



Virtual School and College Education for Teenagers and Young Adults

Final Report

Public Part

Project information

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Executive Summary

1. A *virtual school* is a school where pupils learn mainly at a distance over the internet and any activity in a classroom takes no more than around 15% of study time (1 day per week in a full-time school). The pupils will normally be based at home (and in special cases, in hospital, in the workplace, travelling or in a custodial institution) but in some cases they may be at a 'physical' school – just not the school 'at' which they study.
2. The VISCED work plan did not require us to look at primary schools – we focussed on schools teaching the age range 14-21 – in other words from the early teenage years, up to and beyond the age at which compulsory schooling ceases (typically 16 to 18). Pupils in the age range 18-21 – but in some cases from age 16 – are typically studying at an institution called a *college* rather than a school. Thus a *virtual college* is a college where pupils (in this age range normally called *students*) learn mainly at a distance over the internet.
3. The overarching objective for VISCED was to identify and understand virtual schools across the world, not ignoring the US but focussing mainly on Europe and to some extent on other countries in the world which are often seen as relevant to Europe, such as the more prosperous nations (e.g. the non-European OECD and BRIC nations) and/or those with linguistic, cultural or political links to countries in Europe: including North America, Latin America, la Francophonie, the Commonwealth of Nations and much of Africa.
4. By doing this, and studying eleven virtual schools in great detail, we wanted to understand the reasons why some countries foster virtual schools, others discourage them and a third group (many EU countries) are unaware of them.
5. Since we focussed on countries not dissimilar to many European countries, our policy aim was to provide evidence to ministries and their policy advisors to help them analyse which of their educational challenges are susceptible to partial solution using virtual schools – and in such cases, what type of virtual schools they should encourage and what type of virtual schooling within such schools would be most appropriate.
6. Some of these challenges are universal – such as children in hospital, children looked after by institutions (including custodial ones), travelling children (including migrants with poor home-nation language skills) and deprived children – or largely so (poor skills in STEM subjects). Others may be more specific to the country (poor skills in foreign languages).
7. VISCED is a project in the discipline of **comparative education**. Any such project carrying out comparative education has to *prioritise* and then *tier*. VISCED had to decide which countries were relevant to Europe and within the set of relevant countries decide which countries would be studied thoroughly and which in a quicker way.
8. VISCED developed a large wiki <http://www.virtualschoolsandcolleges.eu>, produced 21 specific **country reports** and also studied many other countries across 14 **regions** (coherent collections of countries).
9. All countries in the plan have completed reports on them and all regions in the plan have completed reports either at regional level or on several key

countries (some like Hispanic America have both). A particular feature has been the series of reports on many of the regions near to but outside the EU, including country reports right across North Africa and the Middle East and regional reports on Yugosphere, Eastern Europe and Central Asia. For island regions, both Oceania and Caribbean have reports on many of their countries.

10. The final state of VISCED research (rechecked while writing this report) itemised on the wiki nearly 500 **virtual schools and colleges** (438 virtual schools and 57 virtual colleges) across the world. There are 268 virtual schools in the USA identified. Outside the US VISCED identified over 200. Of these, 35 are in Canada and 81 are in Europe. Australasia has 29. There are relatively few (8) in Africa. Asia almost certainly has more than identified (20) but China was not one of the planned study countries. There appear to be, surprisingly, almost none in Oceania and the Caribbean.
11. **Exemplars:** VISCED has identified 272 *notable* examples (Exemplars) worthy of consideration as case studies due to the richness, relevance and transferability of their experiences.
12. VISCED also developed:
 - **Taxonomy:** Identification and discussion of the best way to classify virtual schools – they can be of various types.
 - **Influence Maps:** Understanding the complex and often opaque ways in which educational activities and policies in one country affect educational policy in another country.
 - **Policies:** Formulation of key policies both for **EU level** and for ministries of education in various countries/regions, including recommendations as to which sorts of virtual teaching are appropriate.
 - **Teacher training:** Producing a report on appropriate teacher training for teachers aiming to teach in virtual schools.
 - **Innovative pedagogies:** Identifying which pedagogic approaches work best for virtual schools, via an extensive literature search of case studies.
 - **Critical success factors:** Substantial work to define what factors are essential and desirable for the success and sustainability of virtual schools and colleges.
 - A two-volume **Handbook** (216 pages in total).
 - The first ever **European Virtual Schools Colloquium** (held in Sheffield UK in May 2012) with a substantial set of textual and video Proceedings.
 - A comprehensive **web site** with links to all the above resources.
13. The **International Advisory Committee** has met four times and been an effective sounding board.
14. VISCED practitioners are reflective practitioners and with the support of an evaluator have co-developed a mid-project **formative evaluation report** and a final **summative evaluation report**.
15. **Future plans** for dissemination and exploitation are well developed and already (January-February 2013) actively being pursued.

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1. Project Objectives

In order to understand the project's objectives the reader has first to understand the key definition that drove the VISCED project. It was a vital part of the project to attain clarity of the key definitions.

A *virtual school* is a school where pupils learn mainly at a distance over the internet and any activity in a classroom takes no more than around 15% of study time (1 day per week in a full-time school). The pupils will normally be based at home (in special cases, in hospital, in the workplace, travelling or in a custodial institution) but in some cases they may be at a 'physical' school – but not the school they are studying 'at'.

The VISCED work plan did not mandate us to look at primary schools – we focussed on the age range 14-21 – so from the early teenage years, up to and beyond the age at which compulsory schooling ceases (typically 16 to 18). Pupils in the range 18-21 – but in some cases from age 16 – are typically studying at an institution called a *college* rather than a school. Thus a *virtual college* is a college where pupils (in this age range normally called *students*) learn mainly at a distance over internet.

We took the time to make this definition right at the beginning of our project, and so in this report, because prior to VISCED it was believed by experts and ministries that *there were very few virtual schools in Europe*. By the end of VISCED we had still found less than 100 across the EU and in many countries there are only one or two – this is particularly the case in countries which prohibit or discourage homeschooling. In contrast, virtual schools are quite common in the US – there are several hundred and some authorities estimate that 10% of school pupils are involved in virtual schooling – often taking some of their classes over the internet (from a virtual school) while taking many of their classes in their host school (a physical school).

The overarching objective for VISCED was to identify and understand virtual schools across the world, not ignoring the US but focussing mainly on Europe and to some extent on other countries in the world which are often seen as relevant to Europe, such as the more prosperous nations (e.g. the non-European OECD and BRIC nations) and/or those with linguistic, cultural or political links to countries in Europe such as North America, Latin America, la Francophonie, the Commonwealth of Nations (and other Anglophone nations) and much of Africa.

By doing this, and studying some virtual schools in great detail, we wanted to understand the reasons why some countries foster virtual schools, others discourage them and a third group (including many countries in Europe) seem unaware of them. Since we focussed on countries not dissimilar to many European countries, we aimed to provide evidence to European ministries and policy advisors to help them analyse which of their educational challenges are susceptible of partial solution using virtual schools and in such cases, what type of virtual schools they should encourage and what type of virtual schooling within schools would be most appropriate.

Some of these challenges are universal – such as children in hospital, children looked after by institutions (including custodial ones), travelling children (including migrants with poor home-nation language skills) and deprived children – or largely so (poor skills in sciences). Others may be more specific to the country (poor skills in foreign languages).

2. Project Approach

In theoretical terms, VISCED was a project in the domain of *comparative education* – the discipline where researchers look at how an educational situation is dealt with in a variety of countries, and then draw lessons for their country – or countries. The focus was the countries collaborating in the Lifelong Learning Programme – which includes EU, the EFTA countries, Turkey, and a gradually growing set of countries in and around the former Yugoslavia.

Comparative education is not an easy discipline – governments of countries (or regions) can always think of reasons why they are quite unlike other countries, even (or especially) nearby ones. Nevertheless, progress can be made, and various multinational agencies carry out much comparative work on education.

These agencies often have very large project budgets – in contrast, within the Lifelong Learning Programme, project budgets are relatively small. Education is a complex topic – it covers all ages, all subjects, many kinds of providers and many languages (over 200 languages are said to be in daily use in Europe). There are 193 members of the United Nations and over 50 colonies and other autonomous entities.

Thus any project carrying out comparative education has to *prioritise* and then *tier*. In other words, VISCED had to decide which countries were relevant to Europe and within the set of relevant countries decide which countries would be studied and how.

The team who wrote the VISCED bid came up with a list of relevant countries, based on their prior knowledge, and divided them into two ‘tiers’: those which would be studied in depth, and others which would be studied as part of a region. The ones to be studied in depth included those with project partners, ones where it was already known that there were virtual schools (such as US and Canada) and others seen as relevant to Europe even though there was at the time no evidence whether there were virtual schools in them. This was rechecked when VISCED started.

By the end of VISCED, 116 country reports had been produced including specifically targeted 21 ‘Tier 1’ countries and 95 other countries in 14 ‘supraregions’. It was fortunate for VISCED that a previous LLP Erasmus (higher education) project, Re.ViCa (<http://revica.europace.org>), had produced country reports on ICT in higher education for most countries of the world which contained some general material on the country and on education and ICT within the country, though usually with a strong focus on higher education. These had to be updated and relevant material added on schools/colleges, ICT in schools and of course any virtual schools and colleges.

The second part of the research work was to consider the *policy aspects* of the virtual schools found in the country reporting phase. This involved several related elements:

1. Identification and discussion of the best way to classify virtual schools – they can be of various types (D.3.1 – this is how we refer to Deliverable 3.1).
2. Understanding the complex and often opaque ways in which educational activities and policies in one country affect educational policy in another (D.3.2).
3. Formulation of policies which ministries of education in various countries could consider, including recommendations as to which sorts of virtual teaching is appropriate and what steps need to be taken to train/retrain teachers to teach in virtual schools (D.3.9).

4. Doing 12 case studies (D.3.7): 8 detailed case studies of specific virtual schools in Europe plus 4 outside Europe (including one virtual college).
5. Since virtual schools, like virtual universities, do not always last for years, defining what factors predispose a virtual school to be successful/sustainable (D.4.3).

This work started in 2011 and in most cases interim reports were produced by the end of 2011, but the main work was done in 2012.

The third part of the research work was mostly contained in 2012. This was to *pilot* (i.e. try out) some aspects of virtual schooling within schools who are closely associated with two of the project partners (in Athens and Sheffield, so as to get a linguistic and political contrast) and in a third case, is actually a project partner (Ross Tensta Gymnasium, which has a multi-ethnic student body). Piloting plans were formulated in late 2011 and early 2012 (the Tensta pilot started in autumn 2011) and reports written in autumn 2012 after the pilots were run.

However, the research had to be embedded within a larger framework. The project contains many tasks and a set of ten partners with specialised and complementary skills, which needed to be deployed to best advantage. Many reports had to be produced. The project team met every six months and had a monthly teleconference. Thus project management was a key task. (See next section.)

European projects are expected to publish papers, make presentations at conferences, take part in workshops and undertake a range of other tasks to influence the policy makers and other stakeholders interested in project results. Nowadays dissemination tools include web and web 2.0 technologies. Not unusually, research papers and conference presentations were biased towards the second year of the project but VISCED ran an active newsletter (with 12 editions) over both years, a Twitter stream @VISCED (93 tweets, the first one sent three days after the project started) and a rapidly growing wiki with over 1000 new/updated “information” pages (for more on the wiki see Section 7).

VISCED also considered and decided how its intellectual property should be exploited and how the activities of the project sustained after the EU funding ceased. This is a particular challenge when (as with VISCED) the project has committed to the widest possible release of its outcomes on the wiki which is accessible to the public (under a Creative Commons license: Attribution-Noncommercial-Share Alike 3.0). An exploitation strategy was developed and updated throughout the life of the project with a final exploitation report (D.8.4) produced and exploitation agreement signed.

Project staff are expected to reflect on their own practice in a similar way to that which teachers are expected to do. One partner was the internal evaluator, appointed to consolidate this *reflective practitioner* output and to foster a deeper reflection, with a view to continuous quality improvement of the project during its funded period.

The above approaches are often all the ones which projects undertake. However VISCED adopted one further approach, updating it from the earlier project Re.ViCa, and supporting newer projects (such as POERUP) which take it up. This was to have an *International Advisory Committee* of experts from outside the project. The IAC was expected first of all to listen to project outcomes (part of the dissemination role of the project) but also to ponder and discuss the outcomes with a view to improving them (so there is both an exploitation and an evaluation aspect).

3. Project Outcomes & Results

It would be tedious to go through the 52 VISCED project deliverables or even summarise all the work packages and tasks. So what follows is a *thematic description* of the outputs. All public deliverables and other public outputs are linked from the VISCED web page <http://www.virtualschoolsandcolleges.info/project>

Country reports

The plan (D.2.1) of which countries and regions to study was part of the original bid: apart from one swap of countries between partners and clarification of supregion boundaries, it was remarkably stable. It took some discussion to develop a viable country report template which drew on Re.ViCa yet took account of VISCED needs. All 21 Tier 1 countries in the plan have reports, and the 14 regions in the plan have reports either on the region overall or on several of their key countries (or both). A particular feature has been the series of reports on many of the regions near to but outside the EU, including country reports right across North Africa and the Middle East and regional reports on Yugosphere, Eastern Europe and Central Asia. In terms of island regions influenced by Europe, both Oceania and Caribbean have reports on many of their island countries. Deliverable 2.2 (around 500 pages) provided a large sample of country reports and the final Deliverable on this topic (D.2.4) describes the process and outcomes more generally, with an audit trail and celebration of contributions from partner staff, consultants, interns and volunteers.

Exemplars

The list of Exemplars started growing on the wiki from summer 2011, initially with many embedded in country reports, but a constantly increasing set having their own entries on the wiki. All this material and key definitions were consolidated into a Gazetteer (D.2.3). A similar but updated approach was followed in Volume 1 of the Handbook (D.7.7). Our research identified and entered on the wiki **nearly 500 virtual schools and colleges** (438 virtual schools and 57 virtual colleges) across the world. Some 268 virtual schools are in the USA. Outside the US we identified over 200. Of these, 35 are in Canada and 81 are in Europe. Australasia has 29. There are relatively few (8) in Africa. Asia almost certainly has more than we identified (20) but China was not one of our study countries. There appear to be almost none in Oceania and the Caribbean and indeed in multi-island nations where they might be expected. VISCED identified (D.2.5) 272 'Exemplars' (notable examples) worthy of consideration as case studies.

In addition to the list, a typology of virtual schools evolved during 2011, and was discussed at project meetings and the IAC meetings. Many useful ideas have been contributed, even though not all could be instantiated – since a typology has to be understandable and feasible to apply. The early thinking was in Deliverable 3.1 but this was refined for Volume 1 of the Handbook (D.7.7).

Case studies

From an initial set of around 50 exemplars (D.2.3) a number of potential case studies were identified. Eventually 12 were selected (D.3.7) including eight from Europe: BEDNET (Belgium), Ensina a Distância para a Itinerância (Portugal), InterHigh (Wales), iScoil (Ireland), Nettiukio (Finland), Rīgas Tālmācības Vidusskola (Latvia), Sofia Distans (Sweden), and Wereldschool (Netherlands).

Piloting

The detailed piloting work started as per the Piloting Plan (D.6.1) at the beginning of January 2012 in England and Greece (earlier for Sweden) when the school terms started, and was completed at the end of the Spring Term (June or July). The Piloting Plan described the VISCED pilot studies planned in Sweden (Ross Tensta Gymnasium, Stockholm), England (Notre Dame High School and The Sheffield College, both in Sheffield) and Greece, where eventually 16 schools across Greece in an 'Innovation Network' were involved. Three separate piloting reports (D.6.2, 3 and 4) were produced in autumn 2012 and integrated into one Consolidated Piloting Report (D.6.5) – a long document but full of information.

Policy recommendations – including teacher training and good practice

The VISCED project team confirmed in autumn 2011 that policy recommendations would have to be dealt with at both the EU level and at the national level. In view of the partners involved in this work (covering UK, Finland and Estonia) it was further decided that energy would go into (a) an EU-wide policy recommendation (D.3.5) and (b) one detailed national policy document, for England, with documents from Finland and Estonia building on that. England was chosen as the first country to analyse not only because the lead author used to work for the England Ministry on IT policy for education, but also because there was a new government which had changed the former government's approach to ICT in education (in particular, had closed Becta) but had begun to make statements again that ICT was relevant to education.

After further research and consultation with 'in-country' experts about virtual schools and the educational policy environment in Portugal it was subsequently decided to supplement the three country policy documents with one on policy for Portugal. Deliverable 3.5 was updated and discussed, including with the International Advisory Committee. The final policy document for the EU (D.3.9) articulated the key policy challenges and opportunities identified through our research and also put forward a comprehensive set of Policy Recommendations to meet these challenges and exploit these opportunities. It had annexes for the four specific countries.

The policy deliverables were supported by a report on Influence Maps (D.3.2). This described graphically (with commentary) the influence that some countries (and other entities) have on other countries' education policies, as judged by documentary analysis. Partners found it challenging to engage with such analyses and found, surprisingly, that some countries do not have any set of national documentation on ICT for education. The task was not designed to take up a large amount of effort, but some interesting conclusions came out. However, in view of the increasing turbulence of national governments and policy, it was decided not to take this particular approach forward and in particular not to waste effort on doing the analysis for Greece as originally planned given the rapidly evolving political situation there.

EU-wide and national policy also involves aspects of teacher training and, potentially, mandating some specific pedagogic approaches. Deliverable 3.6, the interim report on teacher training, took a 'Scandinavian' perspective on distance education to provide a framework for thinking about training of teachers for virtual schools. It argued that e-learning and distance learning initiatives have often been too concerned with technology and technological issues, and suggested that teacher training towards successful distance education offers must focus clearly on *IT pedagogy* and development of skills *different* from those suitable for teaching in class or lecture rooms. The report finally presented suggestions for focus areas for teacher

training. In order to gain a wider perspective, another author with a different national background was contracted to produce the final version (D.3.10).

Further development of the project's thinking on pedagogy came from Deliverable 3.4, the interim report on pedagogy, which provided a US-based contrast to the European standpoint of Deliverable 3.6. It pointed out that with the small numbers of virtual schools outside North America and the almost complete lack of funded research on these it was impossible to ignore the strong US influence on the literature – since the US has not only the largest number of virtual schools but also some of the largest and longest-established, and (thus) the best-researched. Among other conclusions it suggested that key components of pedagogy include careful content development, insightful instructional design, appropriate methods for student assessment and user-friendly relevant technology. Despite being an 'interim' deliverable the VISCED project team were happy with it – but to check they sought advice from external advisor who recommended that it required only a few days work to finalise, and this was done in autumn 2012 to produce Deliverable 3.8.

Success Factors

In 2011 a short report on Potential Success Factors (D.3.3) was produced in time for a summary be presented to the International Advisory Committee in November 2011. In 2012 EFQUEL brought in KU Leuven (a member of EFQUEL) to help.

A scoping document (D.4.1) was produced, with a definition of key and critical success factors, justified by evidence for selecting the precise VISCED definition used including a useful description of the 14 existing main schemes for quality, benchmarking and success factors. An interim version (D.4.2) of the success factors was based on a thorough analysis of European virtual schools, especially the Case Studies (D.3.7). Thus they are tailored for *European virtual schools*. This was because virtual schools elsewhere in the world (especially the USA) operate in a variety of different social and political environments, where other factors are likely to have greater significance. Moreover, *colleges* are generally much larger in size than European virtual schools and so the appropriate Critical and Key Success factors for virtual colleges are much closer to those for universities and higher education institutions, which were adequately described in the outputs from Re.ViCa (see especially http://virtualcampuses.eu/index.php/Critical_Success_Factors). Finally, a table of the success factors was produced (D.4.3) with an online tool, described in an annex with screen shorts showing use of the tool.

Project management and exploitation

The surrounding project management and exploitation work produced a number of deliverables.

1. Each of the four project meetings produced a Deliverable (D.1.1, 2, 3 and 4). These are far more than just minutes, containing much additional material – for example the report on the Boot Camp (D.1.1) is 18 pages.
2. The International Advisory Committee had four meetings – in 2011 in Oeiras (just after the EFQUEL conference) and Berlin (just before Online Educa); and in 2012 in Sheffield (at the European Virtual Schools Colloquium in May) and again in Berlin just before Online Educa 2012. All meetings are minuted (D.5.2, 3, 4 and 5). The International Advisory Committee was selected from a Long List of 111 possible members (D.5.1). Due to changes in staffing and travel budgets (at ministries, companies and institutions), and the need to

have a wider country representation (to ensure deep knowledge especially of EU and near-EU countries) there was a 'refresh' of the IAC in spring 2012. Despite a great amount of effort, it proved impossible to get serious involvement from many ministries and hard to get involvement from vendors. Fortunately at both meetings in 2012 there was substantial involvement from senior staff at virtual schools and from deep thinkers on online education.

3. The project produced an Exploitation Plan (D.8.1) in September 2011, an update to this at the end of 2011 (D.8.2) and at the end of 2012 (D.8.3), with an agreed Exploitation Strategy and partner agreement (D.8.4). This proposes a small subset of VISCED partners to take forward work on a secretariat with all partners free to exploit the IPR in their home countries.

In addition to the project management deliverables there are also minutes of each monthly tele-meeting and the minutes of the extra project meeting in April 2011.

Dissemination

The dissemination strategy, explained in detail in the bid, was updated in July 2011 (D.7.1), which allowed the inclusion of detailed and up to date Dissemination Audit forms from partners. The Project Flyer (D.7.2) was produced in May 2011 in time for the summer season of conferences. A revised and longer (8 page) Flyer (now called a **Brochure**) was produced in time for the autumn 2012 series of conferences.

The Project web site (D.7.3) went live in July 2011 – but the project wiki was in existence from day 1 of VISCED since it had been inherited from Re.ViCa – although intensive population of the wiki with pages categorised as 'VISCED' did not start until May 2011 (the page 'VISCED' was first created in April 2011).

As is typical of such projects the Dissemination outputs are multi-part deliverables:

- Project presentations (12) – Deliverable 7.4
- Project publications (several) – Deliverable 7.5
- Newsletters (12) – Deliverable 7.6.

There were two project presentations in 2011: a VISCED workshop at the ALT-C conference in Leeds (UK) in September and a VISCED presentation at the CONCEDE conference in Oeiras (Portugal), later that month. That may seem too few but conference deadlines in recent years are many months ahead of the events.

Dissemination activities in 2012 more than made up for a perhaps slow start in 2011. There were international presentations at DEANZ in New Zealand (April), EDEN (June), EFQUEL and ALT-C (September), iNACOL in the US (October), and Media & Learning and Online Educa (November). In addition there were presentations at more nationally-focussed events in UK (December), Finland (April and December), Italy (June), Sweden (February) and several universities in New Zealand (March-April). For more details see Deliverable 7.4.

The **First European Virtual Schools Colloquium**, held in Sheffield in May 2012 fulfilled many purposes including dissemination in the UK, a partner meeting and a meeting of IAC – and also generated a wealth of textual and video resources (<http://www.virtualschoolsandcolleges.info/visced-colloquium-for-virtual-schools>)

The VISCED project is proud of its production of the two-volume **Handbook** (D.7.7) *Virtual Schools and Colleges: Providing Alternatives for Successful Learning* with

executive summaries in six languages other than English. Volume 1 (120 pages) was produced in print in time for Media & Learning and Online Educa; and Volume 2 (96 pages) was produced in time for the final dissemination event, on December 10 in front of online learning experts from Oxford universities, colleges and virtual schools.

The term 'VISCED' is unique to the project. In January 2012 it had already generated somewhat over 8000 hits; in early January 2013 it generated 95,000 hits. Several virtual school-like entities are now indexed on the web *first* under their VISCED entry.

Newsletters started in May 2011, with 12 in total. By the last newsletter 181 articles had been written and the newsletter was reaching over 800 people in 58 countries.

In addition to the more traditional dissemination routes there was a @VISCED **Twitter** account (93 tweets) – this was used mainly for formal project announcements. In addition and more importantly, the project manager used – and continues to use – the hashtag #visced in his day to day tweets.

There was also a LinkedIn Group and a **VISCED Blog**. To increase traction in the scholarly and research community, VISCED also set up groups on the Mendeley reference system – see e.g. <http://www.mendeley.com/groups/1075201/virtual-schools-and-colleges/> with 193 papers listed (and there are 10 other groups).

The **International Advisory Committee** of experts met four times with over 10 delegates on average at each meeting, providing via the experts a useful blend of knowledge capture, dissemination and guidance towards exploitation.

Evaluation

The evaluator produced an Evaluation Plan (D.9.1) in February 2011, a Formative Evaluation after one year (D.9.2) and a Summative Evaluation at project end (D.9.3).

In the Formative Evaluation for 2011 the evaluator Dr Maggie McPherson observed:

“The quantity and quality of the outputs produced so far have been reasonable although some contributions have been more satisfactory than others. It was useful to get feedback from the IAC that the project approach was producing a useful resource that provided information well beyond that previously available.”

Her Summative Evaluation (D.9.3) for the whole project noted:

“The indicators for various tasks described in the original project document were appropriate and useful for assessing the project’s progress. The project documentation, including the minutes for meetings, has been kept in an accessible form for everyone in the partnership. Thus, for the most part it has been possible for all to keep a check on whether objectives were being achieved. Where outputs have not been forthcoming in a timely manner, the project managers have been actively prompting action to try and keep tasks on track.

In these summative remarks, special comment needs to be made about the effectiveness of project management arrangements. The project management team has been consistently visible and proactive. They have demonstrated the capacity to enable participatory arrangements to the partnership, monitor project performance and results, and regularly analyse information to feed into management decisions. Thus, the project managers supported achievement of results by regular and timely communication. Finally, the participatory nature of the project implementation has been effective and has made a significant contribution towards achievement of the project objectives.”

4. Partnerships

VISCED contained ten partners from seven countries from the four quarters of Europe – west (UK and Belgium), Scandinavia (Denmark, Sweden and Finland), East (Estonia) and South (Greece). The countries cover the range of EU country sizes and eight of the EU languages. Their political systems are different – and fluid. For two countries (UK and Belgium), education is devolved to semi-autonomous regions; for the others, education is organised centrally. This allowed the project to gain a range of perspectives on educational issues.

The partners came from different parts of the educational and institutional universe. There was one school (Ross Tensta Gymnasium, a secondary school), two universities (Aarhus and Leeds), three research-based SMEs/small foundations (Sero, Lambrakis and ATiT), two national agencies (Estonian IT Foundation and Finnish Information Society Development Agency), and two network organisations (MENON and EFQUEL, both based in Brussels). For MENON, much of the work was devolved to the MENON member SCIENTER, based in Italy, and the EFQUEL work in 2012 was largely taken forward by the EFQUEL member KU Leuven, further enriching the institutional coverage.

Staff within the partners comprised teachers, university professors/academics, consultants, and business people – one was a former employee of a Ministry of Education who had a key role for e-learning. Many of the staff have or had school-age children – so for them secondary education is not just a theoretical construct.

Several of the partners had worked closely together in the past – MENON, EFQUEL and Lambrakis in particular. Several are still working together on other projects, such as Sero and SCIENTER on POERUP (Policies for OER Uptake).

Perhaps as importantly, many of the key individuals in the project have worked together over the years via several organisations they have belonged to.

However, a partnership would be impoverished if it were only the partners that were involved in the collaboration. One key component of VISCED is the **International Advisory Committee**. This is composed of around 25 experts in e-learning and other people who are interested in virtual schools, drawn from industry, university research groups and ministries – mostly from Europe but some from further afield.

The International Advisory Committee met twice each year – in 2011 it met first at the EFQUEL Conference in Oeiras, Portugal in September and then again at Online Educa Berlin in late November – and in 2012 it met in Sheffield in May and again at Online Educa Berlin in late November. On each occasion members of the project presented a selection of current findings to the IAC, who discussed the topics and then made suggestions for improvement and in many cases provided additional information. A substantial number of virtual schools were first proposed by IAC members. By summer 2012 several staff in virtual schools were members of the IAC.

Without detailing all the many inputs made by IAC members we can single out in particular the following for key contributions:

- Susan Patrick, President, INACOL – International Association for K-12 Online Learning – who came to the September 2011 and May 2012 meetings all the way from the US (Paul returned the compliment in October 2012)

- Professor Michael Barbour and Professor Niki Davis, leading international experts on virtual schools
- Cathy Cavanaugh, a noted US researcher on virtual schools
- Professor Morten Paulsen of NKI, a noted researcher on e-learning
- Jouni Kangasniemi, Finnish Ministry of Education and Culture
- Michelle Selinger of Cisco, which commissioned *Learning from the Extremes*, one of the key reports taken as input by the VISCED project bid
- Bas ten Holter, then Executive Director (EMEA), Moodlerooms
- Yves Punie of IPTS.

There is a final strand of visits generated usually from other collaborative projects. We focus on the main relevant ones during 2011-12 – noting that both in the VISCED bid-writing period and in the period between that and VISCED starting other relevant visits had been made.

In the project *Distance Learning Benchmarking Club* and associated benchmarking projects with Swedish universities, Paul Bacsich made several trips to Sweden in 2011. During these he visited a Swedish Free School (Donnergymnasiet Gotland) and also one of the Swedish virtual schools, Sofia Distans (a case study school). He also made a 6-week study visit to New Zealand in spring 2012 as the guest of the University of Canterbury – during this visit he visited the Open Polytechnic (a mini case study institution) and met schools and ministry policy people.

Barry Phillips, while on a trip to Australia for other purposes in 2011, visited two virtual schools, Brisbane School of Distance Education and Open High School Sydney, which both became mini case studies (D.3.7).

Sally Reynolds of ATiT oversees the Media & Learning conference each year in Brussels in November which brings together a wide variety of e-learning experts including several in 2012 interested in virtual schools, including members of IAC.

5. Plans for the Future

Following to some extent the structure of Section 3, we provide a thematic description of the plans for the future, beyond the funded period which ended on 31 December 2012. (Several VISCED staff were working right up to the end day, a Monday.)

Work on virtual schools

As part of the Exploitation Plan, an Agreement has been signed between the VISCED partners to set up a small VISCED Secretariat at Sero for an initial period of two years, with the specific terms renegotiated after one year. The Secretariat is acting on behalf of the Consortium and will protect the interests of all partners to the best of its ability. Each Consortium member has delegated a representative who is the contact person for this Secretariat. The responsibilities of the Secretariat are:

- General coordination of activities and tasks of any different teams set up under the Agreement
- Maintaining an active communication network with and relaying information between the Consortium members and the different teams
- Managing all discussions related to possible adaptations and further development of the VISCED results and wiki
- Dealing with and passing on any contacts and enquiries from partner countries to the partner in the country and from other countries/regions by agreement.

A team has been made up of representatives named by each Consortium member. This team will monitor and assist on the following tasks, which will be organised by the Secretariat:

1. Promotion, awareness and marketing of the VISCED results and wiki – e.g. Twitter @visced, news items on the website, maintenance and updating of project mail lists, distribution of leaflets, brochures and Handbooks, and monitoring new wiki users
2. Editing & maintaining the final version of the VISCED wiki as it exists on 1 January 2012 until 31 December 2013 (likely to be renewed)
3. Supporting the VISCED website.

All partners of the VISCED Consortium have committed themselves to a task division and an estimated level of effort for the tasks.

The VISCED wiki will remain hosted at the server of KU Leuven where it has been hosted since it started in 2007.

ATiT will continue to be responsible for the hosting and maintenance of the VISCED website up to 31 December 2014. This means that ATiT will pay for the hosting costs associated with the site and will ensure that there is a regular flow of news items to the site to ensure it remains active. The target for ATiT is to ensure there is at least one news item per month. This includes news and announcement from the partnership about relevant publications, presentations etc. It will also ensure that all public deliverables remain available via the site and are easily downloadable.

Country reports

It is likely that as a result of other projects and initiatives that country reports will be updated from time to time, as happened with country reports in the interregnum period of October 2009 to December 2010 between Re.ViCa and VISCED. In particular in spring 2013 there will be a cross-correlation done between POERUP country reports (all linked from <http://poerup.referata.com/wiki/Countries>) and VISCED country reports to ensure that in due course there is a jointly updated report for each country (e.g. Spain, Poland) studied by both projects.

Exemplars

Since virtual schools and colleges remains an active interest at several partners it is expected that new virtual schools entries will be added and existing entries updated from time to time – indeed this has already happened in January-February 2013. Thus it is quite likely that by the time this report is read outside the project some of the numbers we quote will have been increased.

It is of particular interest that an increasing number of virtual schools are taking up OER, which brings them into scope for study in POERUP.

We do not expect any activity with respect to new case studies or pilots, unless and until a new project bid or client materialises.

Policy recommendations – including teacher training and innovative practice

The VISCED policy recommendations have already been taken into account for POERUP and also have already been drawn on for submission to the Open Education experts group of DG EAC, of which several VISCED staff are members.

Success Factors

The VISCED work on Success Factors is being subsumed into ongoing developmental work at EFQUEL and Sero – and in particular is informing the next iteration of the Pick&Mix benchmarking e-learning scheme.

Virtual schools event

There are ongoing discussions between some project partners and also iNACOL and vendors, about holding another European Virtual Schools Colloquium. It is likely that if there is such an event in 2013 it will be a small pilot for a larger event in 2014 – earlier discussions had concluded that a bi-annual event was sufficiently frequent for the immediate future. An informal gathering of interested parties took place during the BETT Exhibition in London in late January to discuss such matters.

International Advisory Committee

A number of the VISCED International Advisory Committee members have already been subsumed into the POERUP International Advisory Committee. In addition a new committee of iNACOL (<http://www.inacol.org>) on international aspects has members from the VISCED project management and several members of the VISCED IAC, and now runs a monthly teleconference.

Dissemination

Work has already started in preparing presentations and papers on VISCED for submission to the main European-based conferences for 2013 and also some key events for further afield. Details are on the next page.

1. A paper (focussing on virtual schools in Asia) has been submitted to, and accepted by, the International Conference *Education for All: Role of Open Schooling* to be held in New Delhi, India in March 2013.
2. A paper (focussing on virtual schools in Africa) has been submitted to the 8th *eLearning Africa* conference to be held in May 2012 in Windhoek, Namibia.
3. A paper on the Greek piloting experience is being considered for submission to the International Conference on ICT in Education (ICEICT, Crete, July).
4. It is expected that VISCED-related presentations will be proposed to at least the following conferences: ALT-C (Manchester, September), EFQUEL (Barcelona, September), and Media & Learning (Brussels, December).
5. Whether or not somebody from VISCED attends the iNACOL Virtual Schools Symposium in US in October 2013 will depend on some factors not yet clear. One such is the working out of a clearer relationship between iNACOL and European Virtual Schools activities – this is a task for the new VISCED Secretariat in collaboration with the iNACOL International Committee.

Exploitation

The wide range of partners in VISCED means that exploitation strategy is very dependent on the skills and interests of each partner – and of the key staff within each partner (noting that there have been some significant changes during the life of VISCED in the active staff at some partners).

1. Sero, MENON and ATiT operate as commercial consultancies on an international basis and key players (often coordinators) in EU bids so have a wide range of exploitation strategies across Europe and indeed beyond.
2. EFQUEL has a specialist interest in exploiting the quality, benchmarking and critical success factors aspects of VISCED, both within its membership (which includes some VISCED partners such as Sero and MENON) and more widely.
3. The university partners (Leeds and Aarhus) are mostly focussed on exploitation in research and publishing terms and as input to their planning of courses for teacher training and lecturer updating.
4. The schools partner (Tensta) is mostly focussed on exploitation of VISCED aspects in the classroom and in near-classroom/'flipped classroom' modes (<http://www.knewton.com/flipped-classroom/>).
5. The national nodes (in Estonia, Finland and Greece) are mostly focussed on exploitation within their national context.

It has to be borne in mind that European countries are at very different stages in their evolution of virtual schools in particular and innovative models of school/college education in general. In theory, Sero, being a consultancy based in England, may be thought to have a greater opportunity of 'commercial' exploitation than other partners – but even in England one should not underestimate the difficulty of engendering ICT-induced change in educational institutions, as several Sero reports indicate. Within these limitations, Sero is already actively pursuing discussions with relevant private-sector actors including IT suppliers and publishers. It was a good sign of the strength of the virtual school concept that staff from Sero met IAC members interested in virtual schools at BETT (<http://www.bettshow.com>) in late January 2013.

6. Contribution to EU policies

In the university world, Europe has for some years been working towards a European Higher Education Area, based on the Bologna Declaration (updated at Bergen and Lisbon).

The work of Re.ViCa (<http://virtualcampuses.eu/index.php/Re.ViCa>) on virtual universities showed that there was a degree of *global* consensus on higher education and appropriate governance of institutions – and even the beginnings of a global approach to quality in universities and success factors (this is also touched on in D.4.1 Annex 1 where quality/benchmarking schemes, many from Higher Education, are analysed for relevance to VISCED). There is also a thriving international market in higher education with millions of students across the world studying outside their home country – and hundreds of thousands studying at a distance from a provider not based in the country in which they live (e.g. over 100,000 students studying at a distance from a UK institution but outside the UK).

In schools education this is almost completely absent, except for provision for some expatriate children. Furthermore, the locus of control of schools is in many countries nearer to the school (though not in the UK) – it sounds good that it is more devolved than can be the case for universities, but this can lead to a lack of policy coherence. Finally, unlike in the university sector in many EU countries (especially England, Spain, Portugal and several eastern EU countries) there is in most EU countries (England being one exception) little private sector provision of schools and even less integration of that provision in policy terms. Ministries are often unaware – or seem unwilling to become aware – of the private sector in schools. In at least two European countries the virtual schools exist in legal limbo, yet are funded by the state for certain kinds of teaching.

The college level is in between – some aspects in some countries are aligned with Bologna, most are not. (The EU situation is completely different from the community college system in the US, which is closely integrated with the university sector.) The college level also suffers from there being no consensus as to what a college is – not only is the upper boundary between post-secondary non-university and university education unclear, and articulated differently in different countries, but the lower boundary is also not clear. In at least one EU country there are pupils doing the same courses, some at colleges, and others at schools, funded by different ministries at different rates. Finally, the college sector suffers from a lack of attention from senior policy levels – most children of the elite do not go to colleges – and when the policy makers do focus on colleges, they tend to impose dirigiste solutions.

EU policies

There has been a substantial policy strand within VISCED (WP3). Starting with Influence Maps (D.3.2) this led through Interim Recommendations in late 2011 (D.3.5) and on to the Final Recommendations (D.3.9) at the end of the project. In addition to the specific deliverables, versions of the policy recommendations were rehearsed during autumn 2012 in the second Brochure (D.7.2) and in both volumes of the Handbook (D.7.7).

Finally, draft recommendations were proposed to the Open Education Experts Group in summer 2012 and presented in papers at EDEN, ALT-C and Media & Learning – thus have had substantial input from experts outside the project.

The policy recommendations fall into three groups:

- a) Consolidating and clarifying the policy and legislative landscape in which virtual schooling in Europe currently exists.
- b) Advising and supporting countries to understand where virtual schooling can help meet national and Commission education and social policies.
- c) Making the best use of limited resources.

The Executive Summary of Deliverable 3.9 on European policy summarises the recommendations as follows:

1. The Commission should remove any unnecessary bureaucratic impediments which inhibit the development and sustainability of virtual schools and colleges.
2. The Commission should facilitate development of the skills essential to high-quality virtual schooling.
3. The Commission should encourage and advise schools and colleges to exploit Open Educational Resources (OERs).
4. The Commission should encourage the exploitation of the potential for virtual schooling to drive internet take-up, promote the information society, e-government services and improve student (and parent) ICT skills.
5. The Commission should raise awareness as to the value and impact of virtual schooling in meeting education and social policies.
6. The Commission should raise awareness of the potential of virtual schooling in helping students maintain timely progression through the curriculum and in supporting students who require additional revision, acceleration or have special educational needs.
7. The Commission should encourage virtual schooling options in traditional schools and colleges as a strategy for reducing early leaving.
8. The Commission should encourage virtual schooling options as a means of increasing the uptake of Science, Technology, Engineering and Mathematics subjects (STEM), expanding the provision of modern foreign languages and filling curriculum gaps.

National policies

VISCED also focussed on the national policy level. However, there is one problem of recent origin. Since the start of the recession, many European countries, some with much publicity, others less visibly, have been cutting their educational budgets, not only in schools, but in ministries (fewer civil servants), in the agencies that ministries used to rely on for advice, and in terms of the number and scale of research projects. ICT-oriented policies are less clear and policy formulation more opaque.

Despite this VISCED has produced four national reports on policy recommendations, for England, Estonia, Finland and Portugal (D.3.9). The first three of these countries contain VISCED partners and in them virtual schools exist and are tolerated; the fourth does not have a VISCED partner but is one where a virtual school exists serving Portugal students and virtual schools are in theory permitted.

Open Education

The VISCED policy recommendations have already been taken into account for POERUP. They also have already been drawn on for the Open Education experts group of DG EAC (several VISCED staff are members of that group).

7. The wiki

All counts unless otherwise indicated are taken on 3 January 2013.

The wiki – <http://www.virtualschoolsandcolleges.eu> – is such a central component of the VISCED project that it deserves its own section.

First set up in November 2007 at KU Leuven to support the Re.ViCa project (Review of Virtual Campuses), the wiki has been under constant development since then, even though Re.ViCa ended in October 2009 and VISCED did not start until January 2011. The wiki is one of the largest educational wikis in existence and certainly the largest with professionally-written peer-reviewed material. The Main Page was initially created on 7 November 2007 and has been viewed over 284,493 times (135,000 by January 2012) – and updated over 187 times (150 by January 2012) since then. These figures underestimate the traffic because increasingly, since VISCED started, traffic is directed from outside the wiki *directly* to pages – such as directly to the page on ‘virtual school’, viewed over 9943 times (3000 by January 2012), or to country pages, where a popular and established page like that on ‘Australia’ has been viewed over 41,236 times (20,000 by January 2012) and updated over 402 times (300 by January 2012).

The wiki has been used for VISCED since early 2011. After the end of the funded period of Re.ViCa in October 2009, the partners agreed to continue the wiki for at least two years. Additional material was included originating from material created to support projects at Becta, the UK Open University, scholarly and research papers including on the UK e-University archives, benchmarking and quality, and as a vehicle to provide project work for interns – regarding the last, many of the entries on countries in Africa were developed during early 2011 by Graham Clarke, an intern at Sero, building on earlier work in 2010 by volunteer professional staff who felt that African ‘virtual education’ was often under-represented on internet databases.

The VISCED partners have committed to host the wiki for at least two years after the end of the funded period of VISCED. Already the POERUP project (funded under KA3 ICT from November 2011) is drawing on material from the VISCED wiki and considering how best to store its new material on the wiki in the longer term. (POERUP runs until mid 2014.) It was decided by POERUP in consultation with VISCED that any large-scale transfer of material from POERUP to the VISCED wiki would not occur until after the VISCED project had completed – this best preserves the branding of VISCED as the current lead developer of content on the wiki. (However, some small-scale additions are being made by POERUP where this can be done in a way synergistic with but not disruptive to the development of VISCED content – see in particular the entries on OER-related topics (in particular <http://virtualcampuses.eu/index.php/Category:POERUP>).

In order to provide an ongoing and sustainable feel to the wiki, the specific project management for VISCED is stored on another wiki – <http://visced.referata.com>. This avoids the situation that pertained at the end of the Re.ViCa project when a great deal of project management and administrative material had to be removed. (POERUP has a similar approach.)

In fact the *pop-up wiki* approach has now been used by Sero (the Coordinator) and some other organisations as a routine tool in project management and information dissemination (see for example <http://luoerl.referata.com>, with its links to Mendeley).

The MediaWiki software for the VISCED wiki was updated in 2012 which makes it rather easier to use and manage – and the support in Microsoft Word and some open source tools for ‘Save to wiki’ is increasingly helpful to editors.

Below are some key statistics, where possible compared with the situation at the end of 2011 (the mid-point of the VISCED project):

<i>Page statistics</i>	<i>End 2011</i>	<i>End 2012</i>
Content pages	2624	2812
Pages (All pages in the wiki, including talk pages, redirects, etc.)	7924	8400
Uploaded files (noting that most such files are on the web site)	491	504
<i>Edit statistics</i>		
Page edits since the wiki was set up (thus most edits were prior to 2012, which is to be expected)	31,415	33,567
Average edits per page	3.96	4.00
<i>User statistics</i>		
Registered users (includes inactive users and blocked suspected spam users)	270	295
Users who have made edits		129
Of which users created since VISCED started (but note that many Re.ViCa users continued into VISCED)		49
<i>View statistics</i>		
Views total (Views to non-existing pages and special pages are not included)	3,197,746	6,883,440
<i>Most viewed pages</i>		
Category:VISCED	186,256	1,697,008
Main Page	147,661	284,642
Programmes (this gives some idea of ‘residual’ Re.ViCa traffic)	55,023	93,067
Abbreviations	43,915	111,678
Category:Universities	31,097	151,200
Category:United States	29,895	140,619
Category:Abbreviations	24,803	150,762
Virtual campus (this gives some idea of ‘residual’ Re.ViCa traffic)	23,167	31,196
Australia	20,572	41,237
Resources	17,215	26,761
United States		34,553
Belgium		31,785
<i>Other key pages</i>		
Virtual school		9943
Virtual college		7097