blu (europa) che esce dalla gabbia	In Europa ogni individuo ha diritto alla libertà di pensiero, di religione, di informazione.	1) Immagine: 3 secondi 2) Testo: 4 secondi

MMS 4	**Funzione pedagogica:**
Integration	Riprende e integra con informazioni integrative
Invio	**Il terzo giorno**

	Immagine	**Testo**	**Tempi**
1	Immagine di 1 disabile, 1 donna, 1 uomo di colore, 1 anziano, 1 bambino	Tutte le persone sono uguali di fronte alla legge	1) Immagine: 3 secondi 2) Testo: 4 secondi
2	Stessa immagine con stesse persone su una bilancia o podio	Nessuno può essere discriminato	1) Immagine: 3 secondi 2) Testo: 4 secondi
3	Bilancia con uomo e donna	sulla base del sesso	1) Immagine: 3 secondi 2) Testo: 4 secondi
4	Bilancia con nero giallo bianco	della razza o del colore della pelle	1) Immagine: 3 secondi 2) Testo: 4 secondi
6	Bilancia con 3 uomini parlanti lingue diverse	della lingua o dell'etnia	1) Immagine: 3 secondi 2) Testo: 4 secondi

MMS 5	**Funzione pedagogica:**
	Invito all'interazione
Invio	**Il quarto giorno**

	Immagine	**Testo**	**Tempi**
1	-	In quest'unità abbiamo parlato di diritti umani.	Testo: 4 secondi
2	Punto interrogativo	Vuoi saperne di più o discuterne	1) Immagine: 3 secondi

		con qualcuno?	2) Testo: 4 secondi
3	Uomo che legge libro	Se vuoi maggiori informazioni sui tuoi diritti, rispondi a questo messaggio scrivendo il codice 01	1) Immagine: 3 secondi 2) Testo: 4 secondi
4	Uomo che discute/parla con insegnante	Se vuoi parlarne con gli insegnanti, rispondi a questo messaggio scrivendo il codice 02	1) Immagine: 3 secondi 2) Testo: 4 secondi
5	“Simbolo Ensemble” che dà la mano a un immigrato	Grazie per aver risposto. Sarai contattato prossimamente.	1) Immagine: 3 secondi 2) Testo: 4 secondi

Annex II – An example of storyboard for podcast

1° Modulo: “La cittadinanza europea”
1° Unità: “Introduzione all’Unione Europea”
Podcast n. 1

Podcast 1 **Introduction**	**Funzione pedagogica:** Introduzione, attivazione di interesse, coinvolgimento, recupero di preconoscenze

Sigla + Intro	In questa unità diamo delle informazioni generali sull’Unione Europea. Questo primo podcast racconta i momenti iniziali della sua creazione. L’episodio dura 3 minuti. Ascoltalo attentamente e, se lo ritieni necessario, ascoltalo anche una seconda volta. Prova poi ad appuntare su un bloc notes le tue riflessioni e le domande che questo episodio ti ha suscitato. Alcune risposte ti saranno comunque date nelle puntate successive. Buon Ascolto!
Vox 1 **F**	Uffa, sono stanca di studiare facciamo una pausa?
Sound	Rumore libro chiuso
Vox 2 **M**	Senti qua: è interessante!
Vox 1 **F**	Interessante?!?
Sound	Rumore passi, apertura frigo
Vox 2 **M**	Senti qua: quando un albero viene tagliato, la sezione è composta da una serie di cerchi che ne raccontano la storia: grazie al numero di questi cerchi è possibile determinare l’età dell’albero. E’ fichissimo!!!
Vox 1 **F**	Certo, peccato che un albero non si può mangiare...
Sound	Rumore piatto, liquido versato
Vox 2 **M**	Sarebbe bello se ci fosse un sistema per sapere l’età di tutte le cose…
Vox 1 **F**	Vuoi il latte?

Vox 2 M Grazie. Tipo, tuo padre quanti anni ha?

Vox 1 F 45

Vox 2 M e tua madre?

Vox 1 F 42

Vox 2 M tua sorella?

Vox 1 F ma che è un interrogatorio?

Vox 2 M queste sono età troppo facili da ricordare: le persone hanno i compleanni e li festeggiano ogni anno!!

Vox 1 F Quasi tutte le cose hanno un giorno in cui sono nate, magari non per davvero, ma fissato per convenzione..

Vox 2 M Tipo?

Vox 1 F Beh, il 12 ottobre è il compleanno dell'America, perché Cristoforo Colombo è sbarcato lì proprio il 12 ottobre del 1492

Vox 2 M interessante...e l'Europa quand'è nata?

Vox 1 F Ma mi vuoi rovinare la merenda con tutte queste domande? Comunque non è stata mica scoperta...

Vox 2 M Sì è vero, è molto vecchia...e l' Unione Europea allora? Anche quella è molto vecchia?

Vox 1 F Ma no, è molto più vecchia mia nonna!

Vox 2 **M**	Perché, quando è nata l'Unione Europea?
Vox 1 **F**	Il 9 maggio 1950, in scienze sono una frana, ma per le date sono infallibile!
Vox 2 **M**	Mmm, e cosa è successo il 9 maggio 1950?
Vox 1 **F**	Dunque, per farla breve: la seconda guerra mondiale era finita da soli 5 anni, l'Europa aveva bisogna di pace e ripresa economica, e così le diplomazie di alcuni stati lavorarono per questo: l' allora ministro degli Esteri francese, tale Robert Schuman, fece un discorso pubblico il 9 maggio 1950 in cui propose di creare una comunità sovrannazionale: la CECA!
Vox 2 **M**	la che?
Vox 1 **F**	CECA: Comunità europea del carbone e dell'acciaio. Vi aderirono 6 paesi: Francia, Germania, Paesi Bassi, Belgio, Lussemburgo e anche la nostra Italia!
Vox 2 **M**	Ho capito..ma allora non è davvero la nascita dell'Unione Europea? Adesso ci sono un sacco di altri paesi che ne fanno parte, mica solo questi 6...
Vox 1 **F**	Bè no, ma quello fu il primo importantissimo passo per unificare il continente! E per questo è stato deciso che il 9 maggio fosse la Festa dell'Europa! Da allora ci sono stati diversi trattati e un processo di allargamento ad altri paesi: pensa che siamo arrivati a 27 stati membri, sparsi su tutto il continente: dal Mediterraneo al circolo polare, dall'Oceano Atlantico al Mar Nero!
Sigla **+** **Conclusion**	Fine del podcast numero 1. Se ti è necessario puoi riascoltarlo. La storia continua con nuovi episodi.