Exit the E-Government Ivory Tower: A Training Strategy
A Case Study from Austria

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Abstract

The national Austrian e-government curriculum aims to train government and public administration staff at all organisational levels, so the training plan needs to be developed on the basis of the national e-government aims and adapted according to the target groups, the contents and teaching modalities. This paper presents the implementation of the e-government curriculum in Austria that began in 2006 and continues today. Based on a case study approach, the paper looks at the issues important in the implementation of a nationwide e-government strategy and training programme. The Austrian e-government curriculum is considered in terms of its strengths and the aims achieved, but also the limitations, weaknesses and mistakes made. It concludes that countries wanting to implement a nation-wide e-government strategy, regardless of whether they are an emerging nation or a highly-advanced country, need to support their e-government strategy with an e-government training plan.

1. Introduction

The development of a national e-government strategy usually occurs within a country’s federal government offices. The e-government office defines the strategies, writes new laws (e.g. [1]) or adapts existing ones, and develops the necessary tools such as e-signatures, e-identity systems or e-delivery solutions. E-government is developed centrally, but is then implemented in public administrations at state, federal and municipal levels.

The provision of high-quality online services and technocratic achievements are important, but it is just as important to ensure that e-government knowledge is made available to public administrations and organizations. Knowledgeable civil servants are the key to successful e-government, so implementing an e-government strategy requires a training plan that takes their skills, their needs and their working environment into consideration [2][3][4], but also reaches all the employees of public administrations. The e-government strategy therefore needs to be accompanied not only by the dissemination of the e-government tools and knowledge to public authorities and their staff, but a nation-wide training programme that enables them to use them. It is the dissemination of the e-government knowledge and ensuring the relevant training that represent the crucial, yet often underestimated, aspects of a successful, nationwide e-government strategy [5].

For a number of years now, Austria has been providing standardised administrative procedures, high-quality e-government services, and tools for electronic delivery, for example, the government webportal help.gv.at, the electronic record system (ELAK), e-payment systems, e-mandates and the citizen’s e-card (Bürgerkarte). Austria is often seen as one of the most successful countries in the implementation of an e-government strategy [6][7][8]. One of the reasons for this success are the close cooperations between the federal government and the municipalities, provinces and federal ministries. Another reason is the implementation of an extensive e-government training programme. This paper presents a case study that describes how the Austrian e-government strategy, the e-government tools and services managed to leave what could be called “the ivory tower of e-government” and reach many levels of government and public administration. This case study provides an overview of the implementation of the Austrian national e-government curriculum plan “eGovernment Akademie” (eGovernment Academy) [9] that began in 2006 and continues today, considers whether the aims have been met, presents some criteria for its success, some mistakes and lessons learned, as well as some tentative foresights.

The case study may be especially interesting for those who are either involved in the development and/or the implementation of an e-government strategy in their countries. It may also be interesting for those who work in e-government and need to know how e-government education can help implement an e-government strategy, help disseminate knowledge about the tools and applications, and gain insights into the educational methods to be used.

2. The Austrian E-Government Curriculum

The Austrian e-government strategy represents a close cooperation between the federal government and each of the 9 relatively autonomous Austrian states (“Länder”). In 2004, the Austrian parliament ratified the E-Government law [1] and a year later, in 2005, the Austrian Chancellery presented the eGovernment Academy (eGovernment Akademie), the plan for the implementation of a nation-wide e-government training curriculum [9]. Both the e-
government curriculum and its implementation are part of Austria’s e-government strategy and, rather than being an educational institution or a brick building, the eGovernment Academy is understood more in virtual terms, representing all the e-government aims, methods (seminars, e-learning), materials, texts, publications, trainer networks, legal frameworks and co-operations with state educational institutions and other partners.

2.1. The Aims of the E-Government Curriculum: the Why

The central objective of the e-government curriculum is to increase the use of e-government in Austria. It is well-known that even if a country develops and agrees on the implementation of an e-government strategy, this does not necessarily imply that the e-government tools and services will be understood or used. The e-government curriculum thus represents the aim that all government and public administration staff be trained and able to use the e-government services and tools, and also be able to promote the use of e-government to other stakeholders such as citizens, businesses, etc. too [10][11].

The developers of the curriculum were well aware that a one-size-fits-all training approach would not be suitable, rather, the curriculum has to consider the different e-government topics, the target group’s area of work and hierarchical level, the needs and skills the staff already has and the new ones they require. It was also necessary to consider the different areas and the specifics in e-government as well as the different modes of instruction that could be used. All government and public administration staff needs to have a common understanding of the e-government system and learn certain basic e-government skills, but they also need to gain specific knowledge relevant to their area of work. To achieve the eGovernment Academy’s main objective, further, more specific aims were defined:

1. The academy is to provide an e-government training programme that is suitable for all members of government and public administrations from all hierarchical levels, ranging from administrators to high-level executive managers, mayors and politicians.
2. E-government is understood as a topic that is relevant to all, but at the same time, public employees, civil servants and politicians may have different backgrounds and requirements, and require specific e-government skills or knowledge. This means that the curriculum needs a modular structure that is able to provide a basic, common understanding of e-government on the one hand and more specific e-government knowledge on the other.
3. The curriculum must include and consider existing training programmes offered by other public administration training academies, organisational know-how, the different target groups’ needs and interests, and be able to solve any conflicts of interest that may arise.
4. The e-government curriculum is to provide decision-makers with a checklist that provides an overview of the staff training costs, the content and quality of the training.
5. The curriculum needs to set and maintain quality standards in both the content and the teaching methods.
6. Quality and information management is a necessary aspect of the curriculum so that quality standards can be maintained and any new knowledge can flow back into the further development of the Austrian e-government curriculum and e-government strategy.

The success of the e-government curriculum can therefore be seen as achieving the main objective (increasing the use of e-government in Austria, represented by the number of participants attending the curriculum’s training) and fulfilling these specific aims.

2.2. The E-Government Curriculum’s Structure: the What, the Who and the How

The e-government curriculum for public sector employees considers 3 aspects: what (the content), who (the target audience) and how (mode of instruction) [10]. These 3 aspects are described below.

2.2.1. The Target Groups. The target groups were defined as politicians (members of the national or regional parliament, mayors, council members), managers/executives, administrators, project managers, and trainers (members of staff that are trained to teach other members of staff). Participants could come from any national, regional, municipal or hierarchical level.

2.2.2. The Contents. Contents of the trainings focused on e-government structures, services and tools, the legal framework, how administrative workflows are improved, new internal and external communication channels and processes. The curriculum was not only to provide new skills and knowledge, but also to encourage participants to understand why new e-government processes are necessary and important. Politicians were presented with the potentials of e-government and successful examples of e-government. Executives were offered workshops which provided an overview of e-government, the reasons and advantages for using e-government applications and services. The administrators could attend seminars about e-government services and tools currently being used as well as seminars that improve general computer competences. Staff members who were to become e-
government trainers were taught e-government contents, training methods for teaching other members of staff and how to act as knowledge disseminators. Project managers, IT coordinators, IT-developers, who were seen as requiring both specific e-government knowledge as well as a variety of skills beyond e-government, were offered longer trainings that included other topics such as public management, process management and change management. These longer trainings were offered in cooperation with universities and regional academies, and the ECTS gained from these trainings could be transferred to an E-Government Master’s Course.

2.2.3. The Modes of Instruction. The teaching methods varied according to the target group. The trainings ranged from ½ day “roadshows” held in a number of Austrian towns, to lectures, seminars, university courses, e-learning, blended learning, and train-the-trainer workshops. The trainers, lecturers and presenters employed also varied according to the target group. For example, for politicians and members of parliament, it was deemed necessary to have well-known public figures present e-government and public innovation. For staff in leadership positions (executives), other in-house high-level executives were engaged, whilst for administrators, e-government trainers and lecturers were used. The seminars “Introduction to E-government” lasted ½ day for executives and 1 day for administrators. Such introductory seminars were offered a number of times during the course of a year. Project managers could attend university courses that lasted 10 days (and included an examination that, if passed, granted them the university certificate “Certified E-Government Expert” [12]). These university courses involved a number of various experts and lecturers from e-government and other areas (e.g. project management, law, etc.). The “Certified E-Government Expert” was accredited with 12 ECTS that could be transferred to a Master’s Course [13]. Train-the-trainers workshops were organised with trainers and experts from various public and administrative authorities.

3. Method

Given the complexity of e-government and the uniqueness of the Austrian e-government strategy the case study approach was deemed to be the most suitable method to study the implementation of the e-government curriculum and to see to what extent the main objective and the stated aims were reached.

3.1. The Case Study Approach

There are different types of case studies, although there are similarities between the types and they will often merge with each other. They can be described as being descriptive, illustrative, experimental and explanatory [14] or as problems, decisions, evaluations (expressing a judgment about the worth, value or effectiveness of a performance, act or outcome and include positive and negative sides) and rules [15].

The case-study method is an in-depth study of a contemporary phenomenon in its real-life context. As a form of exploratory research, it has the following characteristics: firstly, it explores a certain phenomena and tries to understand the context in which the phenomenon takes place; secondly, it does not begin with an initial set of questions and/or notions within which the study will take place; thirdly, multiple methods may be used for collecting the data [16].

Adopting the case-study approach makes it possible to concentrate on a specific aspect of e-government and to analyse various processes – processes which, according to “may remain hidden in a large-scale survey but may be crucial to the success or failure of systems or organizations” [17]. The case study method allowed the researchers to identify the particular features, strengths and weaknesses of the Austrian e-government curriculum.

The case study presented here is descriptive, that is, it describes the Austrian e-government curriculum known as the eGovernment Academy. It also attempts to provide an evaluation of the curriculum by analysing the evidence to see if the stated objective and aims as detailed in the curriculum’s implementation plan [9] and described in section 2.1. were reached.

3.2. Research Methods Used in the Case Study

Different methods were used to gather and analyse the implementation of the e-government curriculum.

3.2.1. Expert Interviews. Unstructured interviews were held with Austrian e-government experts. This included a member of staff from the Austrian Chancellery involved in the development of the e-government strategy and responsible for both strategy and the content of the curriculum (member of Section I of the Chancellery: E-Government Strategy Development). Another expert interviewed was from Section III of the Austrian Chancellery, who was responsible for all the organisational aspects of the curriculum and the cooperations between the Chancellery, state (“Länder”) and municipal partners, and government training academies. It was deemed as important to interview both e-government strategists and people involved in the organisation of the training: organising the nation-wide implementation of a training plan requires knowledge about the public administration training sector and skills in setting up cooperations that strategists may not have. Cooperating with regional partners and trainings institutions turned out to be an essential
aspect for the success of the curriculum’s implementation. To provide the perspective from one of the cooperating educational training academies, the Head of the Lower Austrian Kommunalakademie was interviewed too.

3.2. Documentary Analysis. Documents related to the curriculum [18] and its implementation [9] were analysed to obtain in-depth data about the aims of the e-government curriculum. The curriculum’s training catalogue [19] and figures of participant attendance 2006-2012 were analysed to provide an overview of the trainings offered and the response to them.

4. The eGovernment Academy Case Study

This case study aims to see whether the Austrian e-government curriculum achieved its objective and aims, and, by describing this e-government training programme, to increase understanding and contribute to the collective knowledge in the area of e-government development and training [20].

4.1. The Focus of the Case Study

Whilst the structure, the objective and the aims of the e-government curriculum are provided in the sections above, the focus of this case study is the actual implementation of the e-government curriculum in Austria. The case study investigates 2 aspects in particular: first, it analyses the expert interviews to provide an overview to the responses to the trainings offered, and second, it compares the e-government curriculum’s aims with the number of participants during the period 2006-2012.

No specific research questions guide this case study, but the authors assume that one way of seeing whether the objective and aims have been reached and the implementation of a national e-government has been successful, is by seeing how many members of government and public administrations attended. This case study therefore limits itself to seeing to what extent the curriculum was attended by the staff of public authorities and government since it was implemented in 2006. Further investigating the extent of the e-government curriculum’s success would require more extensive research e.g. feedback from all those who attended any of the trainings offered and studying any changes in the internal and external work-flows.

4.2. Hypotheses

Hypotheses are tentative explanations that account for the facts and that can be tested by further investigation. The hypotheses presented in this case study are derived from the stated aims of the e-government curriculum (see section 2.1.).

H1: The e-government curriculum is suitable for staff from all levels of public administrations.
H2: The e-government curriculum considers the different target groups and their specific needs, requirements, skills and knowledge.
H3: The e-government curriculum considers other training programmes, integrates existing organisational knowledge and participants’ needs and interests.
H4: The e-government curriculum is able to solve any conflicts of interest.
H5: The e-government curriculum is able to solve any conflicts of interest.
H6: The e-government curriculum sets and maintains quality standards.
H7: The e-government curriculum includes information management so that the e-government strategy and the curriculum can be adapted and developed according to changing needs.

4.3. Implementation of the E-Government Curriculum: the eGovernment Academy

The Austrian Chancellery (BKA), Section I is responsible for developing the strategy of the e-government curriculum, providing its content and deciding on the materials to be used. The BKA Section III is a Human Resource department (Verwaltungsakademie des Bundes [21]), and is responsible for managing the nation-wide implementation of the curriculum, including the organisation of the materials, the locations, the trainers, the seminars, the participants, and any partners or external training institutes involved, as well as managing the evaluation and feedback of any of the trainings. This central organisation within the Chancellery has a number of advantages, such as avoiding redundancy and maintaining the high quality of the trainings.

After the first year, where 39 trainings were offered in Vienna, it became clear that if the nation-wide implementation of the curriculum is to reach more participants, extensive cooperations with federal ministries, departments, municipalities, large public authorities (e.g. the Austrian Social Security), all 9 Austrian states (Länder), as well as regional state-owned institutions responsible for public management training (e.g. the Kommunalakademie in Lower Austria [22]) were necessary. Such cooperations are able to support the dissemination and the implementation of an extensive training plan, ensure that regional and local e-government target groups can be reached, that participants’ needs are known and met, and, at the same time, help avoid conflicts of interests between the Austrian Chancellery, public authorities and the regional state-owned training academies. The BKA Section III was therefore also responsible for finding and contacting
regional partners and training institutes so as to set up the cooperations with them.

The implementation and dissemination of the e-government curriculum began in 2006 and continues to this day. The eGovernment Academy now offers a wide range of trainings, workshops and seminars on many e-government and other relevant topics over the course of each year, and also includes new instruction methods such as e-learning modules.

5. Results

5.1. Participation in the Trainings (2006-2012)

In 2006, 39 seminars were offered for 3 target groups: “E-government for Administrators” (26 1-day courses for administrators), “E-government for Executives” (7 1-day courses for politicians and executives) and 2 3-day “Train-the-trainer” courses for trainers (see Table 1 and 2). All the e-government trainings offered in 2006 were held in Vienna, and the majority of the 544 participants (see Table 2 and 3) were from Vienna.

Table 1: Participation by target group

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Administrators</th>
<th>Politicians &amp; Executives</th>
<th>Trainers</th>
<th>Project Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>299</td>
<td>153</td>
<td>92</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>642</td>
<td>42</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>2008</td>
<td>1054</td>
<td>-</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>2009</td>
<td>793</td>
<td>63</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>2010</td>
<td>970</td>
<td>27</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>2011</td>
<td>1155</td>
<td>304</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>2012</td>
<td>275</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total/Target Group</td>
<td>5188</td>
<td>589</td>
<td>240</td>
<td>46</td>
</tr>
</tbody>
</table>

Aiming to increase participant numbers and to disseminate the e-government curriculum in the public administrations in all Austrian regions, in 2007 the BKA began to cooperate with the Austrian states (Länder) and their local training academies. In 2007, the BKA cooperated with the regions Lower Austria and Vorarlberg, and also conducted in-house trainings for the Austrian Social Security, a large public authority. Such cooperations have proven to be valuable, reflected by the increasing number of participants (Table 2). Furthermore, whilst participant attendance of the seminars and trainings held in the federal ministries (in Vienna) can generally be seen as decreasing in the period 2006-2012 (except 2008 andd 2009; see Table 3), during the same period, the number of seminars and trainings offered in other Austrian states increased.

Table 2: Total number of participants and the total number of courses offered per year

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Total Participants</th>
<th>Total Nr. Of Courses Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>544</td>
<td>39</td>
</tr>
<tr>
<td>2007</td>
<td>700</td>
<td>48</td>
</tr>
<tr>
<td>2008</td>
<td>1114</td>
<td>99</td>
</tr>
<tr>
<td>2009</td>
<td>913</td>
<td>95</td>
</tr>
<tr>
<td>2010</td>
<td>1007</td>
<td>70</td>
</tr>
<tr>
<td>2011</td>
<td>1510</td>
<td>86</td>
</tr>
<tr>
<td>2012</td>
<td>275</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 3: Participation in trainings held in Vienna

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Total Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>544</td>
</tr>
<tr>
<td>2007</td>
<td>404</td>
</tr>
<tr>
<td>2008</td>
<td>899</td>
</tr>
<tr>
<td>2009</td>
<td>430</td>
</tr>
<tr>
<td>2010</td>
<td>69</td>
</tr>
<tr>
<td>2011</td>
<td>159</td>
</tr>
<tr>
<td>2012</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 4: Participation in trainings held in cooperation with partners

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Total Participants</th>
<th>States or Public Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>296</td>
<td>Lower Austria, Vorarlberg, Austrian Social Security</td>
</tr>
<tr>
<td>2008</td>
<td>215</td>
<td>Corinthia, Tirol, Salzburg, Styria, Upper Austria, Vienna</td>
</tr>
<tr>
<td>2009</td>
<td>483</td>
<td>Burgenland, Lower Austria, Styria, Tirol</td>
</tr>
<tr>
<td>2010</td>
<td>938</td>
<td>Burgenland, Corinthia, Lower Austria, Salzburg, Styria, Tirol, Upper Austria, Vienna</td>
</tr>
<tr>
<td>2011</td>
<td>1351</td>
<td>Corinthia, Lower Austria, Salzburg, Styria, Tirol, Upper Austria, Vorarlberg, Vienna</td>
</tr>
<tr>
<td>2012</td>
<td>230</td>
<td>Salzburg, Styria, Tirol, Upper Austria, Vorarlberg</td>
</tr>
</tbody>
</table>
notably (see Table 4). Setting up such regional cooperations is not always easy, but by 2010, the Austrian Chancellery was involved in cooperations with all 9 Austrian states. The low figures for 2012 are due to the fact that they represent attendance until the end of May 2012.

The aim of the e-government curriculum was to reach all levels of public administrations. Members from the target groups at the state, regional and municipal level, trainers and administrators participate, whilst participation at the ministerial and executive level was and remains low. As figures from Table 1 show, trainings are attended mainly by administrators (5188 participants), but not by politicians and executives (589 participants) so this aim has not been reached and H1 has to be rejected. This may reflect that at the administrative level, staff needs to know how to use the e-government tools and services on a daily basis and is therefore more likely to attend the trainings.

5.2. Content

In 2006, the contents of the e-government training were structured to suit the needs of the target groups (administrator, executives, trainers and project managers). The contents were twofold: a first part deemed suitable for all participants, describing the e-government strategy, the visions, innovations in public management, issues such as the e-citizens’ card, electronic procedures, electronic registers, and online portals. The second part was more specific, and adapted to the target groups’ specific needs.

On the basis of the numbers of participants and the feedback they provided, in 2007, the curriculum’s strategy in terms of regarding target group and content was altered. The feedback revealed that there was more demand for e-government at the local and administrative level and in terms of e-government applications rather than general e-government content. Trainings were adapted accordingly, and began to focus on specific e-government tools and applications e.g. the webportal help.gv.at, the electronic records (ELAK, Elektronischer Akt), central registry (ZMR, Zentrales Melderegister), on specific e-government topics such as e-law, but also topics such as providing online content according to accessibility guidelines, and the use of online channels and social media in public administrations. In many cases, the participants will first visit an introductory course, then select further seminars depending on the tools and services they need and use. This meant providing more specific seminars but, as the figures from 2007 (Table 2) onwards show, providing more and varied seminars proved to be much more successful. Thus, the curriculum was developed as a set of modules which participants could choose in a more “pick ‘n’ mix” manner. Heads of departments, executive managers and politicians are still offered introductory ½-1-day introductory courses, but attendance has not increased particularly.

Different methods were used to teach the contents. In 2007 the Chancellery, in cooperation with the Lower Austrian Communal Training Academy, organised an extensive roadshow, travelling to 5 different towns. Mayors, executive managers and administrators were invited to attend for ½-1 day and hear about electronic public administration (elektronischer Amtsweg). Although between 24 and 55 participants attended, the roadshows were discontinued. Beside the seminars, trainers attended train-the-trainer courses, whilst project managers could attend university courses. In-house trainings were offered to large public authorities, e.g. the Austrian Social Security in 2007. E-learning was another teaching method used for large public authorities who found the other teaching methods to be unsuitable or where staff was unable to attend on the dates offered. In 2010, e-learning modules were developed for the City of Vienna. These are used not only as an alternative or supplementary teaching method, but as mobile content for those who cannot attend trainings or as refreshers. The material for the modules is licenced under Creative Commons and can be used for other purposes too, for example, as a marketing tool. The e-learning modules were first tested in July 2010 in the City of Vienna, and during the first four months, 1,000 users accessed the programme. Since being made available, 160 employees have completed all the e-learning modules, which points to a strong interest for this form of training/knowledge transfer and employees’ interest in e-government-topics.

Thus H2 was supported. The results show that knowledge and participant feedback are important and necessary to understand the target groups’ needs and to adapt and/or correct the content and teaching modality.

5.3. Organisational Knowledge Through Cooperation

The participant figures from 2006 showed that implementation and dissemination needed to occur outside Vienna. In order to achieve this, the Austrian Chancellery began cooperating with the Austrian regions and the local public administration academies. This change in strategy and the resulting cooperations with all Austrian regions during the period 2007-2012 led to a notable increase in participation figures (Table 2 and 4). The partners not only helped with the dissemination of the curriculum (i.e. marketing within their state), but also with the implementation of the curriculum by providing the Austrian Chancellery with information about public authorities and target groups, their training needs and possible training locations.

The e-government curriculum was thus able to integrate the organisational and local knowledge held by partners and offer local trainings that fulfil local needs. In many cases, the Austrian Chancellery would provide the contents and teaching materials,
and suggest (local) trainers, but the partner academies are in a better position to know participants’ needs and demands and therefore decide on the seminars to be offered. Local training academies were also used as the location to attend the seminars, as travelling to Vienna is often a barrier to participation. This confirms H3.

The e-government curriculum provides homogenous e-government training materials to all regional academies that can be adapted to suit local needs, but there is no evidence that it is able to solve any conflicts of interest between different stakeholders and organisations. Thus H4 is rejected for lack of evidence.

5.4. Information Management and Quality Standards

The e-government curriculum sets and maintains quality standards as the lecturers, trainers, the content and the trainings are evaluated by the participants using the Austrian Chancellery’s formal evaluation schemes. Project managers had to pass an examination in order to obtain the certificate “Certified E-Government Project Manager” from the Danube University Krems. The training academies’ cannot be certified as they are state-owned education institutes. Thus, H5 can only be partially supported on the basis of the evidence available here.

An overview of the seminars and trainings held every year, the content and duration of the trainings can be found in the course catalogue [19]. All seminars are financed by the BKA, so no overview of the costs is provided. The e-government curriculum therefore provides a catalogue with an overview of the content of the seminars offered. H6 is therefore partially supported.

The e-government curriculum is supported by information management. This includes the participants’ feedback and formal evaluations of the trainings, organisational and local knowledge obtained from the cooperation partners and is used to adapt, change and refine the training and seminars. In 2006, 3 different seminars were offered, 1 for 3 of the 4 target groups. On the basis of the feedback gained, as from 2007, trainings became more focused on the individual e-government applications and tools and were accordingly attended by a higher number of participants (particularly administrators). Thus H7 was supported.

6. Discussion

Foresight can be understood in a number of ways, such as “the ability to predict what will happen or be needed in the future” [23]. The authors of this paper do not have a glass ball that can help them tell what the future of e-government holds, nor are they able to read tea-leaves. But some foresight may be possible by looking and evaluating at what has been achieved with the implementation of a nation-wide e-government training programme and by looking at the mistakes made and the negative issues.

The aim of this case study was to analyse whether the nation-wide implementation of an e-government training plan was successful. During the period 2006-2012, the eGovernment Academy, and, as from 2007 in cooperation with its partners, developed and disseminated 454 e-government trainings attended by 6063 participants. Since 2006, the trainings have been continuously refined and adapted in terms of the target groups, content and teaching methods.

There are other outcomes too. The eGovernment Academy was firmly established as the Referat III/6/b: Ausbildung Personal, Recht und E-Government, that is, the human resource department within the Austrian Chancellery responsible for staff development in the area of law and e-government. The eGovernment Academy continues to offer trainings and “knowledge updates” in cooperation with its partners. E-government conferences were held for staff from the states, municipalities, public authorities and organisations working with them (E-government Fachtagung 2008, E-Government Konferenz 2010). The teaching materials have been made available as an e-government handbook for municipalities [24] and as e-learning modules.

One of the main factors that ensures the success of the e-government curriculum is that it is a central aspect of the national Austrian e-government strategy. This places the e-government strategy office, the office responsible for the development of e-government tools and services, and the office involved in the e-government curriculum within one ivory tower. All these offices need to work together rather than separately. Success (here defined in terms of attendance by the participants, and, by assuming that they will then use e-government tools and services, increasing the use of e-government) needs an e-government strategy that exits the ivory tower. So it is clear that within this tower, it is necessary to have an office that is concerned with such an exit in the form of e-government curriculum implemented all over Austria. The e-government curriculum needs to be a national effort, so the offices in the ivory tower must work in close cooperation with local partners, as these partners are the ones who know about the participants and their needs, know how to reach them, and reduce the obstacle of having to travel to Vienna to participate.

A further criteria that significantly impacts the success of the e-government curriculum is developing a broad training programme that allows participants to choose the skills and knowledge they need to acquire. The modular approach has been detailed in this paper, but teaching must focus on the available e-government applications rather than presenting e-government theory. To ensure higher acceptance by participants, trainers should be internal (and, even better, local), or from public administrations as they are more aware of participants’ issues and are often able to link the implementation of a nation-wide e-government training programme and by looking at the mistakes made and the negative issues.
content they present with the reality faced by public authorities.

The financial aspect is a further aspect that impacts the curriculum’s success. The e-government curriculum has, so far, been financed by the Austrian Chancellery, but this may be an issue in future if public authorities have to finance the training. Whilst the train-the-trainer and seminars cost the same to run, train-the-trainer workshops have a higher impact than seminars. E-learning is probably the most cost-effective method, as it is also able to reach a wide audience and can also be used to achieve other aims.

Austria is highly developed in terms of e-skills and computer literacy, but it is clear that additional e-government trainings are necessary, as people will attend them even if they are not mandatory. This case study provides some opportunities for e-government strategists to learn how to implement the e-government strategy and an accompanying training at a national level. But there are some negative issues and mistakes that were made during the implementation of the e-government curriculum. Knowing about these can help with the future implementation of a country’s e-government strategy [25] [26].

Some forms of teaching were not suitable or as successful as thought. E-learning was considered to be an important teaching method as it can be used in a number of different ways and contexts, e.g. as teaching materials, as a refresher, or for those who were unable to attend the trainings and also as a marketing tool. In 2006, when the curriculum was initially rolled-out, the e-learning modules were not ready, and this was certainly a mistake. These modules were only ready in 2010. Nevertheless, they are now used by the City of Vienna and have proven to be a huge success with the staff.

The roadshows and the seminars for politicians and mayors proved not to be so popular, and were attended only by a few. It can be difficult to involve ministers, politicians, higher-level executives and mayors as they often do not have IT skills or knowledge about IT, yet are the ones who take the decisions about the use of IT in their organisation. At the same time, e-government is often associated with IT, and therefore the political target group tends to shirk from attending the trainings or taking an interest in the subject matter. This target groups need to be involved more (maybe by making some training compulsory) and be aware of the e-government tools and services available so that they can implement further public management reforms. Different forms of content and teaching methods may be necessary, as the term “e-government” seems to suggest that only those who are responsible for IT need to be aware of the e-government strategy and the training plan. Changing the name from e-government to e.g. “Administration 2.0” is presently being discussed as a way of encouraging the political levels to take an interest.

The trainings encourage the participants to use new information technology tools and social media according to public administrations’ guidelines, as well as improve existing IT skills. It is important that a technologically deterministic approach is not adopted in the development of an e-government strategy and curriculum: IT tools are not the solution, it depends on how members of all government and public authorities adopt, use the technology and are able to convey their experiences to others. This has two implications, firstly, communication channels and opportunities are needed so that participants can exchange information and experiences. Secondly, participants’ knowledge and feedback needs to flow back not only into the development of the curriculum and trainings, but also specific e-government applications and the e-government strategy too.

The “build-and-they-will-come approach” does not always work! It may be successful in certain cases, such as with the central registry (ZMR), that is supported by a legal framework that makes this the only tool that public administration staff can use to access the data they need. In other cases though, an e-government tool or service may be developed, and the resulting take-up is slow, as is the case with the citizen’s card (Bürgerkarte) that is not compulsory. Trainings ensure that public servants know about all the e-government features that are available, regardless of their popularity and extent of their use.

The e-government curriculum was weak in providing and using online and offline networking opportunities, such as newsletters, social networks, meetings, events and updates. E-government knowledge updates in the form of conferences were held for members from the municipalities, public authorities and organisations working with them (E-Government Fachtagung, E-Government Konferenz) during the period 2008-2010, but were then discontinued. Opportunities for online and offline networking can be central to the success of the project, how participants feel about the trainings they have attended, but also in as a tool for dissemination.

7. Conclusion

This case study highlights the implementation of the Austrian e-government training plan. In terms of the levels of participation, the implementation of the e-government curriculum became increasingly successful, and, in terms of the Austrian e-government strategy, makes e-government available, useful and used, and shows a continuous professionalization of e-government. The Austrian case shows that successful e-government implementation must be accompanied by a training programme. Not only emerging countries, but all highly-developed, technologically advanced and e-government-savvy nations need to develop such a training program to ensure that e-government is understood, implemented and used. In Austria, the public authorities’ staff does not need to be trained in computer skills as they all work with the electronic administration system (ELAK) and it was
not necessary to include contents such as those found in the European Computer Driving Licence. Highly-developed countries may profit by ensuring that the public administration staff obtains e-government training, and emerging nations can adapt their training content to include any computer skills thought necessary.

Case study research has a number of weaknesses, such as setting the boundaries onto the phenomenon or distorting the area investigated and materials used. Furthermore, the phenomenon does not exist in its own vacuum and may have multiple meanings. Yet “in education and business, your conclusions have little meaning unless they’re shared with others” [15], emphasising the need to leave the ivory tower for the participant figures.

whilst some of the successes and problems described in their country so that it reaches as wide an audience as possible. At the same time, it is important to consider some of the difficulties and obstacles. Whilst some of the successes and problems described here may be due to the Austria’s particular legal and political structure, it is always useful to consider the lessons learned and mistakes made by others!

8. Acknowledgments

The authors wish to thank their interview partners (Arnold Schoba, Peter Reichstäder, Harald Bachhofer) and Arnold Schoba and Hubert Zenz from the Austria Federal Chancellery for providing the participant figures.

8. References


1682


