A European Schoolnet project

ValNet

Validation of ITALES

May 2004
A European Schoolnet project

ValNet

Validation of the ITALES project

Jón Torfi Jónasson
Andrea Gerður Dofradóttir

May 2004

Centre for the Development of Education
Social Science Research Institute
University of Iceland
I Introduction

The ITALES ValNet project is a step in the IST ValNet project of “a development of a manageable tool for validation of an innovative ICT project”. We saw our primary task to validate the ITALES project as part of this validation tool development. Thus, we have provided a platform, or basis or data, on which the next step in this development can be taken, when the results of this validation are compared to those of other ValNet projects.

The background of the validation procedure

In the validation procedure we use the MENON, Final ValNet Validation Framework\(^1\). We found the basic ideas of the framework useful, but according to its basic philosophy we adapted to the particular project we were dealing with.

When developing the validation procedure we emphasized using and adapting the POETC dimensions to this particular project. Noting the pedagogical nature of the tool, we centred our attention on the pedagogical dimension, but introduced the other dimensions as a corollary to that. This turned out to be an underestimation of their importance. We also made a determined effort to respect the guidelines provided by the Validation guide and representing the stakeholders’ interest:\(^2\)

1. Have a solid common core to allow comparison;
2. be flexible enough to be applicable to projects of different nature and size in the field of ICT in Education;
3. be aware and in line with state of the art evaluation methodology;
4. be simple enough to be used by non-expert audience;
5. be accompanied by appropriate guidelines for users;
6. not obliging to commit exaggerated resources in validation;
7. adapt itself to different cultural and institutional environments;
8. be perceived as immediately relevant by user projects
9. be coherent with ENIS culture and validation capability
10. be related and relevant to validation debate with the 5th RTD Framework Programme.

This meant that we developed a validation tool, on the basis of the MENON framework, that we thought would be fairly easy to use, reproducible, would not be cumbersome, and would not, when developed, drain the resources of participants in future projects. Thus, we opted for the robust on-line survey (with open and closed questions) and diaries, even though a mixture of additional established methods might have given us even better insight into the nature of the tool, e.g. participant observation, focus groups, and in-depth interviews. When we developed our tool, it was with the express intention of deriving from it a very limited number of bench-mark items that might serve as valid indicators as to the innovative value of

---

\(^1\) Deliverable Code: M2.2T12:D2.1
the project. We will conclude this report with some observations as to what these might be, but feel that we have not made the progress in this direction we had hoped for.

**The structure of the report**

In the report we have used the structure provided by Cathy Lewin, at the OU, the ValNet chief evaluator, as a basic guide, even though we adapt it to the structure of our evaluation. We will also refer in our results briefly to David Wood’s Think scenarios.

**Summary of work and results**

We conclude in our study that even though the opinion on the pedagogical value of the ITALES tools is somewhat divided, the general conclusion about its value is quite positive: the substantial majority view is that it deserves to be further developed. It is thought by many participants to be a potentially interesting and powerful educational tool. Its technical status at the time of testing left something to be desired. There are a number of important organisational, economic, technical and cultural issues, which emerge as quite important and perhaps problematic irrespective of the pedagogical value of the tools. It is suggested that a fairly simple assessment scheme can be used to evaluate innovative projects like ITALES, based on the Menon framework and on the basis of the experience obtained during this evaluation. Such approach should be careful to monitor the POETC dimensions all with equal respect. The evaluation raises some questions as to the whole process of developing tools like ITALES so that they have a chance of a sustainable future within the education system.

**Thanks and acknowledgements**

We did not have much contact with the ITALES design group itself, but when needed, it was quite helpful and we thank them for providing an interesting tool. When needed, EUN and Cathy Lewin were very helpful. We are very grateful to the participants of the ValNet-ITALES study, the teachers from Iceland, The Netherlands, Slovenia and Sweden. The majority complied with our numerous requests. We also thank the national coordinators for their contribution. Especially, we want to extend our appreciation to the Slovenian representatives who were always prompt, and very helpful and professional in every way. We thought the Icelandic coordinator (who is also the coordinator of the whole ValNet-ITALES project) was exceptionally professional, constructive and supportive.
II The ITALES project and its implementation

In this chapter the background of the participants and the implementation of the ITALES project in each country will be discussed. The discussion is primarily based on the responses from the national coordinators to several questions we asked them to respond to as well as on the questionnaire-data and diaries gathered from the participating teachers (see appendices). The national coordinators are:

- Harpa Hreinsdóttir in Iceland (also the ValNet-ITALES coordinator)
- Wim Didderen in The Netherlands
- Julijana Juricic in Slovenia
- Angela Andersson in Sweden.

II.1 Background of the participants

All of the twelve participating teachers in The Netherlands were men and five of the six participants in Sweden. In Slovenia, on the other hand, most of the participating teachers were women, or ten out of twelve, but in Iceland five were women and four were men.

Most of the participants in ITALES, or about two-thirds, were teachers in primary schools and one-third in secondary schools. This proportion varied across countries though (see table 2.1). Far most of the participants in Slovenia were teachers in primary schools, or 92%, whereas two-thirds of the participants in Iceland and about 60% in The Netherlands taught in primary school. The majority of the participants in Sweden, or two-thirds, were on the other hand teachers in secondary schools.

<table>
<thead>
<tr>
<th>Country</th>
<th>Iceland</th>
<th>The Netherlands</th>
<th>Slovenia</th>
<th>Sweden</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school</td>
<td>67%</td>
<td>58%</td>
<td>92%</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>Secondary school</td>
<td>33%</td>
<td>42%</td>
<td>8%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Number of participants</td>
<td>9</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>39</td>
</tr>
</tbody>
</table>

We will not go into detailed descriptions of the respective educational systems and delineate the difference between primary and secondary stages in each country. The variation in Table 2.1 just underscores that the students involved were at various stages.
II.1.1 The implementation of ITALES in Iceland

II.1.1.1 Main features of the project

The Icelandic participants did mainly use ITALCO. According to the national coordinator all of them had a look at the 3-D environment as well, especially in the beginning, but since the 3-D server was extremely slow and there were problems with the schools' firewalls that limited the use of the 3-D environment, most concentrated on using ITALCO to make their own teaching material.

II.1.1.2 Profile of the participating schools

Nine schools, 7 primary schools and 2 comprehensive schools (upper secondary schools), took part in the ITALES project in Iceland. Three of the schools were already ENIS schools when the project started but the others were made ENIS schools as soon as they had decided to take part in ITALES. The two comprehensive schools had also been special pilot-schools in ICT, chosen by the Ministry of Education and Culture, for the last three years before the ITALES project started.

The individual schools were chosen by the Icelandic ENIS liaison, Björn Sigurðsson and the ValNet-ITALCO coordinator, Harpa Hreinsdóttir. The main reason for this choice was the known interest of the individual teachers in the use of ICT. All the headmasters were very positive but it was up to the teachers themselves to decide to participate in the project.

II.1.1.3 Formal arrangements made with the teachers

According to the national coordinator, the Ministry of Education and Culture signed agreements with all the schools. The agreement involved each teacher getting paid 60,000 Icelandic kronas (approximately 684 euros) for his/her work in the project. The Icelandic Ministry paid the travelling cost of the Icelandic teachers to the Schoolnet conference in Brussels (EUN paid the cost of their accommodation) as well as the travelling cost and accommodation costs of the workshop in Akranes, Iceland.

II.1.1.4 Involvement of the teachers

Eight teachers made their own scenarios by using ITALCO, in two cases working in pairs and one teacher made two scenarios. One teacher has not put his own scenario on the World Wide Web but has spent quite some time on making one. According to the national coordinator the two secondary schools teachers were well aware of the limitations of ITALCO and concentrated on making small tasks/projects, without spending far too much time on it. On the other hand, the primary school teachers seemed to over-estimate the possibilities of ITALCO, which made them more prone to run into problems. Because of this some frequently ran into problems. The coordinator has given an example of this:

The pair of teachers that made a scenario about the history of writing and ICT from ancient times, claim that they've spent 200 hours doing this and created more than 60 written pages on
the subject, which of course is not what ITALCO is expected for. (The same teachers estimate that their students will spend 1-2 lessons on finishing the task/scenario that resulted from this work.) I tried to point out the limitations of ITALCO to them, suggested that they used Mediator Pro (a software they already are familiar with) for the most of this work and only put a limited part into ITALCO, but I never succeeded in convincing them that ITALCO only is intended for small projects. On the other hand, one of the comprehensive school teachers claimed that she did her Biology project in a very short time, "in between the cleaning of the house" on a Friday.

According to the national coordinator, teachers' expectations of ITALCO varied a lot, which might be related to how much experience one has with working on his own on trying out different kinds of softwares or the experience of doing pilot projects in ICT on their own. According to the coordinator, both of the comprehensive schools teachers were quite skilled in this respect. Furthermore, technical skills of the comprehensive schools teachers also seemed to be much better than those of the primary schools teachers. This might by, according to the coordinator, the result of the fact that each secondary school usually has its own ICT manager, runs its own server and so forth, which makes it relatively easy to get help when needed, whereas the primary schools usually buy this service from a company outside the school, i.e. the service is therefore not as effective and fast.

II.1.1.5 Overview of teaching material made by the teachers

Following is a list of the 7 ITALCO-scenarios created by the Icelandic teachers and published on the World Wide Web:

- **Frá Súmer til Sviss** (From the Sumerians to Switzerland) by Vigfús Hallgrímsson (Valhúsaskóli) and Kolbrún Hjaltadóttir (Breiðholtsskóli)
  Subject: The History of Writing and ICT
- **Four-Eyes and his adventures** by Páll Erlingsson (Grunnáskólinn í Grindavík)
  Subject: English
- **Little Red Riding Hood** by Lilja Jóhannsdóttir (Grandaskóli) and Sigurbjörg Ragna Ragnarsdóttir (Grundaskóli á Akranesi)
  Subject: English for beginners
- **Snædís á pingvöllum** by Þorkell Daniel Jónsson (Selásskóli)
  Subject: Geography / History / Fairy Tale
- **English Speaking Countries** by Kristín Runólfsdóttir (FSU)
  Subject: English
- **Plöntur í náttúrunni** (On plants) by Kristín Runólfsdóttir (FSU)
  Subject: Hortology / Ecology
- **Leiðangur inn í frumuna** (An odyssey into the cell) by Sigurlaug Kristmannsdóttir (FÁ)
  Subject: Biology

In the beginning of the project, the national coordinator also made one scenario in order to learn how to use ITALCO and be able to assist the participating teachers.
II.1.1.6 Meetings and consultation

According to the national coordinator, most of the consultation took place by using e-mail. Apart from that the teachers participated in four different conferences and meetings:

- February 14th - 16th 2003: The EUN's Schoolnet Conference in Brussels, were the Icelandic, Slovenian and Swedish participants had the first workshop and the ITALES coordinators introduced the software (3-D environment and ITALCO). All the participants had their first meetings there, i.e. all the participants together, the Icelandic ones together and the national coordinators. Since the Icelandic group was travelling together this was an excellent opportunity to get to know each other before the work started.

- June the 9th 2003: A meeting at Valhúsaskóli, Reykjavík, at the initiative of one of the participating teacher. About a half of the Icelandic teachers, as well as Harpa, the national coordinator and Jón Torfi, the ValNet evaluator, got together and explored the 3-D environment software of ITALES together.

- August 16th - 17th 2003: A common workshop at Akranes, Iceland, which 7 of the Icelandic teachers attended, as well as representatives from Slovenia, Sweden and The Netherlands, as well as representatives Jón Torfi, the ValNet evaluator, Harpa, the ValNet-ITALES coordinator and Björn Sigurðsson, the ENIS liaison, on behalf of the Ministry of Education and Culture.

- March the 6th 2004: An informal meeting on behalf of Jón Torfi and Andrea, the ValNet evaluation team, at the ICT conference in Garðabær, Iceland, which 3-4 of the Icelandic teachers attended, as well as Harpa, the national coordinator.

II.1.1.7 Issues arising from the implementation of the project

According to the national coordinator, there were no real administrative problems. The teachers either wrote about their problems in e-mails, which were for the most part technical problems, and sent to the whole Icelandic ITALES group, or sent e-mails to the ITALES coordinators. Some of the teachers were also quite efficient in writing about these problems on the Forum (a web-based conference provided by the ITALES). The ITALES coordinators were very quick to respond, both in e-mails and at the Forum.

In the national coordinator's opinion, the ITALES project got much more assistance and collaboration from the software producers of ITALES than the other projects connected to ValNet. The producers of ITALES even made some applications (like the one for uploading the scenarios on the World Wide Web) especially for the Icelandic group (this possibility was not ready in time, since the time-frame of the ITALES is different from that of the ValNet project).

In the national coordinator's opinion, the primary school teachers would have liked to have had more meetings or workshops in order to explore the software together but this was not the case for the comprehensive school teachers. In that respect the coordinator commented on the differences between the teachers at these two different school levels:

Actually, I have the feeling, after having coordinated this group, that there's a profound difference in the ways of thinking, strategic ways and educational matters between the primary and the secondary schools, much more profound than I thought before. Since almost all the participating teachers were in beforehand known as some of the Icelandic pioneers in the use of
ICT in schools I was surprised to discover their different views on how to deal with the use of new software and the unavoidable problems arising from trial.

The coordinator suggested that those who felt it was important to meet would do so, especially since most of them lived in the Reykjavik area, but they did not, except for those who paired up to create scenarios together by using ITALCO.

II.1.2 The implementation of ITALES in The Netherlands

II.1.2.1 Main features of the project

The opinion of the national coordinator in The Netherlands, regarding the main features of the project, is that ITALES is one of the first integrated concepts for e-learning reflecting new approaches on student centred learning activities in a digital learning environment. The planning of not only a learning environment but also effective authoring and evaluation tools makes ITALES as a total concept a promising project. The participating teachers in The Netherlands used primarily ITALCO, since according to the national coordinator it was the only ITALES tool at the beginning of the project in The Netherlands that was more or less ready for actual use by teachers and for implementation in learning activities in classes.

II.1.2.2 Profile of the participating schools

According to the coordinator, 18 teachers from 11 schools/education institutes started at the initial introduction meeting in The Netherlands. Seven of them were primary schools and 4 were secondary schools. None of the schools had a special status relevant to this project. In The Netherlands there is no active ENIS network or formal qualification alike. Most of the participating schools and/or teachers are advanced in the use of ICT and the implementation of ICT in their curriculum. Teachers were either approached themselves for participation or through the ICT-coordinator at their school. The headmasters of the participating school have all supported the project. Two training institutes for teachers were involved in the introduction training of the participating teachers.

II.1.2.3 Formal arrangements made with the teachers

Formal arrangements were made with the teachers as well as the two trainers. The two trainers got paid by the hour for approximately 6-8 days of work, including the trip to the workshop in Iceland in August 2003 and national planning meetings in relations to each of them coordinating approximately 5 schools.

In terms of the participating teachers, formal arrangements were made with them in that they got paid for travel and subsistence costs and for some of the time they invested in the project, including:

- attending the initial meeting and ITALCO training (4 hours),
- producing and/or using at least one ITALCO scenario in at least one class,
- keeping a diary about the project on a weekly basis and fill in 2-3 questionnaires,
sending in all ITALCO scenarios to a folder in a specific on-line EUN community and
attending a final meeting.

II.1.2.4 Involvement of the teachers

According to the national coordinator, 12 teachers at 10 different schools used ITALCO and many of them presented scenarios to their students. These teachers were actively involved from the beginning and spent an average of 30 hours on the project, including attending workshops, production of scenarios and classroom activities. The teachers were positive about the potential of ITALCO in respect to the curriculum but fairly critical about the current functional flexibility and poor guidelines. According to the coordinator, producing a scenario is too difficult for an average teacher in The Netherlands and it takes far too much time and efforts to learn how to.

II.1.2.5 Overview of teaching material made by the teachers

Following is a list of the 8 ITALCO-scenarios created by the Dutch teachers and sent to the ValNet-ITALES coordinator. Some of them are fully developed while others are still not thoroughly developed. None of them have been published on the World Wide Web, but according to the national coordinator if the project in the Netherlands they were published and shared in a EUN community that was provided at the national level by the coaches for this group of schools. Most teachers felt that their very first products were not yet ready for publishing for a larger audience on the World Wide Web.

- **Benelux (A Tour through Belgium, Netherlands and Luxemburg)** by Joop van Gils and Theo Rademakers (BS De Blokkenberg)
  Subject: Geography
- **12 maanden in de natuur (Twelve Months in Nature)** by Adri Soontiens (OBS De Lindt)
  Subject: Biology
- **Het Zonnenstelsel (The Solar System)** by Mike de Wit (OBS De Straap)
  Subject: Science
- **Grammar 2** by Guus Blezer (Bernardinuscollege I)
  Subject: English
- **Barbarossa (A journey into Russia, during the start of the German invasion in 1941)** by Stan Wilden (Bernardinuscollege II)
  Subject: History and English
- **Marmotte (A stage of the Tour de France by your teacher)** by: Guido van Dijk (Sintermeertencollege II)
  Subject: Technology
- **Quiz (An introduction to the Sintermeertencollege)** by Guido van Dijk (Sintermeertencollege I)
  Subject: Interdisciplinary
- **De Opstand (“The Revolt”, a historic trip through the Netherlands as they are fighting for independence)** by: Bas Arets (Bernardinuscollege I)
  Subject: History
II.1.2.6 Meetings and consultation

According to the national coordinator, the participating teachers received support by phone conversations and in meetings. The Dutch participants (sometimes a part of them) participated in the following meetings and workshops:

- **August 16th - 17th 2003**: A common workshop at Akranes, Iceland, which the Dutch coordinator and two coordinating teachers attended, as well as representatives from Iceland, Slovenia and Sweden, and representatives Jón Torfi, the ValNet evaluator, Harpa, the ValNet-ITALES coordinator and Björn Sigúrðsson, the ENIS liaison, on behalf of the Ministry of Education and Culture.
- **September - December 2003**: Three planning meetings were held with the coordinating teachers.
- **November 2003**: Two Kick-off meetings, including an introduction workshop and ITALCO-training, were held where the participating teachers in The Netherlands attended. One of the meetings was held in Helmond with one group of participants and another one in Heerlen with a different group of participants.
- **November - January 2003/2004**: Small meetings were held where “coaches” (coordinating teachers) assisted other participating teachers with creating an ITALCO scenario.
- **January and March 2004**: Two final evaluation meetings were held, where the two coaches and the participating teachers from the schools in two (regional) groups participated.

II.1.2.7 Issues arising from the implementation of the project

According to the national coordinator of the project in The Netherlands, the start of the project was very difficult because none of the ITALES tools were fully developed and tested, at least not according to their national standards. There were no completed (nor translated) full manuals and guidelines, nor no well-tested good examples etc. Some technical problems came up with installing ITALCO and other ITALES tools, but that was solved with good support by e-mail and phone by the project management at LT Scotland. The teachers got support from the two trainers (coordinating teachers), who invested a lot more time in training, testing the applications and providing guidelines. No major technical problems did, however, occur once ITALCO was properly up and running.

The downloading and installation of the client software was difficult at some schools because of network security policies. Permission was given in most cases because of the “experimental project” status of the project.

II.1.3 The implementation of ITALES in Slovenia

II.1.3.1 Main features of the project

According to the national coordinator in Slovenia the main features of the ITALES projects were working in an international team, getting acquainted with new software and developing new teaching material and methods, which requires different thinking, and some programming approach. Furthermore, the project gave the Slovenian group the opportunity to compare ITALES to other tools they were already using and
did in that respect give them a clearer idea of how advanced the teachers were in using ICT in their schoolwork.

II.1.3.2 Profile of the participating schools

Eleven schools participated in the project, 10 primary schools and 1 secondary school. The schools were, according to the national coordinator, very advanced in using ICT. All the primary schools were already ENIS schools and all the headmasters were positive towards the teachers taking part in the project and supported their teachers during the project.

II.1.3.3 Formal arrangements made with the teachers

The National Education Institute officially selected all the teachers as participants in the ITALES project. The Institute signed contracts with the national coordinator, the national valuator and the person for the technical support, as well as with the participating schools. Due to that the schools have not had any extra costs because of the project. All teachers got paid all travel and subsistence costs for meetings and workshops and the trip to Brussels. They will get an official confirmation for their participation in the project, which can be used to advance within their field of employment, which in turn raises their salary. Those with the contracts got paid the estimated work hours. The teachers who finished their scenarios also got some payment for that. Almost all the budget spent on the project was spent on travel and subsistence costs.

II.1.3.4 Involvement of the teachers

According to the national coordinator, the teachers in the Slovenian group have been responsible in their participation and taken it very seriously. This fit very well with our experience at the ValNet coordinating end. Most of the teachers answered both questionnaire for the validation and wrote the diary. Almost all tried to prepare a scenario, but only 3 finished it. According to the national coordinator, the teachers have on average spent about 60 hours on the project, but those who finished the scenario as well as the national coordinator spent much more time on it.

II.1.3.5 Overview of teaching material made by the teachers

Following is a list of the 2 ITALCO-scenarios created by the Slovenian teachers and published on the World Wide Web. The third scenario has not been finished and published on the Web:

- Tobogan (in Slovenian) by Julijana Juricic (with the help of Viljenka Savli)
  Subject: Physics
- Explore the house by Viljenka Savli
  Subject: English
II.1.3.6 Meetings and consultation

According to the national coordinator, most of the consultation took place either “on-line”, by means of phone conversations and personal consultation. Apart from that six different conferences and meetings were held:

- **February 14th - 16th 2003**: The EUN’s Schoolnet Conference in Brussels, where the Icelandic, Slovenian and Swedish participants had the first workshop and the ITALES coordinators introduced the software (3-D environment and ITALCO).
- **2003**: Meeting of Alenka Zibert, the ENIS national coordinator and Julijana, the national coordinator of ITALES were the project was discussed.
- **2003**: Meeting of Alenka Zibert, the ENIS national coordinator, Julijana, the national coordinator of ITALES, Janja Jakoncic Faganel, the national valuator and the Dalibor Cotar, the technical support person in the project.
- **August 16th - 17th 2003**: A common workshop at Akranes, Iceland, which Slovenian teachers attended, as well as representatives from Iceland, Sweden and The Netherlands, as well as representatives Jón Torfi, the ValNet evaluator, Harpa, the ValNet-ITALCO coordinator and Björn Sigurðsson, the ENIS liaison, on behalf of the Ministry of Education and Culture.
- **November 2003**: A 2 days workshop with all participating teachers where they worked together on scenarios and discussed the possibilities of the tools and the validation.
- **March 2004**: A one-day workshop with all participating teachers where the project was discussed and evaluated.

II.1.3.7 Issues arising from the implementation of the project

According to the national coordinator, the project went on quite fluently apart from some difficulties in the beginning with the installations, usernames and passwords and some other problems, which were solved as the project went on. The participants had some problems with the 3-D environment and ITALCO but with help from the project coordinator, national coordinator and the ITALES team these problems were solved. Problem with Internet connections were solved, and then it was possible to get information on how the 3-D environment could be used in an average equipped Slovenian school. The participants had some problems with creating the scenarios in ITALCO but solved it by helping each other. Some problems appeared in February with the second validation-questionnaire when some members of our team couldn’t reach their questionnaire on the Internet, but that was solved by help of the ValNet evaluation team in Iceland and the ITALES project coordinator who was a link among all participants.

II.1.4 The implementation of ITALES in Sweden

II.1.4.1 Main features of the project

According to the national coordinator of the ITALES group in Sweden, the main feature of the project was the ITALCO part of ITALES. In the coordinators opinion, ITALCO was the only part that was reasonably developed at the beginning of the project in Sweden, in September 2003, and as a result of that ITALCO was the part of the project that most teachers concentrated on.
II.1.4.2 Profile of the participating schools

Most of the 10 schools that scheduled to taking part in the ITALES project are schools with pupils from grade 1 to grade 9, which is the most usual in Sweden (primary to lower secondary). They are all ENIS school and were selected as such in the first round of the ENIS project in 1999. This means they were in the vanguard in 1999. At that time the support from the schools’ headmasters was strong. In most cases the schools can still be considered innovative schools but some of the schools have, after failing to fulfil the validation, chosen to leave the ENIS network.

II.1.4.3 Formal arrangements made with the teachers

The schools were all contracted in writing in August 2003. The contract stipulated that the schools would receive 8,000 Swedish kronas (around 900 euros) for taking part in the validation. In addition to this, the Ministry of Education (until June 2003) and the Swedish National Agency for School Improvement (from July 2003) covered travel costs and expenses (for trips and stay in Brussels and Stockholm) for one or two representatives from each school and for two teachers to Iceland in August 2003. Due to the transfer of the project from the Ministry other funds have been available in order to cover costs for coordination and overall expenses. Most of the reimbursement for the project (20,000 euros) has been steered directly to the schools.

II.1.4.4 Involvement of the teachers

The teachers involvement in the ENIS validation started early in 2003, before a clear structure of the validation was established. There was uncertainty among the teachers about what they were expected to do and with what tools, which led to that some of them were not as committed as would have been required. In some cases they have, early in the project, informed colleagues and peers and raised expectations (mainly about the ITALES) that were not fulfilled, which led to difficulties for them to re-launch the project later in the validation period. They may also have felt that they did not receive sufficient information about the project.

II.1.4.5 Overview of teaching material made by the teachers

According to their coordinator, the material produced by the Swedish teachers is somewhat scarce and consists of a few tasks and assignments produced with ITALCO. None of the teachers used the other parts of ITALES that were made available during the fall 2003. Following are two of the scenarios produced by teachers in the Swedish group, but according to the national coordinator there were some more produced, which she did not have a record of:

- Slateboard by Joel Bysell (a pupil)
  Subject: English
- Chasing Santa by Gunilla Rurang and Agneta Hytteman
  Subject: Culture/traditions
II.1.4.6 Meetings and consultation

According to the national coordinator, the Swedish participants or representatives took part in four different conferences and meetings:

- **February 14th - 16th 2003:** The EUN’s Schoolnet Conference in Brussels, were the Icelandic, Slovenian and Swedish participants had the first workshop and the ITALES coordinators introduced the software (3-D environment and ITALCO).
- **August 16th - 17th 2003:** A common workshop at Akranes, Iceland, which 2 of the Swedish teachers attended, as well as representatives from Iceland, Slovenia and The Netherlands, as well as other representatives of the project. Due to the timing of the meeting in Iceland and the fact that the responsibility for ENIS and other parts of the EUN-activities were transferred from the Ministry of Education to a new agency, only two of the Swedish teachers attended this workshop in order to represent both the validating schools/teachers and the national validation coordinator of ITALES in Sweden.
- **September 2003:** A workshop with representatives from the schools was organised in Stockholm in September. At this meeting, Jón Torfi, the ValNet evaluator took part through a videoconference.
- **March 2004:** During the annual Swedish ENIS-meeting the project was reported back to the ENIS schools and the national coordinator collected additional comments.

II.1.4.7 Issues arising from the implementation of the project

According to the national coordinator, there was a series of organisational problems in implementing the ValNet-ITALCO project, ranging from some general uncertainty in the ValNet timetable and implementation from the EUN side to some internal Swedish problems. We find the description by the Swedish coordinator of these issues plausible, but we find it unnecessary to go into the details. In the introduction we have asserted that the communication with the present national coordinator has been excellent, the lines of communication have been open, and we judge her contribution to have been very acceptable. But we also noted that our primary role is to judge the value of the ITALES tool and not specific implementations, which may have run into quite understandable organisational- or other problems, which have nothing to do with ITALES. In this context we note that the those Swedish teachers who succeeded in taking part as planned have given very valuable feedback which turns out to be quite in line with what we have obtained from the other countries. Therefore, we will not dwell on those organizational issues in our evaluation. The issues are, however, well documented in the coordinator’s report and described in the rest of this section.

In the coordinators opinion, the problems that during the fall occurred, and which the schools themselves did not report or reported very vaguely to the coordinator, were mostly of a technical character. When asked about this in the follow-up to the validation one teacher reports having tried to get help to download the ITALCO tool in early September and being so humiliated by ICT-coordinator at her school, who was supposed to help her, that she couldn’t face trying again. Another school had difficulties with the internal communication, the contact person whom the coordinator was in touch with was not the same person carrying out the actual validation and they did not succeed to get together long enough to clear that ITALCO was not possible to run on a Machintosh computer (in fact there were some encouraging messages going around during the fall, based on a misunderstanding, that implied that this in fact might be possible, which can be part of the confusion about this issue). In another school the network was down most of the
fall and in another school the teacher who was responsible for the validation encountered serious personal problems.

According to the national coordinator, the somewhat discouraging results of the Swedish participation may be partly due to over-optimistic project management, initially by assuming that the original national coordinator would be able to manage the situation and subsequently when the project was taken over by the current coordinator, which rested assured that everything was going according to plans. Furthermore, the results may, in the coordinator's opinion, be partly explained in terms of insufficient internal communication. According to the coordinator, a lot has been learned from this experience and a subsequent validation of the ValNet-ITALLES project, which was carried out in December and January has been taken care of in a more structured way.

II.2 Reflections suggested by reports from the coordinators

There are many issues that emerge when going through the reports of the coordinators and thus some preliminary conclusions are in order, which do not overlap with observations in the later chapter on organisational aspects. The main conclusion drawn is that a validation of a project like this should clearly come after the preliminary evaluation, but should nevertheless follow a number of stages or steps:

a) It seems that when a project is proposed for a ValNet type validation it should go through a preliminary, if superficial formal evaluation, where certain aspects of it are vetted. It should for example be ascertained, a) what computer set-up is necessary for the product to work smoothly, b) what general technical competence is necessary on behalf of the users (teachers), c) the adequacy of available documentation and d) the level of expertise expected from the teachers, to name but four important criteria. A fairly high pass mark on 5-6 criteria like these should be a precondition for the eligibility of the project for such evaluation.

b) It seems that a number of the problems encountered are not unexpected but are nevertheless of a type that may not be foreseen in any particular project. Given the cost of meetings, preparatory time and the potential drain on the resources of a fairly sophisticated group of teachers, it is sensible to pre-test a project like this with substantial resources in one or two schools (in one country). This would involve a group of highly sophisticated teachers, that would nevertheless be able to spot a number of problems that the slightly less experienced might have problems with; problems that may easily be reacted to and corrected as soon as they emerge. It is clear that a number of teachers participating in the ValNet-ITALLES project are highly sophisticated and might be considered as an excellent task force for such or kindred tasks.

---

4 See also Roger Blamire, ValNet presentation January 29th 2003, esp. slides 8, 9 and 12, which we believe deserve very special attention in the light of the present report.
c) It seems quite clear that the internal coordination is of a crucial value and a lot of emphasis should be put on it. When it seems to be weak, even temporarily, it may have quite debilitating effect, and it was also clear that the coordinators did play an important role.

d) The community formed by the teachers seems to have been important, but perhaps not to the extent that one might have expected. It seems that the web page, which was excellent, and e-mail as a tool for communication functioned quite well, but it may be specified better as an integral part of a project of this sort (e.g. of the ValNet type) what obligations the individual teachers and national coordinators have vis-à-vis the web. It might also be reconsidered at what stage the meetings should be held, for whom and what function they are supposed to have.

e) Generally, the whole process from conception, development, through alpha and beta testing of projects like these and then through a validation procedure and subsequent general implementation or distribution should be reconsidered.

f) It is also worth considering to what extent effective transmission of experience between partners, whether about problems (and their solutions) or material, should be expected to be an integral part of the project. The central web page was quite impressive but it is not clear to what extent the participants saw it as a working tool.
III The validation procedure

In order to carry out the validation, two different methods were primarily employed in order to collect data from the participating teachers in the four countries:

a) Diaries

The teachers were asked to make, on a weekly basis, a brief note on the work with the ITALES tools during the whole period of working with ITALES (see “Guidelines concerning the data collection...” in appendix). First, this included writing the approximate time spent on the project during the week, i.e. the total time. This would include the time spent on speculations, trials and errors, reading and composing e-mails or web-pages, preparing and testing software and using it in class and other things that arise from participating in the project and using it in class.

Second, the teachers were asked to give a brief comment describing the experience with the project during the week. This could be a positive or negative comment, relating to the technical side of the project, to the educational side or whatever the teacher was concerned with after each week’s work related to the ITALES project. The teachers were asked to bear in mind the different aspects of the project in terms of the “POETC” dimensions and comment on things related to that. It varied quite considerably to what extent the teachers complied with this request. We found the comments we received quite useful for assembling information about the project. We used these as a basis for the questionnaires, both for the open and closed questions and as an input to our report.

b) Questionnaires

Two different sets of web-based questionnaires were developed and administered to the participating teachers during the validation period (see appendix). The former questionnaire was developed partly based on the comments from the teachers in their first round of diaries. The questionnaire included 36 questions, some of them including several items, concerning different aspects of the ITALES project, especially in terms of “POETC”, as well as background information. The questionnaire consisted primarily of closed multiple-choice questions but also of some open-ended questions.

The second questionnaire was developed and administered to the teachers during the end of the validation period. The questionnaire was based on the diaries and questions and the results from the former questionnaire. The questionnaire included 88 questions, some of them including several items, on different aspects of the project, most of them being closed multiple-choice questions but also several open-ended questions.
III.1 Timeline of data collection

The timeline of data collection points can be seen on figure 3.1. Two rounds of diaries were collected by e-mail, first during the last part of November and in the beginning of December 2003 and again around the beginning of February 2004. A total of diaries from 25 teachers were collected in November/December 2003 from three of four of the participating countries Iceland, Slovenia and Sweden. A total of diaries from 18 teachers were returned in January/February 2004, now including diaries from all the four participating countries.

**2003**

- **February**: The first ITALES-workshop of the Icelandic, Slovenian and Swedish participants at the EUN's Schoolnet Conference in Brussels.

- **March**

- **April**

- **May**

- **June**

- **July**

- **August**

- **September**

- **October**

- **November**: In the beginning of November, formal guidelines on how the data collection would be approached were sent to all participants. **Diaries collected**: At the end of November and in the beginning of December, participants delivered their first round of diaries.

- **December**: **Questionnaire administered**: During the middle of December the former questionnaire was administered on WebCT.

**2004**

- **January**

- **February**: **Diaries collected**: At the end of January and in the beginning of February, participants delivered their second round of diaries. **Questionnaire administered**: During the middle of February the final questionnaire was administered to the participants on WebCT.

- **March**: In the middle of March, additional information about the project in each country was collected by means of a list of questions sent to the national coordinators, which they all replied to.

- **April**: From February throughout April the writing of the ValNet-ITALES validation report took place.

*Figure 3.1* The timing of different parts of the data collection concerning the validation of the ValNet-ITALES project

Both rounds of questionnaires were administered to the participating teachers in the four countries over the Internet by means of the WebCT system. Each participant was given a link to a website containing the
questionnaire and a personal username and password in order to log on to the questionnaire. After submitting the questionnaire, each participant could not log on to it again. Thereby, one could only submit his or her responses once to each questionnaire. The former questionnaire was administered to the participating teachers in the middle of December 2003 and the latter in the middle of February 2004. A total of 25 teachers from three of the four countries, i.e. Iceland, Slovenia and Sweden, responded to the former questionnaire administered in December, whereas 39 teachers from all the four countries answered the second version in February.

At the end of the validation period the national coordinators also received a set of questions in which they were asked to address and comment on several aspects of the project and its implementation in their country. The coordinators in, Iceland, The Netherlands, Slovenia and Sweden all responded to our questions.

The data on which we base our analysis are therefore the following:

1. Diaries from the participating teachers,
2. responses to our preliminary questionnaire sent out in early December,
3. responses to our final version of the questionnaire sent out in February,
4. responses to a set of questions sent to the national coordinators in March.

Even though we have only 39 respondents, we will present the results in percentages in order to highlight certain patterns in the results. But we will underpin our conclusions equally with comments from the various diaries, comments from the open questions in the questionnaires and comments from the coordinators.
IV Results

IV.1 The level of computer expertise and general attitude to the use of computers

The majority of the teachers, or 75%, had been involved in other computer related projects at their school. About 80% of the teachers in Iceland had experience with more than two other computer related projects at their school, about two-thirds of the teachers in Slovenia and half of the teachers in The Netherlands and Sweden. The proportion of the teachers who had not had any experience with such projects before was a little over 40% in The Netherlands, 33% in Sweden, 17% in Slovenia and 11% in Iceland.

<table>
<thead>
<tr>
<th></th>
<th>Iceland</th>
<th>The Netherlands</th>
<th>Slovenia</th>
<th>Sweden</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>11%</td>
<td>42%</td>
<td>17%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>Yes, 1-2</td>
<td>11%</td>
<td>8%</td>
<td>17%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Yes, more than 2</td>
<td>78%</td>
<td>50%</td>
<td>67%</td>
<td>50%</td>
<td>62%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>101%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Number of participants</td>
<td>9</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>39</td>
</tr>
</tbody>
</table>

A majority of the teachers who had taken part in other computer related projects at their school, or about 93%, said that the material from the last project they participated in was still being used either somewhat or quite a lot at the school. About 75% of the teachers said that other computer related projects than ITALES were also being run at the present moment at their school. This shows both some permanence in the computer projects and indicates the level of computer use at the participating schools.

The teachers were generally rather positive towards the use of computers in teaching at their school. Most of the teachers, or 92%, felt that computers should be used to a greater or far greater extent in teaching at their school than was being done presently. About half of them thought that the implementation was going too slowly, where as the other half thought that it was neither going to slowly nor to fast. Only one of the participants thought that the implementation was going to fast. About 90% of the teachers said they used computers in their teaching at least once a week and about 60% once a day.

When the teachers were asked to comment on the use of computers in education they were generally very positive towards it. The main theme in their comments was often that the use of computers in education was important, stimulating, motivating and entertaining for the children and increased flexibility and diversity in teaching and information resources. Some commented that it helped with individualizing
teaching, helping those who had learning disabilities and that computers were part of life generally and that children should therefore learn the use of computers in the school setting; it was a part of preparing children for the future. Furthermore, it was mentioned that teachers should also stress the potential dangers of the Internet as well as too much computer use.

Although this group of teachers was generally positive towards the use of computers in education, some were also somewhat critical and mentioned that computers should primarily be seen as tools, but not as a special subject or a goal in itself and should be used as a part of a well planned pedagogical strategy. One of the participants had this to say about the use of computers in education, which we feel echoes a fairly general sentiment and also demonstrates the high level of sophistication of the group of teachers involved:

\[
\text{It is both a question of learning new skills and developing a new approach and attitude towards learning in general. It is also a question of where and when computers can increase the quality and make learning experience richer. In other words, one has got to develop a sense of both the traditional ways of learning and also a deeper understanding of the ICT-area to make good choices in organising education now and in the future. It's important to have the courage to both say yes and no, when meeting the pressure from the ICT-force as it has been experienced the last decade. It looks like many of us choose to be either very optimistic or very negative. There has got to be a balance and a lot of "perspective taking" in this area, since it challenges the foundation of both school and learning... .}
\]

Noting the way the teachers and schools were selected, i.e. teachers who were known to be positive and energetic were offered to participate on a voluntary basis, and also noting the comments from the teachers and the pattern of results shown here, it is clear that this is a group of teachers who are both experienced in participating in projects of this ilk and are generally positive towards the use of computers in education, as well as genuinely interested in projects like ITALES. Thus, it can be asserted that responses they give are given by an informed, insightful, fairly positive and generally sophisticated group of teachers. The results will be discussed noting this background and this is why we feel amply justified in taking the responses very seriously.

IV.2 The application of the tools of ITALES and products made by teachers

Of the four different tools implicated in the ITALES environment, ITALCO seems to have been most used in the project. Nearly all the teachers, or about 97%, had used it; about 20% rather or very much, 36% somewhat and another 36% rather little. About 56% of the teachers had used ITALES-3D, but most of them only rather little. Only 3 teachers had used it rather much. About 23% of the teachers, all of them either Icelandic or Slovenian had used ATENA, although rather little and only one of the teachers had used MCAT to some extent and three others had used it very little.
IV.2.1 ITALCO

Most of the teachers who had used ITALCO found it useful from a pedagogical point of view, or about 70% of them, but only 3% very useful and about 80% of them thought that it was potentially successful as a pedagogical tool. Far most of the teachers who had experience with ITALCO, or 87%, either agreed or strongly agreed that it should be developed further when considered from a pedagogical point of view. We think that this is a very important result. Therefore, most of the teachers who had used ITALCO were rather positive towards it from this vantage point. Given the overwhelming usage of ITALES, most of our subsequent analysis will be based on this part of the ITALES project even though we will not specify this every time.

IV.2.2 The other tools of ITALES

ITALCO-3D: Among those 22 teachers who had used ITALES-3D about half of them found it to be a pedagogically useful tool whereas the other half thought it was not a useful tool. A little over 60% thought it had the potential to become successful and 75% either agreed or strongly agreed that it should be developed further.

ATENA: Among the ten teachers who had used ATENA eight of them found it to be a rather useful tool whereas two of them found it not to be useful. Seven of the ten teachers thought that ATENA had the potential to become a rather successful tool and about 90% either agreed or strongly agreed that it should be developed further.

MCAT: Among the four teachers who had tried the MCAT tool, two of them found it to be a rather useful tool whereas two of them found it not to be. Two of the teachers thought that it had the potential of becoming a rather successful tool.

IV.2.3 Scenarios made with ITALCO

About 76% of the teachers had made their own scenario by using the ITALCO tool and about 10% had made two scenarios. The teachers, who had made their own scenarios, had spent from 3 to 80 hours on making a scenario, with the average time being 22 hours. Table 4.1 shows a summary of the development of scenarios by the participating teachers in each country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Iceland</th>
<th>The Netherlands</th>
<th>Slovenia</th>
<th>Sweden</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of teachers making their own scenario</td>
<td>9</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Average time spent on making a scenario (hours)</td>
<td>39</td>
<td>17</td>
<td>14</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Standard deviation of average time</td>
<td>24</td>
<td>8</td>
<td>12</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Number of teachers presenting their scenario to students</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Total number of participants</td>
<td>9</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>39</td>
</tr>
</tbody>
</table>
About 60% of the teachers who had made their own scenarios had presented it to their students. It was quite variable how long time it took the students to go through the scenario, ranging from 10-80 minutes. About 70% of the teachers who had presented a scenario they made to students felt that the students had been positive towards its use as a teaching material, about 25% of them thought that the students had neither been positive nor negative and about 5% felt that they had been negative towards it. Thus, this is a noteworthy positive result.

IV.2.4 The use of scenarios made by other participating teachers

Most of the teachers, or about 80%, had seen scenarios made by other teachers in the project and 65% of them had only seen scenarios made by their other participating teachers in their own country. About 60% had used one of the scenarios made by the other teachers, most of them only a little bit though (67%). About 60% of the teachers were either rather or very interested in using some of the scenarios made by other teachers. About 45% of the teachers felt that it would be very helpful to have access to a bank of ITALCO-scenarios made by expert teachers, in the languages their students use, and another 45% felt that it would be rather helpful, whereas only 10% of the teachers said that they would probably not use such a bank. The scarcity of use, but the simultaneous interest, presents a contrast that would be interesting to explore further.
IV.3 Pedagogical aspects

IV.3.1 Teachers’ opinion about the use of ITALCO

When we asked participants to evaluate different statements about the use of ITALCO most of the teachers who had used ITALCO, or about 70%, agreed that their use of ITALCO had been affected because they felt the technology was too complex; about 65% because the instructions (e.g. the manual) had limited information and 70% because they had little spare time to design the scenarios. These complaints are also evident in many of the diaries the teachers sent in. On the other hand the majority, or 65%, did not accept that their use of ITALCO had been affected because the pedagogical strength of ITALCO was not persuasive. As can be seen on figure 4.1 most of the teachers were positive towards different aspects of ITALCO as a teaching tool, although most of them found it not easy to use.

The ITALCO tool...

![Figure 4.1](image)

It is noticeable that only one-fourth of the participants found the tools easy to use. This is noteworthy from two perspectives. It is clear, that in this instance like always when a new technology is introduced that a proportion of the staff is technically very versatile and can easily adapt new technology. We assume that...
such teachers are substantially over-represented in the present participating group. Still, even in this pre-selected group, the majority of teachers did not find the tool easy to use. But this in itself did not make the teachers react negatively to the tool. Two-thirds see the tool as potentially useful given a variety of questions addressing the use of the tool in the classroom. Again one should take note of the variance in the results. On one hand, we have the substantial positive attitude to the pragmatic usefulness of the tool; i.e. it helps to motivate the students, makes the teaching more flexible and helps to build up a resource bank. These are not questions about a spectacular innovation but about what most teachers see, however, to be important in aiding their normal job. On the other hand, there is a sizable group that does not share this view. This impresses on the reader, not only the healthy division of opinion about this, as probably most tools for teaching, but also that there is a potential benefit, which is never guaranteed, nor holds for everyone.

These issues can be seen in the comments of teachers and coordinators when asked to express their general opinion about the ITALCO tool in an open question. The main theme in their comments was that ITALCO was too difficult, complex and time-consuming for the normal teacher to use, although it had clear potentials. Following are a few of their comments:

It's an interesting and useful tool, but far too complex to be used by most of the teachers. It could be made more attractive, as nowadays ICT gives opportunities for complex use of sound text, graphics... It's also difficult to correct minor mistakes. The program generates its own way of storing materials, so you can't interfere to those activities or change them. But in general, it's innovative and challenging for teachers and students and if upgraded for more qualitative use could be a good tool for us.

I believe the ITALCO tool presents possibilities to make the learning experiment fun. When I presented my humble scenario to my students it turned out that something in the scenario was motivating. Perhaps that it is like learning through a game. I presented this to some of my colleagues and they were impressed by the possibilities the tool gives. Even though using the ITALCO tool was simple to me, I think it could be complicated to use to those teachers less technically literate. I don't know but I suspect it could be the case. I find the general pedagogical idea behind the tool very appealing to me.

I was not thrilled about this tool, ITALCO. But after the test with my students I saw that this might be something worthwhile. But without all the technological defects. I think a teacher needs a simple tool if he is going to test the knowledge a student has acquired.

Like all other software ITALCO has its limitations, being aware of them in the beginning is necessary. I like working on projects and making teaching material. If you want the material to be successful it is a lot of work. The same goes for material made in ITALCO, most of the work, writing the text, the quizzes, taking pictures, drawing, etc., has to be done before you start putting it into the tool. So I would say ITALCO is just one way of presenting you teaching
material and pupils who like working with computers are likely to be motivated by ITALCO scenarios.

As an idea, it is rather good to have the possibility to create innovative scenarios where the pupils' own experiences and expectations can be incorporated. However, there is a serious issue concerning the effectiveness factor when time spent on creating one scenario is compared to time spent on the particular scenario by individual pupils. Even if the ITALCO tool offers methods to make teaching more interesting, it is not flexible enough to allow for pupils to develop solely on the basis of ITALCO. Additional tools should be used in combination to achieve this.

I think this tool is good for making small, supplementary tasks in any subject. The authoring tool ought to be more user-friendly and it will never be widely used unless the scenarios can be accessed on the WWW without a special ITALCO application having to be set up in the computer or the user.

Of those who were using ITALCO about 50% were only or mostly using their own material, whereas 43% were using material prepared by themselves as well as material prepared by the other teachers. Two-thirds of the teachers (67%) said that they would use material prepared by themselves as well as material prepared by others in the future, 15% mostly or only their own material, but 15% of the teachers said that they would not use ITALCO in the future. This underlines an important aspect of the ITALCO tool. An underlying pedagogical feature is the possibility it affords the technically competent teacher to construct his or her own teaching material. But it certainly also offers the possibility of sharing materials, and it seems that the teachers may have evaluated the tool on different points along this dimension. This means that some of them may have been preoccupied with the possibility of constructing their own material but others may have been content with having access to material made by others. We think that this dimension should be kept well in mind when the evaluation is digested.

When asked if they had become more positive or negative towards ITALCO after getting acquainted with it, compared to their expectations at the beginning, roughly 20% said that they had become more negative, about 40% neither more negative nor positive and another 40% had become more positive. This again underscores the different general attitudes of the teachers and perhaps very different initial expectations, but we take it as an important sign that on the whole the teachers retained the their initial attitude or as nearly half of them did, elevated it.

This different attitude towards the nature of the ITALES tools emerges from the following. Around half of the participating teachers felt that the ITALES environment was mainly an authoring tool (53%), whereas the other half (47%) saw it as a tool providing them with teaching material to use in class. Whereas about 80% of the teachers who looked at ITALES mainly as an authoring environment found it a promising authoring environment, 60% of those who looked at it mainly as tool providing teaching material found it a promising authoring environment.
Assuming that ITALES would be used in the next ten years, half of the teachers (50%) thought that it would be used as a balanced mixture of a developmental tool and a tool providing ready-made teaching material, whereas 26% thought that it would be used primarily as an environment where one could adopt material developed by others. Around 13% of the teachers thought it would be used primarily as a working platform (i.e. an environment that helps one integrate different teaching and learning tools) and 8% primarily as an authoring environment, i.e. an environment to develop teaching material.

IV.3.2 The pragmatics of the ITALES tool

The teachers were asked to state their opinion concerning the somewhat pragmatic aspects of the ITALES project (see figure 4.2). The majority of the teachers felt that the ITALES tools were enjoyable to use for students and around half of the teachers felt that its interfaces were attractive to use and the platform manageable (50-51%). Still fewer teachers, or 38-41%, felt that its platform was flexible and the content easy to use and adapt to different situations, and even fewer, or 29-32%, thought that the interfaces were simple to use and the tools enjoyable to use for the teachers.

The ITALES...

Figure 4.2 The proportion of participants in ITALES agreeing with statements about different aspects of it
The technical status of the project receives quite negative evaluation in a number of the summaries from the teachers. But it should be kept in mind on the basis of figure 4.2., that on most questions between 30 and 40% of teachers give it quite a positive assessment. This should be kept thoroughly in mind.

When asked about the pedagogical aspects of the ITALES project most of the participants, or 66%, said that they responded to the questions primarily based on their experience with the ITALCO tool, whereas 34% said that they were not responding on the bases of any specific ITALES tool.

About 70% of the teachers felt that ITALES or very similar tools were an important addition to the teaching tools they had available. Almost all of the Icelandic (100%) and the Slovenian (92%) teachers felt that ITALES or similar tools were an important addition but only half of the Dutch participants (50%) and one-third of the Swedish participants (33%). This may depend either on different attitudes but also on different contexts, which we will return to while discussing the cultural aspects of the project.

Half of the teachers (50%) who had introduced ITALES to their students said that from a pedagogical standpoint the students had been using ITALES mostly as they intended, whereas 40% said that they had been using it only partly as they intended but only 10% mostly or totally differently.

Figure 4.3 The responses of participants in ITALES to different statements concerning the effectiveness of ITALES in helping the teacher build a learning environment...

The teachers were asked about their opinion concerning the effectiveness of the ITALES environment in terms of helping them build a learning environment. There are at least two ways to evaluate figure 4.3.
One is only to consider the rather definite responses and then we see that about 20% are in the sceptical group, but 25-35% in the optimistic group. But if we include the nuances, the positive responses are dominating. On the other hand it may be suggested that figure 4.3 shows that the majority of the teachers (62-76%) found it only slightly effective or even ineffective in helping them building a learning environment that was novel, exiting and motivating or which would make the students learn more. From this point of view, the majority has at best a rather bland attitude towards the tool.

IV.3.3 ITALES as compared to other novelties in teaching

Similarly, when asked to compare the I TALES environment to other novelties in teaching only one-third of the teachers agreed that I TALES was more promising in terms of usefulness, about 90% that it demanded more technical knowledge and that it was more time-consuming in preparation, and 40% agreed with the statement that I TALES demanded more teamwork than other novelties (see figure 4.4). The teachers were also asked if they agreed or disagreed with the same statements as shown on figure 4.3 when comparing the I TALES environment to other software they knew of. The proportion of teachers agreeing with the statements when comparing I TALES to other software was quite similar to that if comparing I TALES to other novelties in teaching (as shown on figure 4.4).

Compared to other novelties in teaching (not only computer related), the I TALES environment...

![Figure 4.4](image-url)
IV.3.4 The general manageability of the ITALES tools

Figure 4.5 shows the proportion of participants in ITALES agreeing with different statements relating to the ITALES environment living up to its expectations. Almost 80% of the teachers agreed with the statement that as for the intentions of the developers, the ITALES environment had lived up to its expectations as being based on a sensible pedagogical idea and 65% in terms of its suitability for lesson development, whereas around half of the teachers (44-55%) agreed that it had lived up to its expectations in terms of either its interactive power, flexibility and being a sensible choice for a school. The split between the positive and non-positive responses is quite noteworthy and deserves special attention.

As for the intentions of the developers, the ITALES environment has lived up to its expectations in terms of...

- being based on a sensible pedagogical idea: 72% Agree, 6% Strongly agree
- being a sensible choice for a school: 55%
- its flexibility: 50%
- its interactive power: 44%
- its suitability for lesson development: 65%

Figure 4.5 The proportion of participants in ITALES agreeing with different statements in terms of the ITALES environment living up to its expectations

When asked if they would gradually integrate tools like ITALES into their teaching or if they thought that such tools would remain marginal for the next ten years, about 40% of the teachers said that such tools would soon become visible in their every-day teaching, or that within the next ten years they would become quite important tools in their teaching. Another 40% of the teachers were on the other hand a bit more hesitant and said that such tools would within the next ten years be used only somewhat in their teaching, whereas the rest of the teachers (20%) said that they would either not be used very much in their teaching or mainly on an experimental basis. Again, this division of opinion deserves attention.
IV.3.5 The pedagogical characteristics of ITALES

When asked about the future, or the potential promise of ITALES as a learning environment the teachers were, for the most part, considerably more positive than when for example stating its current effectiveness. This is an important discrepancy, demonstrating that the teachers discern between what they see as the actual usefulness of a tool and its potential or its conceptual value. As figure 4.6 shows, the vast majority of the participating teachers, or 70-90%, agreed with the statements that the ITALES environment would turn out to be successful because it was either novel for the students, motivated them, made them think or was interactive. On the other hand, only 14% of the teachers felt that it would become successful because it would be a better tool than other ICT tools. Thus, we may brace ourselves for the conclusion that conceptually the idea of ITALES is important, but that its implementation has to compete with a number of other kindred devices or packages.

![Figure 4.6](image)

The ITALES environment will turn out to be successful because it...

...is novel (it is different from other teaching material) 68%

...makes the students think 64%

...is interactive 82%

...motivates the students 81%

...is better than other ICT tools 14%

Figure 4.6 The proportion of participants in ITALES agreeing with different statements about the about why the ITALES environment will turn out to be successful

About 60% of the participating teachers were positive towards using the ITALES environment further. Roughly 40% of the teachers felt that it was rather likely that they would choose ITALES as a project to work on further if they were given extra time to work on an ICT developmental project, but almost 20% seemed more certain and said it was either very likely or that they were almost certain that they would
choose ITALES. This may be seen as an important recommendation. The rest of the teachers, or 40%, said on the other hand that it was either rather or very unlikely or that they would certainly not choose ITALES. Once again we get this clear division of opinion, which must constantly be kept in mind.

**IV.3.6 The future prospective of ITALES**

A considerable majority of the participants were positive towards the further development of ITALES (see figure 4.7). Almost 80% felt that it was important that the school supported their further work on the project, and around 90% felt that it was important that teachers would be supported to make more material and that it was important that ITALES would be developed further. Almost all the teachers (97%) felt that it was important that some ITALES projects would be given further support. This result deserves, special attention from the European Schoolnet. When considering these results it should be kept in mind that this group of teachers is not naïve in terms of computer projects like this one, and many of them were also considerably critical towards some of the aspects of the project. Thus, this rather strong support for the further development of the project is not the view of naive, uncritical enthusiasts.

![Figure 4.7](image-url)

*Figure 4.7 The proportion of participants in ITALES agreeing with different statements about the future of ITALES*
IV.3.7 Summary and discussion of results on the pedagogical aspects of ITALES

It is rather complex to summarise the evaluation of the ITALES tool from the pedagogical perspective. But it is clear that the tool as it stood while being introduced was on the whole rather cumbersome and unwieldy. It was time-consuming and even though the majority of the teachers could operate it they did not feel at ease with it. But at the same time, we know that some of the teachers managed quite well nevertheless. Many of teachers had good teaching experiences with ITALES and thought that it already at this stage presented an interesting tool for the teachers. But all these are minor points. We think that the most important points are the following:

a) The variation in the responses of the teachers, indicate that they are quite prepared to indicate both the strong and the weak points of the project. This we take as lending support to the construct validity of our probe.

b) The views of these experienced teachers are divided. They have different criteria, different attitudes towards teaching and different emphasis in their education. Both positive and negative views should be taken very seriously. It is clear that to some teachers a tool like ITALES offers potentially a very useful device from a variety of vantage points. It is equally clear that other teachers don't think that this is so. We are inclined to take this division very literally and let that guide us in our general conclusion.

c) If the device (tool) is to be used by the general teacher, it needs to be developed considerably. It is not ready for general use. It has to be easy to use, not unduly time-consuming and must be well documented if it is going to be used on a general basis. It is, however, very doubtful that a device of this sort, in the present high-tech environment has any chance of surviving in the fast technical development without a developmental support of a totally different magnitude from what it has now got.

d) It is quite clear that the majority of teachers feel that the tool, or at least the concept, has a considerable potential. A great variety of questions show this quite clearly and in an impressive manner. This is an important conclusion of this evaluation and should be taken as a very important reason to provide further support for its development. One of the problems in the evaluation is that we don't know enough about other tools the teachers are familiar with against which they can compare the ITALES tool. There are quite possibly other potentially and equally promising tools.

e) It is clear that there is a spectrum of opinion regarding the role of individual teachers in constructing their own material. The ITALES tool can both be used as an authoring system for individual teachers, and seem to have a great potential in this respect, but also as a carrier for materials made by other teachers and seems also to have considerable potential in this role. This emphasises the variety of roles the teachers see themselves as having and should be respected.
f) The general impression from this evaluation is that this group of teachers is appreciative of the original idea of the ITALES developers. On a variety of dimensions the potential of the tool is judged to be quite strong. It offers to fit into the THINK scenario 2. But as we will see later, then for a variety of reasons outside the technical nature of the tool, it may lapse into a THINK scenario 1, where it may fit quite well even though it is not designed for this mode of operation. It was perhaps somewhat premature and probably unfair to the system to test it at this stage. But then again, as the idea seems to be accepted by the teachers, and it has their support for further development, this should be considered very seriously. But there is no way we can on the basis of this information pit this tool against other tools of a similar ilk, which may equally deserve development.
IV.4 Organisational aspects

There are two very different sides to the organisational aspects of a project like this. One is the basic organisation of the project and how it is managed in general and this we have briefly discussed in the section where we reported on the projects in the different countries. In this section we concentrate on the organisational aspects that relate to fitting the project into the school setting.

Whereas little over half of the participating teachers in ITALES (53%) found the content of the project rather or very easy to fit into the curriculum they were expected to cover, a little less than half found it difficult to fit into the curriculum (47%). This proportion varied considerably by country (see figure 4.8). Whereas 100% of the Icelandic teachers found the content of ITALES easy to fit into the curriculum they were expected to cover, 60% of the Swedish teachers thought this was the case, 40% of the Dutch teachers and 20% of the Slovenian teachers.

We interpret this as basically reflecting different level of flexibility within the curriculum of the different countries, even though this can probably be debated. But around half of the participants (47%) felt that it was easy to fit the content of ITALES into the timetable of their classes. This was especially the case in

![Figure 4.8 The proportion of participants in each country that found different organisational aspects of ITALES rather or very easy](image)
Iceland where two-thirds of the participants found this to be the case. The participants were on the other hand more negative when they were asked how easy or difficult it was for them to fit the preparation work for ITALES into their own working timetable at school (outside classes). Only 11% of them found that easy, none of the participants in The Netherlands and Slovenia.

This should be taken very seriously, and may turn out to be a crucial factor when new ideas are introduced into the operation of a school. A sound idea may falter largely for this reason. When asked to comment on the hypothetical case, if using tools like ITALES would help the teachers gain more control over the curriculum or make the teaching better, the responses can be placed crudely in two categories. On the one hand, many of teachers were rather negative towards the potential of tools like ITALES in terms of making teachers gain more control over the curriculum or make the teaching better and often said that ITALES was too complicated for teachers. On the other hand, another group of teachers was considerably more positive (approximately as big as the negative group). As an example, one of the teachers comment was:

Yes I do. Still, I don’t believe tools like ITALES will come instead of anything. It simply provides a new way of delivering/practicing the items the curriculum requires us to cover. This is a good thing because we need new ways to deliver the curriculum to our students. Tools like ITALES help us to keep our teaching up to date. We are not only teaching facts. We are changing the way our students think and living in the technical world of tomorrow requires different way of thinking than yesterday’s world. We are subjects of the yesterday’s world and think in more linear way than the hyper-kids. This does not mean we can’t practice different way of thinking. We only have to keep our minds open and use tools like ITALES.

A third group was rather positive but pointed out that it depended on different other factors as well. One teacher gave the following answer:

In theory yes, but I think that that issues like availability, stability of software, accessibility, time-effectiveness etc. should be discussed more. Otherwise I fear that this rather good idea will fail to attract the teachers, who already are very stressed and have several time frames to follow ...

And another teacher had this to say:

I certainly don’t think that tools like ITALES will help teachers gain more control over the curriculum. On the contrary, I believe that teachers should have already mastered the curriculum before adding tools of this kind. A teacher should not start using tools like ITALES until he/she has gained some experience in teaching and gained some knowledge in the material at hand. He/she has to know exactly WHAT he/she is doing and WHY. Only then, the tool can start to make the teaching better.

The ValNet-ITALES coordinator made another critical comment. According to her, the answer to the question about ITALES making teachers gain more control over the curriculum or make the teaching better was:
No. But it might make teaching/learning more fun. (My opinion is based on that I don't regard teachers as having to be especially funny or entertaining - that's not their job. Besides, schools can never compete with the market in this field. I've also kept this opinion to myself in my job as a coordinator of this project.)

IV.4.1 Summary and discussion of results on the organisational aspects of ITALES

The organisational problems are in some ways much greater than the problems related to the tool itself. It is clear that the teachers had problems to find time to work on the project (which probably turned out to be more time than originally anticipated), they found problems introducing the materials into a tight timetable and some of the teachers had considerable problems finding a place in a tightly controlled curriculum. It is absolutely clear that these problems should be taken very seriously.

This does not necessarily reflect negatively on the evaluation of the tool itself. This once again is taken to demonstrate the professional judgement of the teachers. Then again a number of teachers do not have these problems and found it quite easy to adapt the ITALES based material into their teaching.

It seems naïve to spend a lot of effort to introduce tools into a setting that for organisational reasons does not accommodate them, even thought there might be a consensus that the tools in themselves are technically sophisticated. This may also reflect on David Wood's scenarios, because the tools might be used in some cases of limited time to fit into a different setting from that for which they were originally devised.

It is obvious from the data that there are considerable and important national differences that may evoke some speculation about what are the cultural organizational differences that may hinder the transfer of project ideas between cultures.
IV.5 Economic aspects

The majority of the teachers, or 65%, felt that on the whole the ITALES project had been either rather or very fruitful project. About 90% of the Icelandic teachers thought this was the case, little less than 70% of the Swedish teachers, 60% of the Dutch teachers and 45% of the Slovenian teachers. As table 4.2 shows the teachers had spent on average 49 hours on the project in total by the time they answered the questionnaire in February. The number of hours spent on the project varied considerably though, as the standard deviation shows (Std. dev.). Also the number of hours spent on the project as well as the number of hours still needed to use ITALES as one would like to, varied considerably by the country of the teachers and their technical background. Roughly speaking, the teachers seem to have been content with doubling the time spent, about an extra week per teacher. It should not be too difficult to give a teacher the 80 hours, total, to develop a scenario she would be able to use.

Table 4.2 The average number of hours already spent on ITALES and average number of hours still needed to use ITALES as optimal by country of teacher and the level of teacher’s technical background

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of participants</th>
<th>Mean (hours)</th>
<th>Std.dev. (hours)</th>
<th>Number of participants</th>
<th>Mean (hours)</th>
<th>Std.dev. (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>9</td>
<td>60</td>
<td>32</td>
<td>7</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>10</td>
<td>29</td>
<td>11</td>
<td>9</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Slovenia</td>
<td>12</td>
<td>69</td>
<td>79</td>
<td>11</td>
<td>59</td>
<td>46</td>
</tr>
<tr>
<td>Sweden</td>
<td>5</td>
<td>21</td>
<td>9</td>
<td>3</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>Level of technical background</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rather or very good</td>
<td>25</td>
<td>53</td>
<td>60</td>
<td>19</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Some to rather limited</td>
<td>11</td>
<td>39</td>
<td>20</td>
<td>11</td>
<td>41</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>49</td>
<td>51</td>
<td>30</td>
<td>36</td>
<td>38</td>
</tr>
</tbody>
</table>

When asked to state their opinion about introducing software like ITALES to the schools in terms of the time teachers have in order to prepare their lessons, they were generally of the opinion that ITALES was too time-consuming, both in terms of getting acquainted with the software as well as preparing lessons with it, especially in terms of an already tight schedule. This was a view particularly shared by those who did not see themselves as ICT experts. In this respect it was sometimes mentioned that teachers would use ITALES if they had the teaching material already made. For example, one of the teacher’s comment was:

I think ITALES is quite time consuming and teachers would not be making scenarios every week. However, given that teachers would have access to scenarios that are in accordance with the curriculum and the standards they make for teaching material it would probably be successful.
Some of the teachers also stressed that teachers should be trained thoroughly in using the software in order for tools like ITALES to become successfully implemented in schools. One teacher said:

Software like that cannot be thrown into the hands of the teachers, without proper introduction and training. In fact, I think it should be a decision made by school authorities, whether they want tools like this to be used at their school. The authorities should then provide their teachers with support, training and added preparation time to implement the tools in order to use the software to it’s full.

Finally, another pertinent point was made concerning the time-consuming problem of ITALES:

I think that ITALES needs more marketing. I noticed that quite many teachers tend to reject new projects, independently of how good or promising they may be, if they seem to take too much time. But, if teachers are involved and softly introduced into ITALES, this platform may become successful in many schools. There is another problem concerning that some teachers are reluctant to new modalities ...

Another important element in terms of the economic aspect of the implementation of tools like ITALES in schoolwork concerns the costs of the investment of technology needed for such projects. When asked to what extent there had been a need to update the computer equipment at the schools specifically for the ITALES project more than half of the teachers (57%) said that there had been no need at all for updating the computer equipment in order to implement ITALES, 27% said that this had been the case only to a little extent, about 14% to some extent and only 1 teacher, to a large extent.

Most of the teachers were of the opinion that ITALES was uneconomical primarily in terms of the time teachers had to spend mastering the software and making their material. This view was clear when they were asked to answer an open question about looking at the project from a purely economic point and state their opinion about cost in terms of the time spent on it and equipment. Most of the teachers found the time factor as being the most salient cost factor in the implementation of ITALES. One of the teachers had for example this to say:

If all teachers in my school would spend as much time as I have on this project (most of them would probably need more time actually), and if they would get paid accordingly, it would be tremendously expensive for the school. That alone is enough to prevent projects like this to "settle" permanently in schools. We have a few entrepreneurs in most schools who are ready to experiment with things like these in their own time, but most teachers will not spend the necessary time unless getting paid accordingly and most schools are not willing to pay. This is obviously very odd, because most schools (at least in Iceland) are ready to pay large amounts of money on hardware, but not on software or training staff.

Although most of the teachers held this opinion some of them stressed that the time spent on ITALES was still fruitful:
If we are talking about my time spent on this I feel that it was a positive experience, which will help me in other tasks. The equipment is there in my school. But the time spent is considerable and I used my spare time. ...

IV.5.1 Summary and discussion of results on the economic aspects of ITALES

There are a number of points that emerge quite clearly (and expectedly) from this section. A project like this takes time, perhaps more time than is generally anticipated or planned. But this was in order, as this was a selected group of ICT positive teachers who were willing to participate and take some risks with their time. But this rather common and dreary problem must be taken very seriously, because, on the basis of the responses here, it can lead to a number of problems.

A project will become more (perhaps much more) expensive than anticipated. The common problem of underestimating the time cost in terms of teacher time has to be tackled beforehand in some way. It is impossible to ask teachers to spend some time on a project and then tell them, before they can see it through, that there is no more money. Thus, it must be very clear (and realistic) how much time the teachers are expected to spend on a project and how this time is paid for. Also, if it turns out that the necessary time has been underestimated, it must be decided beforehand how this is to be tackled. It seems from various comments, both from coordinators and teachers, that issues like these are no less important than the pedagogical potential or technical sophistication of a project. It should be noted that the teachers involved in projects of this sort are normally a group that is very valuable as a test bed and should not be treated lightly. One should be aware of the common problem of burn-out of the enthusiasts and take great care not to demand continuously too much of them.
IV.6 Technical aspects

Most of the participating teachers in the ITALES project had a rather good technical background and know-how. Roughly 70% of them said that they had either a very good (32%) or rather good (40%) general technical background to participate in the ITALES project. Only 8% of the teachers felt that they had limited general technical background. Around 60% of the Dutch and the Slovenian teachers said that they had good general technical background, roughly 80% of the Swedish teachers and 90% of the Icelandic teachers.

Similarly, the majority of the teachers, or roughly 60% said that at present they had either a very good or rather good technical know-how to participate specifically in the project, but only 5% felt that they had a rather limited specific technical know-how in order to participate in ITALES.

One wonders if a pre-requisite in both cases should not have been that 100% should have been able to respond to these questions positively? Nevertheless, the level of technical competence of this group is quite high and, apparently, quite adequate for this project as it was accepted for the ValNet phase. It will not be assumed that many of the problems encountered were due to technical incompetence, which is not to say that there were no technical problems.

About two-thirds of the teachers (72%) said that the status of the equipment at their school was good enough to allow the use of ITALES, whereas only about 10% felt that the status was bad. About 60% of the Dutch and Slovenian teachers said that the status of the equipment in their schools was good as for implementing ITALES, about 80% of the Swedish teachers and all of the Icelandic teachers (100%). Most of the teachers, or 72%, felt that software like ITALES did not make unreasonable demands on the level of computers and related technical resources at their school.

Likewise, three out of every four teachers (75%) said that the general technical support at their school was either rather or very sufficient whereas one of every four (25%) said it was insufficient. Whereas 85% of those who had good technical background felt that the technical support was sufficient at their school, only 55% of those whom had only some or rather limited technical background found the support sufficient.

Most of the teachers, or 72%, felt that software like ITALES did not make unreasonable demands on the level of computers and related technical resources at their school. When asked to give their general opinion about the technical level and the technical demands of the ITALES project, some of the teachers commented that although their schools were technologically well equipped for the project many schools would not be:

.... The ITALES project does not require higher technology than my school can meet. It requires high bandwidths (good internet connections), which my school has. On the other hand, I think
that the ITALES project would have been difficult to participate in if the technical level of the school had been lower.

Not too high in today’s world of technology. But for many schools it still too high.

Thus, on the whole the level of technology was adequate but nevertheless on the verge of being problematic in some cases. A general distribution of a project of this sort would probably be unrealistic in many school districts.

Around half of the teachers were of the opinion that it was sufficient to concentrate on the PC and Windows environment when it came to the development of a software package like ITALES, whereas about one-third (32%) felt that it was sufficient to concentrate on the PC but not only the Windows environment. About 20% of the teachers said on the other hand that it should be developed for other platform as well, such as for Machintosh computers and operating systems.5

Whereas roughly half of the teachers (54%) felt that ITALES should be used both by expert teachers that have been trained in designing curriculum and teaching material as well as by ordinary teachers, about 30% felt that it should be used primarily by expert teachers and 16% only by expert teachers. This indicates that although the teachers had themselves in general good technical knowledge and experience in using ICT in their schoolwork many of them were rather reluctant to believe that ITALES was a suitable tool for ordinary teachers.

When asked to give their opinion about the demands or complexity of ITALES given that it is meant to be use in a normal school situation, the general opinion was that the ITALES was too complex and needed further development in order to function in a normal school setting. The following are, in our judgement, fairly typical examples of comments given by teachers, who express this opinion.

I think the project is much too complex for any "normal" teacher. It takes a lot of time and effort only getting acquainted with the tools, and most teachers simply don't have that amount of time. Not in a normal school situation anyway.

I suspect that technical know-how of the average teacher is overestimated. Therefore, I think that only a small part of the teacher population will use the ITALES tools to create something. But I do think that most teachers can easily use already made material with the students given that they have the facilities to do so.

It's too demanding. Teachers generally have no knowledge of html. Often even they have hardly any decent computer experience. This makes it hard for them to use a tool like ITALCO (at least making own content).

5 In the Swedish group there seems to have been some misunderstanding as to the possibility of using Apple Macintosh. We do not think it serves any purpose to dwell on this problem.
It is not developed yet. There are too many discrepancies in the product. If the tool were flawless maybe two or three teachers would use it in my school.

Well, most teachers today have some knowledge about computers and different methods. But, few have an overall expertise that provides the knowledge and capability to create really competitive programs or applications that could actually compete with commercial products and incorporate pedagogical aspects into computer usage. Many teachers feel they do not have time enough to develop their teaching in an innovative way that could make learning more interesting to pupils. ITALES sometimes lacks information on how different items can be incorporated into the scenarios or applications. Also, the lack of complete instructional tuition on how to use for example ITALCO makes the use much harder and forces the teacher to "waste" a lot of time on trial and error activities that in the end actually damage the motivation.

Finally, the ValNet-ITALES coordinator had this to say about the demands or complexity of ITALES in terms of being used in a normal school situation:

The 3-D environment might work with small children, if run on a fast server with a lot of bandwidth. I don't think older pupils, who are used to much more sophisticated graphics of the computer games, will find this interesting to explore. The ITALCO authoring tool might become popular among teachers if it was simpler to use. ITALCO might also be used by students doing their own projects, but I think that as it is it's bound to loose in the competition to other similar software for making multimedia projects, like Mediator Pro (which is getting quite popular in Icelandic primary schools). I think that the main idea of the ITALCO, i.e. a tool for making a quest, is a good one and can be fitted into the teaching of most subjects.

IV.6.1 Summary and discussion of results on the technical aspects of ITALES

There were some technical problems adapting the ITALES tools into the participating schools. But these were not serious, nor very common, and are not seen to disturb seriously the general evaluation of the package. It seems that the technical sophistication of the teachers allows them to distinguish between current problems and the technical viability of the tools. Some of the teachers thought that the technical demands of the tool would make it unreasonable to expect it to become of general use, whereas many of teachers thought that given a reasonable development, it might become a tool for many teachers. It is another question whether the technical sophistication of a tool that is not developed with a commercial backup, will be seen as sophisticated when using the commercial computer games as benchmarks.
IV.7 Cultural aspects

In this section of the report, the ITALES project will be discussed in terms of teaching culture, language and the importance of international cooperation.

IV.7.1 Teaching culture

The working methods presented by the ITALES environment seems to have fitted rather well in to the teaching culture that most of the teachers were accustomed to. Three-fourth (75%) of the teachers said that it fitted rather or very well into their teaching culture, whereas 25% felt that this was not the case. Somewhere between 80-90% of the teachers in The Netherlands, Iceland and Sweden were positive in this respect but around 60% of the Slovenian teachers. Some of the Slovenian teachers, that held the opinion that ITALES did not fit that well into their teaching culture, said that they were used to more traditional ways of teaching. One of the Slovenian teachers said that they had problems with using Slovenian letters when preparing scenarios but otherwise there were no problems in that respect. Many of the teachers felt, on the other hand, that they and their students were used to working with and using ICT to at least some extent in their school setting and as a result, ITALES did in their opinion fit rather or very well into the teaching culture they were accustomed to. The Swedish coordinator was also positive in this respect:

Swedish teachers are not tied to a strict curriculum and have a huge freedom to use various materials other than textbooks as learning objects (traditionally this was newspapers, study visits etc.). Sweden does not have a governmental body publishing textbooks, this is done by publishing companies and teachers or schools choose what they want to buy.

The Icelandic coordinator thought that it depended on the school level and the ITALES tool:

The answer to this differs with the respect to the subject and school level and the different parts of ITALES. As an example the ITALCO idea of a quest fits nicely into the approach of Problem based learning, which is getting popular in Biology and some Science modules of the secondary schools in Iceland. ... It's more difficult to see how this is supposed to work in Maths, for instance. On the whole I suppose one could find use of this working method (of ITALCO) in most subjects, if needed. The 3-D probably relies more on the school level and the teachers' tastes. The idea of the Metadata Course Assembly Tool fits well into the ideas of putting whole modules or courses on the WWW but also competes with other similar software, some of which are open source or free to use, like WebCT, Learning Space, Claroline, Manhattan ... even ITCOLE (one of the other ValNet projects), which the EUN has already started to use. The ATENA tool (for making interactive tests) has to compete with the free and popular Hot Potatos tool etc.
The teachers were asked to make comments on how they thought the application of platforms like ITALES would affect the teaching culture in their school. While some of the teachers felt that it would not change the teaching culture at their school, others felt that it would change it, particularly in the long run. Following are examples of comments from teachers and coordinators that amplify both types of views:

I don't think it will affect the teaching culture very much. It will take some time to be activated in schools. Teachers will evaluate for a time and then some will use it but other not.

I don't think this will make much difference, since I think the application will never be more than just supplementary to the traditional teaching methods. This is just like the application of videos; they're used now and then in education but haven't made any fundamental changes.

I don't think it will affect the teaching culture in our schools very much over a short time because changes come slowly. Over the long run we will eventually have to change the way we teach. It has been said that a teacher from 100 years ago would not feel so much out of place in a classroom of today. Why is that? Because our ways of teaching has not changed so much. I base this opinion of mine on changes I have tried to implement in my school. So little changes requires extremely much effort.

It depends on the conditions at each school, how often teachers already use computer and how much they know about ICT in teaching. In schools, which are familiar with that ITALES cannot offer something especially new. In schools, which are in the beginning of the implementation of ICT it can offer quite a lot ...

I am the only teacher using ITALCO so it is not affecting my school now. But the application of it in my school would probably be rather difficult if all the teachers would have to make their own material. However, if they had databases with ready-made material it would probably go more smoothly. As we are already using a learning environment and more and more teachers have started using it I have to say that ITALCO would probably be similar. When a learning environment was introduced in our schoolteachers got short seminars and assistance when they needed. For ITALCO something similar would probably be needed.

I am the only teacher using ITALCO so it is not affecting my school now. But the application of it in my school would probably be rather difficult if all the teachers would have to make their own material. However, if they had databases with ready-made material it would probably go more smoothly. As we are already using a learning environment and more and more teachers have started using it I have to say that ITALCO would probably be similar. When a learning environment was introduced in our schoolteachers got short seminars and assistance when they needed. For ITALCO something similar would probably be needed.

In the beginning it will not affect the teaching culture, only replace paper with computer. In the long run, however, I believe it will change the way students will learn significantly: more interactive, more self-learning, learning at your own speed, less limitations in courses etc.

Toward a more individualised teaching system where each student can start at his/he level...in the best of possible worlds of course. It could also lead to that computers “replace teachers” which could be good in some cases so teachers can spend their time on the pupils that need their attention more.
IV.7.2 A question of language

About 20% said that they themselves had either quite some or very serious language problems when using the ITALES environment, and about one-third (32%) said that there were language problems, but no great problems. This means that a little less than half of the teachers had either a very few problems or no problems at all. These proportions were quite different depending on which country the teachers came from. As can be seen in figure 4.9 the language issue was most problematic in The Netherlands where half of the teachers (50%) said that they had either quite some or very serious language problems when using the ITALES environment. Also, for almost one-fifth of the teachers in Slovenia this was the case, whereas none of the teachers in Iceland and Sweden had had substantial problems in this respect.

When the same question was posed with reference to their students, about one-third of the teachers (30%) said that there were either quite some or very serious language problems for their students when using the ITALES environment, and about one-fourth (24%) said that there were language problems but no great problems. Less than half of the teachers said on the other hand that their students either just managed, had very few problems or no problems at all.

![Figure 4.9 The proportion of participants in each country that felt that the ITALES environment’s use of the English language presented problems for themselves or their students](image-url)
As can be seen in figure 4.9 the language issue in terms of the students was, according to the teachers, most problematic in The Netherlands and Slovenia, but around 40% of the teachers in these countries felt that their students had either quite some or very serious language problems when using the ITALES environment. Also, the same answers were given by about one-fifth of the teachers in Iceland, whereas none of the teachers in and Sweden thought that their students had had substantial language problems when using ITALES, although two-thirds of the teachers said that their students had problems, but not great ones in this respect.

The teachers were furthermore asked if they could use material from the teachers in the other countries participating in the project. A clear majority of the teachers, or about 80%, felt that they could use it probably somewhat, whereas only 14% of them thought they could quite or very easily. Around one-fifth (22%) said on the other hand that they either could probably not use it, that it was very unlikely or that there was no possibility that they could. As figure 4.10 shows, the teachers in The Netherlands and Iceland can be considered most pessimistic in this respect, in that 30-33% of them said that they either could probably not, it was very unlikely or not possible to use the material created by the teachers in the other countries, whereas 17% of the Swedish teachers and only 8% of the Slovenian teachers held this opinion.

Figure 4.10 The answers of the teachers in each country to the question about if they thought they were able to use material from the participating teachers in the other countries.
IV.7.3 The importance of translation

Roughly half of the teachers thought that the special Dutch, Icelandic, Slovenian or Swedish letters presented problems when using ITALES. About 49% said that it presented some problems, but only 5% quite substantial problems. About one-fourth (22%) was not sure if it was problematic and one-fourth (24%) said that it presented very little or no problems at all. The teachers, especially in Slovenia and Sweden, thought that their special letters presented problems. As can be seen in figure 4.11, 83% of the Slovenian teachers and 67% of the Swedish teachers thought that their special letters presented some or substantial problems when using the ITALES software. The comparable proportion was 40% among the Dutch teachers, but only 22% among the Icelandic teachers.

![Figure 4.11 The answers of the teachers in each country to the question about if they thought that the special letters in their countries presented problems when using the ITALES software](image)

When asked about how important they thought it was for the other teachers in their country to have the ITALES tools translated into their language in order to make it widely used, the majority of the teachers, or 87%, felt that it was either rather or very important. This was the general opinion independent of the teachers’ country of origin. Similarly, most of the teachers (92%), independent of country, felt that it was either rather or very important for students in their country to have the ITALES tools translated into their language in order for it to be widely used as a teaching tool in a wide variety of subjects.
The teachers were asked, given that they felt that the ITALES software should be translated into their language, if it was a matter of principle or for practical reasons. Whereas roughly half of the teachers (53%) thought that it was mainly or purely for practical reasons, 41% of the teachers felt that the practical and principal reasons were both very important. Only 6% of the teachers felt that it was mainly a matter of principle that ITALES should be translated into their language. The teachers’ opinion varied considerably across countries (see figure 4.12). About three-fourth of the teachers in The Netherlands and Sweden (70-75%) felt that ITALES should be translated into their language, mainly or purely for practical purposes, half of the teachers in Slovenia (50%) and only 25% of the teachers in Iceland held this opinion. The Icelandic teachers seem to hold to the principle, compared to the others, since 63% felt that the principle and the practical reasons were both very important and 13% found it mainly a matter of principle that ITALES should be translated into Icelandic. These proportions were considerably lower among the teachers in the other countries, apart from that 10% of the Dutch teachers felt that the translation of the software into Dutch was mainly a matter of principle.

![Figure 4.12](image)

**Figure 4.12** The answers of the teachers in each country to the question about if they thought that the ITALES software should be translated into their language for principal reasons or for practical reasons

When asked to make general comments on the language aspect of the ITALES project, most of the teachers held the opinion that ITALES should be translated into the native languages of the countries it was being implemented in. Some held this opinion mainly with reference to the students, especially elementary
school students, but some also in terms of the teachers in their country. This view may be easily seen in the comment of the Icelandic coordinator:

In general I think that all software that Icelandic teachers or Icelandic students are supposed to use should be in Icelandic. It's essential that they're able to work in an Icelandic environment. The language will have much to say when the teachers choose whether they should use the software or not. (Besides this is a very important issue from the view of the importance of preserving and maintaining this rare language ... ).

Some of the teachers felt on the other hand that there was not any real need to translate the software into the native languages of those implementing it. For example, one of the teachers had this to say:

It's very difficult if one makes content in his/her own language. I think English should be the main language in which all content should be made, otherwise it will never be an internationally usable environment.

One of the teachers held both views:

If it is possible the ITALES environment should be in the mother language of the students. They shouldn't spent valuable time in trying to understand what meaning is of label on a button. On the other hand, the use of a single language (English) will better prepare students for their future in a multicultural world (globalisation).

IV.7.4 The significance of international cooperation

When asked to make general comments concerning the usefulness of international cooperation when considering the ITALES framework, the majority of the teachers felt that it could be helpful if the cooperation was good. The teachers were, however, commenting from different perspectives. For example, the following points were made:

Depending on the material international cooperation can be quite useful. Already our school has a few international projects; with countries like Germany, Canada, Rumania and Poland. Teaching shouldn't be country related. Because the world is becoming 'smaller' by the day. It can be useful for students to learn from different countries and cultures by becoming familiar with teaching materials used there.

It gives more diversity and adds to the teaching materials we have. And also erases boundaries/borders between countries and calls for more cooperation, understanding and harmony.
One of the coordinators made the following point:

International cooperation is necessary and useful in all pilot work/when trying out new things, like software. It's not sensible to invent the wheel in every individual country.

Some of the teachers were more specific in terms of the usefulness of international cooperation:

I think that ITALES framework could be a very useful way for international cooperation, especially for foreign language learning and nonverbal themes - art.

Others were more negative in their opinion concerning the usefulness of international cooperation when the ITALES framework was considered. Some were commenting in terms of potential for cooperation using software like ITALES, whereas others commented in terms of the cooperation as it had been in the project:

International cooperation has its obvious disadvantages when it comes to different languages. Some of the projects made in this framework, however, have focused on teaching English as a second language, and that is a field that most nations can meet on. It also matters which nations you are working with, e.g. the Swedish and Icelandic languages are similar in many ways, while Slovenian is very unfamiliar to us. International cooperation can work well, however, when it comes to sharing ideas and comparing the ways we work.

I have participated in few cooperation projects between countries over the years. I always have been excited participating in them but I have to admit that most often I have been disappointed with the outcome. My students have not benefited much from these projects. If I mention this project, that is the evaluation of ITALES, I have not seen much from other countries other than my own and a little from Slovenia despite that a platform was created for communications. Despite this I believe there is much to be gained from international cooperation. ...

IV.7.5 Summary and discussion of results on the cultural aspects of ITALES

As far as the teaching culture goes there are three main comments, or observations:

a) The majority of the teachers think that the tool fits quite well into their teaching culture. This would mean a culture, which allows flexible methods, involvement of students, and generally a problem solving approach. The problem is that we know that the tool can also be used in a somewhat routine way, even if that is not its basic philosophy. Thus, we cannot be very sure that it would not drift into a rather traditional mode even though it would be used quite extensively.

b) Secondly, it is quite clear that in order to change a teaching culture, a tool like this would not be very effective unless it would get a support of a totally different order of magnitude from what it is getting in the pilot run. This is a well-established fact from a number of efforts and this one hints at the same results.
c) Teaching cultures may be different between countries, but is also different within countries, even within disciplines. Thus, it could be the case that a tool like this would fit extremely well into the teaching culture of some teachers, in some subjects, but perhaps in a number of countries.

As far as the specific language problems, it is quite interesting to note once again the interesting variability in the responses. A substantial part of this (quite sophisticated group) has language problems. But then again quite a big proportion does not have. It is clear that in order for ITALES to get an extensive distribution in the countries where it is implemented, a translation is necessary. Not least for the part of the tool that the students use. The English lessons seem, however, to be well served by an English platform. It is also quite interesting to see that there is a noteworthy variation in the demand for translation on the basis of principle, even though in all the countries the support for translation was quite strong.

The teachers’ view on international cooperation is interesting and somewhat sobering. It is quite clear that much more explicit attempts will have to be made to transfer material across countries where the emphasis on sharing the teaching material or getting the students to cooperate becomes more central. From the experience of this project the trans-national value added must be re-evaluated so that the value of the international character of a project like this becomes clearer (and in a project like this there are several ways of doing this).
V A summary questionnaire

We decided to pose a number of summary questions (statements) at the end of the questionnaire in order to set the stage for a fairly simple probe that might be used to screen a variety of innovative projects that might then be taken for further development. The items in this list and the results are shown in figure 5.1.

In the light of the report, there are two main general conclusions to be drawn from this series of questions. First of all, we feel that the results to these questions substantiate our previous conclusions, and suggest that the list has given us both reliable and valid information. Secondly, we feel that in keeping with our previous discussion, we have overemphasised the pedagogical dimension in this summary list of questions and not asked enough about the organisational and economic aspects and neglected both the technical and especially the cultural dimension. However, we still believe that a list of this sort can be very useful; it would neither need to be very extensive nor cumbersome.

As for the details of the results, we note once again the divided opinion among the teachers responding. We also note that many of the teachers are quite optimistic about the use of ITEALES to individualise their teaching and motivate their students, make themselves independent and make their teaching more efficient (but not less expensive). It is noteworthy how many think that the teaching will reinforce traditional teaching and one gets the impression from these responses that many of teachers are in fact responding within the scope of Think scenario 1. It would have been interesting to have responses from more participants as there are patterns in the responses that could be suspected to be somewhat contradictory; some responses point to changes in the ways students may work and teachers teach, but others point to entrenchment of traditional, if very professional modes of working. The tools will not dramatically change the ways these teachers think about computers in education but may help to change the views of their colleagues.
Figure 5.1 The proportion of participants in the ITALES project agreeing with different statements (a summary questionnaire) about the potential efficacy of the ITALES tools.
Discussion of further development of the validation tool

The POETC frame

This pedagogical dimension was certainly the focus of our attention, and a priori the most interesting part of the project. But we found that the other four dimensions, were perhaps, either individually or certainly all together, probably more important than the intrinsic pedagogical value of the ITALES tool. Thus, when a tool like this is evaluated, 3-4 hard questions should be asked about each of the organisational, economic, technical and cultural dimensions concerning the viability of the project, assuming in the meantime that it is pedagogically sound. Only if there are no serious problems on those counts can a long-term pedagogical contribution be seriously evaluated. This may, however, be a bit of an oversimplification of the situation, as all these dimensions are interwoven and it is clear that a tool, even though it is pedagogically very exciting, will not survive if it does not fit into the “OETC” of the school. Thus, an evaluation like ValNet should perhaps be in a number of stages, where only one stage should be a pedagogical evaluation, but other stages (like the one worked on here), which anticipates up-scaling a tool, should concentrate on the four latter aspects of the POETC dimensions, i.e. the organisational, economic, technical and cultural aspects, to a greater extent than was done in this evaluation project.

Pedagogical aspects (P)

The tool seems to be pedagogically worthwhile, and lends itself to be integrated into a THINK scenario 2 teaching culture. But its operational status was on the whole not up to its promises, except for some specific parts of it and for the most technically competent teachers or those who were prepared to invest practically unlimited time in the project. It offers potentially considerable pedagogical diversity and can be used both as a ready-made tool and as a working tool, both for students and teachers. Therefore, it would be unfair to judge it on narrowly defined criteria. It should not be expected, however, that a tool of this sort can be used to alter a school culture in any very perceptible way unless a much more powerful support and developmental environment is provided. In fact a long-term negative effect may be found, if a number of “promising” tools are introduced which do not live up to their expectations.

Thus, in order to investigate the pedagogical innovative potential of a tool we should go further than was done here in specifying the underlying pedagogical intention of the tool and then investigate to what extent this fits with the developmental aims of the school. This does not have to be a complex analysis. The ability of the tool to fulfil its potential should also be assessed.

We feel that ITALES basic conception fits well into a THINK scenario 2 ideology, but we did not investigate sufficiently to what extent the schools were bent on moving in that direction. Thus, the pedagogical innovative potential of ITALES cannot be assessed to the extent we would have wished.
Organisational aspects (O)

Some work has to be done in order to see how the material can be fitted into the curriculum of different schools and different subjects. This is not as non-problematic or trivial as it may seem. It must also be planned how much of their preparatory time the teachers are, in a normal setting, supposed to spend preparing the material. The issue of time must be attended to very closely and if the tool (even a well developed one) demands more time of the teachers than their school organisation allows, the tool will of course not work as an innovative agent.

Thus, 2-3 questions related to this issue should be asked in order to assess the innovative potential of a new tool, e.g. how much time will be given to the teachers in the long run and how this fits with the demands of the tool or its underpinning ideology.

Economical aspects (E)

The related problems of the time spent by the teachers and the technical staff making a project like this operational in the first place must not be underestimated. It is very costly to integrate a new tool into the school curriculum, even if it works quite well, both in terms of time and equipment. It is also important to speculate on the economic viability of the tool, e.g. to what extent it has the economic support for further development, which is a prerequisite both for its initial appeal but more importantly for its continued use. If the burden of the introduction becomes too heavy it may prematurely alienate a fair number of interested teachers and lead to an untimely burnout of others.

Thus, it should be investigated and assessed how economically viable, in the broad sense, a tool like this is likely to be.

Technical aspects (T)

The technical sophistication, both in terms of equipment and expertise of the teachers, must also not be underestimated, quite apart from the pedagogical sophistication of the tool. We have now so much experience with the oversold expectations of new technology that this must be looked into from a very pragmatic viewpoint. It seems that in the present case, it is clear that the idea of the ITALES tool is technologically quite sophisticated. However, its technical status while being tested was too low, its comparative technical status on par with other interesting tools, and no clear commitments were for its further development. Even though this may not be a problem here, it is clearly a very relevant issue when the innovative potential of a tool is assessed.

Thus, the technological absolute, comparative and prospective status should be assessed carefully when the innovative viability of a tool like ITALES is being assessed.
Cultural aspects (C)

There are a number of cultural dimensions that may perhaps be tougher to deal with than apparent at first sight. We feel that it transpires form the investigation that these are very important indeed. These range from the culture of teaching, to the type of curriculum to various issues related to language that should not be underestimated at the outset. On the other hand it may be that a number of cultural barriers need to be overcome, such as the somewhat sceptical attitude teachers had towards using material made by teachers in other countries.

When assessing the innovative potential of a new tool, it is therefore imperative both to assess, even in a cursory way, how it fits into the educational culture of the school and then look hard at the issue of language. We don't feel that this needs cumbersome probing, even a cursory analysis will show quite quickly if these cultural issues will cause problems.

Thus, when attempting to assess whether a tool has an innovative potential on a fairly large scale, it would not be too difficult, if the issues mentioned above are dealt with head on.

We feel (perhaps unjustly) that the overriding culture of the schools in question fits into THINK scenario 1, with the keen interest by a fair number of the participating teachers to move onto THINK scenario 2. But school culture is quite strong and it may be difficult to shift from a traditional one to a new one. It may even be the case that schools will change reforms, no less than the reforms will change the schools. Thus, even though a project such as ITALES is meant to facilitate shifting towards THINK scenario 2, it may in fact end up entrenching THINK scenario 1.

---

VII Appendices

1. Guidelines sent to coordinators and participating teachers on the data collection procedure in terms of the ValNet-ITALES validation

2. The former ValNet-questionnaire administered to the participating teachers in December 2003

3. The final ValNet-questionnaire administered to the participating teachers in February 2004

4. A set of questions administered to the national coordinators in March 2004
Appendix 1

ValNet-ITALES

Guidelines on data collection
Valnet

Guidelines concerning the data collection among teachers
who are using the Itales / Italco tools

The following text is based on the presentations by Jón Torfi Jónason at Akranes on August the 17th and a work-shop with the Swedish teachers on September 16th.

Contact address: andread@hi.is

The data collection

The data collection is based on diaries\textsuperscript{1}, that each teacher is asked to write weekly, as well as on two questionnaires, one at the beginning of December and the other towards the end of January 2004.\textsuperscript{2}

The diary

Each teacher is asked to make weekly, a brief note on the work with the ITALES tools during the whole period of working with ITALES. This should include two components:

a) The approximate time spent on the project during the week. This is the total time. Thus, this would include, speculations, trials and errors, reading and composing e-mails or web-pages, preparing and testing software and using it in class and other things that arise from participating in the project and using it in class.

b) A brief comment, preferably in one or two sentences, describing the experience with the project during the week. These can be positive, negative, relating to the technical side (i.e. related to the guidelines from the soft-ware production team), to the educational side (i.e. to what you feel the students are learning) or whatever is at the top of your mind after a week’s work, some of which is related to the ITALES project. (It should be noted that sometimes you feel that more than one or two sentences is needed to express your feelings, and so you can write a little bit more, but please, restrain your self. We will, later on, also ask you some questions where you can express your attitudes).

The Diary might look like this:

<table>
<thead>
<tr>
<th>Time:</th>
<th>Comment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent about 3hrs. on ITALES</td>
<td>I felt that I lacked guidelines concerning the evaluation.</td>
</tr>
<tr>
<td>Spent approx 3 hours preparing the material for ITALES</td>
<td>… or The fire-walls in the computer system at school have caused unexpected problems (T).</td>
</tr>
<tr>
<td>Did not work on ITALES this week, 0 hrs.</td>
<td></td>
</tr>
</tbody>
</table>

Sending in the data

a) \textbf{The 24\textsuperscript{th} of November 2003.} We would like to get as many examples of your diaries as possible during the week starting 24\textsuperscript{th} of November (that week does not have to be included in the part you send to us). Using the term “examples” underlines that this is a part of an ongoing documentation and you will

\textsuperscript{1} We assume that all the diaries are written on a computer in a Microsoft Word (or similar document).
\textsuperscript{2} We do not intend to collect examples of your work. We may, however, change our mind on this issue as time goes on and we will consult you on this.
\textsuperscript{3} In our reporting we will normally not identify individual teachers or schools, but we will possibly differentiate between countries. We may identify individuals when they expressively allow this in the case of exemplary materials or practices.
\textsuperscript{4} See later on the use of the letters P,O,E,T,C, which is optional.
continue writing the diaries as you keep working. In the heading you put your name and your school. The reason for why we want the part of diary you have already written is that we will base some of our questions in the questionnaire, on these.

b) 19th of January 2004. We will have collected all the data by the end of January 2004. We would nevertheless like to have the whole of your diary up to that point (the 19th) sent to us. We now ask you to send in one file the whole of the diary, in a word document. We will then present to you some open questions in the light of the data we will already have received and subsequently, at the end of the project, we will ask you to describe briefly how you used the ITALES software.

An extra:
The above is basically what we want in terms of the diary. But, as has been mentioned (on the PowerPoint slides), in the final evaluation we will need to comment on several different aspects related to the use of new technology in education. Thus it is important that you realise this and bear this in mind when you write your comments. It is important for the evaluation to have comments, not only on what may be classified as education or technology but also on issues that fit into the other categories.

These relate to the:

P Pedagogical aspects. This relates to how useful the tools are to achieve educational purposes. Are they as important as a learning experience, or as a teaching tool?

O These relate to a number of organisational aspects, such as: How does the use of these tools fit into the organisational structure of the school? Do they make the planning or running of the teaching any easier?

E Economic aspects. What do we think are the economic aspects of adopting these tools? Will these tools make the education we are stimulating in the school more or less economic to run?

T Technological aspects. This relates to a variety of questions, like: Are the demands on the hardware in keeping with what the school has? Is the software well developed?

C Cultural aspects. This includes a variety of topics, ranging from the use of language (e.g. our native languages versus the of English), the assessment culture of our systems (Does the software align it-self with the assessment system in the school?), the type of learning culture (Is the software compatible with the way we teach?) or does the material we are working with fit into the curriculum?

You do not have to classify your comments using these letters, but it would be nice if you tried. If you don’t feel you understand the categories well enough, then you don’t have to do this.

The questionnaires

1st round of questionnaires. The first questionnaires will be run during the first week in December. They will consist primarily of closed multiple-choice questions but perhaps some open questions.

2nd round of questionnaires. The second round of questionnaires will be in January 2004.

Do you want more information?
If you find the guidelines concerning diary unclear, you have two options:

a) You can send an example of your diary and ask for a comment. We would then simply comment on the format by indicating if what you send, is more or less what we are asking for.

b) You can ask for further clarification on some specific issues.

In all communication you send the post to Andrea G. Dofradóttir, at andread@hi.is, and please, always with the word Valnet in the subject heading.

Jón Torfí Jónasson, professor of education, Faculty of Social Science, University of Iceland.

Andrea G. Dofradóttir, researcher at the Social Science Research Institute, University of Iceland.
Appendix 2

ValNet-ITALIES

ValNet-questionnaire
for December 2003
Dear ValNet participant.

The following questionnaire is a preliminary probe into the ValNet project. Please note that we, who design the questions, know that the project is in some cases just starting and that only superficial answers can be given. But please, respond according to your feeling and your present knowledge and this will in fact give us a good idea about the general state of affairs.

We will ask you similar questions later when you know more and by then we will know better what are the proper questions to ask.

In the following we will use the term the ITALES environment. Here we are referring to all aspects of ITALES as it is at the end of November 2003, e.g. ITALCO, the ITALES-3D tool and ATENA. Please note this wider meaning. Be sure to use what you have experienced (used) as the basis of your responses. For instance, if you have only (or primarily) used ITALCO all your responses to questions about the ITALES environment will, in your case, be based on your experience with ITALCO (but you don’t have to tell us this). Just respond to the questions on the basis of your experience.

Note that at the end we ask you a question about how long it took you to respond to the questionnaire!

If you have any questions concerning the questionnaire, please do not hesitate to contact us at andread@hi.is.

Sincerely,
Jón Torfi Jónasson
ValNet Evaluation Manager

BACKGROUND INFORMATION

1. What is your name?

Name:__________________________________

2. In which country are you working on the ITALES project?

☐ 1  Holland
☐ 2  Iceland
☐ 3  Slovenia
☐ 4  Sweden

3. How often, on average, do you use computers in your teaching, other than connected to the ITALES project? (Select the most appropriate choice).

☐ 1  At least once a day
☐ 2  At least once a week
☐ 3  At least once a month
☐ 4  At least once a term (semester)
☐ 5  Less than once a term (semester) or never
4. Have you taken part in other computer related projects at your school (previously or concurrently)?

☐ 1 Yes, more than two other computer related projects
☐ 2 Yes, two other computer related projects
☐ 3 Yes, one other computer related project
☐ 4 No

5. How much have you already used the following ITALES tools?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Very much</th>
<th>Rather much</th>
<th>Somewhat</th>
<th>Rather little</th>
<th>Very little or not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ITALCO</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>b) ITALES-3D</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>c) ATENA</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>

6. In using ITALCO, are you now using your own material or material prepared by others? (Note that in this question we ask about the present).

☐ 1 Only my own material
☐ 2 Mostly my own material
☐ 3 Both my own as well as material prepared by others
☐ 4 Mostly material prepared by others
☐ 5 Only material prepared by others
☐ 6 Do not use ITALCO

7. In using ITALCO, are you in the future planning to use your own material or material prepared by others? (Note that in this question we ask about the future, say next spring).

☐ 1 Only my own material
☐ 2 Mostly my own material
☐ 3 Both my own as well as material prepared by others
☐ 4 Mostly material prepared by others
☐ 5 Only material prepared by others
☐ 6 Do not use ITALCO

THE ITALES ENVIRONMENT

(Please answer the questions in terms of how the ITALES environment functions at the moment but not as it may turn out to be)

8. Do you look at the ITALES environment mainly as an authoring tool or a tool providing you with teaching material?

☐ 1 Mainly as an authoring tool or environment, something I use to make my own material
☐ 2 Mainly as a tool providing me with teaching material to use in class
9. As it stands (and given that it is being developed), how promising or unpromising do you consider the ITALES environment to be as an authoring environment?

☐ 1. Very promising  
☐ 2. Rather promising  
☐ 3. Neither promising nor unpromising  
☐ 4. Rather unpromising  
☐ 5. Very unpromising

10. Assume in this question that the ITALES environment will be used in the next ten years. How do you think that the ITALES environment, when mature (when it has been well developed), will be used by most teachers?

☐ 1. Primarily as an authoring environment (i.e. an environment they can use to develop their own material)  
☐ 2. A balanced mixture, in some cases using it as a development tool, but in other cases using it as providing them with ready-made material  
☐ 3. Primarily as an environment, adopting material they have obtained commercially or from the public domain, i.e. using material developed by others  
☐ 4. It will be used primarily in other ways than mentioned above. How: ________________________________

11. How effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that is novel for your students?

☐ 1. Very effective  
☐ 2. Rather effective  
☐ 3. Neither effective nor ineffective  
☐ 4. Rather ineffective  
☐ 5. Very ineffective

12. How effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that is exciting (stimulating, motivating) for your students?

☐ 1. Very effective  
☐ 2. Rather effective  
☐ 3. Neither effective nor ineffective  
☐ 4. Rather ineffective  
☐ 5. Very ineffective
13. Compared to methods you have been using up till now, how effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that makes your students learn more (irrespective of whether it is fun or novel)?

☐ 1 Very effective
☐ 2 Rather effective
☐ 3 Neither effective nor ineffective
☐ 4 Rather ineffective
☐ 5 Very ineffective

14. Do you agree or disagree with the following statements. In the statements you are asked about the potential (promise) of the ITALES environment as a learning environment (that is from the perspective of what your students might gain from it). The ITALES environment will turn out to be successful because...

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) it is novel (it is different from other teaching material)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) it is interactive</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) it makes the students think</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) it motivates the students</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>e) Other. What?</td>
<td>__________________________</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Do you agree or disagree with the following statements. Compared to other novelties in teaching (not only computer related), the ITALES environment...

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is more promising (in terms of usefulness)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) demands more technical knowledge</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) is more time-consuming in preparation</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) demands more teamwork (working with others)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>

16. Do you agree or disagree with the following statements. Compared to other software you know of, the ITALES environment...

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is more promising (in terms of usefulness)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) demands more technical knowledge</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) is more time-consuming in preparation</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) demands more teamwork (working with others)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>
17. Do you think that you will gradually integrate tools like ITALES into your teaching or that they will remain marginal for, say the next ten years?

- They will soon become quite visible in my every-day teaching
- They will within the next ten years become quite important in my teaching
- They will within the next years be used somewhat in my teaching
- They will within the next ten years, be used in my teaching, but not very much
- They will within the next ten years mainly be used on an experimental basis

18. Do you think that the ITALES tool, or very similar tools, is an important addition or not to the teaching tools you have available?

- Very important
- Rather important
- Neither important nor unimportant
- Rather unimportant
- Very unimportant

TECHNICAL KNOW-HOW

19. Do you think that you had enough general technical background to participate in the ITALES project?

- Yes, I had a very good background
- Yes, I had a rather good background
- I had some background
- No, I had a rather limited background
- No, I had a very limited background/I had to learn a lot about computer use generally

20. Do you think that you now have enough technical know-how to participate specifically in the ITALES project?

- Yes, I have a very good specific technical know-how
- Yes, I have a rather good specific technical know-how
- I have some specific technical know-how
- No, I have a rather limited specific technical know-how
- No, I have a very limited specific technical know-how
ADOPTION OF THE ITALES MATERIAL INTO THE CURRICULUM
(Specifically, we ask about time and content).

21. **How easy or difficult is it to fit the content** of the ITALES project you are working on into the **curriculum** you are expected to cover?

- □ 1 Very easy
- □ 2 Rather easy
- □ 3 Neither easy nor difficult
- □ 4 Rather difficult
- □ 5 Very difficult

22. **How easy or difficult is it to fit the content** of the ITALES project you are planning into the **timetable** your classes have?

- □ 1 Very easy
- □ 2 Rather easy
- □ 3 Neither easy nor difficult
- □ 4 Rather difficult
- □ 5 Very difficult

23. **How easy or difficult is it to fit the preparation work** for the ITALES project into your **working timetable** at school (outside classes)?

- □ 1 Very easy
- □ 2 Rather easy
- □ 3 Neither easy nor difficult
- □ 4 Rather difficult
- □ 5 Very difficult

TIME SPENT ON THE ITALES PROJECT

24. **When all is taken together, how much time do you think you have already spent on the ITALES project?**

- □ 1 0-10 hours
- □ 2 11-20 hours
- □ 3 21-30 hours
- □ 4 31-40 hours
- □ 5 41-50 hours
- □ 6 51-60 hours
- □ 7 61 hours or more
25. On the whole, how fruitful or unfruitful do you think that the time you have spent on getting acquainted with the ITALES environment has been?

☐ 1 Very fruitful
☐ 2 Rather fruitful
☐ 3 Neither fruitful nor unfruitful
☐ 4 Rather unfruitful
☐ 5 Very unfruitful

**TECHNICAL ASPECTS**

26. How good or bad do you think that the status of the equipment in your school is to allow the use of ITALES?

☐ 1 Very good
☐ 2 Rather good
☐ 3 Neither good nor bad
☐ 4 Rather bad
☐ 5 Very bad

27. How sufficient or insufficient do you think that the general technical support (apart from how to use ITALES) is at the school?

☐ 1 Very sufficient
☐ 2 Rather sufficient
☐ 3 Neither sufficient nor insufficient
☐ 4 Rather insufficient
☐ 5 Very insufficient

**CULTURAL ASPECTS**

28. How well do the working methods presented by the ITALES environment fit into the teaching culture you are accustomed to?

☐ 1 Very well
☐ 2 Rather well
☐ 3 Neither well nor badly
☐ 4 Rather badly
☐ 5 Very badly
29. Are there any language problems for your students when they use the ITALES environment?

☐ 1 Yes, very serious problems
☐ 2 Yes, quite some problems
☐ 3 Yes, but no great problems
☐ 4 No, they just manage
☐ 5 No, there are very few problems
☐ 6 No, there are no problems at all

30. Does the ITALES environment's use of the English language present problems for you in your work?

☐ 1 Yes, very serious problems
☐ 2 Yes, quite some problems
☐ 3 Yes, but no great problems
☐ 4 No, they just manage
☐ 5 No, there are very few problems
☐ 6 No, there are no problems at all

31. Do you feel that you can use material from your colleagues in the other countries participating in the ValNet-ITALES project?

☐ 1 Yes, very easily
☐ 2 Yes, quite easily
☐ 3 Yes, probably somewhat
☐ 4 No, probably not
☐ 5 No, it is very unlikely
☐ 6 No, there is no possibility of this

THE ITALES SOFTWARE

In the next three questions please assume that the ITALES software programme is quite useful. The questions are really about language rather than software.

32. Do you think that the special Dutch, Icelandic, Slovenian or Swedish letters (characters) present particular problems when using this software?

☐ 1 Yes, quite substantial problems
☐ 2 Yes, some problems
☐ 3 I am not sure
☐ 4 No, very little problems
☐ 5 No problems at all
33. How important or unimportant do you think it is for other teachers in your country to have the software (the ITALES tools) translated into your language, in order to make it widely used?

☐ 1 Very important
☐ 2 Rather important
☐ 3 Rather unimportant
☐ 4 Very unimportant

34. How important or unimportant do you think that it is for the students in your country to have the software (the ITALES tools) translated into your language, in order to make it widely used as a teaching tool in a wide variety of subjects?

☐ 1 Very important
☐ 2 Rather important
☐ 3 Rather unimportant
☐ 4 Very unimportant

ABOUT THIS QUESTIONNAIRE

35. On the whole, how easy or difficult was it for you to understand the English language in the questions in this questionnaire?

☐ 1 Very easy
☐ 2 Rather easy
☐ 3 Neither easy nor difficult
☐ 4 Rather difficult
☐ 5 Very difficult

36. How long time did it take you to fill in the questionnaire?

Approximately ________________ minutes.

Thank you very much.
Appendix 3

ValNet-ITALES

ValNet-questionnaire
for February 2004
Dear ValNet participant.

The following questionnaire is a part of the final probe into the ValNet/ITALES project. In some cases the questions take some time to answer, but this data collection is a very important part of the ValNet project. Accepting to take part in ValNet included most certainly to take full part in the evaluation. Thus, it is absolutely imperative that you respond to the questionnaire in a careful and considered manner.

In most cases you are asked to make a judgement. Please do this carefully and add with comments where we ask open questions. We have now added a lot of open questions and please answer these carefully, they are no less important than the closed questions.

There are some repetitions in the questionnaire. We have tried to keep them to a minimum, but they can in most cases be justified by slight difference in emphasis or context. So don’t let this disturb you.

In the open questions we expect normally something like 40-60 words for clarification. If you need to expand your comments even more it is quite all right.

From our previous questionnaire we know that most of you have little problems with English and we know how long time it took to respond to it. We have taken account of this, but it will take you considerably longer time to respond to this one.

We ask a number of the same questions as we did previously. This is mainly for comparative purposes, but also because we intend to have responses from all the participants, and now you know more about the tools than you did in early December.

In the following we will use the term the ITALES environment. Here we are referring to all aspects of ITALES. But we will also ask specific questions about ITALCO, the ITALES-3D tool and ATENA. We also ask you about the specific projects you have been working on.

Note that at the end we ask you a question about how long it took you to respond to the questionnaire, so please keep track of the time while you are answering it.

If you have any questions concerning the questionnaire, please do not hesitate to contact us at andread@hi.is.

Sincerely,
Jón Torfi Jónasson
ValNet Evaluation Manager
BACKGROUND INFORMATION

1. What is your name?
   Name:__________________________________

2. In which country are you working on the ITALES project?
   ☐ 1. Holland
   ☐ 2. Iceland
   ☐ 3. Slovenia
   ☐ 4. Sweden

3. Do you teach in a primary or a secondary school (where you are using ITALES)?
   ☐ 1. Primary school
   ☐ 2. Secondary school

4. For which school-grade are you using the ITALES project (if you are using it in more than one grade, you can name both or all)?
   The____ grade

5. How much extra time were you given in order to work on the ITALES project?
   ______ hours in total

6. How much time have you actually spent on the ITALES project?
   About ______ hours in total

THE GENERAL COMPUTER ENVIRONMENT AT YOUR SCHOOL

7. Have you taken part in other computer related projects at your school (previously or concurrently)?
   ☐ 1. No
   ☐ 2. Yes, one other computer related project
   ☐ 3. Yes, two other computer related projects
   ☐ 4. Yes, more than two other computer related projects

8. Is the material or tools from the last computer related project you participated in still being used at your school (not counting ITALES)?
   ☐ 1. I have not taken part in a computer related project before at the school
   ☐ 2. No, not at all
   ☐ 3. Yes, somewhat
   ☐ 4. Yes, quite a lot
9. **Are there other computer related projects being run at your school at the present moment?**

- □ 1. No
- □ 2. Yes, one other computer related project
- □ 3. Yes, two other computer related projects
- □ 4. Yes, more than two other computer related projects

10. **Do you think computers, in general, should be used to a greater or lesser extent in teaching at your school than is done at the present moment?**

- □ 1. To a far lesser extent
- □ 2. To a lesser extent
- □ 3. Neither to a lesser or greater extent
- □ 4. To a greater extent
- □ 5. To a far greater extent

11. **Do you feel that the implementation of computers into the teaching at your school is going too slowly or too fast?**

- □ 1. Far too slowly
- □ 2. Too slowly
- □ 3. Neither too slowly nor too fast, at the right pace
- □ 4. Too fast
- □ 5. Far too fast

12. **How often, on average, do you use computers in your teaching, other than connected to the ITALES project? (Select the most appropriate choice).**

- □ 1. At least once a day
- □ 2. At least once a week
- □ 3. At least once a month
- □ 4. At least once a term (semester)
- □ 5. Less than once a term (semester) or never

13. **In general, what is your opinion about the use of computers in education?**

   Answer:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
THE ITALES ENVIRONMENT - I. THE TOOLS

14. Since you started taking part in the project, how much or little have you used the following ITALES tools?

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Rather much</th>
<th>Somewhat</th>
<th>Rather little</th>
<th>Very little or not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ITALCO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ITALES-3D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) ATENA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) MCAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Given that you have some experience with these tools and as things stand now, how useful or unuseful do you think that the following ITALES tools are from the pedagogical point of view?

<table>
<thead>
<tr>
<th></th>
<th>Very useful</th>
<th>Rather useful</th>
<th>Rather unuseful</th>
<th>Very unuseful</th>
<th>Have not used this tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ITALCO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ITALES-3D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) ATENA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) MCAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Given that you have some experience with these tools, how potentially successful or unsuccessful do you think that the following ITALES tools are from the pedagogical point of view?

<table>
<thead>
<tr>
<th></th>
<th>Very successful</th>
<th>Rather successful</th>
<th>Rather unsuccessful</th>
<th>Very unsuccessful</th>
<th>Have not used this tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ITALCO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ITALES-3D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) ATENA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) MCAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Given that you have some experience with these tools and given that they need further development, do you agree or disagree from a pedagogical point of view with the opinion that the following ITALES tools should be developed further?

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Have not used this tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ITALCO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ITALES-3D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) ATENA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) MCAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE ITALES ENVIRONMENT – II. We are now asking questions specifically about the ITALCO TOOL (THE TOOL THAT ENABLES YOU TO DESIGN DIFFERENT SCENARIOS or PROJECTS).

18. Have you made your own scenario or project using the ITALCO tool?
   - ☐ 1. No >>> if no, please answer next question 23
   - ☐ 2. Yes, one scenario
   - ☐ 3. Yes, two scenarios

19. How much time have you spent on making the scenario (on average if you have made more than one scenario)?
   About _______ hours

20. Have you presented a scenario you made, to students, yet?
   - ☐ 1. No >>> if no, please answer next question 23
   - ☐ 2. Yes

21. How long time did it take the students (on average) to go through your scenario (pick the most successful scenario if you have presented more than one of your own scenarios to your students)?
   About _______ hours

22. How positive or negative were the students towards the use of the scenario as a teaching material after having worked through it?
   - ☐ 1. Very positive
   - ☐ 2. Rather positive
   - ☐ 3. Neither positive nor negative
   - ☐ 4. Rather negative
   - ☐ 5. Very negative

23. Have you seen scenarios made by other teachers in the project?
   - ☐ 1. No >>> if no, please answer next question 26
   - ☐ 2. Yes, one scenario
   - ☐ 3. Yes, a few scenarios
   - ☐ 4. Yes, several scenarios
24. Is/are the scenario/scenarios you have seen made by teachers in your country or by teachers in one of the other participating countries?

☐ 1 By teacher(s) in my country
☐ 2 By teacher(s) in one of the participating countries
☐ 3 Both by teacher(s) in my country as well as in one of the participating countries

25. Have you yourself used one of the scenarios made by other teachers?

☐ 1 No
☐ 2 Yes, a little bit
☐ 3 Yes, somewhat
☐ 4 Yes, considerably
☐ 5 Yes, a lot

26. How interested are you in using some of the other scenarios made by other teachers?

☐ 1 Not interested
☐ 2 Slightly interested
☐ 3 Rather interested
☐ 4 Very interested

27. How helpful or unhelpful do you think it would be for you to have access to a bank (a collection) of ITALCO-scenarios made by expert teachers, in the language your students use?

☐ 1 Very helpful
☐ 2 Rather helpful
☐ 3 Would probably not use it
☐ 4 Would definitely not use it
☐ 5 Have not used ITALCO and are therefore not able to judge

28. Do you agree or disagree with the following statements. My use of the ITALCO tool has been affected because ...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Have not used ITALCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) the technology is too complex.............................................</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>b) the instructions (e.g. the manual) have limited information...............</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>c) I simply haven’t got time to design the scenarios........................</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>d) the pedagogical strength of it is not persuasive ........................</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>
29. In using ITALCO, are you now using your own material or material prepared by others? (Note that in this question we ask about the present).

- [ ] 1. Do not use ITALCO
- [ ] 2. Only my own material
- [ ] 3. Mostly my own material
- [ ] 4. Both my own as well as material prepared by others
- [ ] 5. Mostly material prepared by others
- [ ] 6. Only material prepared by others

30. In using ITALCO, are you in the future planning to use your own material or material prepared by others? (Note that in this question we ask about the future, say next spring).

- [ ] 1. Will not use ITALCO
- [ ] 2. Only my own material
- [ ] 3. Mostly my own material
- [ ] 4. Both my own as well as material prepared by others
- [ ] 5. Mostly material prepared by others
- [ ] 6. Only material prepared by others

31. Do you agree or disagree with the following statements. The ITALCO tool...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Have not used ITALCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) helps me to become pedagogically innovative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b) helps me to motivate my students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c) enhances the flexibility of my teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d) is easy to use</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e) helps me to individualise my teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f) helps to build up a rich efficient resource of teaching materials</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

32. As you have become acquainted with the ITALCO tool, has your opinion of it become more positive or more negative, as compared to your expectations at the beginning?

- [ ] 0. Have not used ITALCO
- [ ] 1. Much more positive
- [ ] 2. More positive
- [ ] 3. Neither more positive nor negative
- [ ] 4. More negative
- [ ] 5. Much more negative
33. In general, what is your opinion about the ITALCO tool?

Answer:
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

THE ITALES ENVIRONMENT - III. GENERAL QUESTIONS

34. Do you look at the ITALES environment mainly as an authoring tool or a tool providing you with teaching material?

☐ 1 Mainly as an authoring tool or environment
☐ 2 Mainly as a tool providing me with teaching material to use in class

35. As it stands (and given that it is being developed), how promising or unpromising do you consider the ITALES environment to be as an authoring environment?

☐ 1 Very promising
☐ 2 Rather promising
☐ 3 Rather unpromising
☐ 4 Very unpromising
☐ 5 Do not know

36. Assume in this question that the ITALES environment will be used in the next ten years. How do you think that the ITALES environment, when mature (when it has been well developed), will be used by most teachers?

☐ 1 Primarily as an authoring environment (i.e. an environment they can use to develop their own material)
☐ 2 Primarily as a working platform (i.e. an environment that helps you to integrate many different teaching and learning tools)
☐ 3 A balanced mixture, in some cases using it as a development tool, but in other cases using it as providing them with ready-made material
☐ 4 Primarily as an environment, adopting material they have obtained commercially or from the public domain, i.e. using material developed by others
☐ 5 It will be used primarily in other ways than mentioned above

How: __________________________________________
37. Do you agree or disagree with the following statements, which relate to the basic philosophy of the ITALES project. The ITALES...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) interfaces (i.e. the menus etc.) are attractive to use</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>b) interfaces are simple to use</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>c) tools are enjoyable to use for the teacher</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>d) tools are enjoyable to use for the student</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>e) content is easy to use</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>f) content is easy to adapt to different situations</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>g) platform, or environment, is flexible</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
<tr>
<td>h) platform, or environment, is manageable</td>
<td>□1</td>
<td>□2</td>
<td>□3</td>
<td>□4</td>
<td>□5</td>
</tr>
</tbody>
</table>

THE ITALES ENVIRONMENT – IV. PEDAGOGICAL ASPECTS

38. When you respond to the following questions about the pedagogical aspects of the ITALES environment, please indicate if you are primarily responding on the bases of a certain ITALES tool.

□1 No, I am not primarily responding on the basis of a certain ITALES tool
□2 Yes, I am primarily responding on the basis of a certain ITALES tool

Which tool? __________________________________________________

39. How effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that is novel for your students?

□1 Very effective
□2 Rather effective
□3 Slightly effective
□4 Somewhat ineffective
□5 Rather ineffective
□6 Very ineffective

40. How effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that is exciting (stimulating, motivating) for your students?

□1 Very effective
□2 Rather effective
□3 Slightly effective
□4 Somewhat ineffective
□5 Rather ineffective
□6 Very ineffective
41. Compared to methods you have been using up till now, how effective or ineffective do you find the ITALES environment to be in helping you build a learning environment that makes your students learn more (irrespective of whether it is fun or novel)?

☐ 1 Very effective
☐ 2 Rather effective
☐ 3 Slightly effective
☐ 4 Somewhat ineffective
☐ 5 Rather ineffective
☐ 6 Very ineffective
☐ 7 I have no basis for judgement

42. Do you agree or disagree with the following statements. In the statements you are asked about the potential (promise) of the ITALES environment as a learning environment (that is from the perspective of what your students might gain from it). The ITALES environment may turn out to be successful because...

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) it is novel (it is different from other teaching material)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) it is interactive</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) it makes the students think</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) it motivates the students</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>e) it is better than other ICT tools</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>f) Other positive aspects. What?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

43. Do you agree or disagree with the following statements. Compared to other novelties in teaching (not only computer related), the ITALES environment...

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is more promising (in terms of usefulness)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) demands more technical knowledge</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) is more time-consuming in preparation</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) demands more teamwork (working with others)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>

44. Do you agree or disagree with the following statements. Compared to other software you know of, the ITALES environment...

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is more promising (in terms of usefulness)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b) demands more technical knowledge</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c) is more time-consuming in preparing the lessons</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d) demands more teamwork (working with other teachers)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>
45. **Do you think that you will gradually integrate tools like ITALES into your teaching or that they will remain marginal for, say the next ten years?**

- □ 1 They will soon become quite visible in my everyday teaching
- □ 2 They will within the next ten years become quite important in my teaching
- □ 3 They will within the next ten years be used somewhat in my teaching
- □ 4 They will within the next ten years, be used in my teaching, but not very much
- □ 5 They will within the next ten years mainly be used on an experimental basis

46. **Do you agree or disagree with the following statements. As for the intentions of developers, The ITALES environment has lived up to its expectations, in terms of...**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) its suitability for lesson development</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>b) its interactive power</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>c) its flexibility</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>d) being a sensible choice for a school</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>e) being based on a sensible pedagogical idea</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
</tbody>
</table>

47. **Do you think that the ITALES environment, or very similar tools, is, or is not, an important addition to the teaching tools you have available?**

- □ 1 Very important
- □ 2 Rather important
- □ 3 Rather unimportant
- □ 4 Very unimportant
- □ 5 Do not know

48. **Do you agree or disagree with the following statements. From the pedagogical point of view, it is important that...**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) the ITALES environment will be developed further</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>b) teachers are supported to make more material</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>c) the school supports my further work on the project</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>d) some ITALES projects will be given further support</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
</tbody>
</table>
49. If you were given extra time to work on an ICT developmental project at your school, how likely or unlikely is it that you would select ITALES as a project to work on further?

- [ ] 1 Almost certain that I would choose ITALES
- [ ] 2 Very likely that I would choose ITALES
- [ ] 3 Rather likely that I would choose ITALES
- [ ] 4 Rather unlikely that I would choose ITALES
- [ ] 5 Very unlikely that I would choose ITALES
- [ ] 6 I would certainly not choose ITALES

50. From the pedagogical standpoint, to what extent do you think that your students are using ITALES the way you intended, or differently (choose the most relevant answer)?

- [ ] 1 Totally as I intended
- [ ] 2 Mostly as I intended
- [ ] 3 Partly as I intended and partly differently
- [ ] 4 Mostly differently
- [ ] 5 Totally differently
- [ ] 6 Have not introduced ITALES to my students yet

51. Are your students using ITALES as you intended or differently from that you intended, please clarify?

   Answer:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

THE ITALES ENVIRONMENT - V. ORGANIZATIONAL ASPECTS
(QUESTIONS CONCERNING TIME AND CONTENT)

52. How easy or difficult is it to fit the content of the ITALES project you are working on, into the curriculum you are expected to cover?

- [ ] 1 Very easy
- [ ] 2 Rather easy
- [ ] 3 Rather difficult
- [ ] 4 Very difficult
- [ ] 5 Do not know
53. **How easy or difficult is it to fit the content of the ITALES project into the timetable your classes have?**

- □ 1 Very easy
- □ 2 Rather easy
- □ 3 Rather difficult
- □ 4 Very difficult
- □ 5 Do not know

54. **How easy or difficult is it to fit the preparation work for the ITALES project into your working timetable at school (outside classes)?**

- □ 1 Very easy
- □ 2 Rather easy
- □ 3 Rather difficult
- □ 4 Very difficult
- □ 5 Do not know

55. **Do you think that using tools like ITALES will help teachers gain more control over the curriculum and/or make the teaching better?**

Answer:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

THE ITALES ENVIRONMENT – VI. TECHNICAL KNOW-HOW AND TECHNICAL ASPECTS

56. **Do you think that you had enough general technical background to participate in the ITALES project?**

- □ 1 Yes, I had a very good background
- □ 2 Yes, I had a rather good background
- □ 3 I had some background
- □ 4 No, I had a rather limited background
- □ 5 No, I had a very limited background/I had to learn a lot about computer use in general
57. Do you think that you now have enough technical know-how to participate specifically in the ITALES project?

☐ 1 Yes, I have a very good specific technical know-how
☐ 2 Yes, I have a rather good specific technical know-how
☐ 3 I have some specific technical know-how
☐ 4 No, I have a rather limited specific technical know-how
☐ 5 No, I have a very limited specific technical know-how

58. What do you generally feel about the demands or complexity of the ITALES project given that it is meant to be used in a normal school situation?

Answer:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

59. Do you think that ITALES should be used primarily by expert teachers that have been trained in designing curriculum and teaching material, or by ordinary teachers?

☐ 1 Only by expert teachers
☐ 2 Primarily by expert teachers
☐ 3 Both by expert teachers as well as ordinary teachers
☐ 4 Primarily by ordinary teachers
☐ 5 Only by ordinary teachers

60. How good or bad do you think that the status of the equipment in your school is to allow the use of ITALES?

☐ 1 Very good
☐ 2 Rather good
☐ 3 Neither good nor bad
☐ 4 Rather bad
☐ 5 Very bad

61. How sufficient or insufficient do you think that the general technical support (apart from how to use ITALES) is at the school?

☐ 1 Very sufficient
☐ 2 Rather sufficient
☐ 3 Rather insufficient
☐ 4 Very insufficient
☐ 5 Do not know
62. To what extent do you think that software like the ITALES makes too much demands in terms of the level of the computers (e.g. demanding the most recent models) and related technical resources at your school?

☐ 1. It does not make undue demands on the level of computers and related resources at the school
☐ 2. It does make some demands, but not unreasonable on the level of computers at the school
☐ 3. It makes rather much demand on the level of computers and related resources at the school
☐ 4. It makes very much demand on the level of computers and related resources at the school
☐ 5. It makes unreasonable demands on the level of computers and related resources at the school

63. Which option do you prefer in terms of the development of a software package like ITALES, when the question arises whether it should be developed for more than just the PC and the Windows environment?

☐ 1. It is sufficient to concentrate on PC and Windows environment
☐ 2. It is sufficient to concentrate on PC but not only the Windows environment
☐ 3. It should also be developed for other platforms, such as Macintosh computers and operating system

64. What is your opinion, in general, concerning the technical level and the technical demands of the ITALES project?

Answer:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

THE ITALES ENVIRONMENT – VII. ECONOMICAL ASPECTS AND TIME SPENT ON THE PROJECT

65. When all is taken together, how much time do you think you have already spent on the ITALES project?

About _____ hours

66. How much more time do you need to be able to use the environment in the way you would like to?

About _____ hours
67. On the whole, how fruitful or unfruitful do you think that the time you have spent on the ITALES project has been?

☐ 1 Very fruitful
☐ 2 Rather fruitful
☐ 3 Rather unfruitful
☐ 4 Very unfruitful
☐ 5 Do not know

68. What is your opinion about introducing software like ITALES to the schools in terms of the time teachers have to prepare their lessons?

Answer:
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

69. To what extent has there been a need to update the computer equipment in your school specifically for the ITALES project?

☐ 1 Not at all
☐ 2 Only to a little extent
☐ 3 To some extent
☐ 4 To a large extent

70. What is your opinion about the ITALES project if you look at it from a purely economic point of view, i.e. the cost in terms of the time spent on it and equipment?

Answer:
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

THE ITALES ENVIRONMENT - VIII. CULTURAL ASPECTS AND LANGUAGE

71. How well do the working methods presented by the ITALES environment fit into the teaching culture you are accustomed to?

☐ 1 Very well
☐ 2 Rather well
☐ 3 Rather badly
☐ 4 Very badly
☐ 5 Do not know
72. Could you please explain your answer to question 71?

Answer:

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

73. Are there any language problems for your students when they use the ITALES environment?

☐ 1 Yes, very serious problems  
☐ 2 Yes, quite some problems  
☐ 3 Yes, but no great problems  
☐ 4 No, they just manage  
☐ 5 No, there are very few problems  
☐ 6 No, there are no problems at all

74. Does the ITALES environment’s use of the English language present problems for you in your work?

☐ 1 Yes, very serious problems
☐ 2 Yes, quite some problems
☐ 3 Yes, but no great problems
☐ 4 No, I just manage
☐ 5 No, there are very few problems
☐ 6 No, there are no problems at all

75. What is your opinion, in general, concerning the language aspect of the ITALES project?

Answer:

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

76. Do you feel that you can use material from your colleagues in the other countries participating in the ITALES project?

☐ 1 Yes, very easily  
☐ 2 Yes, quite easily  
☐ 3 Yes, probably somewhat  
☐ 4 No, probably not  
☐ 5 No, it is very unlikely  
☐ 6 No, there is no possibility of this
77. **What is your opinion, in general, concerning the usefulness of international co-operation when you consider the ITALES framework?**

Answer:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

78. **How do you think the application of platforms like ITALES will affect the teaching culture in the school?**

Answer:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

In the next three questions please assume that the ITALES software programme is quite useful. The questions are really about language rather than software.

79. **Do you think that the special Dutch, Icelandic, Slovenian or Swedish letters (characters) present particular problems when using this software?**

☐ 1 Yes, quite substantial problems
☐ 2 Yes, some problems
☐ 3 I am not sure
☐ 4 No, very little problems
☐ 5 No problems at all

80. **How important or unimportant do you think it is for other teachers in your country to have the software (the ITALES tools) translated into your language, in order to make it widely used?**

☐ 1 Very important
☐ 2 Rather important
☐ 3 Rather unimportant
☐ 4 Very unimportant

81. **How important or unimportant do you think that it is for the students in your country to have the software (the ITALES tools) translated into your language, in order to make it widely used as a teaching tool in a wide variety of subjects?**

☐ 1 Very important
☐ 2 Rather important
☐ 3 Rather unimportant
☐ 4 Very unimportant
82. If you think it is important that the software (the ITALES tools) will be translated into your language, is it a matter of principle or for practical reasons?

☐ 1. Do not think it is important to translate it into my language
☐ 2. Purely a matter of principle
☐ 3. Mainly a matter of principle
☐ 4. Mainly for practical reasons
☐ 5. Purely for practical reasons
☐ 6. The principle and the practical reasons are both very important

83. Please comment on the language issue as far as the teachers are concerned.

Answer:
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

84. Please comment on the language issue as far as the students are concerned.

Answer:
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
85. Do you agree or disagree with the following statements. Using the ITALES tools, when their development has been completed, is likely to be an efficient way to...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Do not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) achieve the curricular objectives that I have ................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>b) evaluate the understanding the students have ..................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>c) evaluate the knowledge the students have ........................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>d) teach the standard curriculum .....................................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>e) make the pupils less reliant on the teacher ....................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>f) change the way my students learn ..................................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>g) change the way I teach the students ...............................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>h) motivate the students .................................................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>i) change the way I think about computers in education ..........................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>j) help me to move away from the standard curriculum ............................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>k) get students to take the initiative in their studies ........................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>l) make me more independent in my teaching ..........................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>m) demonstrate the usefulness of computers .........................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>n) individualise teaching and learning ...............................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>o) help those students who tend to be behind ......................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>p) make education less costly ...........................................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>q) make education more efficient .......................................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
<tr>
<td>r) reinforce traditional ways of teaching ..........................................</td>
<td>□₁</td>
<td>□₂</td>
<td>□₃</td>
<td>□₄</td>
<td>□₅</td>
</tr>
</tbody>
</table>

86. Please make final comments about your experience with the ITALES environment. You may for instance want to comment on things that were not referred to in the questionnaire or things that you find important to comment on generally. Please make an effort to make this as constructive and informative as possible.

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
ABOUT THIS QUESTIONNAIRE

87. On the whole, how easy or difficult was it for you to understand the English language in the questions in this questionnaire?

☐ 1 Very easy
☐ 2 Rather easy
☐ 3 Rather difficult
☐ 4 Very difficult

88. How long time did it take you to fill in the questionnaire?

Approximately ________________ minutes.

Thank you very much.
Appendix 4

ValNet-ITALES

A set of questions administered to national coordinators
Dear ITALES national coordinators.

As we are now in the process of analysing data gathered from the participants in ITALES and writing the validation report, we need you to provide us with information concerning certain aspects of the project in your country, which we will include in the report.

We ask you to comment in writing on the following:

I. What are the main features of the project, from your point of view (i.e. ITALES or ITALCO etc) and how were they adapted in your country?

II. A profile of the schools in your country, which are participating in the project. Please write about the following:

a. The number of schools, what they are (primary, secondary), the status of the schools as ICT schools (i.e. have they any special status) and the interest of the headmasters as are as you know.

b. Descriptions of the involvement of each teacher as you see it, with a timeline of the involvement (see the following example).

Example of a timeline of involvement of teachers:

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th></th>
<th>2004</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>0</td>
</tr>
</tbody>
</table>

x = worked on the project (each cell accounts for an involvement during that week).

c. An overview of the material the teachers produced.

d. An overview of the meetings and consultations the teachers were involved in.

e. The formal arrangements made with the teachers, the time they were paid for working on the project etc.

III. Explain the general issues arising from the implementation of the project and how they were dealt with, e.g. relating to problems with technology and administrative problems.

IV. Please respond to the following open questions from the perspective of a national coordinator. These were a part of the February-questionnaire that most of the participants in the project have answered (see attached questionnaire). With your comments on these questions you provide a somewhat harmonized evaluation in this capacity as national coordinator.

The questions are (numbered as in the original questionnaire):

13. In general, what is your opinion about the use of computers in education?
33. In general, what is your opinion about the ITALCO tool?
55. Do you think that using tools like ITALES will help teachers gain more control over the curriculum and/or make the teaching better?
58. What do you generally feel about the demands or complexity of the ITALES project given that it is meant to be used in a normal school situation?
64. What is your opinion, in general, concerning the technical level and the technical demands of the ITALES project?
68. What is your opinion about introducing software like ITALES to the schools in terms of the time teachers have to prepare their lessons?
70. What is your opinion about the ITALES project if you look at it from a purely economic point of view, i.e. the cost in terms of the time spent on it and equipment?
71. How well do the working methods presented by the ITALES environment fit into the teaching culture teachers in your country are accustomed to?
75. What is your opinion, in general, concerning the language aspect of the ITALES project?
77. What is your opinion, in general, concerning the usefulness of international co-operation when you consider the ITALES framework?
78. How do you think the application of platforms like ITALES will affect the teaching culture in the school?
83. Please comment on the language issue as far as the teachers are concerned.
84. Please comment on the language issue as far as the students are concerned.
86. Please make final comments about your experience with the ITALES environment. You may for instance want to comment on things have not been asked about or things that you find important to comment on generally. Please make an effort to make this as constructive and informative as possible.

Sincerely, Jón Torfi Jónasson
ValNet Evaluation Manager.