UTGM Multimedia Language Courses

Jenny Petrucci1, Laura Ricci2

1 Università Telematica Guglielmo Marconi/International Relations Department, Rome, Italy
2 Università Telematica Guglielmo Marconi/International Relations Department, Rome, Italy

Abstract—As a greater number of people relocate to live and work in different countries, language skills are becoming increasingly important. The demands of working life may mean that, for many, formalised training is too inflexible. For these reasons Università Telematica “Guglielmo Marconi”, also conforming to the new European initiatives concerning multilingual policies, has started up the promotion of new autonomous, long distance, second language learning methodologies, effective and usable in both education and professional contexts. Focused on four main languages (Italian, Spanish, French and Russian), the course structure is mainly based on the integration of different multimedia channels that stimulate an active and flexible learning process. Through a detailed and thorough description this paper intends to offer an explanation of the learn-by-doing methodology applied and the innovations of UTGM multimedia language courses.

Index Terms—E-learning, learn by doing methodology, multimedia channels, multimedia language courses.

I. INTRODUCTION

If you talk to a man in a language he understands, that goes to his head.
If you talk to him in his language, that goes to his heart.
(Nelson Mandela)

In 1995 the European Commission released the White Paper on Education and Training called Teaching and Learning towards the Learning Society. In this document and for the first time the importance of being proficient in two community languages other than one’s own mother tongue was strongly emphasised.

White papers are documents containing proposals for Community action in a specific area. They sometimes follow a green paper published to launch a consultation process at European level. [1] “This White Paper is part of a process designed simultaneously to provide an analysis and to put forward guidelines for action in the fields of education and training. It takes forward the White Paper “Growth, competitiveness, employment”, which stressed the importance for Europe of intangible investment, particularly in education and research. This investment in knowledge plays an essential role in employment, competitiveness and social cohesion. This White Paper whilst looking forward to the Madrid European Council meeting, draws upon the conclusions of the Cannes European Council of June 1995, which state that: Training and apprenticeship policies, which are fundamental for improving employment and competitiveness, must be strengthened, especially continuing training”. [2]

The above White Paper states that three major factors have influenced education and training over the last years:

- the development of the information society;
- the impact of internationalization;
- the impact of scientific and technological knowledge.

It is clear and very well known that the new technologies have dramatically changed the world of education but also the organization of work. In this way even the relationship between teacher/tutor and learner changes and turns from a passive one into an interactive one. Pupils can actively participate to the learning process and become part of it. It is also true that the internationalization of the economy has given freedom of trade to products, goods, services and also to people’s mobility.

The impact of scientific and technological knowledge has a dual reaction; from one hand it is seen positively in terms of achievements and possibilities offered to all development fields whereas on the other hand it is seen as something negative that people do not understand perfectly.

When it comes to the new technology applied to education for instance, learners (especially adults) are almost scared to face such innovations because they are unknown and therefore difficult to use at a first stage. It is like a turning era when newness takes place and tradition is left behind or at least this is the feeling people have. On the contrary scientific and technological knowledge should be seen as a way to improve and to make progress happen. Everything is changing so quickly that it is sometimes hard to keep updated with such developments, but on the other hand the possibilities arising by such changes are infinite.
In this framework it is fundamental to promote a scientific and technical culture as well as to give everyone access to knowledge in order to provide people with the right tools and skills to comprehend changes and progress. In this way they can take advantage from the new instruments and use them both in their careers and in their personal lives. Thanks to knowledge people can acquire two fundamental things: the power of judgment and the ability to choose. In this way they will be able to understand the world around them and to decide for their own future in the best possible way.

The White Paper tries to analyze “how best to use education and training to commit European countries to a process of job creation, whilst taking control of the internationalization of the economy and the arrival of new technologies.”[3]

The real innovation brought by the new technologies is the ability they have to bridge the gap between education and production; between learning and working. Whereas in the past learning was mainly directed at the acquisition of abstract concept and the practice was to be found only at work, after the development of the new technologies things have changed dramatically.

Technology has deeply affected education, not only in the methodology but also in the approach. Technology supports teachers’ efforts to appeal to different learning styles as well as to a multidisciplinary approach to learning. The integration of different disciplines helps learners to combine their mathematical, scientific, logical, linguistic, social and artistic knowledge to make their lives and interaction with the world clearer. Technology has also the great power to connect people and to extend the learning experience. Learners from all over the world can not only communicate but also share experiences and thoughts contributing to the enhancement of their own learning process. Far from replacing traditional teaching, educational use of ICT improves it, by fostering curiosity, discovery and experimentation.

The use of technology to provide information resources, information processing tools and communication links to other people could assist in developing independence in learners and learning how to learn. The instant worldwide connections enabled through the Internet have changed the way people everywhere think about communication, information, and doing business. The advantages of using new technologies in the language learning can only be interpreted in light of the changing goals of language education and the changing conditions in postindustrial society.

In this framework technology integration in foreign language teaching demonstrates the shift from a behavioral to a constructivist learning approach:

**Constructivism**

Constructivism states that knowledge is internalized by learners and views learning as a process in which the learner actively constructs or builds new ideas or concepts based upon current and past knowledge. In other words, “learning involves constructing one's own knowledge from one's own experiences.” Constructivist learning, therefore, is a very personal endeavour, whereby internalized concepts, rules, and general principles may consequently be applied in a practical real-world context.

In this way learners construct knowledge for themselves whereas the construction of meaning lead to learning. The latter is in fact an active process embedded within the learn by doing and learn to learn processes.

UTGM multimedia language courses provide communication tools that allow meaning to be negotiated. The way content is presented and organize enables a high level of initial interaction between the learner and the material, resulting in increasingly progressive engagement with course materials in a nonlinear and adaptive process. In this way UTGM multimedia language courses permit a self-determined investigation.

The courses are all designed in order to meet different learning needs and styles. For example, visual learners will benefit from images, videos, charts, maps and animations, auditory learners will respond to audio files, especially of supported by text files, etc…

Thanks to its dynamic content and design, each learner can find his/her own path and follow it the way it better suits him/her.

Multimedia language courses allow users to learn through a cognitive scaffolding strategy. According to Sylvie L. F. Richards “Cognitive scaffolding means that a student needs to visit a learning space more than once in order to construct meaning. Each visit builds upon prior knowledge as well as new experiences gained from explorations. In between each visit, there must be time for reflective thinking. And because the Interactive Syllabus presents the student with a rich content environment in an open format, the student is free to criss-cross the learning landscape in an unstructured peregrination. The Interactive Syllabus promotes this kind of “free-range” organic investigation of course content, allowing the learner to determine relevancy”. [4]
The attention of UTGM multimedia language courses is focused on what adults want to do or have to be able to do with the second language (L2). For this reason it is important to remember the concept of Andragogy (as a learner-focused education for people of all ages) that states at the basis of the above courses design.

Knowles’ theory of andragogy relates mainly on 5 postulates:

1. Self-concept: As a person matures his self concept moves from one of being a dependent personality toward one of being a self-directed human being;

2. Experience: As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning;

3. Readiness to learn. As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles;

4. Orientation to learning. As a person matures his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centeredness;

5. Motivation to learn: As a person matures the motivation to learn is internal [5]

Since adults are self-directed, instruction should allow learners to discover things for themselves, providing guidance and help when mistakes are made but allowing them to decide for themselves and to follow their personal training path. The ultimate ability of initiatives such as web-based learning to be non-linear allows an adult to follow the path that most appropriately reflects their need to learn. UTGM designs technology-based adult learning courses using all of the capabilities of the technology including the possibility to skip sections a student already understands, multiple forms of presentation of material which can assist people with various learning styles and a flexible and dynamic content.

UTGM multimedia language courses take into consideration the fact that adults are problem-centered when it comes to learning. They want to understand how they can apply what they learn to their real life or on the job.

UTGM pays also a great attention on the 5th postulated of Andragogy (see above) that is learners’ motivation to learn. In order to accomplish such goal of encouraging adult learners, the multimedia language courses respond to their internal priorities such as job satisfaction, self-esteem and quality of life. Those can contribute to give adults a strong reason to learn.

UTGM courses relate such priorities to technology based instruction in order for adults to respond in a positive way. In this framework the courses offer activities such as oral and written exercises that build students’ self – esteem and motivation since they can check their results immediately and retake the exercise after having revised the related grammar. The latter is automatically linked to the exercise so that the student can have an immediate feedback and can keep concentrated.

In addition, the possibility for the learners to prioritize the topics according to their own needs and desires can give them a sense of ownership over the learning process making them realize to be part of it and therefore helping them motivate completion of a longer lesson.

In this sense the multimedia language courses are not only technologically workable but also effective and useful from the learners’ perspective.

In designing multimedia language course UTGM has borne in mind the fact that a greater number of people relocate to live and work in different countries and therefore language skills are becoming increasingly important. The demands of working life may mean that, for many, formalised training is too inflexible. For these reasons Università degli Studi Guglielmo Marconi is conforming to the new European initiatives concerning multilingual policies and has started up the promotion of new autonomous, long distance, second language learning methodologies that are effective and usable in both education and professional contexts. Focused on four main languages (Italian, Spanish, French and Russian), the course structure is mainly based on the integration of different multimedia channels that stimulate an active and flexible learning process:

1. An animated or static graphic is used to present grammar contents and other sections together with an appropriate and coherent choice of graphic styles and formats that allow the application of familiar communication standards;

2. Audio material for the reproduction of dialogues, sentences and single words are used to emphasise interactions between user and environment as well as to enhance the reality-effect of certain simulations;

3. Static and animated graphic realistic drawings, pictures, etc.. combined with texts and audio material;

4. Videos reproducing real life situations and dialogues.

The UTGM Multimedia Language Courses are oriented towards a professional training path and are designed to provide the competences and skills required to achieve different European linguistic certifications. The courses are offered at three different levels, in accordance with the
knowledge-level classification system used in EU countries:

- Basic
- Pre-intermediate and Intermediate
- Pre-advanced and advanced

In order to guarantee a successful accomplishment of language competences required by the European framework, the multimedia language courses of Università degli Studi Guglielmo Marconi focuses on a learn by doing approach.

Through dedicated exercise sections learners can achieve language learning objectives in:

- listening/oral comprehension;
- speaking;
- reading/written comprehension;
- writing.

**THE LESSONS AND THE CONTENT MACRO – AREAS**

The UTGM language courses are multimedia learning environments divided in several lessons according to different levels. Each lesson is divided in 4 macro-areas and is addressed to a specific grammar aspect that leads to the development of the related language competences: conversation, grammar, culture and a dedicated and personalized student area called my French/Spanish/Russian.

**Conversation**

Conversations come from graphic and audio-visual reproduction of daily life situations where people discuss about general subjects like family, work, friends, spare-time etc. This section includes also listening and oral exercises, with an automatic vocal recognition system. In such teaching situation, video helps enhance clarity and give meaning to an auditory text; it creates a solid link between the materials being learned and the practical application of it in a testing situation. It would be therefore easier for learners to put into practice what they learn and apply the right language to each situation.

**Grammar**

This section analyses the main language grammar rules related to phonetics, spelling, and vocabulary providing specific exercises for each one of the grammar aspects the students would have encountered. This dedicated and separate section allows learners to pass from the selected grammar topic to sections occurring in the multimedia material presented elsewhere in the course and vice-versa. The grammar presented in each course is considered as a tool to be drawn upon at any time learners wish to explore the grammar they encounter when working at different areas of the course. This can be grouped with other supports such as vocabulary, learners’ records.

**My French/Spanish/Russian**

This is the most practical and customised area where learners can find all different kinds of exercises as already introduced within the sections of “Conversation” and “Grammar” and redistributed according to the language competences acquired (listening, speaking, writing, reading). The present area represents a chance to revise exercises and grammar topics that are more difficult to grasp and to understand.

**Culture**

This area contains information related to culture and traditions of the country of reference. Students learn about various aspects of contemporary Italian society including geography, regional diversity, travel and transportation, climate and weather, holidays and food, sports and games, literature and fine arts, etc… Thanks to the videos and conversations included in the course, learners examine how individuals interact with family members, elders, peers and integrate this knowledge into their interpersonal communications.

**II. SUPPORT INSTRUMENTS FOR ACCESS AND NAVIGATION**

Support instruments for the access and navigation of the course are provided as an integration of the four macro-areas described above.

Every page is provided with:

- Section: an icon indicating the area of the lesson the user is currently working in;
- Lesson: an icon indicating the active lesson;
- Competence: an icon indicating which competence the activity is focused on (listening, speaking, reading, writing);
- Track: an icon indicating the pages already viewed as opposed to those being accessed for the first time;
- Counter: a device displaying the number of the active page and, if necessary, keys activating written translations, audio devices or “nota bene” used to direct attention to specific grammar aspects.

The courses provide also other general utilities such as:
The new multimedia language courses promoted by Università degli Studi Guglielmo Marconi aim to respond innovatively to such needs, trying at the same time to motivate learners and to spread different languages and cultures because, like Nicholas Ostler in the Empire of the World said: “Most people in the world are multilingual, and everybody could be; no one is rigorously excluded from another’s language community except through lack of time and effort. Different languages protect and nourish the growth of different cultures, where different pathways of human knowledge can be discovered. They certainly make life richer for those who know more than one of them.”

REFERENCES


AUTHORS

Jenny Petrucci is with the International Relations Department, Università Telematica Guglielmo Marconi, 00193 Rome ITALY (e-mail: progetti5@unimarconi.it).

Laura Ricci is with the International Relations Department, Università Telematica Guglielmo Marconi, 00193 Rome ITALY (e-mail: l.ricci@unimarconi.it).

Manuscript received 21 May 2009. Published as submitted by the author(s).