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Implementation Guide





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Chapter 1:

WebTV Implementation Guide

1.1 For the teacher

The aim of this guide is to support the teachers involved in the WebTV for schools project to implement the proposed activities in the school environment, alongside with the support material for the teachers already available on the project's website. The project will be implemented in two phases; the first phase which takes place from September to November '03, will serve as a piloting phase while the second phase from February to May '04 will be the final run of the project. The piloting phase will get both students and teachers familiarized with the project, the WebTV platform which will be the main tool of this project and the pedagogical approach for the implementation and evaluation of the project. The second phase is intended to provide more room for students' imagination and involvement.

The project aims at using the video as an educational tool which will give the opportunity to students to express themselves, show aspects of their life, learn to work in teams. Each video will be the distributor of a message delivered by the students themselves with no external intervention. The students will select a subject to present on video. They will then go through all stages of the production of a real video: they will distribute the relevant tasks in the team; they will write the scenario, do the necessary research on the topic, select and present the material accompanying the video. This material can be in the form of text, graphs, images and URL links. They will then shoot the film, do the montage and write the subtitles. Each production should have a maximum duration of approximately 10 minutes. At the same time the project aims at connecting students' preferred activities to the formal school curriculum. The subject of the video can be chosen from or connected to the school curriculum. The students' enthusiasm and intrinsic motivation is expected to increase through their active involvement in the project. The whole procedure of preparing and shooting the video will be imprinted on students' minds and will build up knowledge on the specific subject.

During the teachers' workshop, which was a milestone in the project's run, several aspects of the proposed framework were discussed and presented to the teachers of the participating schools. These matters included a detailed approach of the technical issues involved in planning a movie, shooting and editing as well as the pedagogical issues underlying such an educational project. As far as the latter is concerned the pedagogical team of the proj-

ect collected and evaluated the feedback offered by the teachers during the workshop. The pedagogical team of the project took into consideration this feedback in order to evolve the questionnaires designed for the pedagogical evaluation of the project which are included in this guide.

The implementation guide is divided into **six chapters**. **Chapter 1** is a general introduction containing information on the project and its objectives. **Chapter 2** is a presentation of the pedagogical framework of the project setting its implementation parameters and the general pedagogical framework. **Chapter 3** is a technical description of the webtv platform, starting with a general description of the system and going into a more detailed description of the users' interfaces, the subtitling mechanism and finally the uploading mechanism to be used by the students when they have finished their production and they wish to upload it on the web platform of the project. **Chapter 4** is a short movie guide with instructions to the non-expert (such as the teachers and the students of the participating schools) on how to write a scenario, how to prepare a production, how to shoot a movie and how to edit and add subtitles. **Chapter 5** contains the intention notes of the movies from all the schools participating to the project. Finally, **Chapter 6** refers to the pedagogical evaluation of the project presenting the design of the evaluation plan and the evaluation instruments, namely the questionnaires, which are presented in the appendix.

1.2 Introduction

The rationale and the background of the project

In our days the world has become very competitive, technology-directed, market-oriented. Today's school often fails in following the pace of the evolutions, innovations, demands of the society. It offers considerable amounts of information, not always interesting for the students, not always up-to-date, focusing more on the transmission of knowledge to students than in the development of students' skills and to their active contribution and participation in the learning procedure. However, it has been proved that in this way students learn less, are bored and usually forget very quickly what they have learned, as the knowledge acquired in school has almost no application in everyday life. The gap between school and society disappoints students who spend the most productive years of their lives in an environment that does not receive and integrate the messages of society and consequently does not prepare them properly for their life as adults. The lack of flexibility of the current school curriculum does not allow for the full exploitation of the full potentials of informal ways of learning inside and outside school; therefore most students think that learning stops when school stops as well. Moreover, it is common knowledge that the media nowadays have not taken up the responsibility to produce good science or education programmes; the emissions addressing an audience of youngsters with the aim to help them learn are very limited in number and do not always combine the contributions of both technologists and pedagogues; moreover, there are no emissions on the media made by students themselves for other students; what is created for them does not necessarily interest them as their opinion has not been asked in advance. Finally, the current means of inter-school communication (school newspapers, emails, even Bulletin Boards) between students lack in interactivity, innovation and are extremely deficient compared to the stimuli nowadays youngsters receive from the Media and their everyday extracurricular activities.

Since school nowadays does not include many motivating activities for students, is usually far from the evolutions of society and often accused of being anachronistic and outdated, it is absolutely necessary for actors implicated in education to create the appropriate learning environment that would encourage students to become active learners and realize the value of informal learning as an integral part of education. This can only be achieved through the formation of multidisciplinary learning environments, which would propose to the participating students a well-structured series of activities with a common aim. These activities should be student centered and integrated in the everyday school curriculum.

As research in pedagogy demonstrates successful learning can be achieved **in authentic situations**. Furthermore, very much related to constructivist learning theories, the learner should be encouraged to actively explore "the world" by himself instead of being taught through teacher-oriented approaches which are often based on the idea of "knowledge transmission". By developing the WebTV educational platform, the **Web-TV for schools platform**, over which students will collaborate in order to present emissions created by themselves to their virtual classmates, the **Web TV for schools project** brings together experts in technology and the audiovisual sector with experts in pedagogy and students. The partnership considers it a great challenge to exploit the individual talents and expertise of its members in order to create a pilot WebTV platform for students with an educational aim, hoping that the impact of the proposed approach will be much bigger in the future as it might launch a new educational culture coming to classrooms but also households through the Internet.

Aims and objectives

The main objectives of the project are the following:

- **Provision of a model for motivating activities integrated in the school curriculum.** The Web TV for schools project involves students in extended authentic episodes of playful learning. The main task for the students in the framework of the project is the preparation of emissions for the Web TV for schools channel. Students select an aspect of their country's culture to promote; they then collect the audiovisual content, create the scenario, shoot the film, do the montage and finalize the emission by adding subtitles in English and upload the emission to the platform especially created for the project. The students' activities offer new learning experiences connecting society with school through real life situations, making students learn in an informal but effective way in the framework of their school curriculum.
- **Development of an interdisciplinary application in the current educational practice.** In the framework of the project students' activities will be implemented in various subjects (History, Foreign Languages, Geography, Technology, Informatics class) of their curriculum, profiting from the various aspects of the project. It is well known that the interdisciplinary approach is more effective as to the quality of the learning result since it provides a more global view of the subject to be taught examining the learning object from various aspects.
- **Provision of a model for collaborative learning and teamwork.** It is common knowledge among educators that students' participation enhances the learning result and is therefore one of the major demands of the teaching practice nowadays. In the framework of the project students collaborate between them inside the same group closely in every stage (selection of the scenarios, collection of the content, development of the material, preparation of the emissions, evaluation and discussion on other students' emissions) of the implementation; the students' groups also collaborate with their virtual classmates (through short field researches in the participating schools asking them what they would prefer to watch, realizing videoconferences and live online discussions with the use of "plateau" technology; finally, students also have the unique chance to collaborate with teams of field experts (Academics in Computer Science, Pedagogy and Cognitive Science and professionals in the field of audiovisuals).
- **Familiarization of students with the culture of other European countries and their cultural background.** Students will attend through the platform the emissions prepared by their virtual classmates and will have the opportunity to comment and influence their further development. The aim of the partnership is to make the emissions act as stimuli for an intercultural dialogue between the participating students, and help towards the direction of the understanding of the "others", their culture, and their customs. In this way a forum of discussion between students is being created and an exchange of views takes place. Students in Finland learning about the ways of production of the famous French wines, students in Denmark watching traditional folklore Greek dances performed by their Greek classmates, students in Germany learning about Greek historical mon-

uments, are just some indicative examples of the kind of emissions students will present to their classmates in the aim to familiarize them with their own national culture, customs and traditions.

- **Promotion of language learning.** Students participating in the project create scenarios both in their own and in foreign languages; they also comment upon their virtual classmates' videos and write down subtitles in their own languages for the videos they view on the Web TV for schools platform. The Web TV for schools platform becomes in this way a language-learning tool offering students a new learning environment, with motivating, modern and challenging activities instead of the traditional exercises.
- **Familiarization of students and teachers with ICT and audiovisual productions.** ICT and the field of audiovisual productions are both very competitive and market-oriented subjects nowadays. Through the activities of the project students and teachers are expected to get to know the fascinating world of Multimedia and audiovisual productions in a pleasant way. Making students and teachers deal with them through the well-planned activities of the project can be considered as a unique opportunity of participating in a short trainee course about advanced applications in informatics. Before the project's implementation effective training is offered to the teachers during the teachers workshop and through online seminars.
- **Research the educational potential** of the proposed ICT application in different educational and cultural settings. The project will be implemented in two cycles of school centered work in a school network in six different countries (Greece, Austria, Germany, Finland, France, Denmark) that will also allow for an ethnographic research and evaluation of different attitudes against the use of advanced technologies in different cultures providing thus ways for intercultural dialogue to improve these attitudes. As of today the first cycle of implementation is on its way.
- **Effort to involve parents and local communities in general in the formation of the proposed learning environment.** The project aims to listen to the parents' ideas about their children's school, about the society in which their children live and will live as adults and profit from their ideas, concern and experience. Subjects such as the difference between the generations, online live discussions with the use of the "plateau" technology between parents from different European countries as well as the live transmission of seminars for parents could help education profit from the input parents have to give as well as about the education of their children.

Innovation of the project

The project is innovative not only in its conception (informal learning in a formal environment) and following on of activities, but as far as the main outcome, the Web TV for schools platform is concerned. The integration of ways of informal learning in a formal educational environment such as the school is an innovation by itself. Moreover, in the framework of the project informal learning is promoted through the motivating activities students will have to implement. In the case of Web TV for schools project the final product of the project, the Web TV for schools platform will be the outcome of the collaboration effort of experts in technology, in the audiovisual productions, in pedagogy, teachers and students. The result of this collaboration effort is expected to be student-centered, as there is an equivalent and parallel development of pedagogical and technological components of the platform, seeing to students' needs and interests, as they are also able to participate in the design of the Web TV platform and direct its development. Finally, the Web TV for schools platform as an educational tool consists an innovation in the education technology field, since there are not many educational tools of this advanced technology used in current educational practice.

The project's approach is graphically represented in Figure 1.1.

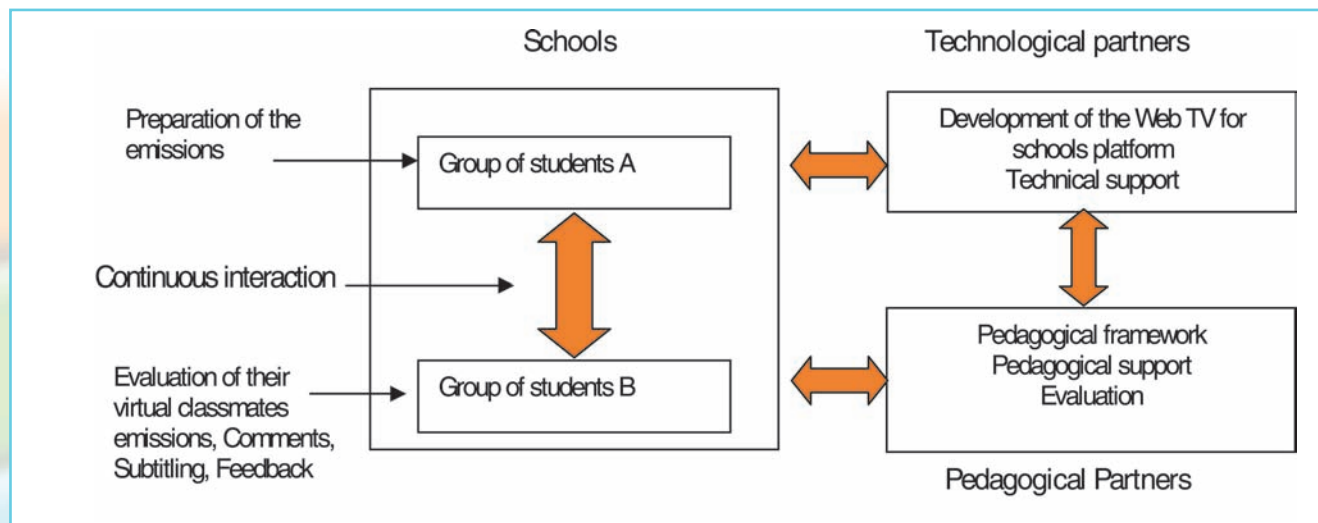


Figure 1.1: The student- centered approach that is adopted to the project. The Web TV for schools emissions are the outcome of the collaborative work of students, under the guidance of pedagogical and technological experts. The final outcomes, the Web TV for schools platform are the outcome of this continuous interaction between students, teachers, technologist and pedagogical experts.

The pedagogical and didactical approaches

The main pedagogical and didactical approaches which are adopted and will be served during the project's run are the following:

- **Learning should be a collaborative experience:** In the WebTV for schools project a continuous effort will be made to stimulate students' interaction. In the framework of the project students are asked to select scenarios from thematic fields that would interest their virtual classmates around Europe. Then start writing down the scenarios, shoot the videos exchanging views with their European classmates through videoconferences and via Bulletin Board, proceed with the montage and prepare the first version of the emissions. The emissions created by the groups of students will be diffused to the WebTV for schools platform where students from all the other schools will have the chance to view the creations of their classmates, comment them, etc. Their feedback will be sent back to their colleagues in order to let them prepare the final version of the emission. Students will also have the chance to collaborate with experts in the field of Computer Science and Audiovisuals as well as with experts in Pedagogy and Cognitive Science throughout the project's run.
- **Participation enhances learning:** It is widely believed that increased students' participation stimulates interest. The participation of the students at all steps of the WebTV for schools project is safeguarded. No activity in the framework of the project can be realised without enhanced participation; students will actively engage themselves in the filming, documenting and publishing of their activities. They will engage themselves in the materialising rather than in the theoretical thinking and the individual talents will emerge.
- **Need for cross curricula approach:** Interdisciplinarity is crucial towards enhancing the effectiveness of education, since it provides a unique way of strengthening learning processes, such as discovering analogies, similarities etc., while providing topics, which are inherently closer to real world problems.



Chapter 2

The pedagogical framework of the WebTV for schools project

2.1 Implementation parameters for WebTV

When we talk about making a film for the WebTV for schools platform we mean that the students themselves, with a side-help and guidance from their teachers, will produce a film consisting of all important elements to make it attractive to the virtual schoolmates and at the same time it should possess an educative element for the creators as well as for the spectators of the film. The final aim of the project is to build the foundations of a TV channel on the web, broadcasting over Europe and having a programme consisting of news, sports, films, documentaries and musical video clips created by the students and fulfilling their needs and wishes for entertainment and education. At the same time it will be a means for students to express themselves and communicate with their schoolmates from other countries.

At the same time the students participating in the making of the film will learn to systematically examine a subject and present it to others by making use of the many communicative tools the audiovisual media offer. To succeed to this goal the films should be based on a specific scenario, they should be entertaining, have some form of action and definitely be of interest to the wider school community and the public since they will be uploaded on the internet (the WebTV platform) and be accessible to all. The implementation parameters should therefore respect the above mentioned principles. A first plan to determine the implementation parameters for the adoption of the activities of the project to the school curriculum is presented in the next page:

Project's activities	Project embedded in the curriculum	Project not embedded in the curriculum	Remarks
Management of the project	-	-	The team work and internal management nature of the project is emphasized
Choose a theme and collect the relevant material from the internet, encyclopedias etc in the form of text, pictures, etc	♦ Biology ♦ Environmental Science ♦ History & Culture ♦ Social Sciences ♦ Athletics ♦ Music ♦ ?	Any theme	
Write the scenario	Language and Literature	Language and Literature	The teacher will only guide the students to the proper use of language whenever necessary
Distribute the roles, prepare the scene and the shooting	♦ Language and Literature ♦ Arts	♦ Language and Literature ♦ Arts	
Shoot the film	Technology	Technology	
Do the montage	♦ Technology and ♦ Computing	♦ Technology and ♦ Computing	
Add music	Music	Music	The music could be performed or even composed by the students themselves
Add subtitles	English Language	English Language	The subtitles will be in English in all the films
Upload the film on the WebTV platform	♦ Technology and ♦ Computing	♦ Technology and ♦ Computing	The teacher will have been specially trained to support the students

Table 2.1: The correlation between the activities of the WebTV project and the subjects of the school curriculum for the two cases of embedded and not embedded projects.

If the project is applied to a group of students outside the standard school curriculum (not embedded in the curriculum) then it does not need specific implementation parameters to choose the theme of their film and pre-

pare the relevant material and the students should be free to choose anything they like, such as an activity, a social event of their lives, something that happened in school and influenced them, or make a film based on a scenario written by them. The design and creation of the film could be implemented by following the same implementation parameters in its various stages as in the embedded in the curriculum case.



Fig.2.1: The students choose to make a film based on a scenario written by them. After all, a film is a representation of real life.

If the project is applied to a class inside the standard school curriculum, then the thematic fields although still very broad are now limited by the taught subjects' curriculum. The topics on which the scenario will be based could be drawn from science topics such as Biology and Environmental Science, from History and Culture, from Social Sciences or from any subject which could inspire the students to make a film (this is represented by ? in the table 2.1).

As an example, consider the implementation of the project in an **Environmental Science** class. The chosen topic could be on water, how important it is for our lives, the water cycle and the problem of shortage of water which many countries are facing. The students will then select the scenery, for example a river or a lake, a story tell (scenario) for example an excursion of friends to the river to do rafting or another similar extreme sport and a way to connect the film action with the problem of water shortage, for example the rowing boat is stuck on shallow waters, etc. Through the film the observer will be informed and consequently develop sensitivity for the importance of water, its presence everywhere, its preciousness and immense value for the planet earth and all life forms therein. The film mainly targets the young population but it is also appropriate for the broader public. Another school could choose a different approach on the same topic which is the shortage of water problem by making a film of a visit to the National water company factory which purifies and circulates water in a big city.

Another example of an environmental topic embedded in the school curriculum could be a film on alternative forms of energy resources in a country, such as water power stations, solar energy, wind-mills etc, a film which could be descriptive and narrative and will inform young people and the public about such forms of energy and other related problems such as the pollution of the earth caused by traditional forms of energy etc.



Fig. 2.2: The students choose to make a film on sweet water and its shortage and are preparing to shoot the film on site: The scene here is the river Sperxios located in central Greece.

In other subjects of the school curriculum such as **History & Culture** there is a huge field from which the students could be inspired, ranging from visits to Archaeological sites, Museums, Historical Monuments etc. In this context the students could make an historic tour on the site and add to the video music and narrative text in order to present to the audience the historic event and the corresponding era. They could also connect it with other aspects of life, for example scenes of everyday life of that time played by the students on site etc.



Fig. 2.3: *The students choose to make a film on the life of Ancient Athenians. They are distributing the roles and preparing to shoot the film on the Acropolis.*

Similarly the students could decide to make a film on a **concert** performed by their music class or an **athletic event** organized between school teams. When filming such events it is very important to show the preparatory stages of the event, to capture the real live action, the protagonists' and the public's reactions during the event and also to show what happens after such an event, for example peoples' comments and impressions, how satisfied they were etc.

We should emphasize the **team-work nature** of the project in the sense that a clear separation and consignment of the different tasks in the preparatory stage and in film shooting and editing is necessary and should be done by the students themselves. In every task the corresponding team should be represented by a student who will be responsible for the best and on time delivery of the corresponding outcome. Thus, the management of the project will be performed by the students themselves (internal management) with a proper guidance and help by the teacher responsible for the project.

The implementation parameters should respect the students' complete freedom to express themselves and give them equal opportunities within the group to actively participate in the design and implementation of the project, regardless of gender or ethnic origin.

2.2 WebTV project - General Pedagogical Framework

The following are some general pedagogical guidelines designed to help us organize WebTV for schools activities in such a way that there is some uniformity across the participating teams. It is not our purpose to propose a rigid and pre-determined pedagogical approach but rather to suggest a skeletal framework that will be general enough to fit the pedagogical traditions of the various countries participating in the project and will respect cultural diversity.

A central challenge of the development of pedagogical approach of WebTV for schools is to determine and support activities and processes that are critical for facilitating intentional and thoughtful learning. It will be essential to work for achieving a shared understanding of the pedagogical value of WebTV for schools. It also appears to be important to develop scenarios of collaborative movie building and define activities critical from this perspective.

2.2.1 Collaborative Design

Collaboration can be encouraged by setting up design teams consisting of 4-5 students. Each team is expected to design WebTV productions; the actual productions will be selected from among the preliminary designs. The participants will be expected to create detailed designs of the movies to be produced before actual production stage, assess the design during the process, and evaluate success of the project in the end of the production. Optimally, each group will be given an opportunity to create at least short movies so that learning from the first to the second project will become possible.

2.2.2 Distributed Expertise

The project can capitalize on the cognitive diversity of the students. This can be accomplished by creating heterogeneous teams (female & male, high & low achieving students). An important aspect of the project will be to encourage the students to adopt an expert's role [students specializing, for instance, in design of a) story line, b) lights, c) sound, and d) actual shooting of the video]. The method of reciprocal teaching could be used to help students to specialize in the selected expert domain (expert-students from several teams representing certain area could have their own meetings) and facilitate sharing of corresponding knowledge and understanding. Perhaps the WebTV platform could help expert-students from different countries representing certain domain share their experiences.

2.2.3 Peer interaction

The participating students will be systematically guided to comment on each other's designs and ideas. They will be encouraged to provide and receive feedback of each other's movies within and across WebTV participating schools. Peer interaction will be encouraged by creating tools for the WebTV platform that allow the users to comment on each other's designs at various stages as well as comment of the final productions. The project will prove an authentic context for interacting with people from different countries by using video links, email, chat, database discussion. It is essential to create a WebTV platform that helps participants to communicate about students' videos, building knowledge about them, and have the students' own ideas in the center.

2.2.4 Scaffolding expert-like movie production

An important challenge of WebTV for schools project is to support students in expert-like production of movies. Toward this end, perhaps the participants that are experts in movie production need to construct simple guidelines that help students to structure their movie production according to core steps of production procedure. These kind of structures or scaffold may be build into the WebTV platform in which students are posting their designs (i.e., certain steps that needs to be completed before a design is completed or students are allowed to start the actual production of the movie). Through this kind of cognitive scaffolding novices may be guided to function in a more expert-like way than would otherwise be possible. The students need to be helped to set up production groups with appropriate pre-determined roles and pre-structured series of activities. By making the guidelines uniform across schools and countries, it will be possible to compare the actual production processes (and not only end results).

For this chapter we need collaboration from the technical partners, we need to know 1) what kind of different roles there are for students, also 2) what are the stages/phases of movie making, what kinds of elements there are involved.

While the above presented points are related to the actual production of WebTV movies, the following points focus on the contents and topics of the movies. By selecting appropriate topics and working with the topics in a meaningful way, WebTV for schools activities may be used to facilitate meaningful learning.

2.2.5 Facilitating subject-matter learning (knowledge acquisition)

Encouraging the participants to produce movies concerning relevant subject-matter problems and topics and engage in corresponding discussion among them. The implementation parameter for WebTV document specified those subject-matter domains that are likely to be involved in WebTV programs produced by the students. Those involve language and literature (writing the scenario), English (subtitles), Arts, Sciences and social studies and so on. Resources of the whole curriculum may be used to produce WebTV programs.

2.2.6 Learning through inquiry

From the pedagogical perspective it is essential that the students do not only focus on transmission of information through producing and broadcasting the WebTV for schools movies. It appears important to encourage them to engage in inquiry learning by selecting sufficiently multi-faceted and complex topics that provide apple opportunities for engaging in deepening inquiry through pursuing students' own questions and articulating their own conceptions. Optimally, working with WebTV for schools productions guide the students to work for solving of complex and authentic problems. Participation in this kind of process emphasizes cognitive reconstructing, by changing the cognitive division of labor between teacher and student. When a student takes responsibility for higher cognitive activities, it enables him or her to go to a deeper level of the learning process. This shift from teacher centeredness towards students' activity presupposes strong self-regulative efforts from students, and at the same time offers more space for individual activities. This kind of meaningful and close relationship towards the learning tasks also may help students increase their interest.

Communication among the schools and the pedagogical team

Each participating school is encouraged to explicate its pedagogical approach in the beginning of the project as well as to engage in a continuous dialogue with the overall pedagogical framework of the project with the pedagogical team and the other schools. The WebTV for schools pedagogical approach will co-evolve or co-develop together with that of the participating schools. The co-evolution will be supported by providing each school feedback of its pedagogical design of WebTV for schools activities by the pedagogical team.





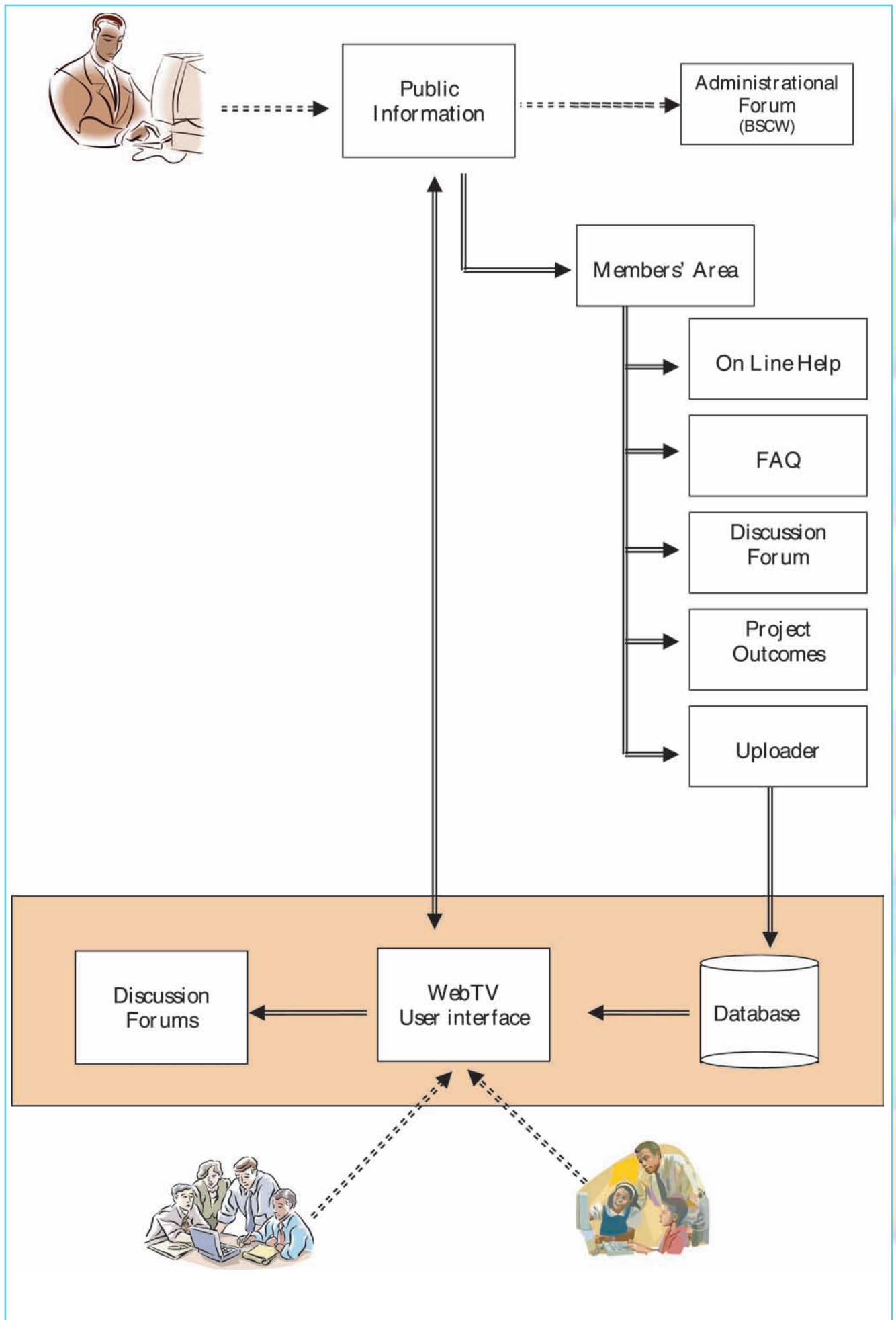
Chapter 3

Technical description of the WebTV for schools platform

3.1 WebTV for schools platform

The WebTV for schools project aims at the development of the appropriate framework for the introduction of ways of informal learning in the school curriculum. In the framework of the project a web platform will be developed, that will act as a stimuli for intercultural dialogue among schools that participate in the project.

The main aim of the platform is to become an advanced, interactive, easy to use learning environment, where all major steps of the project as well as the project's outcomes will be presented. It will be the nodal point over which students will present emissions created by themselves to their virtual classmates, communicate to each other, exchange ideas and opinions between them, but also communicate and exchange ideas and opinions with the public and experts.



There are five main user categories of the WebTV for schools platform:

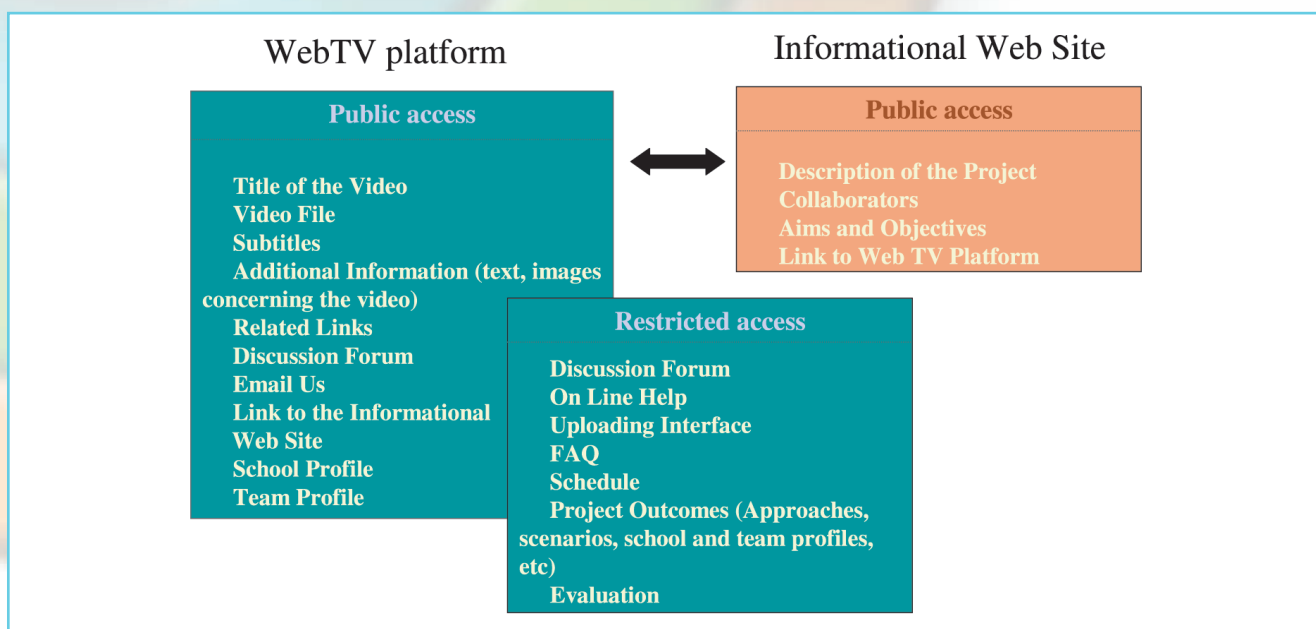
- **Students:** along with teachers will be the main target group of the project. They will learn to develop video productions from scratch and make them available to public through Web.
- **Teachers:** will help and guide students during the development of their production.
- **Pedagogues:** will be responsible of the determination of users' needs and parameters, social and psychological, that are important for the design of the WebTV for Schools platform.
- **Technicians:** will develop all the mechanism for the WebTV for schools platform based on pedagogues' remarks.
- **Public:** will be the end users. They will be able to watch students' productions over web and learn about WebTV project and its aims.

The success of the WebTV for schools platform site is to serve in the best way the needs of its users and provide them with all the facilitations that will advance and provide guidelines to their work.

For that reason, it provides:

- **General information** concerning the project such as title, description, aims and objectives, workshop, links to similar sites, bibliography, etc.
- A **WebTV for Schools** platform over which students will collaborate in order to present their productions. It will also give the ability of communication and collaboration not only between partners, but also between partners and the public, while at the same time it will supply specialized information about the students' emissions and their profiles and the outcomes of the project. The platform consists of six components:
 - The **Uploading Interface** that provides an easy and friendly way to the students in order to upload and store their emissions and the project's outcomes, such as scenario, approach, questionnaire etc, in a database.
 - The **Database** in which all the gathered information during the uploading procedure is stored.
 - The **Data Retrieval Tool** that retrieves from the Database the requested information that a partner, or a student or the public might request.
 - The **WebTV User Interface** in which the requested information that concerns the students' emissions, is presented.
 - The **Authorization System**, which supervises access to the web site.
 - The **Members' Area** where partners can find projects' outcomes, on-line help, manuals and general information concerning projects' steps.

A diagrammatical representation of the overall WebTV for schools platform and its organization is as follows:



3.2 WebTV for Schools Platform Architecture

The WebTV for schools platform will be implemented in php programming language. The first page of the platform will be in flash technology, so that it will be more spectacular and friendly to users.

As shown on the scheme above, it is combined of two areas:

- The **public access** area contains information about students' emissions and constitutes the medium of communication among partners, students and the public.
- The **restricted access** area contains information about the projects' outcomes, offers help to partners and is the medium of communication among them. Of course, only partners have access to this area, which is controlled through the **Authorization System**.

3.2.1 WebTV User Interface

The WebTV User Interface is the public access part of the WebTV for schools platform. It is where the information about students' emissions is presented. Specifically, provides information to partners and the public about:

1. **School Profile**
2. **Team Profile**
3. **Links** related to the displayed production
4. **Discussion Forum** among public, partners and authors (students and teachers). Subjects that can be discussed are related to the emissions
5. **Title of the production**
6. **Video and subtitles files or flash file**
7. **Additional Information**

On the **WebTV User Interface** window there will be available the School and Team Profile, a Discussion Forum, Links and the Title of the production. The rest of the information will vary. Each team will be able to select the way that the information concerning the production will be presented to the web site. There are four predetermined interfaces with different kind of information and layout in each one. The information that is contained in each interface is:

- ♦ **Interface 1:**
 - Title of the production
 - Video file
 - Subtitles
 - Additional Information concerning the production
- ♦ **Interface 2:**
 - Title of the production
 - Video file
 - Subtitles
 - Discussion Forum
- ♦ **Interface 3:** it used when students select to make a flash animation production instead of a video
 - Title of the production
 - Flash Animation
 - Additional Information concerning the production

- ♦ **Interface 4:** it is used when students have developed a large video file. Since it is not possible to play over Web a large video file, it has to be separated into smaller video files that have duration about 7 minutes each. The students can develop up to 5 video files.
 - Title of the production
 - 5 video files
 - 5 subtitle files
 - Additional information that concerns the production

3.2.2 Authorization System

There is an **administrator** responsible of the right running of the WebTV for Schools platform and the manipulation of users. His/her obligations are to add or delete users to the system, update predefined information such as the theme categories, supervise the discussion forum.

The user's categories that need to have access to the restricted area through the Authorization System are Teachers, Students, Pedagogues, and Technicians. When the administrator creates a new user, his/her login, password, name, surname, specialty on the project and institute that belongs, are stored in the database.

Specifically, each school has one account, which teachers along with students use in order to store their emissions in the database. When the administrator creates that account, at the same time, he/she submits to the database the name, the country and the address of the school. This is the minimum information provided for the school profile and none can change it or delete it but the administrator. So, the school user can only enrich this profile by adding a description or some photographs or an e-mail etc (see the description below concerning the school profile at the Uploading Interface). Additionally, each school user has access only to the productions and files that owns. He/she is not able to change or manipulate information submitted from other schools during the Uploading procedure.

3.2.3 Members' Area

The Member's Area consists of all the necessary components that will guide and help students and teachers to implement the activities in the frames of the school and the schoolroom. It is the restricted access part of the WebTV for schools Web Site. As already mentioned, it will constitute the medium of communication among partners that will help them to exchange ideas, evaluate the project and reach to conclusions. It will also provide useful information regarding project's run and inform them of the important for deliverables dates.

The information that will be available in **Members' Area** is:

- ♦ **Discussion Forum:** it includes two main categories
 - Discussion forum for pedagogical problems and issues
 - Discussion Forum for technical problems and issues

Each one of them includes more specific categories that are specified based on the categories of the **On Line Help**.

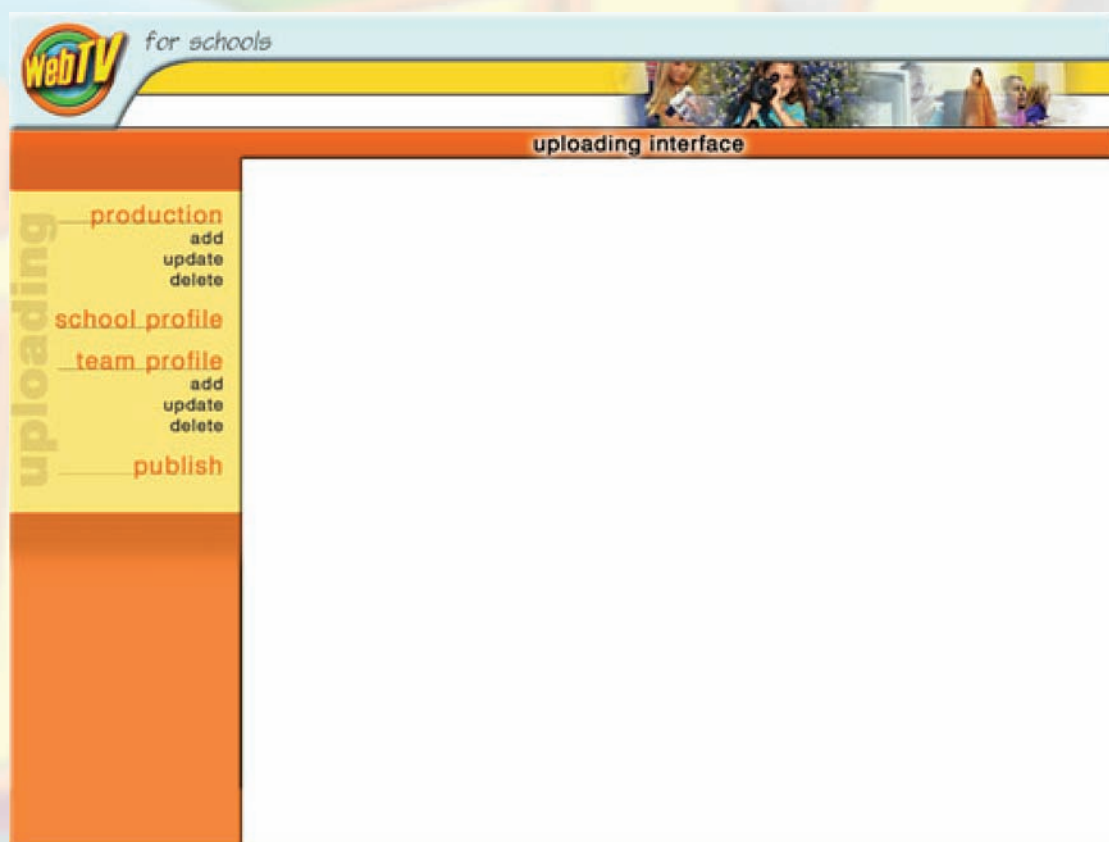
- ♦ **On Line Help:** in this area, all the training material, categorized by the subject and the stages of the project's implementation, is stored. Some of the basic informational categories, which the system could offer are:
 - **Pedagogical framework**
 - **Planning video**
 - **Developing the project idea**
 - **Schedule**
 - **Research**
 - **Implementation scenarios and storyboards**
 - **Assigning roles**
 - **Producing video**
 - **Gathering material**
 - **Using the camcorder**
 - **Transferring the video to the computer**
 - **Video editing**
 - **Uploading information to the server**
 - **Using the WebTV platform**
 - **Evaluation**
- ♦ **Uploading Interface:** it is the procedure that a team has to follow in order to upload and store all the necessary information in the database.
- ♦ **FAQ:** it consists of the most important questions and answers on pedagogical and technical problems, approaches and procedures as a result of the daily activities, study, creation and use.
- ♦ **Schedule:** here are displayed all the important dates for project's deliverables.
- ♦ **Project Outcomes:** all the project outcomes, such as Approaches, scenarios, school and team profiles etc, will be available for internal consumption.
- ♦ **Evaluation:** here are stored all the necessary questionnaires and the given answers of the students and teachers.
- ♦ **Video Conference:** through this option the students of the classroom could communicate with each other for exchanging ideas in real time.

3.2.4 Uploading Interface

The Uploading Interface is the medium through which all the necessary information about a production is gathered in order to be displayed on the WebTV for schools platform.

After the integration of a production, and not earlier, each team must follow the procedure explained below in order to store into the database the required information. The Uploading Interface is located into the **Member's Area** and have access to it only partners and more specifically, only schools.

At the following scheme is presented an image of the first page of the Uploading Interface. There is a main menu on the left bar where are displayed all the actions that can be performed.



3.2.5 Production

Each team can manage productions from here. That means that each team can add a new production or update the information of an already submitted production or even delete a production if necessary. Below there is a description of all these operations.

3.2.5.1 Add

During the addition of a new production it is requested some information such as the title of the video, the theme category on which the production is based on, the flash file or the video file along with the subtitling file, to deter-

mine keywords, the approach file, the scenario file, the team names and, depending on the chosen interface, it might also need to provide a short description of the production accompanied with some images and links that the team visited to find information concerning the production.

All this amount of information is submitted into steps, which are described below. When the user selects to add a new production the left bar menu changes, as shown at the scheme, into the steps that has to follow in order to make the insertion.



In order to return to the main menu of the Uploading Interface, press the first link on the left bar menu **"uploading menu"**. At each step of the procedure the corresponding link on the left bar is highlighted. For example, at the scheme above the link **"interface"** is with different color.

The steps that need to be followed in order to have a succeeded insertion of a production are:

Step 1: Each production can be presented to the end user by 4 different ways. At this point the user has the ability to see a preview of those four interfaces by clicking on the numbers one to four. The user selects the interface that desires to use by leaving the preview and then clicks on the **"next"** button.

Step 2: Click on the little arrow at the **Category** field to open the drop-down list of all the categories. Select the category that the production is based on by clicking on the name. Write the title of the production into the box **"title"**. Press the **"next"** button to go to the next step or the **"back"** button to go to the previous step and make changes if necessary.

WebTV for schools

uploading interface

uploading menu
interface
title - category
video/flash
description
images
keywords
approach-scenario
links
preview
team

Category (required)

title (required)

back next

Step 3: Depending on the interface that was chosen on step 1, the video or the flash file must be uploaded. The acceptable format of files is, **rm** for video files and **fla** for flash files. If a video file is uploaded, then the subtitling file must be also uploaded.

In case that:

- interface 1 or 2 was selected from step 1, then only one video file and one subtitling file must be uploaded
- interface 3 was selected, then only one flash file must be uploaded
- interface 4 was selected, then can be uploaded more than one and up to five different video files, along with the corresponding subtitling files

WebTV for schools

uploading interface

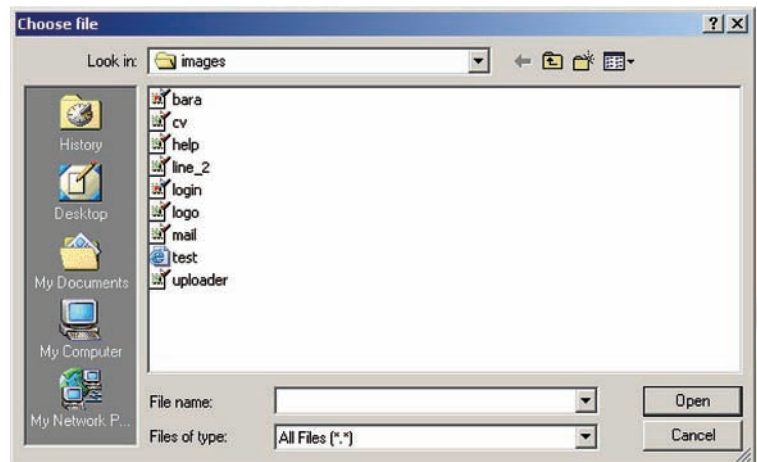
uploading menu
interface
title - category
video/flash
description
images
keywords
approach-scenario
links
preview
team

Video browse

Subtitling browse

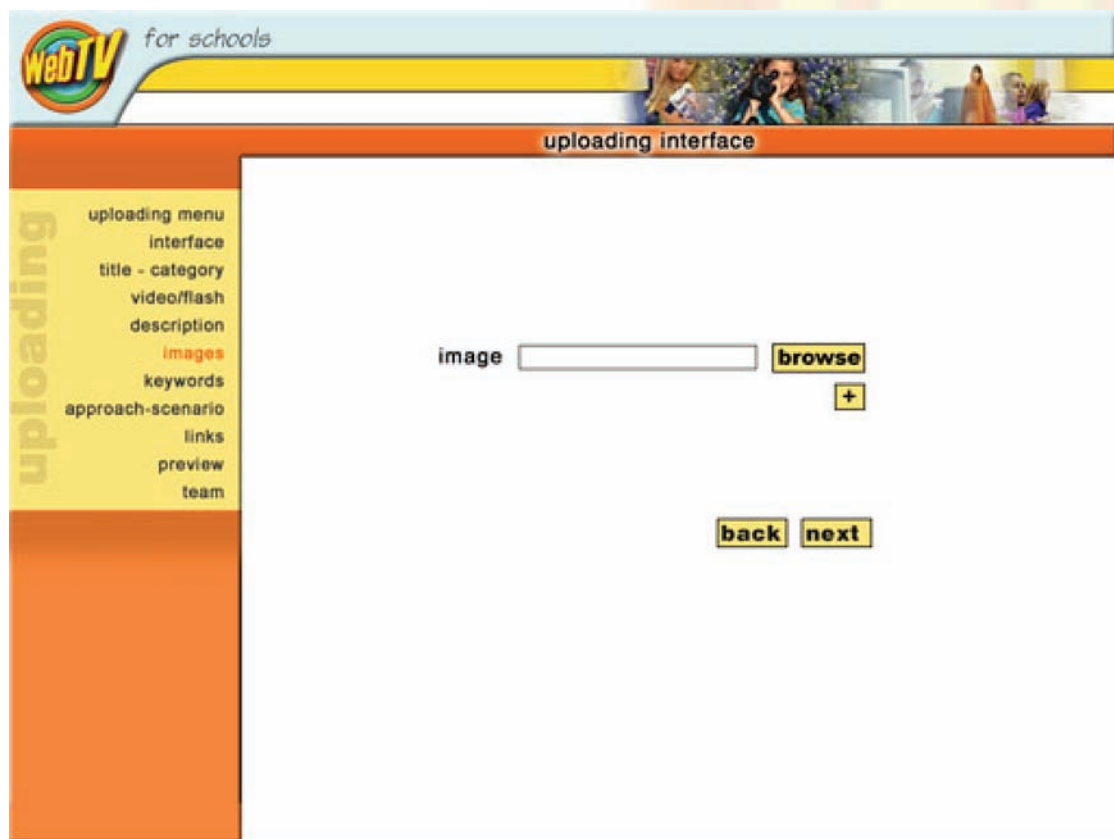
back next

In order to upload a file press the **"Browse"** button and a new window like the one on the scheme will appear. Navigate into the files of your computer to find the file you want to upload. Click on the file and then press the **"Open"** button.



Step 4: A description concerning the production is given here. There is the ability of using simple html commands, such as `<b></b>` to make the text bold, `<u></u>` to underline the text, `<a></a>` to add a link, `<i></i>` to make the text italic etc, to form the text.

Step 5: Along with the description, a number of images that concern the production can be submitted at this point. The number of images that can be uploaded varies from none up to ten different images. To upload an image follow the procedure that is described at step 3. When the image is uploaded, click on the "+" button to add an empty field in order to upload a second image. If the insertion of images is finished, click on the **"next"** button to go to the next step or click on the **"back"** button to return to previous steps and make corrections if necessary.



Step 6: For each production there are a number of keywords given, which are used in the platform as criteria for search and to find a production through keywords. Write the keywords that concern the production and separate each other by commas.

Step 7: The initial approach and the scenario of the production are uploaded. The acceptable formats for these files are **doc** and **pdf**. To upload the files follow the procedure that is described at step 3. Click on the **"next"** button to continue to the next step of the uploading procedure or click on the **"back"** button to return to previous steps and make corrections.

Step 8: Submit links that are related to the production and the team has visited in order to gather information. At the title field give a **title** for the link that will be displayed on the platform. At the **link** field give the url and at the **description** field describe what useful was found at the particular site. If it is needed to submit more than one links press the "+" button and new empty fields will appear to submit a new link. If the insertion of links is finished press the **"next"** button to go to the next step of the uploading procedure.

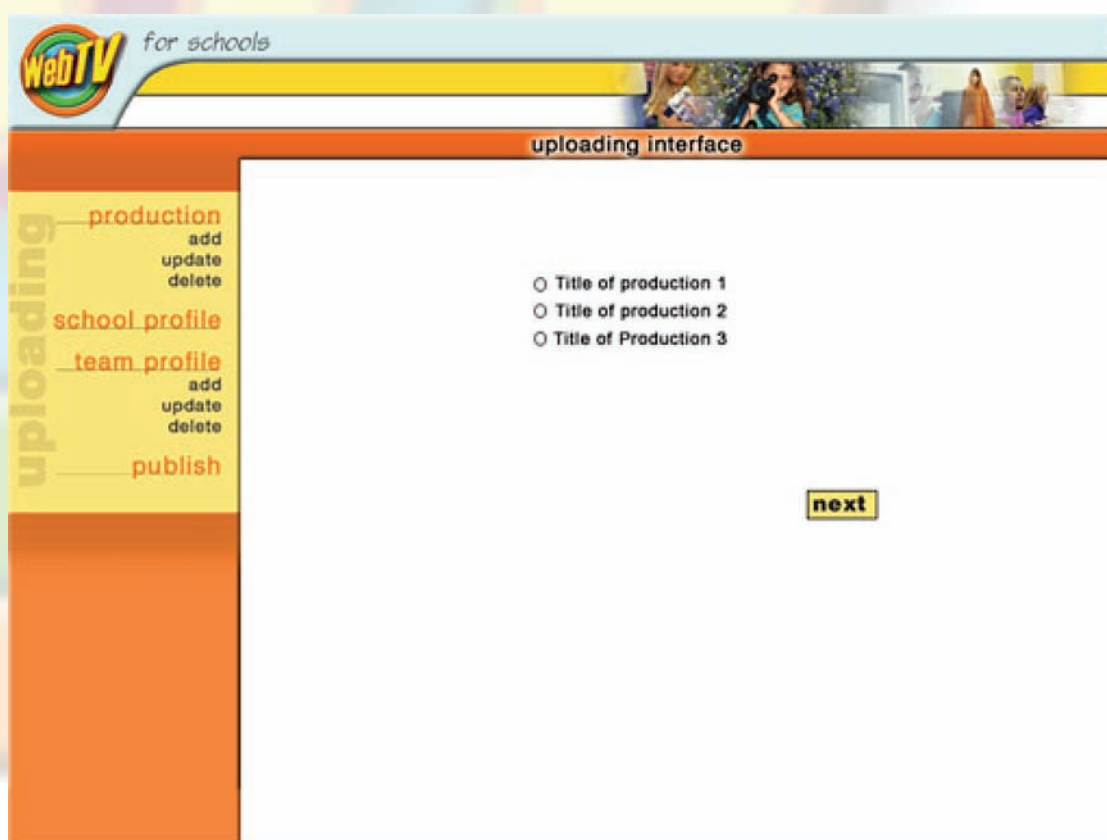
Step 9: Since all the requested information is submitted a preview of the WebTV Platform, is presented to the user. If something needs to be corrected, press the **"back"** button to move to that particular step or choose the appropriate step from the menu on the left side of the page. If everything is in order then press the **"Submit"** button, so that the information will be stored in the database.

Step 10: Determine the team that participated to the production. Select from the list the teachers and the students and press the **"Update"** button. In order to add a new member in the list, press the **"New Member"** button.

3.2.5.2 Update

The user has the ability to make corrections to the information of an already submitted production. The procedure is implemented in steps as follows:

Step 1: A list of all the productions that a school has developed is presented. Select the production that needs to be updated by clicking on the circle that is located on the left of the title. Then click on the **"next"** button to go to the next step.



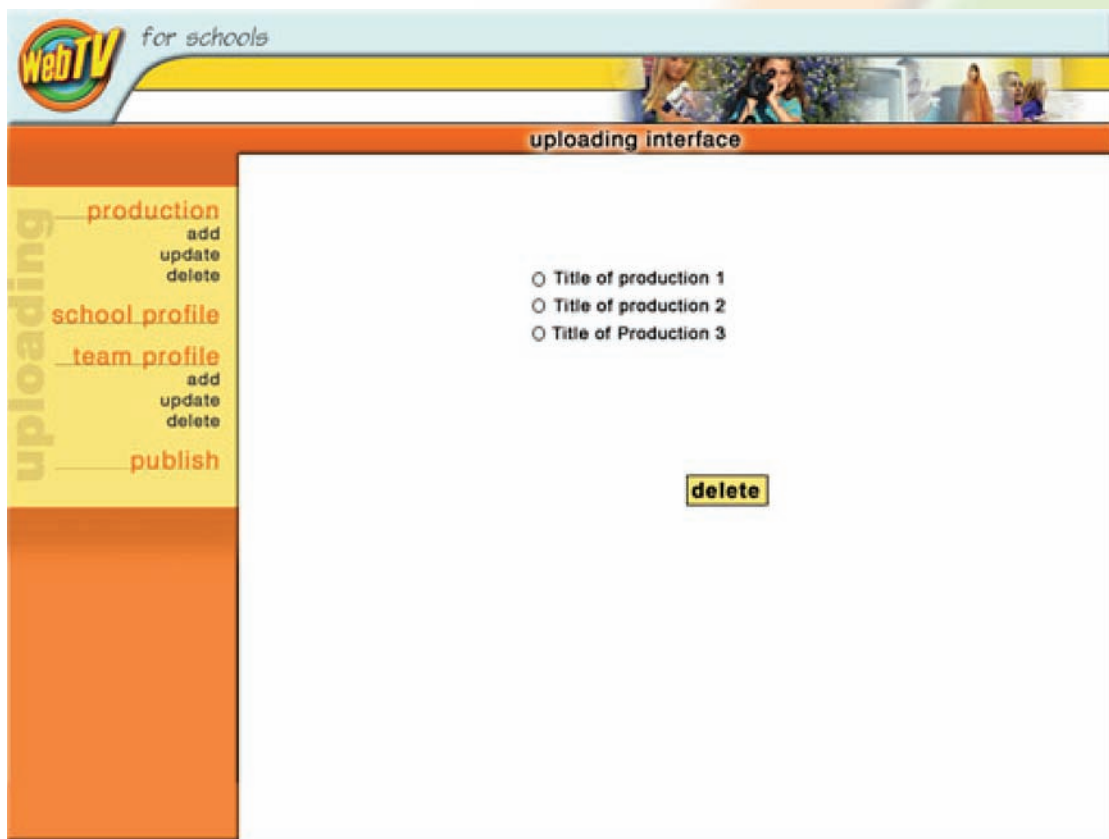
Step 2: The first set of information is presented. Make any changes you need and press **"next"** button.

Step 3: The second set of information is presented. Make any changes you need and press **"Next"** button.

Step 4: The list with the names of teachers and students of the school is presented. The names that participate in the particular production are already checked. Check or uncheck names to update the team members. Click the **"Update"** button to store the changes that are made or press the **"Back"** button to return to a previous step and make more changes.

3.2.5.3 Delete

From the list of all the production that the school has developed, choose the one that needs to be deleted, by clicking on the circle and then press the **"Delete"** button.



3.2.6 School Profile

The school name and the address are already submitted in the database. Complete the rest of the requested information for the School Profile. In order to upload an image follow the procedure that was presented above. Press the "Update" button to store the information in the database.

The screenshot shows the 'uploading interface' for 'WebTV for schools'. On the left is a vertical navigation menu with the word 'uploading' written vertically. The menu items are: 'production' (with sub-links 'add', 'update', 'delete'), 'school profile' (highlighted), 'team profile' (with sub-links 'add', 'update', 'delete'), and 'publish'. The main content area is titled 'uploading interface' and contains the following form fields:

- Name:
- Address:
- Telephone:
- Fax:
- Description:
- Url:
- Email:
- Image: **browse**

At the bottom right of the form is an **update** button.

3.2.7 Team Profile

There are two main categories that can be members of a team, teachers and students. In order to determine a team, it is initially needed to submit each member's profile in the database.

3.2.7.1 Add

The procedure to add the profile of a new member is realized into two steps:

Step 1: Click on the arrow and select from the drop-down list the occupation of the member you are going to submit and then press the **"Next"** button.

Step 2: Complete the required fields of the new member. In order to upload an image follow the procedure as described above. When all the requested information is completed press the **"Submit"** button in order to store the information into the database. Use the **"Back"** button to return to previous step and select another occupation.

WebTV for schools

uploading interface

uploading

production
add
update
delete

school profile

team profile
add
update
delete

publish

Name

Age

Specialist

Description

Url

Email

Image

Note: the **Age** field appears only if the selected occupation from previous step is **Student** and the **Specialist** field appears only if the selected occupation from previous step is **Teacher**.

3.2.7.2 Update

Step 1: Select from the list the teacher's name or student's name, whose data need to be updated, by clicking on the circle on the left of the name. Then press the "next" button.

WebTV for schools

uploading interface

uploading

production
add
update
delete

school profile

team profile
add
update
delete

publish

Teacher
☐ Teacher 1
☐ Teacher 2

Student
☐ Student 1
☐ Student 2
☐ Student 3

Step 2:: The stored profile information of the chosen member is displayed. Make the changes that you need and press the **"Update"** button in order to store the changes into the database.

3.2.7.3 Delete

Select from the list the teacher's name or student's name, whose profile is going to be deleted, and then press the **"Delete"** button.

3.2.8 Publish

The stored in the database information will not be available to public unless the **"Publish"** link, which is located on the left bar menu, is selected. This provides the ability to gather and submit all the required information, check if it is correct and then publish it.

3.2.9 Discussion Forum

There are two Discussion Forums used at the Web Site. The first one is located in the Members' Area and only the projects' partners have access to it. They use it as an easy medium of communication with each other.

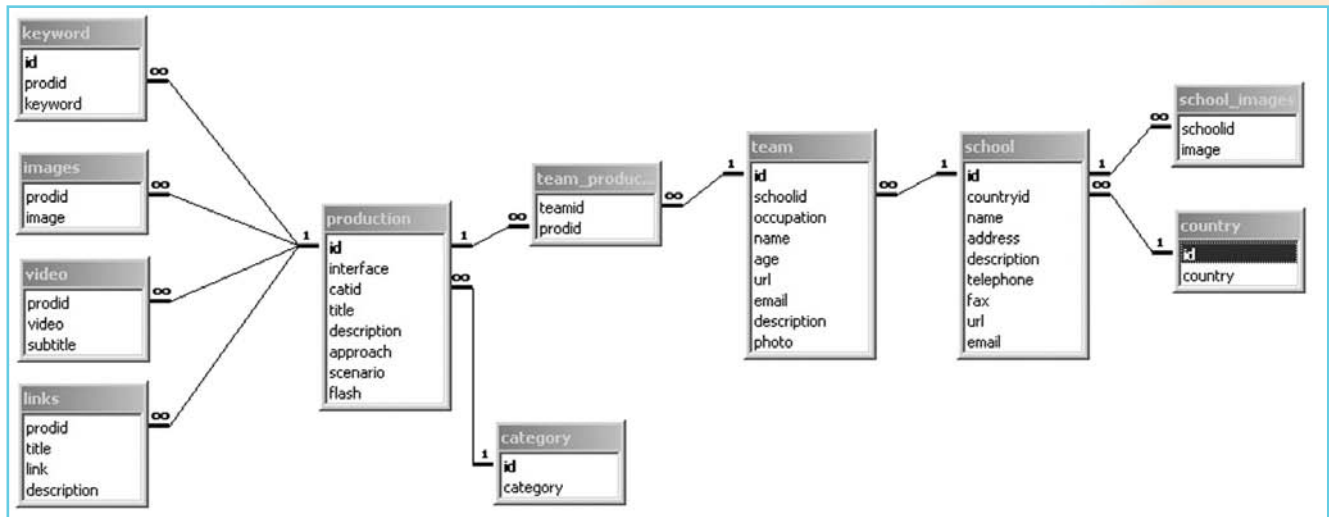
The second one is located on the WebTV User Interface and constitutes the medium of communication between public and partners, but mainly between public and students. The public will be able to present remarks.

In both cases, the Discussion forum is a "live" forum. That means that the user is not obliged to reload his/her page in order to see if there are new messages to read. This is automatically done. All messages are downloaded and stored in the database. There is a search engine that provides the ability to the user to retrieve a message by author or a keyword.

There is an administrator of the discussion forum, who will be responsible of the right running of the forum. Through an administration interface he/she will be able to forbid access to the discussion forum by a choice of an **ip**, to delete messages.

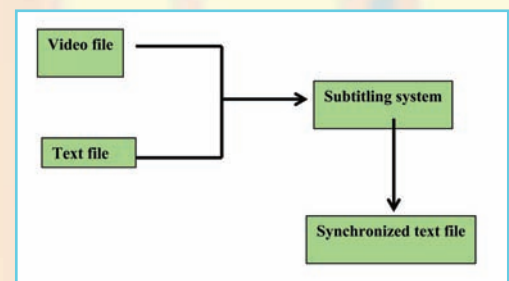
3.3 Database

The **database**, in which all the gathered information through the Uploading procedure is stored, is a classical MySQL database. You can see in the following diagram the general structure of the Database.

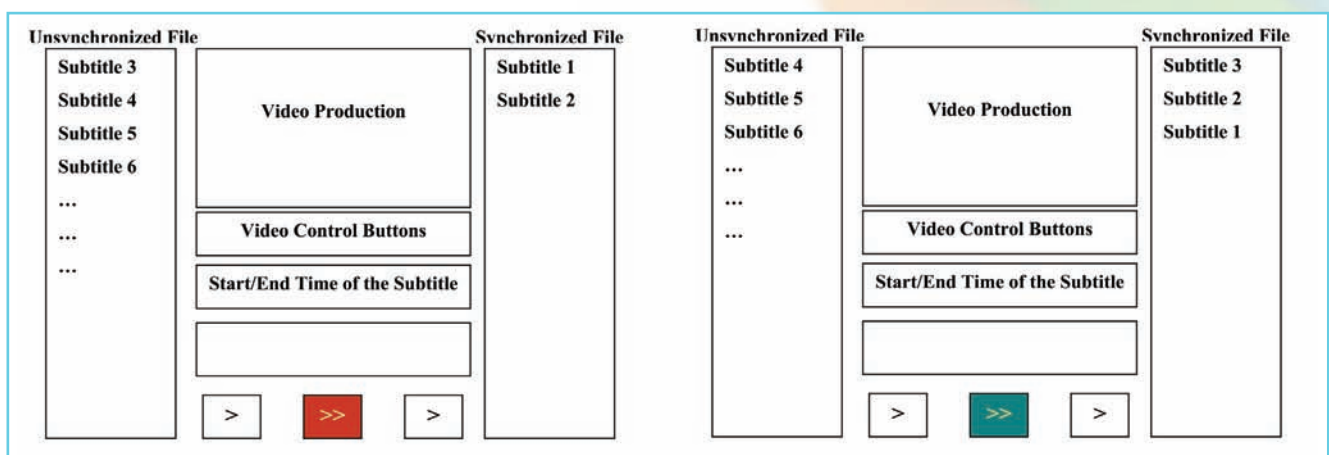


3.4 Subtitling

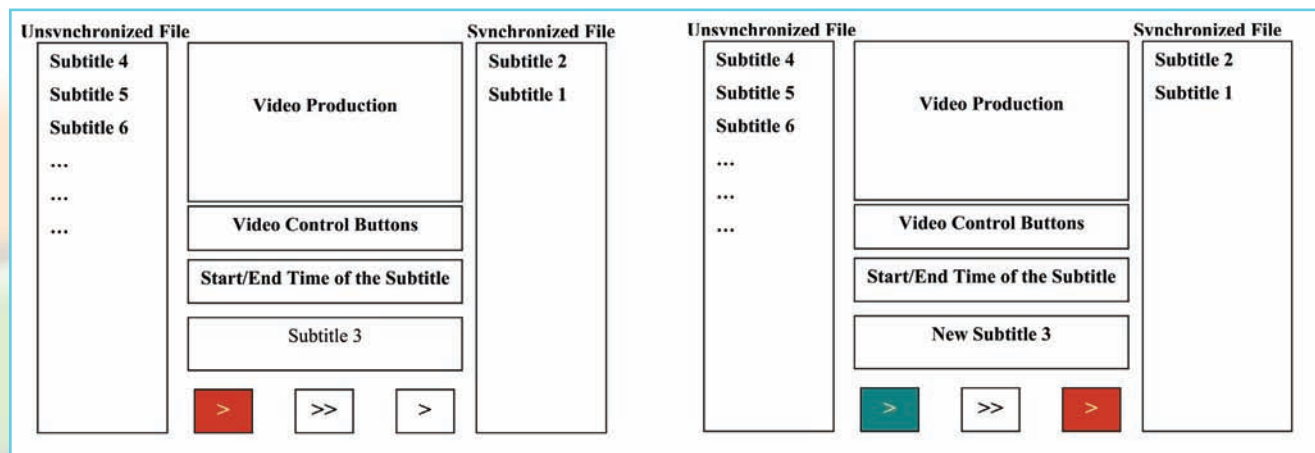
When students have completed their video, they must add subtitles in English language and synchronize them with it. These subtitles will be displayed in the subtitle area of the **WebTV User Interface** as presented above. They will be the translation of the narrations and dialogues during the video display.



Synchronize subtitle

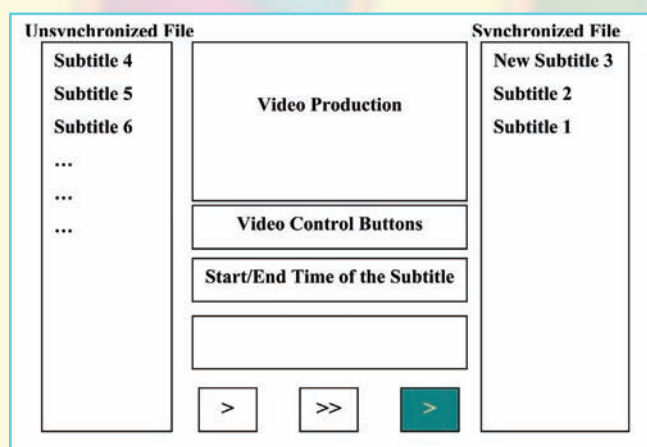


OnClick on the ">>" button the subtitle from the **Unsynchronized** list is automatically entered in the **Synchronized** list. The start time of the subtitle is when the user pressed the button and the end time is after 2 seconds. This is an option that can be set from the user of the subtitling user.



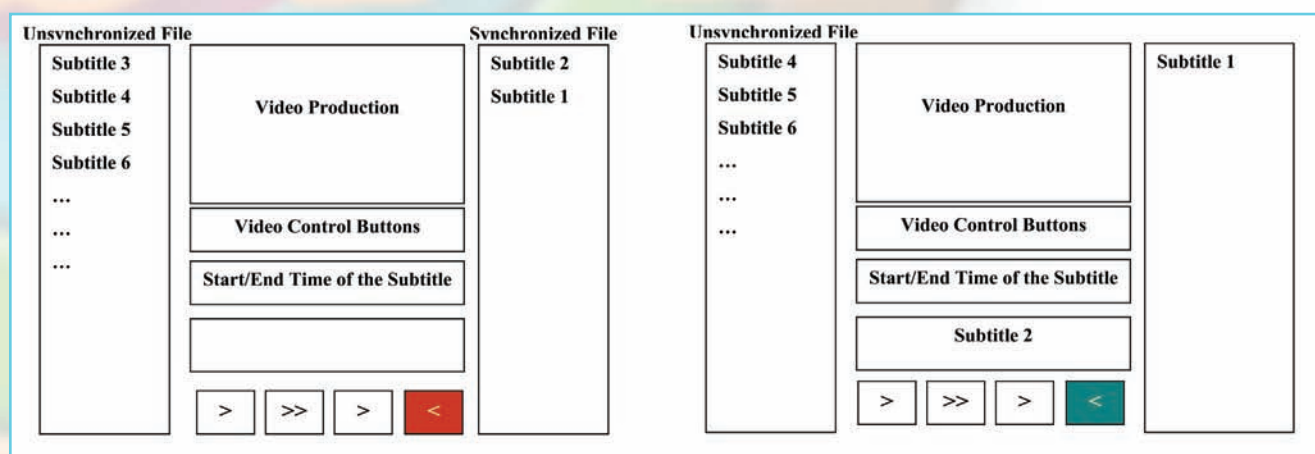
OnClick on the left ">" button the subtitle from the **Unsyncronized** list is entered in the area below the **Start/End Time** where the user has the ability to correct the subtitle. The start time of the subtitle is when the user pressed the ">" button.

OnClick on the right ">" button the changed subtitle is entered in the synchronized subtitle list. The end time of the subtitle is when the user pressed the right ">" button.



The new subtitle is entered in the **Synchronized** subtitles

Correct already Synchronized subtitle



The user has the ability of correcting a subtitle, which has already been synchronized, by clicking on the "<" button. This moves the subtitle in the area where user can make further corrections on it

The user can make changes on the subtitle and then by pressing the right ">" button to move it to the synchronized list again, as described above.



Chapter 4

How to produce a movie

4.1 Production methodology

Student's Projects Production Methodology

This chapter describes the proposed Methodology of students productions, some Design Samples and the necessary documentation about the Making procedures.

Methodology

Group Organization: First choices

- Each participant identify his wishes and skills
- Each participant define a level of leadership
- The whole group validate the organization choice

Group Organization: Classic Structure

- 1 or 2 leaders for the whole project (Director status)
- Three working groups with each a head-manager
 - Artistic (Concept, Bible, Scenarii, Director work, Graphics, Sounds)
 - Technical (Shooting, Programming, Encoding)
 - Logistic (Planning, Equipment, Resources, Uploading)

Project Roadmap:

Several steps and many supporting documents...

- First approach (Intention Note)
- Design (Bible, Macro-Structure, Scenario and Storyboard, Scenic, Interface)
- Making (Planning, Call-Sheets, Reports, Data Files)
- Post-Production (Rushes List, Edit List, Formatted Data Files)
- Uploading (On Line Formatted Data Files+Logs)

First approach: Intention Note

- Short document giving main project characteristics
 - Project Title
 - Project Type (Course, Portrait, Documentary, Fiction,...)
 - Project Size (Duration,...)
 - Target (Everybody, students, family,...)
 - Subject(s)
 - Main idea
 - Short Synopsis
 - Specific aim(s)
 - Tone (Rigorous, humorous,...)
 - Production Type (Real life video, Animation video, Flash animation/with or without interaction/with or without associated hypertext track,...)

Example: Intention Note

- Lab given specifications
 - Project Title:
 - Project Type (Course, Portrait, Documentary, Fiction,...): *Fiction.*
 - Project Size (Duration,...): *2 minutes max*
 - Target (Everybody, students, family,...):
 - Subject(s): *Pollution*
- Main idea: A pollution consequence could be population desocialization
 - Short Synopsis :
 - Specific aim(s) :
 - Tone (Rigorous, humorous,...) :
 - Production Type: *Animation video*

Design

The design of the production consists of the following parts: Bible, Macro-Structure, Scenario, Storyboard, Scenic and Interface

Bible

- Documentation
- Location(s) description(s)
- Characters descriptions
- Other acting objects descriptions

Macro-Structure

- List intermediate targets to achieve
 - A, B, C, D, E
- Sort them partially
 - A should be completed before D
 - B should be completed before E
 - A should be completed before C

Scenario

- The scenario is made of a set of small fragments (called scenes for a film) each of them describing a situation combining :
 - Messages sent to the user (texts, images, sounds,...)
 - Potential user action (if any)
 - Self-evolution (if any)

Storyboard

- The storyboard illustrate each shot by a canvas.
Very useful for animation but optional for real life video except for fiction.
- California Raisins Demo

Scenic Description

- The script describes what happens the scenic describes how to show it. Its a director work.
- Illustration : Two characters A and B have a conversation. A speaks, B listens. One scenario can describe both versions.
 - Scenic 1: You show A speaking
 - Scenic 2: You show B listening

Making

The Making procedure consists of: Breakdown, Planning, Call-Sheets, Reports, Data Files

Breakdown

- A careful analysis of the scenario allows to prepare the shooting. Its done by annotating and redlining.
- Warning : Many necessary resources are not explicitly mentioned by the script.
 - Ex 1:* If you shoot the fall from a building of an actor you will use a mannequin
 - Ex 2:* If you have a rainy weather you need a water-truck.

Planning

- The problem is to plan the shooting days with as much resources optimization as possible (Difficult when treating live events)
- The main rule is to shoot together scenes having the same main set.

Demo of a production tool

- Documents generated with CineMac software will be provided later for on line manual.
- The lists automatically generated by the software can be handled by hand for small projects.

Call-Sheets

- A call sheet is a document summering all the information about a shooting day.
- General Information
 - Communication
 - Transportation
 - Eating
- Shooting Information
 - What is to be shoot (Script resume)
 - Specific Tasks for technicians

Call-Sheets

- General Information
- Production details (Film Title, Director, Staff Coordinates)
 - Production day number
 - Date
 - Day time schedule for everyone (especially Arrival, Make-Up, Ready to Shoot)
 - Shooting Addresses
 - Location Map

Call-Sheets

- Shooting Information
 - For each scene:
 - Number
 - Main and secondary set
 - Effect
 - Characters
 - Duration
 - Abstract
 - Any other shooting directive
- Specific Tasks for technicians:
 - Team or technician name
 - Arrival Time
 - Ready to Shoot Time
 - Directives
 - Materials

Reports and Data Files

- At the end of the shooting the work is totally represented by two kind of documents:
 - Shooting Reports
- Information about all the takes (Tape identification data, good/bad status, comments, ...)
 - Data Files (Rushes for a video)
- The films or the tapes or the computer files depending on the production technology

Post-production

- All post-production work has been detailed during another session.
- First work is to prepare the rushes list
- The result of the editing is an edit-list often delivered by the software or it can be established manually.

Uploading

- All uploading work has been detailed during another session.

Students Projects

Case Study

Example: Intention Note

- Project Title : *A How-to Guide to "Yo-Gi-Ho! Game"*
- Project Type : *Course*
- Project Size : *About 30 to 40 minutes*
- Target : *Students mainly*
- Subject(s) : *Yo-Gi-Ho! game*
- Main idea : *Explaining how to play*
- Short Synopsis : *Yo-Gi-Ho is a new game where both players use small sets of cards (the decks) taken from a much larger set. Each card has various characteristics that have to be mastered. Numerous rules have to be learned for the play phase and the preparation of the deck itself is an important aspect of the game. A beginner can start quickly but he will need much more effort to learn all game strategies and start to participate to tournaments. All these aspects are illustrated in the various videos of the project.*
- Specific aim(s) : *Understand the cards and the rules of the game*
- Tone : *Rigorous*
- Production Type : *Real life video (with optional hypertext track)*

4.2 Preparing a scene and shooting

Whether you are creating an one minute short video about a family event, or a one hour documentary about a pressing special issue, just remember these basic points - tell a story with your production, make sure you are comfortable with your equipment, including the camcorder, audio and tripod, and expect things to go wrong and have a work around plan and gear just in case. Of course, since you are planning to put your video on the web, you will also have to deal with compression, uploading, bandwidth restraints and the other issues associated with streaming and web based video.

4.2.1 Shooting Movies for the Web

The process of making movies for the Internet is not altogether different from making classical films, but there are several distinctions that will call for special attention. When shooting for the Web, you should begin with the end in mind: watching Net cinema is a radically different experience than seeing a movie in a television set or cinema. The width of the screen (the monitor window of most multimedia players) is three inches, not thirty feet. The typical Web surfer huddles only 15 inches away from the image, not 150 feet. The factors that determine how your movie will appear over the Web are governed by the video-compression software used to squeeze your raw DV signal into a video file. For this reason, you need to consider several shooting methods that can dramatically improve the Web movie experience.

4.2.2 Cinematographer and his staff



The cinematographer is the source of information on all things to do with the camera. The knowledge that the cinematographer is required to know encompasses photography composition and processes, lighting, and camera movement. Cinematography is therefore very involved with each shot of a film. The following staff work under and report to the cinematographer:

- *Camera Operator*, who may have further assistants to operate and maintain the cameras.
- *Key Grip*, supervisor of the team of grips. The grips carry and arrange equipment and props, as well as set and lighting parts.
- *Gaffer*, that often-puzzling name which is really the head of electrics. The gaffer supervises organisation and positioning of lights.

4.2.3 The Director

The director is generally in charge of those phases in production which require the camera and editing; co-ordinating the look of the film and how these 'looks' are assembled together. The director's aim is to give an ideal picture of the scene, in each case placing his camera in such a position that it records most effectively the particular piece of action or detail which is dramatically significant. He becomes, as it were, a ubiquitous observer, giving the audience at each moment of the action the best possible viewpoint. The director and cinematographer very often work together on how each scene will be shot and lit.

4.2.4 Equipment

Concerning equipments, the cinematographer uses film cameras running at the agreed standard of 24 *frames per second* (fps), cinematographers are limited in the choice of shutter speeds they can use. The shutter speed therefore cannot exceed 24fps. They can, however, control exposure time by using a variable speed camera. For internet movies around 14 fps are enough.

If your camcorder supports it, turn on the start and stop beeps. Also, if your camcorder provides, make sure the time code or footage meter is displayed in the viewfinder or foldout LCD view screen. Another good technique to practice with your new camcorder is zooming. Some zoom controls are very touchy while some are smooth as silk. Almost every camcorder now comes with variable touch zoom control. The harder you push, the faster the zoom goes. Practice with it so that you know just how much touch is needed to do a slow zoom versus a crash zoom. Also play with focus. Even though auto focus works great most of the time, there are some moments when you will need to focus manually. Know how to find that focus ring in the dark; learn which way you need to turn the focus ring. What about manual overrides, transitions and special effects? If you use controls like white balance, aperture, shutter speed, etc., practice with them before using them for the first time in the field. If your camcorder supports it, check out the various auto exposure modes and see how they affect your camcorder. Sometimes modes like Sports, Sun & Ski, Landscape, etc., can be very helpful. On other camcorders they may not do much at all.

Another question is how light sensitive is your camcorder? How much light do you really need to make nice pictures? You need to know before you volunteer to shoot a wedding ceremony in a candlelit church how your camcorder is going to respond in that low lighting. Will you need to make special adjustments to the manual controls like aperture, shutter speed and gain? Do you even know where your aperture, shutter and gain controls are?

4.2.5 Special Effects or Not

If you apply a special effect to your video while you are shooting, you are stuck with it. If you decide to use an "old time movie" effect while shooting your video, you can not go back later and get rid of it. That is why it is recommended adding all your special effects later in the editing process. That way the original footage stays pristine and perfect. Experiment with effects in the editing process. By the way, many new camcorders can now add these special effects during playback so that if you really want them, you can get them without affecting your original video. The biggest problem which has been noted with camcorder special effects is that sometimes they get accidentally turned on and you end up shooting your whole video without noticing that the image is stretched out to wide angle or that the image is tinted pink. In the rush of excitement when shooting a family event, it is easy to overlook the fact, especially in a dark hall, that something just doesn't look right about the picture in the viewfinder. However, there may be times when you have to use special effects. Maybe you hate to edit or don't have time to add additional effects. I know professional wedding guys who prefer to do many of their effects in camera. They have pre-set up "wedding day" stills with a series of graphics that can be used to superimpose over the live video. They also use pre-made stills to act as chapters between the various sections of the event.

4.2.6 Be prepared as well as possible

Be ready for all that can go wrong is the best way to prepare for a video shoot. For example - do you have enough batteries in case the ceremony or event goes long? Are they fully charged? If you do run out of charged batteries, did you remember to bring the AC power supply? OK, you got the power supply but did you bring power extension cords? How about some duct tape to tape down those cords so that people don't trip over them? How about videotape? Do you have enough? Do you have a good system for labelling and keeping track of your tapes?

What about shooting outside events? Are you ready for all eventualities? What if it starts to rain or snow? What are you going to do if the sun sets?

4.2.7 Shoot Too Much - Cover Your Scene

Unless you are planning to edit your entire production in the camera, on location, feel free to overshoot. Tape is cheap. As long as you have power and tape, shoot as long as possible. Make sure you get lots of close-ups. Close-ups of faces, of presents, of the car, etc. Get shots of any documentation like signs, cards and banners. These kinds of shots, often referred to as b-roll in the professional world, often spell the difference between a boring chronological documentary of what happened at an event and a lively and exciting video production. You might want to hand off your camcorder to others and let them have a go. If you feel comfortable, bring some extra consumer camcorders, put them on full automatic, and hand them out. Let some of the other people at the event roam around and gather footage. Each video shooter has a personality. There are certain kinds of shots you will prefer to grab. By letting other personalities participate in the shooting process, you will get a much wider range of shots to select from. Of course, the negative is that you will have to watch and log these other tapes and unfortunately, much of it may simply be unusable.

4.2.8 Audio

If you want the audio to sound good you need to spend some time planning on how to capture interviews, music and other room sounds. Unfortunately, the built-in microphones on most camcorders are not very good. DV camcorders have the "potential" to capture great CD quality sound but once again, their built-in microphones border on average to poor. On many camcorders, especially those tiny little DV camcorders, the microphone is on top, perfect for catching room noise and little else. You will need to use some kind of external microphone plugged into your camcorder's audio in jack. Some camcorders, in particular, Sony, provide a mike power outlet as well. Either way, by using an external mike, you will be able to get much better quality audio. If you are working by yourself you can attach a shotgun mike to your camcorder and walk around the room, catching video and audio. Another option is to use a wireless microphone system. The receiver unit sits on your camcorder. You can then attach a wireless lavalier mike to whoever is speaking or you can hold a mike in your hand. If you can recruit a helper, it is often helpful to have someone walk around the event conducting interviews with the guests and partygoers. If you have a helper, you can have them do these interviews with a hand held mike, or by using a mike on a boom, actually move in close enough to mike the various guests. Whatever option you choose, make sure you hook up your mike system before you go to the event and try it out. Play with it a while and make sure the connections are secure. Of course, if these are powered mikes, brings lots of extra batteries.

4.2.9 Have a Plan

Every video you shoot tells a story. It has a beginning, middle and end. Whether you are simply documenting your kid's birthday party, a little league game or a wedding, every event has a structure. Obviously the easiest structure to follow is chronological. First this happened, then this, then this. You don't have to shoot in this order but your finished production should have a pattern and structure. For example, let us take a typical children's birthday party. You might want to start with interviewing your kid when he or she wakes up the morning of the party. You may then want to cut to a close-up of the invitation. This could serve as a great title section for the movie. Your next shots might be preparing for the party and getting everything ready. Your next shots could be a series of the guests arriving, then a montage of various party games cut to some cool rock and roll, and finally ending with

everyone singing happy birthday, and opening up the presents. Document the guests leaving, the big mess in the house, and maybe then end with a still shot of your 5 year old napping after the big event. You get the idea. Create a story. Write down the shots you will need. Create a checklist to make sure you get all the shots you need. Of course, be open to "found" shots. Things just happen and you should be open to catching the unexpected. Depending on your computer and editing gear, you might want to edit all this in the camcorder, carefully shooting one scene after another. You can also connect two DV camcorders together via their 1394/FireWire ports and assemble edit between them, building your final presentation. And of course, if you have nonlinear editing software on your computer, you can edit your final production together and add sophisticated titles, effects and transitions.

4.2.10 Use of lights and lighting a scene

Photography is painting with light: you start with a subject, and then add or subtract light to achieve the look you want. The goal of lighting is not to fill in all the shadows so that everything is lit evenly. The lights are your instruments for creating an effect or mood. Today's camcorders enable you to create an infinite variety of lighting effects. If all you do is use just the available light, you will probably get useable pictures. However, if you take the time to control the light in a scene, you can produce great pictures that work well with your story.

In professional moviemaking, producers can't afford to worry about the time of day or the weather. They defy nature by bringing lighting gear to create their own time and weather. If it's overcast, they can add sunlight. You probably won't have that kind of flexibility and budget. In most cases, you won't be building a set and lighting it from scratch, but using real locations and adjusting the available light.



Here are things to think about as you work to light the shot:

- **Look at the shot.** With the camera set up and actors or stand-ins in position, study the lighting and notice how it works with the actors and the background. Does it accentuate the primary subjects? In the composition of the shot, is anything highlighted so that it competes with the subject for the viewer's attention? Does the lighting make sense with the story? Will the lighting in the shot match the lighting in other shots when they are edited together? Suppose that in the office you are using, there is only one artificial light, which sits on a desk behind the camera, plus strong, direct sunlight filtering through blinds on the other side of the room.
- **Make decisions.** Does the existing light work? In this example, you'd probably decide to eliminate the sunlight. It is so strong that the room light is too low for the given contrast ratio of the camera. In other words, everything that is not lit by sunlight is almost black. The sunlight also competes with the story. You want the scene to feel foreboding, not sunny. There are two other reasons why the sunlight doesn't work. First, it is not motivated. If your scene includes heavily filtered sunlight, the viewer is going to want to know why. If it doesn't relate to the story, then you've added an element of confusion. In addition the sun will move. If it takes more than a few minutes to complete the shoot, the shots won't match when it comes time to edit the scene together. With the sun gone, the room will be fairly dark. You can take advantage of additional lighting in the room, or use some of the lights you brought.
- **Set up lighting.** So far you've made two lighting changes: you reduced the sunlight by closing the blinds, and added additional overhead room light. The room light adds a low, warm, diffused light from above that covers the whole scene. You can turn the exposure up on the camera to compensate. Even though the actors' faces are now lit, they seem undefined, and blend too much with the wood walls in the background. Definition is created by adding and controlling shadows. You can add lighting to the actors' faces by bouncing a photoflood

off a white wall that is out of frame to the right of the camera. This adds a soft, diffused light to the sides of their faces and provides some definition. To add some colour and warmth to the shot, you could also move the floor lamp into the background and turn it on.

- **Last check.** Now you ask the actors to walk through the shot one last time. As they move, you watch every move carefully and look for areas where the lighting can be improved further. You notice that one actor passes through a shadow as he enters the room, so you add a light in the hallway outside.
- **Everything looks good.** The adjusted lighting now adds just the right amount of contrast and definition to objects in the shot—it complements the composition. It also matches the other shots in the scene. Most importantly, it helps set the mood for the scene. And by doing this, it fits with the story you are telling. If you have little or no control over your subjects, you must block and set up shots as you go. When you study a location, think about how you are going to get the shots. If you can, adjust the lighting before you start. If not, and the location is fairly dark, you can try using a very diffused camera light or turning the gain up on the camcorder. In situations where you have little or no control over lighting and the subject, you have to be very creative. The pictures may not be pretty, but if they fit with the story you are telling, the shots will work.

4.2.11 Shooting

You've spent the time and energy to plan, block, and compose the shot. You've set the lights, and prepared the sound. Now it's finally time to start shooting. As the director, it is time for you to take charge. Before you press the red button on the camcorder, you need to let everyone know who is in control.

If you are shooting dialog and have control of the location, you should first make sure that everything is as quiet as possible: all talking and noises stop. You might need to speak up to get everyone's attention. Then, inform everyone that you are about to roll and that everyone should go to their places; you can say "stand by" or "first positions." When everyone is quiet and waiting, start the camcorder and inform the group that the camera is "rolling," or "rolling and recording." When you are ready, cue the actors to begin the shot by announcing "action." The type of shot will dictate how much direction you need to give before you start rolling. If you are shooting real life and want the shot to seem unplanned, you may not want to give any warning at all. Do whatever it takes to get the shot. It may require setting up 50 feet away from the subject and giving no direction; it may mean setting up one foot away and jabbing the subject with a stick. In either case, a director's job is to get the shot, and you go about that anyway you see fit.

4.2.12 Review Your Work

The basic strategy for getting a shot is to shoot the scene all the way through and keep doing takes until you are satisfied with everything. Even if it seems repetitive and painfully boring to shoot the entire scene from every setup multiple times, you will be rewarded in the editing room with adequate coverage. If everything works right on the first shot, you can move on to the next one—or maybe get another take just for safety.

Therefore, to make sure a take is good, especially if it was a complicated setup, you should play it back in the camera. As you play it back, carefully examine the performance, framing, lighting, and sound. It's possible a moment you thought was brilliant was actually out of focus, or the tape jammed and nothing was recorded. If you check your work often, you might be able to catch the mistake and re-shoot the material immediately.

During production of a big-budget movie, the producers, the director, and the director of photography view dailies to make sure the shoot is on track. Dailies are a compilation of the good takes from the day's shoot. If you have time in the evening after your shoot, play back the material you took during the day. If you have a break between shooting days, do a rough edit of the pieces you shot. It is far easier to do a pick-up while you are set up for production than to have to set everything up again. A pick-up is a shot or part of a shot that you get later to repair or improve a previous bad shot.

4.3 Capture and Editing

Editors select sounds and images from all the film that has been shot and arrange them to make the movie. They also plan how one shot will best transition to the next. There are dozens of possible transitions the editor can choose, each of which will create a different feeling. Editing often begins as soon as film has been shot. Early scenes are assembled for the producer and director to view. Occasionally, the actors will also view these early scenes. Many directors choose not to show actors these edited scenes for fear that they will affect the actors' performance.

The first cut of a film, called a "rough cut", takes up to three months to complete. The final cut may take another month to finish. Sometimes the editor works alone, sometimes with the director. The sound designer and music composer join them for the final cut, adding sound effects and the musical score. When the editing is complete and the director and producer have approved the final version of the film, this final cut is sent to a negative matcher. The negative matcher makes a negative of the film that exactly matches the final cut, and the negative is then sent to a film lab where prints are created. These prints eventually end up in theatres.

In the past, editors worked with copies of negatives called "work prints" to plan a film's scenes and transitions. When an editor was satisfied with the final film, he or she would create an edit decision list, a list of each shot in the film and its length. The list would correspond to numbers, called "edge numbers," printed on the edge of the work prints. These numbers helped a negative matcher accurately copy the work print and cut the negatives.

Today with the use of digital editing systems, the process of editing is more efficient, but for the most part, the principle is the same. The work prints, complete with edge numbers, are stored in the computer. The editor arranges the work print, and then creates an edit decision list that will be passed on to the negative matcher

4.3.1 Hardware Issues

Working with video requires large amounts of hard disk, the MHz. speed of your processor as well the megabytes of RAM on board are important factors as well as the megabytes on your video card. All these factors suggest that unless you have purchased a computer in the past year, you may be short in the resources that matter when considering video capture and editing. Some of these limitations can be addressed with upgrades and the one that is most critical is the video card. A newer video card that includes video input or a TV Tuner card will have the capability to import and capture analogue video. Those that own a digital camcorder will need to have an IEEE 1394 card installed in their computer to transfer digital movie files for editing onto their PC. You must also know that video requires much disk space. An uncompressed AVI file in 320 x 240 YUV9 format by Intel with 22 kHz, 16-bit audio consumes 151 Megabytes/minute or to put it another way 6.63 minutes consumes 1 Gigabyte. Similarly, a MPEG-1 file in 320 x 240 format with 44 kHz, 16-bit, stereo consumes 25 Megabytes/minute or to put it another way about 40 minutes consumes 1 Gigabyte. Another factor to consider includes Frame Rate which determines or sets the number of frames per second (fps) for your final video. Higher frame rates, up to 30 fps, provide smoother motion, but also result in larger video files. Lower frame rates, such as 8 fps, use less data but create jerky motion. To provide a smooth sense of motion, .AVI files are often set to 15 fps.

Minimum system requirements recommended for DV and MPEG 2 capture and editing:

- *Operating system.* Windows 98 SE and later
- *Processor.* At least Pentium II 350 MHz
- *Memory.* 128 MB of RAM



- *Hard disk.* Digital Video (DV) is space hungry - taking up roughly 3.5MB for each second of film! That's 210Megs a minute - or around 12 Gigabytes an hour. So, a tiddly little 6 GB hard drive isn't going to cut the mustard - if you want to edit an hour's worth of video together, you're going to need at least 12 GB for the raw capture footage, another 12GB for the edit footage and perhaps another 12GB for temporary space - so it's no exaggeration to say that a 40GB drive is likely to be where you want to be if you really fancy dressing up your masterpieces. Thankfully, a 40GB hard drive is very cheap these days - but, be aware that it must be capable in your system of maintaining a data transfer rate of 5MB per second. UDMA 66 is a must, and UDMA 100/133 is even better, as are 7200RPM drives or faster. If you want to step up a notch, and be sure that the hard disk is going to be both big enough and fast enough, many vendors have a FireWire connected 80GB unit for sale. So it is recommended to get a three port IEEE 1394 card.
- *Video cards.* SVGA video card with at least 32 MB RAM. Also required for capture is a TV tuner or video analog capture card or IEEE 1394 DV camera capture card. However, given that the price of a decent Digital Video Camera is dropping almost daily, and they nearly all have IEEE 1394 output (FireWire or i-Link), it is better to dispose an IEEE 1394 interface card. There is a standard for these - OHCI is its moniker - and the better ones adhere to it. Whichever card you choose, though, go for one that has more than one socket available to you - IEEE 1394 is a much more capable standard than USB, and more and more peripherals featuring it are coming out every month. That's because IEEE 1394 is not dependent on the host processor - so, unlike USB, it won't stall if your PC is doing something heavy at the time you need to use it.

4.3.2 How to get into your PC digital video, by an example.

Here's how you'd go about producing a short, three-clip movie, taking Microsoft's Windows Movie Maker as an example.

Step 1. Attach your DV Camera to your FireWire card and switch it on. You can check that all is OK by looking in "My Computer", where the DV Camera will be shown alongside. Open up Movie Maker.

Step 2. Click on <File> <Record> and a dialogue box will open up - here you have three choices. The most useful is the bottom one - "use default recording device" - which is your DV Cam. The top option allows you to simply record to hard disk anything and everything that's on the tape - and it even rewinds it to the beginning for you.

Step 3. Choose "record from current position". You'll note that there is a full control bar that allows you to control your DV Cam from the PC. You simply use the controls to position the tape to a point just before you want to start recording, and then click the <record> button. Movie Maker will record from there until you press <stop> (the same button) - it doesn't notice when the tape has reached the end. There's no need to worry about splitting the recording into separate clips - Movie Maker can sense when the scene changes, and will automatically split the recording into "clips" for you.

Step 4. Now that the clips are in your "library", it's time to arrange them on the storyboard in the order you want them to appear in the finished movie. Of course, they don't have to be in chronological order - and it's as well to audition each one first by dragging it from the library pane into the viewing pane. While the clip is being viewed, you can set the start and end points, as well - useful for getting rid of any strange looking moments. If the need really arises, you can also split the clip into smaller clips

Step 5. With the clips inserted into the storyboard, you should now switch to Timeline mode and drag the start of clip 2 just slightly over the end of clip 1 - that will form a basic Transition, where clip 1 fades into clip 2 - what's known as a dissolve in videographic terminology. The length of time the dissolve takes is governed by how far the

two clips overlap - too short and your audience will become confused, too long and they'll be even more confused. Generally, it's best to aim for a no more than three seconds for a dissolve.

Step 6. Once you have set up all your transitions - and there's nothing wrong with a plain cut (where one scene stops and another starts abruptly - think Top of the Pops as a TV program than uses lots and lots of very fast cuts to see what I mean) - you're ready to "produce" your movie. That means compiling it - making all the clips, effects and other clever bits blend into one smooth, seamless finished article. Movie Maker refers to this as "saving" the movie, and it's at this point you need to decide on exactly what quality level you're aiming for. Since Movie Maker is aimed at online delivery mechanisms, and works in the Windows Media format, you can't output to DV tape - you're effectively looking at a Web page, or CD delivery. So, you must now choose what data rate you want the movie to be saved at. As a rough guide, choose the lowest data rate that your viewers are likely to be using - it it's a Web based movie, that's going to be a connection speed of 28.8 kbps in the average. Then, click "save" and go and put the kettle on. It can take some time to compile the movie - an hour's worth of video will take at least 75 minutes, depending on how many clips you have, how many transitions and so on. And that's about it.

4.3.3 Some basic principles for editing and assembling

The film editor must know how to tell a story, be politically savvy when working with directors and studio executives, and have a calm and confident demeanour. Scenes may have been photographed poorly and performances might have been less than inspired, but a skilled and creative editor can assemble the film so that the audience will never see these imperfections. In order to do so it takes into account the following basic principles.

4.3.3.1 Components of editing

Cutting is naturally the easiest and most-used manner of getting from one shot to another. There is no visual effect between one shot and the next. Thus, in dominant cinema, it cannot really be, unlike those below, used where change (location or time, for example) occurs. It is used most often where the location and scene is the same, but it requires a different camera shot. Needless to say, this device can be used in a number of contexts. Although the above is the most well-known and well-identified, it can be used in, for example, juxtaposition to achieve very different effects. Consider the use of montage, which uses the cut to achieve noticeable differences between shots.

Also the following operations are possible:

- *Insert.* Where a shot not in the diegetic world (that of the film) is inserted. However, due to the position at which it is inserted, it is often used to draw a connection between the inserted shot and the previous shot, in metaphor or cliché. For instance, a scene in a factory has an inserted shot of an ant colony. You can imagine the resulting connection for yourself.
The insert is used much in comedy; insert shots can allow us to see inside the mind of the protagonist - a whole new world that is funny by the association of the insert shot to the previous shot. Inserting shots do not have to be from the non-diegetic world. Quick flashbacks and recollections involve inserts, such as a painful memory that won't go away. The power of the insert shot can be very intense. Its associations can be stark and powerful. Consider the power when the insert shot is of a riot, war, or death. An awful lot can be said from these without actually speaking any dialogue. Inserts also play a role in discontinuity editing.
- *Fade Out.* The image fades into a single colour. This is often associated with the end of a particular scene in the narrative, where the image traditionally fades to black.
- *Fade In.* The opposite of a fade out. The image fades out of a single colour, and is often associated with the

beginning of a scene.

- *Dissolve*. The mixing of one image into the next. This mixing can be of audio as well as video. Applications include mixing into fantasy sequences and dreams, and large leaps in time.
- *Wipe*. A physical change between two images. For instance, a line going from one side of the screen to the other pushes out the old image and introduces the new. Again, this is often used as a bridge between noticeable gaps of image or narrative. Instances include where a new location or moment in time is required to further the story. A familiar generic application of the wipe is comedy.

4.3.3.2 Continuity editing

Continuity editing is more than the cut between two shots. It is the method of providing a seamless transition from one to the other. The purpose and the effects of the cut are exclusively dramatic or psychological. As it is claimed by David Bordwell et al,

"If the scene were played on a stage and seen from a seat in the orchestra, it would have the same meaning... the changes of point of view provided by the camera would add nothing."

These principles effectively say that continuity editing cannot really 'disturb' or move around the objects in the mise-en-scene, and that it operates as a provider for shots and nothing more. The narrative is not continuity editing, and continuity editing is not narrative.

As well as the cut itself, this is achieved by the following techniques:

- *Similar framing*. In the mise-en-scene of both shots, the objects in the frames are placed in roughly the same area of the frame. If two people are in the centre of the frame in shot A, shot B has them broadly in the same area, although the camera position may be entirely different. This helps graphic relations and eliminates possibilities of viewers' eyes having to jump from one position of the screen to the other to keep track of the action.



Although the camera position has been vertically reversed, the action continues almos unnoticed, because persons A and B have kept the same position. Imagine two people having an argument in shots like this

- *Similar setting*. Graphic needs such as lighting and colour are kept similar (if not identical). If shot B is in the same scene as shot A, the idea of space and spatial relations are kept similar also.
- *Similar rhythm*. Long shots tend to take up more screen time than short shots. Editing is a mirror of technology, in that it was not really possible to make cuts that were transparent until sophisticated machines were available. In some respects this was a blessing in disguise, as it allowed directors to further play around with the boundaries and relations of form and content.
- *Shot/reverse shot*. An easy term: the reverse of a shot.

A typical example is a conversation where two people are facing each other. Cameras are placed on each person in close up. The first shot is person A asking a question. The second shot is person B answering it - the *reverse shot*.

Shot/reverse shot is mostly used in conjunction with the 180° rule. Once a shot and its reverse shot have occurred, it can be possible to draw a line between them - the line of the 180° rule.

- *Eyeline match*. Linking in again with the notions described above, eyeline match is simply where there are two shots. If, in the first shot, something is looking at something else (the subject), then the second shot tells us what is being looked at (the object). This 'something' is usually a character, but it could be an object such as a periscope, a gun sight, or, of course, a camera!
- *Match-on action*. This is where movement occurs in the frame. If a character moves around, or out of the

frame, the second shot must continue this movement - the editing matches on the movement between the shots.

4.3.3.3 Establishment of shots

Consider filming the environment around you. How would you go about it? How could you portray the whole area in a small number of shots, whilst including characters and objects? An establishing shot does this. It defines the overall space, and (often but not always) at least one principle character. Although the establishing shot does not give in-depth proportions and details to what is in the frame, it does give indications of what is there, and the spatial relations between objects. The establishing shot does not always have to be the first - it is purely the shot that defines the general area where the action, from there onwards, will take place. An establishing shot can be applied to each scene in the film, where we are required to have knowledge of the visual area and contents.

4.3.3.4 Relations of the shots

Continuity editing requires its relations to be fairly tightly defined, as listed below. In order to move away from the standards of continuity editing, these relations can be played with and used to create many other possibilities. It may be the case now that we are so used to the formal standards of continuity editing, that the rules have to be broken in mainstream cinema for the audience to remain active viewers.

Decoupage is defined as being the following [Noel Burch]:

*"The spatiotemporal characteristics of the match, the relationships between screen space and off-screen space, and plastic interactions between shots...
the very nature of which suggests the possible forms that their dialectical organization might take."*

- **Graphic relations.** Are to do with editing and *mise-en-scene*. The whole 'look' of objects in the frame tells us something about them, due to cues such as colour and size. If there is, due to editing, more than one *frame*, we can compare and contrast different objects in different frames. For instance, a 'playoff' can be achieved if two characters are in separate frames, wearing very spartan, grey or very lavish, colourful clothes. We can then be informed about such influences as lifestyle, income, class, level of self-confidence, and so on. Of course, this does not merely apply to human objects. The background can indicate as much graphic relation as the foreground and its inhabitants.
- **Spatial relations.** The amount of space occupied in a frame by certain objects in certain frames. One cluttered frame, full of people, which then cuts to a sparse frame containing one person can indicate isolation or claustrophobia, depending on the point of view and which frame is 'favoured'. Consider also the angle of the camera. A 'David and Goliath' scenario indicates that not only does Goliath take up most of the space in his frame, but that the camera is at a very sharp vertical angle to make him look even larger. The opposite will be true of David. Spatial relations further consist of the following two factors:
 - a. The 180° rule, allowing for ease of viewer perception according to rules of spatial geometry.
 - b. Establishing shot, allowing for definition of space.
- **Temporal relations.** The relations of objects and narrative in time. Editing is the most important method of controlling the allocation of time in film. As graphic relations are also to do with *mise-en-scene*, temporal relations share themselves with another part of film - in this case, narrative. Entities in the film are allocated time according to the following mechanisms:

- a. **Order** *The order in which shots are picked.* Mainstream narratives follow a certain 1-2-3-4 trend to make them straightforward and easy to follow. This does not have to be the case. Other orders can induce jump cuts, feelings of mystery (where the viewer has to 'work' to achieve comprehension), alienation, and so on. Consider the following four shots:

- 1 Person A opens front door of house
- 2 Walks inside
- 3 Walks through corridor into kitchen
- 4 Switches kettle on.

If shot 4 is first, followed by shot 1, you may think that someone is already inside the house, switching on the kettle. Thus, the *order* should be kept as structurally defined as possible - one shot out of place can bring down the entire piece.

- b. **Frequency.** *The number of times that a shot occurs.* This is an excellent mechanism for building up tension. If a shot recurs over and over again, there is a feeling of increasing tension, followed by (perhaps) surprise when a new shot occurs. Frequency is also to do with temporal relations, in that a shot is allocated a certain number of 'runs' until it is succeeded.
- c. **Duration.** Mainstream cinema requires that more 'active' sequences have shorter shots and (thus) a greater turnover of edits. Another requirement is that once the mise-en-scene is empty or has changed, that particular shot is over. Duration does not necessarily mean that that particular scene has passed - a take could perhaps be repeated again, shot from a different angle. This could be particularly disturbing!
- d. **Rhythmic.** Mainstream cinema usually calls for more active scenes to have a greater number of shots. This is rhythmic. Variations in rhythm make us expect a change in narrative action and/or setting. However, rhythm does not just depend on editing - it also calls on the narrative, context, environment and mise-en-scene to work out a suitable rhythm. The mise-en-scene can provide rhythm for itself - consider a scene of active figure movement in an inner city compared to an open field. Continuity editing also allocates differing slices of time according to the physical depth of field. If the shot is a close-up, much less time is given to it than a long shot. In conclusion, the length of time of the shot depends on the narrative action and the shot distance.

4.3.3.5 Montage

Montage (at least in its European sense) is characterized by a particular film editing method: shots, rather than just 'edited' together, are *constructed*. James Monaco [James Monaco] has defined montage as having the following usages:

- "A dialectical process that creates a third meaning out of the original two meanings of the adjacent shots (editing thus has only two fundamental methods: cut and overlap)."
- "A process in which a number of short shots are woven together in order to communicate a great deal of information in a short period of time."

Montage, in this sense, operates on a more practical level in editing. It can be used, for example, to manipulate time. The jump cut, thus, is an element that can be used in montage. Shots can be repeated, manipulated, or have time expanded or contracted in them. Cross-cutting gives ability to have stories running concurrently, interweaving between each one - in real time or otherwise. You may want to think about formal meaning too.

Overall, what is produced from montage is a construction of a specific notion that the director has in mind. A particular sequence uses montage for an identifiable purpose - as with the examples just given. This notion is usually thematic, but it can produce far deeper connotations, such as the following.

4.3.3.6 Clips

If you watch much TV, you'll know that the viewpoint on any given event changes fairly often, and, in some cases, very often. Each "clip" can be very short (Top of the Pops and other "music" shows are a prime example of very short clips), and for a very good reason. A "static" shot - one in which the viewpoint doesn't change for ages and ages - can be exceedingly boring. So, when you're shooting, try to move about, move around the action and get various different views on it - you can split a continuous clip into shorter ones, and switch between them as you go, to make your movie much more interesting. If you're stuck for space, though, use the zoom facility on your DV Cam to vary the viewpoint - zoom in close on a child concentrating on a jigsaw to show only the face, maybe the tongue sticking out, and the head being scratched, then zoom out to show what he's actually doing, then zoom in on the hands as a piece is placed into position, or is offered up to see if it fits. You can then separate the three different views and use them in any order to show the action.

4.3.3.7 The 180° rule

The 180° rule is essentially this: In any scene, an imaginary line can be drawn in the centre of the filming area, which divides it into two equal parts.

You cannot change to another camera if you overstep this imaginary line. You may not have thought this to be the case before, so take a look at any film you wish in order to research the 180° rule. This rule goes hand-in-hand with the rule of perception in editing: The minimum change of camera angle in two different shots to avoid confusion is 30°.

This rule guaranties the following two principles:

- Continuity.* As the topic right now is continuity, a range and rhythm of shots is defined to be continuous (unless it isn't!) In order for us to maintain a sense of space and perspective, the camera cannot be allowed to constantly throw around our ideas of such spatial use.
- Consistency.* Continuing from the above point, the change of camera must be seamless, in order to stop our ideas of the visual space from being disrupted.

4.3.3.8 Effects

Most of the video editing packages offer some very strange effects . For example, you can show a negative image of your video, colorize it to be all in tones of one colour, swirl it, spherise it, make mosaics - all sorts of stuff. Like fonts in word processing, all these effects are very nice and exciting, but they should be used in moderation, nay, even sparingly. Do bear in mind that your viewers will not have had the benefit of being there when the video was shot - they don't necessarily know what's behind the swirling mass of red mist your effects have produced, so, if you must use them, be very sparing with them! The same goes for transitions between scenes. If you have 80 clips in your hour-long video, and the package you have chosen to edit it in has 50 transition types, it doesn't mean that you have to use all 50 of them. Sometimes a straight cut will do. A few dissolves here and there, and maybe one or two wipes (old fashioned as they are) and blinds will just mix things up enough to keep the interest - but beware of long transitions between short clips - they're guaranteed to confuse. Use a cut instead.



Chapter 5

Presentation of the Schools' movies - Intention Notes

5.1 BG Schwechat

Project title:	Water power Stations in Austria
Project type:	Video and (interactive) text with photos
Project size:	4 - 8 Minutes, text not larger than 3 pags
Targets:	Students
Subjects:	Introduce the technology of water power stations
Main idea and aims:	Explain, how the transform of mechanical energy to electrical energy works, explain technological details, introduce the importance of water powered electricity as it is a main energy - source in Austria, understand the advantage and also the risks of the use of water for producing electricity.
Tone:	scientific
Production Type:	Real life video, html - text

5.2 Ellinogermaniki Agogi

Project Title:	Oceans and pollution.
Project Type:	Documentary.
Project Size:	5-7 minutes max.
Target:	Students mainly.
Subject:	Pollution. Oil spill in the sea.
Main idea:	Students will become sensitive about a specific environmental problem (oil spill) and they will try to solve it.
Short Synopsis:	Spain suffered its worst ever environmental disaster in November when the tanker Prestige sank, spilling much of its 77,000 tones of toxic fuel oil along the country's north west coast and unleashing a wave of public anger. Crude oil is a complex mixture of chemicals, many of which are harmful to wildlife in various ways. Crude oil does not mix readily with water, and tends to float at the surface. Slicks can be transported over large distances by wind forces. Volunteers and officials are still battling to clean the coast of Galicia. The same scenario can be easily repeated in many countries surrounded by sea, like Greece. Students of EA are trying to inform the other students about this situation and they are presenting a simple experiment that might give, in some cases, a solution to the problem mentioned above. This experiment will help us understand why the cleaning up of an oil spill is such a difficult task with the use of tools that are environmentally friendly and easy to find.
Specific aims:	1. Students will realize that an oil spill in the sea causes many environmental problems which extend from the flora to the fauna and are present for many years and perhaps generations of life. 2. Students will experience the difficulty in cleaning up an oil spill. 3. Students will understand that environmental problems should promote programs of common interest among neighboring countries to decrease pollution.
Tone:	Rigorous.
Production Type:	Real life video.
Production date:	writing the scenario by 1/4/03 and video creation by 10/4/03

5.3 Freier Vom Stein

Project Title:	A typical school career in Germany.
Project Type:	Documentary.
Project Size:	30 - 40 Minutes
Target:	Everybody.
Subject:	Interviews with students, Locations, Growing up, Education system in Germany
Main idea:	"A typical school career in the FVS School".

Short Synopsis:

a) Introduction. The school will be shown from the outside perspective together with the nearby infrastructure. Possible ways to school, changes of the situation in elementary school will be touched and the goal setting, the achieving of ones school diploma as an admission requirement for the enrolment in an college or a qualified job training will be described.

b) The portrayal of grade 5 out of the perspective of the now 16 years old and interviews with students from the fifth grade show the student's ideas, hopes, expectations as well as fears and problems should be clarified. The difference between expectation and reality is rounded of the comparison with older students. At the appropriate passage in the sequence critical remarks on the discrepancy between expectation and reality will be heard.

c) After the first school year the students are familiar with the school system, the facilities and the teachers. Typical teaching situations or little events during the break can be sketch school reality. Positive and negative highlights show the difference between expectation and reality.

d) It is a natural phenomenon that the relevance of school decreases for the individual with the beginning of puberty. Physical and mental changes, different attitude and altered organisation of ones leisure time may be shown. School, its role and its assistance with puberty problems will be included.

e) In the 8th grade school isn't only a place of learning, but also an important facility for the students to communicate. Instructional problems caused by interaction between young people in puberty and older teachers can be picked out here and in the following years. Frankfurt and environment changes its meanings for young persons, teens hang-outs can be included and honoured. f) The executives of this project are highly aware of their grade level (10th) as well as 11th grade. Changes in school, personal experiences and exploration of their environment Frankfurt are the centre of attention.

g) Short resume of school experiences given by the involved persons from their perspective now and a critical summary.

h) The projection to the future begins with grade 11. Hopes and expectations will be shown here in comparison with the students comments of this age group. The upper school system and herewith the German course system are being presented.

i) Central is here the course system with its strengths and weaknesses and the conditions partially changed personal points of view and schools external activities.

j) In the final year the students are very conscious of the goal they strive for. It is hope and burden at the same time. Their 13th year at school end up with their baccalaureate and their desired certificate will be hopefully theirs.

Specific aims:	1. Not the "what" but the "why" will be pushed strongly into the students consciousness.
	2. An extensive discussion of the school system, the herewith included problems and the strengths and weaknesses of the chosen school can be achieved.

Tone: Life tone.

Production Type: Real life video.

Production date: 8/4/2003

5.4 Juhani Vuorinen School

Project Title:	Sisu, Sauna and Sibelius
Project Type:	Documentary.
Project Size:	6x6 minutes
Target:	Everybody + students 13-18
Subject:	Sisu (The Finnish concept not to give up). Sauna (Finnish innovations). Sibelius (We hope to present glimpses of Finnish culture and art)
Main idea:	Finnishness/ is there any Finnish national character?
Short Synopsis:	The first of these main ideas (SISU) which means the special Finnish spirit of not giving up we intend to present sportsmen, some activities which show the Sisu in its true meaning. The second idea called SAUNA reveals Finnish innovation through objects like house-building, technical appliances etc. The third idea SIBELIUS got its name from the Finnish composer Jean Sibelius. We are going to present that little something that makes Finnish culture to what it is - Finnish
Specific aims :	1. To tell about the peculiar characteristic of the Finns which other nations may find odd. 2. To tell about Finnish phenomena 3. To tell about the Finnish culture by examples from the fine arts and handicrafts
Tone:	Matter-of-fact, narrative/reportative.
Production Type:	Real life video.
Production date:	30.03.2003

5.5 Lycee Henri Poincare

Project Title:	Petites histoires de pommes.
Project Type:	Fiction.
Project Size:	3 microclips chacun de duree maximale 2 mn
Target:	Everybody.
Subject:	<i>Clip 1:</i> "Phrases videos": la pomme a travers un certain nombre d' expressions francaises. <i>Clip 2:</i> Les peripeties d'une pomme tombee a terre. <i>Clip 3:</i> La legende de Guillaume Tell revisitee...en dessin d'animation
Main idea:	Un hero inhabituel au cinema : une pomme...
Short Synopsis:	Le synopsis de chacun des microfilms est en cours d'ecriture... cela sera fait le 28 mars
Specific aims:	1. Travailler sur la langue francaise et montrer que des mots tout simples peuvent etre integres dans des expressions tres imagees qu'il est parfois bien difficiles de traduire sauf en images et en sons ... 2. Travailler la notion de point de vue avec les eleves. 3. Travailler sur une legende qui fait partie de notre patrimoine europeen (Guillaume Tell)
Tone:	Humorous
Production Type:	Real life video, animation video with interaction, with associated hypertext track
Production date:	25/3/2003

5.6 VEJLE HANDELSSKOLE

Project Title:	Web TV
Project Type:	Documentary
Project Size:	6 teams of 6 - 10 minutes
Target:	everybody, students.
Subject:	Country Culture, School Culture, Cole powered energy, Wind powered energy, Presentation of 2 companies from the area
Main idea:	What to show you what Denmark is like
Short Synopsis:	
Specific aims:	1. Politic, economic 2. How it is to be a student on our school 3. Mission, goal, customer etc
Tone:	
Production Type:	Real life video
Production date:	26.04.03

Chapter 6

Evaluation and monitoring of the project

6.1. General objectives of the evaluation

According to the general objectives of the WebTV for schools project, the pedagogical framework was designed to support activities and processes that are critical for facilitating intentional and thoughtful learning. It also appears to be important to develop scenarios of collaborative movie building and define activities critical from this perspective. It will be essential to work for achieving a shared understanding of the pedagogical value of Web-TV.

Guided through these objectives of the project the evaluation will focus mainly on the following aspects:

Inquiry learning - Critical thinking: Working with the different aspects of the WebTV productions, teachers should guide the students to work for solving complex and authentic problems. It is very important to encourage students to engage in inquiry learning by selecting sufficiently multi-faceted topics that provide ample opportunities for engaging in deepening inquiry.

Motivational and Self-regulated learning: It is important for teachers to facilitate the active participation of the students to the multi-faceted topics used of the WebTV activities in ways that make it possible for the students to develop self-monitoring and regulation skills. This can be done, by guiding the students to do the projects themselves, in collaboration with other students rather than telling them what to do. It is important to give the students greater and greater control over the WebTV activities, as they learn how to work in groups.

Collaborative learning: The project will encourage the collaboration amongst students. Collaboration will also be encouraged not only with classmates, but also with their virtual classmates from the other countries that participate in the project. This will be done through videolinks, email, chat and database discussion. In this case we are looking at collaboration not only as a skill but also how collaboration can enhance learning.

Technical skills: *The activities made in the classroom concerning the use of new technologies, would lead to acquire knowledge related to the topics of the project like the procedure needed for a movie production, video skills, video-conferencing, internet search, bulletin board. All these practices of using ICT involve interdisciplinary applications as language, literature (writing the scenario), foreign language (subtitles) arts, sciences, social studies and so on.*

6.2. Methodology

6.2.1 Test design

The evaluation of the project will have two phases. Phase 1 will take place from 15/9/03 to 30/11/03. Phase 2 will take place from 1/2/04 to 30/6/04.

Phase 1. In phase 1, we will give to students questionnaire 4 (collaboration) and questionnaire 6 (technical skills) as pre-tests between 15/09 and 30/11, before the beginning of the first phase of the implementation (test run). At the end of this period we will administer the questionnaires 4 (collaboration), and 6 (technical skills) again as pot-tests. In addition, we will administer questionnaire 7 (teachers' questionnaire). At the same time teachers' thoughts and remarks concerning the whole process of the first phase of the implementation of the project will be collected through interviews. Some interviews of selected students will also be made, to find out how the project worked and make improvements for the second phase. The products of the students' work will be collected and will be evaluated by experts.

Phase 2. Before the second phase of the implementation (final run) of the WebTV activities, we will give to students the questionnaires 3 (motivational beliefs), 4 (collaboration), 5 (self-regulation) and 6 (technical skills) as pre-tests. Just before the WebTV activities, we will also give questionnaire 2 (interest) as a pre-test. After the administration of these questionnaires, students and teachers will work on the WebTV productions and at the end of this phase we will administer the questionnaires 3, 4, 5, and 6 again. We will also collect teachers' thoughts and remarks concerning the WebTV activities, administer interviews with selected students, and evaluate the students' work by peers and experts.

Figures 6.1 & 6.2 give a more detailed overview of the different steps of the evaluation with respect to the pre and post-tests conditions.

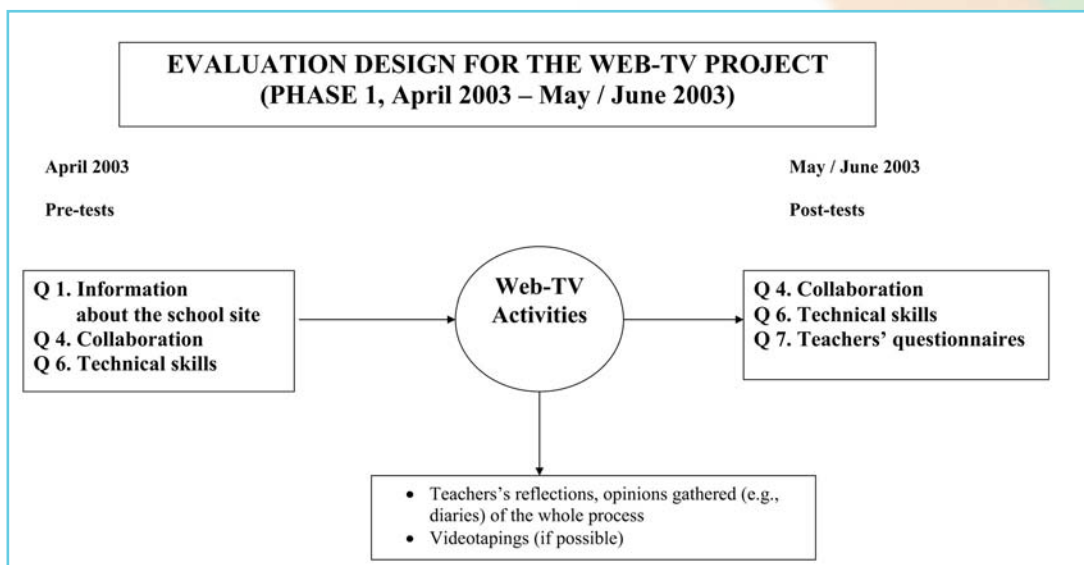


Figure 6.1

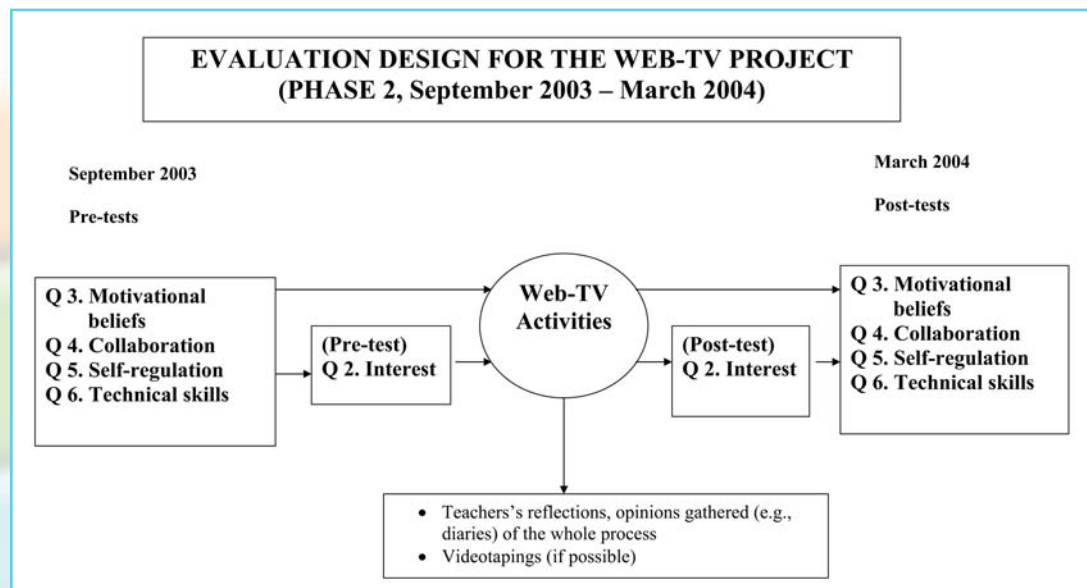


Figure 6.2

6.2.2 Instruments

We have developed six questionnaires, according to the general objectives of the project.

Questionnaire 1 (*Information about the school site*) consists of 28 items seeking information about the school and ICT used in it. These items are divided in six parts

- a) name and address (of school site),
- b) basic site description,
- c) staff,
- d) academic schedule and performance,
- e) projects (the school has participated in the past),
- f) ICT use.

Questionnaire 2 (*Interest*) consists of a few introductory open questions and of 20 single items which refer to four domains:

- 1) Interest in collaboration,
- 2) Interest in technology,
- 3) Interest in specific tasks, and
- 4) About the anxiety in specific tasks.

Questionnaire 3 (*Motivational beliefs*) is the short version of the GOMB questionnaire (Goal Orientation and Motivational Beliefs) developed by Markku Niemivirta (2003). This short version contains 25 single items which refer to five domains:

- 1) Learning (mastery - intrinsic),
- 2) Achievement (mastery - extrinsic),
- 3) Performance - approach,
- 4) Performance - avoidance, and
- 5) Avoidance.

Questionnaire 4 (*Collaborative learning*) is partly a short version of the "Inventory of Competence and Knowledge Sharing" (Hakkarainen Kai et al., submitted for publication). This short version consists of 26 items which refer to six domains:

- 1) Resource management: Peer learning (Pintrich P.R et al. 1991),
- 2) Experienced knowledge sharing in a class,
- 3) Knowledge building culture,
- 4) School support for knowledge sharing,
- 5) Trust in school, and
- 6) Progressive problem solving.

Questionnaire 5 (*Self-regulated learning*), is based on the MSLQ questionnaire (Motivational Strategies for Learning Questionnaire) developed by Pintrich, R.R., & DeGroot, E.V. (1990). In the original questionnaire the items are divided in two parts: motivation and learning strategies. In the questionnaire for the WebTV (which contains 50 single items) we have used 2 items from the motivation part and after modification almost all the items of learning strategies part.

Questionnaire 6 (*Technical skills*) consists of 18 partly multiple items, respectively of 105 single items. These items are divided into five parts:

- a) Description of the usage of ICT (frequency, duration, contents),
- b) Mastery of ICT tasks,
- c) Utility of the ICT,
- d) Effects to the persons and towards the relations with others, and
- e) Acquisition of technical skills.

Questionnaire 7 (*teacher's questionnaire*) consists of 13 open questions. Its purpose is to get information about the participating teachers' experiences about the project.

The complete questionnaires appear in Appendix 1.

6.3 Data Analysis

Quantitative analysis of the results of the questionnaires will be conducted to compare pre and post effects. In conjunction with formal assessment, we propose to follow a case-based approach on evaluation. Since only six schools are participating in the WebTV for schools project, it appears plausible to take each school as a case with its specific cultural characteristics. Each of them is a case that cannot fully be compared with the others. Therefore, it is essential to collect systematically information about the way the WebTV for schools project is set up and develops in each school. For that purpose, it is important the participating teachers to use pre-structured learning logs during the school-level implementations. The participating teachers could write down how the project develops, what goes well and what problems they face during the implementation of the project.

Qualitative self-reports, made by students and teachers about their experiences during the project, video analysis and summary of information kept in the logs (by teachers) will be used to give additional information to some specific questions, like:

- Active participation of the students in the process of acquisition of knowledge,
- Interactions between students, collaborative learning,
- Interaction between students and teachers,
- Impact on teachers,
- Attitude towards ICT.

Appendix

Evaluation Instruments

Questionnaire 1 - Information about the School Site

Please fill in the form and double click on the boxes to check them. When you finish send the word document by email as an attachment to the webtv mailing list.

A. Name and address

1. Name and address of site:
2. Web site (if one exists):
3. Telephone:
4. Fax:
5. Name and title of lead site contact:
 Phone:
 E-mail address:

B. Basic site description

6. Type of school (choose from the following alternatives):
 - Elementary ☐
 - Junior high school (Gymnasium) ☐
 - High School (Lyceum) ☐
 - Public ☐
 - Private ☐
 - Special populations ☐
 - Special services ☐
7. Location of site (choose from the following alternatives):

- Urban ☐
- Inner-urban ☐
- Suburban ☐
- Small town ☐
- Rural ☐

8. Socio-economic status of parents (choose from the following alternatives):

- Low ☐
- Medium ☐
- High ☐

9. Number of students:

10. Approximate school budget:

11. Other significant resources received in the past two years (volunteers, corporate donations, etc.):

C. Staff

12. Name and title of lead administrator:

Phone:

E-mail address:

13. Administrative structure:

Departments:

Special educational needs:

Arrangements:

Roles of staff:

14. Number of staff:

Regular:

Visiting:

15. Average number of hours spent teaching for teachers whose primary assignment is classroom teaching:

D. Academic schedule and performance

16. Academic schedule:

Starting date:

Ending date:

17. Weekly schedule:

Number of days:

Number of hours:

18. Students' performance levels:

- Low ☐
- Medium ☐
- High ☐

E. Projects

19. Has the school participated in innovated projects in the past?

- No ☐
- Yes ☐

If the answer at the above question is 'yes', please give more information about the projects.

20. Number of innovative projects that the school has participated

- Number of national projects:
- Number of international projects:

21. Please, write a short description of the projects.

F. ICT

22. Brief description of the main technologies (ICT) used at the site:

23. Total number of WWW-usable computers:

24. Total number of other computers:

25. Locations of computers (choose from the following alternatives):

- Labs ☐
- Classrooms ☐
- Library ☐
- Other ☐

26. Are computers and the Internet accessible to students and teachers beyond class time?

- Yes ☐
- No ☐

27. Main uses of ICT in the curriculum:

28. Brief description of the ICT technical and pedagogical support provided to students, teachers, and administrators:

Questionnaire 2 - Interest

1. GENERAL

- 1a. Name:
- 1b. Age:
- 1c. Sex: male female
- 1d. Class:
- 1e. School (country): (.....)

2. PRE-EXPECTATIONS

2a. Why are you interested in joining the Web TV project?

.....

.....

.....

2b. What do you expect to get out of the Web TV project?

.....

.....

.....

3. INTERNATIONAL COMMUNICATION

3a. Have you participated in a European project in the past? (A project is considered European when more than one European countries are involved)

.....

.....

.....

3b. Did you have in the past (or have in the present) a temporary or permanent contact with students abroad?

.....

If yes:

3bi. What were/are the means of communication?

.....

3bii. What was/is the communication about (content)?

.....

.....

Read each statement carefully and decide how well it describes Your thoughts about working for the Web TV project. Use the scale provided to indicate how much you agree (or disagree) with the statement (1 means "I totally disagree" and 7 "I totally agree").

Circle ONLY ONE option! There are no right or wrong answers -just Your own opinions!

	1	2	3	4	5	6	7
1. Working with tasks like the Web TV project is not interesting for me.	☐	☐	☐	☐	☐	☐	☐
2. Collaboration with other students is interesting.	☐	☐	☐	☐	☐	☐	☐
3. I feel under pressure to do this task well.	☐	☐	☐	☐	☐	☐	☐
4. It would be embarrassing to fail at this task.	☐	☐	☐	☐	☐	☐	☐
5. I like doing these kinds of tasks, like the ones for the Web TV project.	☐	☐	☐	☐	☐	☐	☐
6. Working with technology is interesting.	☐	☐	☐	☐	☐	☐	☐
7. Collaborative work interests me a lot.	☐	☐	☐	☐	☐	☐	☐
8. I enjoy working with technology.	☐	☐	☐	☐	☐	☐	☐
9. This task seems to be very interesting to me.	☐	☐	☐	☐	☐	☐	☐
10. I don't like using technology.	☐	☐	☐	☐	☐	☐	☐
11. When I think about the task, I feel somewhat concerned.	☐	☐	☐	☐	☐	☐	☐
12. I enjoy collaboration.	☐	☐	☐	☐	☐	☐	☐
13. I am not interested in tasks like this.	☐	☐	☐	☐	☐	☐	☐
14. I am not interested in sharing my work with my fellow students.	☐	☐	☐	☐	☐	☐	☐
15. Technology is very interesting to me.	☐	☐	☐	☐	☐	☐	☐
16. I feel petrified by the demands of this task.	☐	☐	☐	☐	☐	☐	☐
17. I am not interested in using technology.	☐	☐	☐	☐	☐	☐	☐
18. I enjoy working on tasks like this.	☐	☐	☐	☐	☐	☐	☐
19. I'm afraid I will make a fool out of myself.	☐	☐	☐	☐	☐	☐	☐
20. I don't like to collaborate with other students.	☐	☐	☐	☐	☐	☐	☐

Questionnaire 3 - Motivational beliefs

Name: _____ Girl ☐ Boy ☐

School: _____ Age: _____ Class: _____

Dear Student,

The purpose of this questionnaire is to gather information about your thoughts and beliefs about school, learning and yourself. Read each statement carefully and decide how well it describes you. Use the scale provided to indicate how much you agree (or disagree) with the statement (1 means "I totally disagree" and 7 "I totally agree").

Circle ONLY ONE option! There are no right or wrong answers -just your own opinions!

	1	2	3	4	5	6	7
1. It is important to me that I get good grades.	☐	☐	☐	☐	☐	☐	☐
2. I try to get off with my schoolwork with as little effort as possible.	☐	☐	☐	☐	☐	☐	☐
3. For me, an important goal at school is to do better than other students.	☐	☐	☐	☐	☐	☐	☐
4. I like the most tasks that I can learn new things from.	☐	☐	☐	☐	☐	☐	☐
5. I feel good if I manage to demonstrate other people that I am competent.	☐	☐	☐	☐	☐	☐	☐
6. I am not interested in doing anything extra for my schoolwork and studying.	☐	☐	☐	☐	☐	☐	☐
7. Learning something new at school feels especially good.	☐	☐	☐	☐	☐	☐	☐
8. I try to avoid situations in which I may appear dumb or incompetent.	☐	☐	☐	☐	☐	☐	☐
9. It is important to me that I don't fail in front of other students.	☐	☐	☐	☐	☐	☐	☐
10. I am particularly satisfied if I don't have to work much for my studies.	☐	☐	☐	☐	☐	☐	☐
11. I study in order to learn new things.	☐	☐	☐	☐	☐	☐	☐
12. My goal is to succeed at school.	☐	☐	☐	☐	☐	☐	☐
13. It is important to me that I don't look stupid in the eyes of other students.	☐	☐	☐	☐	☐	☐	☐
14. Getting good grades is an important goal for me.	☐	☐	☐	☐	☐	☐	☐

15. An important goal for me is to do well in my studies. ☐ ☐ ☐ ☐ ☐ ☐ ☐
16. It is important to me that others think I am able and competent. ☐ ☐ ☐ ☐ ☐ ☐ ☐
17. I feel I have attained my goal if I get better results or grades than many other students. ☐ ☐ ☐ ☐ ☐ ☐ ☐
18. I try to avoid failures at school in all possible ways. ☐ ☐ ☐ ☐ ☐ ☐ ☐
19. It is important to me that other students think I am a good and able student. ☐ ☐ ☐ ☐ ☐ ☐ ☐
20. I always try to do nothing more than just the required schoolwork. ☐ ☐ ☐ ☐ ☐ ☐ ☐
21. An important goal for me in my studies is to learn as much as possible. ☐ ☐ ☐ ☐ ☐ ☐ ☐
22. I try to avoid situations in which I may fail or make mistakes. ☐ ☐ ☐ ☐ ☐ ☐ ☐
23. I am especially satisfied if my school tasks are simple and do not require a lot of effort. ☐ ☐ ☐ ☐ ☐ ☐ ☐
24. To acquire new knowledge is an important goal for me at school. ☐ ☐ ☐ ☐ ☐ ☐ ☐
25. I feel especially good if I do well in tests or exams. ☐ ☐ ☐ ☐ ☐ ☐ ☐

Name: _____ Girl ☐ Boy ☐

School: _____ Age: _____ Class: _____

When answering the following questions, we would like to ask you to think of your class and your relationship with your fellow students.

Assess the following statements according to your own personal opinion of how often those things are present in your class.

[illegible]

12. I try to work with other students from my class to complete the course assignments.	☐	☐	☐	☐	☐	☐	☐
13. I often try to find new solutions for old problems.	☐	☐	☐	☐	☐	☐	☐
14. Discussion with my fellow students helps me solve more complicated problems than otherwise would be possible.	☐	☐	☐	☐	☐	☐	☐
15. Teams, in my school, are set up to represent diverse kinds of expertise.	☐	☐	☐	☐	☐	☐	☐
16. I am treated fairly in my school.	☐	☐	☐	☐	☐	☐	☐
17. Our teachers show by their example of open communication how profitable it is to share knowledge.	☐	☐	☐	☐	☐	☐	☐
18. I have noticed at my school that it is much more effective to develop solutions together than to do it alone.	☐	☐	☐	☐	☐	☐	☐
19. When studying, I often set aside time to discuss course material with a group of students from the class.	☐	☐	☐	☐	☐	☐	☐
20. Collaboration across classes and work groups is actively supported in my school.	☐	☐	☐	☐	☐	☐	☐
21. I think that it is very inspiring to get a very demanding and complex problem to solve.	☐	☐	☐	☐	☐	☐	☐
22. Persons who guide and assist others are greatly valued in my school.	☐	☐	☐	☐	☐	☐	☐
23. People in my school are engaged in developing new ideas together.	☐	☐	☐	☐	☐	☐	☐
24. I am able to openly express my thoughts in my school.	☐	☐	☐	☐	☐	☐	☐
25. I believe that persons at my team are ready to teach me everything that they are able to.	☐	☐	☐	☐	☐	☐	☐
26. It is very important for the management of my school to organize joint events for students.	☐	☐	☐	☐	☐	☐	☐

Questionnaire 5 - Self-regulated learning

Name: _____ Girl ☐ Boy ☐

School: _____ Age: _____ Class: _____

Dear Student,

Please rate the following items based on your behavior in your class. Your rating should be on a 7-point scale where 1 means 'not at all true of me' and 7 means 'very true of me'.

Circle ONLY ONE option! There are no right or wrong answers -just your own opinions!

	1	2	3	4	5	6	7
1. I think I will be able to use what I learn in a course in other courses.	☐	☐	☐	☐	☐	☐	☐
2. When I take a test I think about items on other parts of the test I can't answer.	☐	☐	☐	☐	☐	☐	☐
3. When I study the readings for a course, I outline the material to help me organize my thoughts.	☐	☐	☐	☐	☐	☐	☐
4. During class time I often miss important points because I'm thinking of other things.	☐	☐	☐	☐	☐	☐	☐
5. When studying for a course, I often try to explain the material to classmate or friend.	☐	☐	☐	☐	☐	☐	☐
6. I usually study in a place where I can concentrate on my course work.	☐	☐	☐	☐	☐	☐	☐
7. When reading for a course, I make up questions to help focus my reading.	☐	☐	☐	☐	☐	☐	☐
8. I often feel so lazy or bored when I study for a class that I quit before I finish what I planned to do.	☐	☐	☐	☐	☐	☐	☐
9. I often find myself questioning things I read or hear in a class to decide if I find them convincing.	☐	☐	☐	☐	☐	☐	☐
10. When I study for a class, I practice saying the material to myself over and over.	☐	☐	☐	☐	☐	☐	☐
11. Even if I have trouble learning the material in a class, I try to do the work on my own, without help from anyone.	☐	☐	☐	☐	☐	☐	☐

12. When I become confused about something I'm reading for a class, I go back and try to figure it out.	☐	☐	☐	☐	☐	☐	☐
13. When I study for a class, I go through the readings and my class notes and try to find the most important ideas.	☐	☐	☐	☐	☐	☐	☐
14. I make good use of my study time.	☐	☐	☐	☐	☐	☐	☐
15. If course readings are difficult to understand, I change the way I read the material.	☐	☐	☐	☐	☐	☐	☐
16. I try to work with other students to complete the assignments.	☐	☐	☐	☐	☐	☐	☐
17. When studying for a course, I read my class notes and the course readings over and over again.	☐	☐	☐	☐	☐	☐	☐
18. When a theory, interpretation, or conclusion is presented in class or in the readings, I try to decide if there is good supporting evidence.	☐	☐	☐	☐	☐	☐	☐
19. I make simple charts, diagrams, or tables to help me organize course material.	☐	☐	☐	☐	☐	☐	☐
20. When studying for a course, I often set aside time to discuss course material with my fellow students.	☐	☐	☐	☐	☐	☐	☐
21. I treat the course material as a starting point and try to develop my own ideas about it.	☐	☐	☐	☐	☐	☐	☐
22. I find it hard to stick to a study schedule.	☐	☐	☐	☐	☐	☐	☐
23. When I study for a class, I pull together information from different sources, such as lectures, readings, and discussions.	☐	☐	☐	☐	☐	☐	☐
24. Before I study new course material thoroughly, I often skim it to see how it is organized.	☐	☐	☐	☐	☐	☐	☐
25. I ask myself questions to make sure I understand the material I have been studying in a class.	☐	☐	☐	☐	☐	☐	☐
26. I try to change the way I study in order to fit the course requirements and the instructor's teaching style.	☐	☐	☐	☐	☐	☐	☐
27. I often find that I have been reading for a class but don't know what it was all about.	☐	☐	☐	☐	☐	☐	☐
28. I ask the instructor to clarify concepts I don't understand well.	☐	☐	☐	☐	☐	☐	☐

29. I memorize key words to remind me of important concepts in a class.	☐	☐	☐	☐	☐	☐	☐
30. When class work is difficult, I either give up or only study the easy parts.	☐	☐	☐	☐	☐	☐	☐
31. I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for a course.	☐	☐	☐	☐	☐	☐	☐
32. I try to relate ideas in a subject to those in other courses whenever possible.	☐	☐	☐	☐	☐	☐	☐
33. When I study for a course, I go over my class notes and make an outline of important concepts.	☐	☐	☐	☐	☐	☐	☐
34. When reading for a class, I try to relate the material to what I already know.	☐	☐	☐	☐	☐	☐	☐
35. I have a regular place set aside for studying.	☐	☐	☐	☐	☐	☐	☐
36. I try to play around with ideas of my own related to what I am learning in a class.	☐	☐	☐	☐	☐	☐	☐
37. When I study for a class, I write brief summaries of the main ideas from the readings and my class notes.	☐	☐	☐	☐	☐	☐	☐
38. When I can't understand the material in a course, I ask another student for help.	☐	☐	☐	☐	☐	☐	☐
39. I try to understand the material in a class by making connections between the readings and the concepts from the lectures.	☐	☐	☐	☐	☐	☐	☐
40. I make sure that I keep up with the weekly readings and assignments for a class.	☐	☐	☐	☐	☐	☐	☐
41. Whenever I read or hear an assertion or conclusion in a class, I think about possible alternatives.	☐	☐	☐	☐	☐	☐	☐
42. I make lists of important items for this course and memorize the lists.	☐	☐	☐	☐	☐	☐	☐
43. Even when course materials are dull and uninteresting, I manage to keep working until I finish.	☐	☐	☐	☐	☐	☐	☐
44. I try to identify students whom I can ask for help if necessary.	☐	☐	☐	☐	☐	☐	☐

45. When studying for a class, I try to determine which concepts I don't understand well.

☐☐☐☐☐☐☐

46. I often find that I don't spend very much time on a class because of other activities.

☐☐☐☐☐☐☐

47. When I study for a class, I set goals for myself in order to direct my activities in each study period.

☐☐☐☐☐☐☐

48. If I get confused taking notes in a class, I make sure I sort it out afterwards.

☐☐☐☐☐☐☐

49. I rarely find time to review my notes or readings before an exam.

☐☐☐☐☐☐☐

50. I try to apply ideas for course readings in other class activities such as lecture and discussion.

☐☐☐☐☐☐☐

Questionnaire 6 - Technical skills

Dear student!

The purpose of this questionnaire is to gather some information about your thoughts about the use of ICT. Please, answer all the questions presented below, because forms filled incompletely can cause problems when analysing the results.

Name _____ Age _____

Sex: Boy ____ Girl ____

School _____ Class _____

A. Description of the usage of ICT (frequency, duration, contents)

1. Do you have a possibility to use a computer (mark every alternative)?

- | | Yes | No |
|---------------|--------------------------|--------------------------|
| 1.1 At home | ☐ | ☐ |
| 1.2 At school | ☐ | ☐ |
| 1.3 Elsewhere | ☐ | ☐ |
| where ? _____ | | |

2. Do you have a possibility to use the Internet connection? (mark every alternative)

- | | Yes | No |
|------------------|--------------------------|--------------------------|
| 2.1 At home | ☐ | ☐ |
| 2.2 In my school | ☐ | ☐ |
| 2.3 Elsewhere | ☐ | ☐ |
| where ? _____ | | |

3. If you have a connection at home, what type of connection do you have?

4. Do you have a private email? (mark every alternative)

- | | Yes | No |
|------------------|--------------------------|--------------------------|
| 4.1 At home... | ☐ | ☐ |
| 4.2 In my school | ☐ | ☐ |
| 4.3 Elsewhere | ☐ | ☐ |
| where ? _____ | | |

5. Do you have a personal web page?

Yes	No
☐	☐

6. Which is your favorite web site?

7. Which is your favorite search engine (Lycos, Yahoo, etc.)?

Not at all Rarely Monthly Weekly Daily

8. What kind of media do you prefer to use?

8.1. TV	☐	☐	☐	☐	☐
8.2. Radio	☐	☐	☐	☐	☐
8.3. Internet	☐	☐	☐	☐	☐
8.4. Magazines	☐	☐	☐	☐	☐
8.5. Others	☐	☐	☐	☐	☐

9. What activities do you use computers for at school? What programs do you use during your lessons at school?

Not at all Rarely Monthly Weekly Daily

9.1. Word-processing	☐	☐	☐	☐	☐
9.2. Spreadsheet (e.g., Excel)	☐	☐	☐	☐	☐
9.3. Drawing and graphics	☐	☐	☐	☐	☐
9.4. Digital image processing (working with digital photos)	☐	☐	☐	☐	☐
9.5. CD-ROM-based encyclopedias (e.g. Encarta)	☐	☐	☐	☐	☐
9.6. Programming languages	☐	☐	☐	☐	☐
9.7. Educational programs (e.g. language, mathematics)	☐	☐	☐	☐	☐
9.8. Multimedia or video authoring	☐	☐	☐	☐	☐
9.9. Games	☐	☐	☐	☐	☐
9.10. E-mail	☐	☐	☐	☐	☐
9.11. Chat	☐	☐	☐	☐	☐
9.12. Web forum	☐	☐	☐	☐	☐
9.13. Searching information from the Internet	☐	☐	☐	☐	☐
9.14. Publishing pictures, texts, and reports in the Internet	☐	☐	☐	☐	☐
9.15. Downloading material from the Internet	☐	☐	☐	☐	☐
9.16. Uploading material to the Internet	☐	☐	☐	☐	☐

10. Use of computers during free time at school.

Yes No I don't know

10.1 Are pupils allowed to use school's computers outside official school lessons?

☐ ☐ ☐

Not at all Less than 1 hour 1-2 hours 3-5 hours More than 6 hours

10.2 I use a computer daily for school related tasks during my free time

☐ ☐ ☐ ☐ ☐

10.3 I use a computer daily during my free time for other purposes than for school related tasks (i.e., recreational purposes)

☐ ☐ ☐ ☐ ☐

10.4 Navigate in the web

☐ ☐ ☐ ☐ ☐

11. What activities do you use computers for at home?

	Not at all	Rarely	Monthly	Weekly	Daily
11.1 Word-processing	☐	☐		☐	☐
11.2 Spreadsheet (e.g., Excel)	☐	☐		☐	☐
11.3 Drawing and graphics	☐	☐		☐	☐
11.4 Digital image processing (working with digital photos)	☐	☐		☐	☐
11.5 CD-ROM-based encyclopedias (e.g. Encarta)	☐	☐		☐	☐
11.6 Programming languages	☐	☐		☐	☐
11.7 Educational programs (e.g. language, mathematics)	☐	☐		☐	☐
11.8 Multimedia or video authoring	☐	☐		☐	☐
11.9 Games	☐	☐		☐	☐
11.10 E-mail	☐	☐		☐	☐
11.11 Chat	☐	☐		☐	☐
11.12 Web forum	☐	☐		☐	☐
11.13 Searching information from the Internet	☐	☐		☐	☐
11.14 Publishing pictures, texts, and reports in the Internet	☐	☐		☐	☐
11.15 Downloading material from the Internet	☐	☐		☐	☐
11.16 Uploading material to the Internet	☐	☐		☐	☐

12. How often do you use computers at home for the following purposes?

	Not at all	Less than 1 hour	1-2 hours	3-5 hours	More than 6 hours
12.1 I use a computer at home daily for school related tasks	☐	☐	☐	☐	☐
12.2 I use a computer at home daily for other purposes than for school related tasks (i.e., recreational purposes)	☐	☐	☐	☐	☐
12.3 Navigate in the web	☐	☐	☐	☐	☐

B. Mastery of ICT tasks

13. How well do you master some essential ICT (computer) applications?

	Not at all	Rather weakly	Neither weakly nor well	Rather well	Very well
13.1 File management (operating system, finding files, copying, deleting)	☐	☐	☐	☐	☐
13.2 Word-processing	☐	☐	☐	☐	☐
13.3 Spreadsheet (e.g. Works spreadsheet, Excel)	☐	☐	☐	☐	☐
13.4 Database (e.g. Works database-program, Access)	☐	☐	☐	☐	☐
13.5 Drawing and graphics programs	☐	☐	☐	☐	☐
13.6 Digital image processing (e.g. scanning, manipulating digital photos)	☐	☐	☐	☐	☐
13.7 Desktop publishing (PageMaker, First Publisher)	☐	☐	☐	☐	☐
13.8 Programming tools or application generators (e.g. C + +, Java, Toolbook, Hyperstudio)	☐	☐	☐	☐	☐
13.9 E-mail	☐	☐	☐	☐	☐
13.10 Searching information from the Internet	☐	☐	☐	☐	☐
13.11 Downloading material from the Internet	☐	☐	☐	☐	☐
13.12 Uploading material to the Internet	☐	☐	☐	☐	☐
13.13 Making and publishing WWW and home pages	☐	☐	☐	☐	☐
13.14 Phoning via Internet	☐	☐	☐	☐	☐
13.15 Video conferencing	☐	☐	☐	☐	☐
13.16 Digital voice manipulation or music composition	☐	☐	☐	☐	☐
13.17 Multimedia or video authoring	☐	☐	☐	☐	☐

C. Utility of the ICT

14. How much do you agree with the following statements? (1 - I totally disagree, 7 - I totally agree)

	1	2	3	4	5	6	7
14.1 In our days mastery of computers is very important for professional life	☐	☐	☐	☐	☐	☐	☐
14.2 Mastery of computers is very important to follow in our social life	☐	☐	☐	☐	☐	☐	☐
14.3 We can succeed in professional life without mastery of computers	☐	☐	☐	☐	☐	☐	☐
14.4 I always use ICT in order to do my schoolwork.	☐	☐	☐	☐	☐	☐	☐
14.5 In our class we are not sufficiently encouraged to use ICT in our schoolwork.	☐	☐	☐	☐	☐	☐	☐
14.6 I rarely use ICT for my schoolwork.	☐	☐	☐	☐	☐	☐	☐
14.7 Working with computers helps me to achieve more correct responses than I usually do.	☐	☐	☐	☐	☐	☐	☐
14.8 In order to achieve good results with computers I have to study very hard	☐	☐	☐	☐	☐	☐	☐
14.9 It is very easy for me to prepare a task with ICT.	☐	☐	☐	☐	☐	☐	☐
14.10 The use of computers does not change the quality of my work.	☐	☐	☐	☐	☐	☐	☐
14.11 In order to learn a task with computers I am ready to put a lot of effort.	☐	☐	☐	☐	☐	☐	☐
14.12 If I cannot use the computers in my work, I give up easily.	☐	☐	☐	☐	☐	☐	☐
14.13 It is very important for me to know how to use computers well.	☐	☐	☐	☐	☐	☐	☐

D. Effects to the persons and towards the relations with others.

15. How much do you agree with the following statements? (1 - I totally disagree, 7 - I totally agree)

	1	2	3	4	5	6	7
15.1 I often help my classmates to achieve a task with computer	☐	☐	☐	☐	☐	☐	☐
15.2 I often help my teachers to achieve a task with computer	☐	☐	☐	☐	☐	☐	☐
15.3 I like to work with computers outside school	☐	☐	☐	☐	☐	☐	☐
15.4 The use of computers socially isolates people from each other.	☐	☐	☐	☐	☐	☐	☐
15.5 The use of computers strongly involves collaborative activity.	☐	☐	☐	☐	☐	☐	☐
15.6 I think it is much nicer to use computers together with other people than alone.	☐	☐	☐	☐	☐	☐	☐
15.7 I think it is nice that I can share my work with others via computers.	☐	☐	☐	☐	☐	☐	☐

E. Acquisition of technical skills

16. Identify the correct order (write 1 to 5) to the subject "write a scenario in order to shoot a movie for internet":

Shooting
imagine the story
find a title
find documentations about the story
list intermediate targets to achieve

17. Identify the correct order (write 1 to 5) to the subject "create a movie for internet":

electronic compression
imagine the story and write the scenario
shooting
montage
uploading

18. What do you think is essential when making WebTV productions ?

Questionnaire 7 - teacher's questionnaire

Teachers' reflections

The purpose of this reflection note/ diary is to get information about the participating teachers' experiences about the project that they have carried out with their students.

1. What worked well in the project? Why?
2. What did not work well? Why not?
3. What did the students learn in this project? What is the importance of these things that students learnt?
4. How did you contribute to the activities of WebTV project? How should a teacher participate in general in your opinion?
5. What kind of problems did you have in guiding and helping students? Why?
6. How did you resolve the problems of guidance? Can you tell some examples?
7. How did the collaboration between the students succeed in this project? Was there any benefit of the collaboration? If so, can you explain exactly what?
8. Was it useful to use WebTV platform? Why?
Were there any problems in using it? If YES: What were they?
9. What is your opinion about collaborative work? What is essential in it (what makes it work, what interests you in it)?
10. What things bother you in this kind of learning activity? What feels difficult?
11. What did you learn while carrying out this project? What would you do differently next time?
12. How was your collaboration with your students?
13. Did something change in your collaboration with your students? Did you collaborate more than usually?

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