# AC 2009-247: USING WEB 2.0 TECHNOLOGIES IN THE AUTOMOTIVE ENGINEERING LANGUAGE CLASSROOM AS A TOOL TO IMPROVE WRITING SKILLS AND PREPARE UNDERGRADUATE STUDENTS FOR THE INTERNATIONAL WORKPLACE

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# Web 2.0 Technologies in the Automotive Engineering Language Classroom as a Tool to Improve Writing Skills and Prepare Undergraduate Students for the International Workplace

# Abstract

In times of multi-national engineering companies and international job assignments, the ability for a graduate engineer to communicate competently in English, whether or not it is their first language, is now paramount. In the department for Vehicle Technology, the syllabus of the English program has been carefully designed to prepare undergraduates for the realities of English in the international workplace, while at the same incorporating the praxis oriented approach to education adopted by the department.

The importance of English is underlined by the fact it is the most taught subject on the course, present in six out of the seven semesters, where students are present on site at the institute. Every effort is made to ensure that the course consists of the most effective and up-to-date methods and for this reason Web 2.0 technologies have been integrated into the syllabus over the last number of years.

The objective of this paper is to outline the use of Web 2.0 technologies within the English syllabus for Austrian students and show how these not only link into the curriculum as a whole, but also prepare undergraduates for professional life after completing their degree.

The first Web 2.0 technology examined is "webquesting", which in this case is the organisation of a departmental excursion to a real Auto Show in an American city from Austria within a given budget. This is used to provide the basis for  $2^{nd}$  semester students' first written report at university level in English. Prior to this stage, students have only been required to write such documentation in their native tongue and this follow-up process enables skills to be transferred and applied in a second language.

The second Web 2.0 technology examined is "e-portfolio". Again, in conjunction with courses in their native language, students are required to create their own online portfolio in English using the portfolio platform Mahara, complete with their résumé, covering letters, details of projects, other academic achievements and any other miscellaneous data relevant to successfully gaining employment as a graduate engineer. The group structure of the platform allows for both instructor and peer assessment, as well as self reflection for students post submission. This exercise also demonstrates intercultural differences within the EU, and also between EU countries and the USA and Asia with regards to the expectations of the employer and the potential employee, such as layout and design of written documentation as well as the interview process associated with starting work.

The result of this integrated approach grants students the knowledge necessary to be able to work either at home or abroad and to be able to make the transition beyond their own cultural borders while at the same time improving both foreign language and writing skills to a level requisite for the international workplace of today.

## Introduction

The last two decades have seen major progress in the field of computing and communications. Global business practice has been revolutionised by the mass use of email, internet and associated technologies. Development is continuing at present with the introduction in the last four to five years of social networking websites, cheap and reliable telephony, RSS feeds, wikis, YouTube and other technologies generally referred to under the umbrella term of Web 2.0. These are fast being integrated into our everyday lives, irrespective of nationality or country and already form an essential means of communication particularly amongst the "Net Generation" for whom PCs have been present throughout their entire lives, and which is the age-group born between 1982 and 1991 that now comprises the bulk of undergraduate level students.<sup>1</sup>

Many tertiary level institutions in Europe have recognised the importance of preparing students for the wider international workplace and not solely for domestic industry. Such an approach therefore incorporates an industrial placement to provide industry experience, the most recent didactic approaches and course content. There is also a strong emphasis on foreign language skills, in particular English, which is the focus of this paper. Due to its current position as the global *lingua franca* of the business world, English is an essential competency for any engineer once they have graduated, to succeed in the workplace. This is true whether the student be a native speaker of the language, or, as in our case, speaks English entirely as a second, third, or even in some cases fourth language.

The degree subject of Automotive Engineering is no exception to this rule and as such, English language instruction in the department of Vehicle Technology is given high priority. During an eight semester undergraduate degree course, six semesters contain English, and in each semester, 30 teaching hours are allocated to the subject. In addition, the seventh semester is reserved for internships in industry, which may entail the student working and submitting their academic reports in English. In such a case, the student is given a language supervisor as well as a technical supervisor to ensure proficiency in all areas of their work. In a similar vein, the final diploma thesis (to gain the final undergraduate degree award) can be written in English, in which case, the student receives similar language support as they would during an internship.

There are many different methodologies, which can be and often are utilized in language instruction. Since the 1970s there has been much research into the modernization of traditional teaching ideas, including for example Allwright's assertion in 1977 that 'if the language teacher's management activities are directed exclusively at involving the learners in solving communication problems in the target language, then language learning will take care of itself'.<sup>2</sup> This paper does not intend to go into detail regarding the exact nature of these changes, but will build on the concept of communication problems in a target language and show how new Web 1.0 and Web 2.0 technologies have been integrated as activities allowing teachers to create such an environment to engage students.

Motivation in second language acquisition is clearly an important factor in language learning success and unsurprisingly therefore has been well researched since Gardner and Lambert suggested that learners are motivated by a desire to integrate into the target language's culture in 1972.<sup>3</sup> The same study (as well as many others) has also strongly linked success in foreign language learning with motivation. While cultural integration could be considered in factor in a small number of engineering students, most consider the primary goal of the degree course to be that of obtaining an engineering degree. Quite understandably, intrinsic motivation for language study is not given a high priority by

many students, as it is seen as superfluous to the "more important" technical subjects and in order to facilitate the best possible language learning environment, it is necessary to find ways of convincing students of the importance of language learning. Web 2.0 technologies play an essential role here, as they can provide a clear link between language learning and its application in a wider context, therefore providing an extrinsic form of motivation by providing a clear relation to the "real" world and situations where the language may very plausibly be used. Additionally, Web 2.0 technologies are well-known and comfortable to members of the Net Generation and therefore hold no threat in terms of teaching environment.

These web based technologies related activities were incorporated into a second semester English course, through the activity of *webquesting*, and into a fifth semester English course where e-portfolios were created through the use of the open source software Mahara. These activities have been specifically placed within the overall English curriculum, which itself is tailored to match the requirements of the department of Vehicle Technology's didactical method incorporating a multi subject project based learning approach.<sup>4</sup>

# **Departmental Didactical Approach**

In order to facilitate the application of theoretical knowledge in practice, a particular didactical approach has been adopted in the department of Vehicle Technology based on the principle of Project Based Learning (PBL). In this approach, the curriculum is divided into three distinct phases and during each phase, the subjects in the syllabus are designed to compliment each other and motivate student learning.

The first phase takes place in the second and third semesters of the degree course and concentrates mainly on theoretical and language education. In the final stage of this phase, students are required to write a piece of computer software, which applies a mathematic principle to solve a problem. This project is undertaken in teams of three or four and the project language is English. Thus, the language of all documentation relating to the project as well as the final presentation of the software is English.

During this first phase of PBL, English courses (General English 1 and General English 2) are specifically designed to compliment the approach. General English 1 and 2 concentrate on refreshing students' English skills and bringing them all to a defined level of language competence. In addition to this it is also necessary to prepare the students for the previously mentioned project presentations and documentation writing. The first of the web based activities "webquesting" is intended to correspond with the area of documentation writing required within the first phase of the PBL approach.

The second phase of the PBL approach presents students with tasks, which relate to industry directly or are modeled on real-life engineering problems. These tasks include the Formula Student project and necessitate the use of professional tools to be successfully completed. The main objective of this phase (from the fourth to the sixth semester) is to prepare students for professional life in the automotive industry. The English language instruction curriculum during this phase is designed accordingly and hence the focus of the content of these three semester courses shifts to correspond: this is a fact reflected in the names of the English courses taught in semester four, five and six – Professional English 1, 2 and 3.

In Professional English 2, the syllabus focuses on resume writing and interviewing techniques, in preparation for possible international internship and job interviews. The second activity referred to in this paper, is the creation of an e-portfolio using *Mahara* open source software. In this activity, students

post their resumes and professional details online, mimicking professional networking websites such as LinkedIn as well as the more generic online resume builder (e.g. <u>www.myresumeonline.org</u>).

Finally, the third phase of PBL approach used in the department for Vehicle Technology focuses on practical training within companies and comprises a single semester internship in the seventh semester, where the students can apply their garnered theoretical knowledge and soft skills in the automotive workplace.

# **Activity 1: The Webquest**

*Webquests* were conceived and first put into practice by Bernie Dodge and Tom March at San Diego University in the mid to late 1990s. A webquest has been defined as 'an inquiry oriented activity in which some or all of the information that learners interact with comes from resources on the internet'.<sup>5</sup> Dodge furthermore goes on to define two separate types of webquest: short-term and long-term. The short term model should have the "instructional goal of [...] knowledge acquisition and integration" should expose the learner to new information which must then be assimilated and finally is designed to be completed within 1 to 3 lesson periods.<sup>6</sup> The long-term model involves a longer period of time for the learner to manipulate the information, typically between one week and one month and also requires deep analysis and a transformation of the original information. The shorter model has been used as the basis for the activity described in this paper.

The *webquest* has become popular enough to be featured on standard ESL/EFL websites containing teaching materials, notably <u>www.onestopenglish.com</u> and of course, Bernie Dodge's own website (<u>www.webquest.org</u>).

First integrated as a classroom activity in 2005, the *webquest* represents an intermediary step towards the full implementation of Web 2.0 technology based activities in the lesson plan. Indeed, Web 2.0 technologies were embryonic at best in their development for use in the language classroom as recently as 5 years ago and entirely non-existent when Dodge and March first publishing their ideas in 1995.

The *webquest* was introduced into the second semester English language course, General English 1. As a course component, the *webquest* is assessed as group work and the final report handed in by student groups comprises 10% of the final overall English grade for the semester. The motivation for introducing the webquest and the method of its implementation are outlined in the following sections.

# Motivation

An important feature of student motivation for the completion of a task is relevance. Immaterial of the subject (it could be mathematically or language based) many students find difficulty in comprehending the purpose of a given task or activity, as they are unable to relate the task to any practical application. This is often the case in the English language in grammar teaching, where it is not immediately obvious to some students why, for example, a certain tense in necessary in English (particularly if the tense does not even exist in their mother tongue). In addition, languages are often given very low priority by students who are studying technical subjects, as they cannot understand what the purpose is of a language course in the context of an engineering degree.

In this case, therefore, it is important to provide clearly structured tasks, which relate to the "real" world to provide motivation and in some cases justification to the students for the task at hand. This is clearly not possible in every task set, but part of the purpose for the introduction of a *webquest* onto the

English curriculum was an effort to link the academic and "real" worlds in the eyes of the students, while at the same time maintaining one of the core language objectives of the course. That the internet has become such an essential part of everyday life was a major influence in the selection of this particular activity. There is also a particular relevance for the English language in this regard, as by recent estimates more than 80% of the total content available on the internet is in English, whereas only 5% of the total is available in the students' native language of German.<sup>7</sup>

It should not be lost sight of, however, that at the same time as providing motivation for the students by providing this academic / "real" world link, the *webquest* also facilitates the primary language objective, which in this case is the composition of a written report in a suitable language register to be presented to either an academic supervisor or a departmental superior.

## Implementation

The webquest activity, unlike a normal English lesson, takes place in the departmental computer labs. Fortunately, the department is well resourced in the area of computer technology. In addition to two CAD studios, the separate computer laboratory contains 22 separate Windows based PCs, each networked and with internet access. During their first two semesters, students are required to undertake a course of 30 hours in each semester in *Informatics*, including basic introductions to programming in C++ and Visual Basic. Hence the demands placed on the students for this activity with regards computing knowledge cannot be considered overly strenuous and basic familiarity with the internet is also assumed.

As the activity is modeled on the principle of a short-term webquest, the allocated lesson time with teacher / student contact is one timetabled two-hour session (two timetabled hours representing  $2 \times 45$  minutes: thus 1 hour and thirty minutes). Furthermore, students are required to complete the research and writing associated with the activity outside of teacher-student class contact time and the additional estimated time for the activity is approximately 60 minutes per student (assuming a two student group).

The typical student is assumed to be an Austrian high-school graduate, who has begun his/her tertiary education directly after the completion of high-school, or directly after the completion of Austria's mandatory national service, which can last a maximum of eight months, but obviously delays entry into tertiary education by a full academic year. This places the typical age-range of the average student at between 18-20 years.

During the "lesson" stage of the activity (face-to-face teacher-student contact), students research their chosen objective and also begin writing their reports. It is during this phase of the activity that the teacher must be aware of their three essential roles in order to ensure the success of the activity. First, the role of facilitator: ensuring the students have all they need to complete the task; second, the monitor: it is vital to ensure the correct objectives have been understood and are being worked towards before the students continue the activity in their groups independently. Finally, language resource: although typical Austrian students should theoretically be at the same level, this is rarely the case. Therefore, it is necessary to identify weak students at an early stage to provide the requisite knowledge and material, so they may complete the task.

Before the activity begins, an additional 30 minutes is allocated to ensure that students have been properly logged into their university accounts and also to demonstrate an online bilingual English-German dictionary (http://dict.leo.org), which for obvious reasons is of practical use for the students.

# **Activity Description**

The webquest presented to the students each year varies only in minor details, which are controlled by the available content on the internet at the time of the lesson.

The objective: in groups of two (maximum three), students plan an itinerary for a short trip from Austria to an auto show in the United States of America. Students are presented with the details of three upcoming auto shows in different towns and using the links provided must plan all aspects of the trip for themselves and four departmental staff members. Students may also plan a trip to an entirely different auto show if they prefer, although links in this case are not provided.

In addition to the information provided to the students regarding authentic auto shows, students are also provided with various other links to websites to enable them to plan the trip. Examples of such include: airlines, car rental, hotel, tourist board, public transport and other potentially relevant websites.

Clearly, all links are provided to the English version of the website, should there be the option to change the language into their native tongues. Students are also asked to refrain from using languages other than English, if they have the option to do so, but for obvious reasons, this is impossible to monitor once the activity moves beyond the classroom phase.

Finally, students are given a (fictitious) budget within which the trip should be planned. This is deliberately challenging, although no part of the activity description states that students must remain within budget. Obviously, the point is stressed vehemently, that no payments of bookings of any kind may be made on behalf of the university for such a trip and anyone doing so would receive no actual financial reimbursement. A copy of the activity, as presented to the most recent group of students in the summer of 2008, is attached as Appendix A.

# **Report Content & Language**

English language production associated with this activity comes in two forms: oral and written.

The oral form is not evaluated, as it is purely the language of communication designated for the classroom and therefore relates to any student – teacher interaction during the contact phase of the activity.

The written form is evaluated according to language and report content. Evaluation is described in more detail in the following section. In order to fulfill all task requirements, the following information must be included in the report, which is designated as being for an academic member of staff, to also appraise student awareness of register. Students should:

- 1. select an auto show and outline the reasons for their choice
- 2. plan all aspects of the trip, including transport and accommodation and give a synopsis of arrangements
- 3. plan a short sightseeing itinerary for the last day of the trip
- 4. provide the budget in tabulated form

A major difficulty with many students can be that of plagiarism or simple "cut & pastes" from the internet, in particular, Wikipedia. However, this is generally fairly easy to identify, either due to the teacher's own prior knowledge of the source or because of notably improved language sections within

the body of the work submitted by the students, which often range from lower intermediate ability in one sentence, followed by native speaker quality in the next. Hence, in many cases it is necessary to require students to resubmit reports.

# Evaluation

The activity comprises 10% of the overall grade for the course General English 1.

Assessment is carried out on the basis of the written report in English, which is generally submitted a maximum of two weeks after the initial webquest lesson. The following criteria are assessed in the report:

- Task fulfillment
- Communication of ideas
- Appropriacy of language
- Syntax

One drawback of this activity can be the group nature of the work. In some cases, the work is clearly written by only one of the students in the group, while both receive the same mark. While this can be construed as a negative aspect in terms of the overall assessment of individual candidates, it places greater emphasis on combined work, thus allowing students to comprehend their weaker areas and learn from their peers, as well as in a more "traditional" mode from the teacher.

As this activity serves within the degree's English curriculum as the first major piece of written work, language assessment is correspondingly leveled for intermediate students, or a maximum of B2 according to the Common European Framework of Reference for Languages<sup>8</sup>.

While the activity comprises part of the overall mark for the second semester General English 1 course, it also serves as an integral component in preparation for the interdisciplinary 3<sup>rd</sup> semester projects documentation writing.

# **Activity 2: Mahara**

*Mahara* is an open source software e-Portfolio platform, which was first established in 2006 in New Zealand as a joint venture between Massey University, Auckland University of Technology, The Open Polytechnic of New Zealand and Victoria University of Wellington. The system is designed to be a learner centered modular e-Portfolio system.<sup>9</sup>

An e-Portfolio (also sometimes referred to as a *webfolio*) 'is a digitized collection of artifacts including demonstrations, resources and accomplishments that represent an individual, group, community, organization or institution'.<sup>10</sup> Generally, the e-Portfolio is then placed on the Web to represent the author in either a personal or professional context.

The potential importance of e-Portfolios has already been recognized by the fact of the creation of the Europortfolio project headed by EIfEL – the European Institute for E-Learning as well as the plethora of institutional e-Portfolio projects taking place at universities in the United States.<sup>11</sup>

The concept of the e-Portfolio for the purpose of this activity and paper relates to the individual and is

taken as a modernized version of the "professional" documents required to obtain employment, which as little as ten years ago, would exclusively be printed on paper or circulated through e-mail, either in pasted form or as an attachment.

The creation of student e-Portfolios links directly into the main objective of the Professional English 2 course: the creation of a resume and the requisite correspondence associated with finding graduate entry-level employment.

Professional documents are understood in this case to mean any generic documentation, which a person may have and require in the process of applying for a job and becoming employed. The documents here include "covering" or "motivational" letters and professional resumes.

For the purpose of examples for this paper, a student e-Portfolio has been made public and can be seen in Figure 3 in this document.

# Motivation

The platform contains many similarities with currently available social networking websites, such as Facebook (<u>www.facebook.com</u>) and LinkedIn (<u>www.linkedin.com</u>). Such social networking websites have become extremely popular in the last few years, both on personal and professional levels, and in both English and non-English speaking worlds.

There are, of course, a number of other examples, including non-English versions, such as StudiVZ (<u>www.studivz.net</u>), a social networking website founded in October 2005 in Berlin, which serves student populations in Germany, Austria and Switzerland in the German language.<sup>12</sup> The popularity of these websites is underlined by both their span – StudiVZ is also now available in Polish, Italian, French and Spanish versions – and also their membership: StudiVZ now claims over 12 million members worldwide<sup>13</sup>, while figures for Facebook suggest a membership in the region of 200 million.<sup>14</sup>

Every effort is made within the English curriculum to ensure that activities are relevant and do not simply practice English which would not be useful outside of the classroom. With such interest in social networking websites, their integration into the teaching curriculum is a logical step, as the dual role of student motivation and usefulness can be achieved. Student motivation is often augmented, when students themselves can perceive the link between the theory presented in the classroom and the practical application outside of it.

Finally, a practical advantage considered in the selection of Mahara over other similar social networking programs was the language of the platform. Mahara, in the form of the software installed in the department of Vehicle Technology, is only available in English, thus forcing the students to interact in the target language, at the very least within the program itself. As already noted with platforms such as StudiVZ and also true in the case of Facebook, it is possible to change the language to that of the user's preference (assuming the user's preference is for German).

## Implementation

The activity was integrated for the first time in 2008 into the fifth semester course, Professional English 2, with the objective of implementing Web 2.0 technologies of relevance, which would both motivate

student-centered learning as well as provide targeted language instruction. By using the Mahara platform, an environment already familiar to most students could be accessed, which would also stand a high likelihood of being required in a professional context both towards the end of and post the degree program. Indeed, a brief survey of the year-group partaking in the activity revealed that 85% were already registered Facebook or StudiVZ users.

Professional English 2 consists of three timetabled teaching hours per week (each 45 minutes), taught in a single block, hence lasting two hours and fifteen minutes. The course runs over ten weeks in the winter semester term from October up to Christmas.

Mahara is presented to students over a period of three timetabled teaching sessions, which are divided into two distinct parts, the first of which takes place in lesson 8 of 10 during the course and the second of which in the final lesson of the course. The first of these lessons was 45 minutes in duration and the second one hour and thirty minutes.

The presentation of Mahara took place in the departmental computer laboratory, where each student has individual access to a networked and internet capable computer station. The Mahara open source software had already been installed on the department's own server and access restricted to student year-group members and staff only to ensure data privacy.

The technical aspects of the installation and web administration were carried out by the department's IT technician, and a close cooperation avoided the necessity for any specialized IT knowledge on the part of the teacher, beyond familiarity with the inner workings of the Mahara program itself.

The level of specialized computer knowledge required on the part of the teacher to complete this activity is negligible, for anybody who is already familiar with and a competent user of social networking websites such as those previously mentioned (e.g. Facebook). The Mahara software also comes with clear guidelines both for students and teacher. In addition to a working knowledge of the Mahara program, the teacher must also be a familiar user of Microsoft PowerPoint (or an equivalent program) and be a confident user of projector technology, both with PowerPoint and also demonstrating program procedures to the class.

Finally, the creation of an e-Portfolio is assessed and graded as part of the final course mark for Professional English 2. The work submitted by students comprises 20% of their final overall mark. The e-Portfolio replaces the previously paper based submission of the same documents.

# Preparation

Unlike the webquest, the Mahara activity entails a relatively large amount of teacher preparation before students become involved in the activity. Apart from the obvious need to familiarize themselves with the Mahara program, its features and capabilities, it is also necessary to have the elements of an e-Portfolio pre-prepared as an example for demonstration purposes. In other words, the course trainer should register on the Mahara platform and prepare their own identity or an example identity in advance. This includes the creation of an e-Portfolio, including any elements required for activity completion. In the case of the activity as it is carried out in Professional English 2, the example e-Portfolio contains a resume, profile information, contact information, and also information regarding skills, interests and previous projects / publications.

The trainer must also prepare the platform for student access if necessary, which in the case of the

activity here, entailed the creation of three groups with forums, so that students could communicate with one another. Further details on the groups can be found ion the *Activity Description* section, Part 2.

# **Activity Description**

The activity was divided into two separate parts entailing teacher-student contact. These are designated parts 1 & 2. In addition, and an essential feature of the activity, was the individual as well as co-operative work undertaken by the students outside of these times. These will be addressed separately.

Part 1: the introduction of the Mahara e-Portfolio platform to the students both in theory and in praxis.

This was achieved by demonstrating the software using PowerPoint to demonstrate the signup procedure and was followed by teacher supported student use of Mahara. First the students log into their normal university accounts through which they can access Mahara.

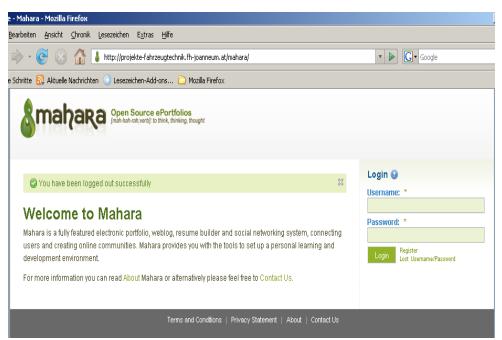


Figure 1: the Mahara welcome page

There are two possible ways to access Mahara, when installed on a local server. Firstly, students could type in the exact location on the local server: <u>http://projekte-fahrzeugtechnik.fh-joanneum.at/mahara/</u>. The alternative was to access the program through the university's own e-Learning platform, *eNcephalon 4*, which also contained all the course materials for students download.<sup>15</sup> This e-Learning platform is well known to students at the University of Applied Sciences FH Joanneum, as it is used in a variety of subjects. In each separate case, it must remain the responsibility of the course instructor (in conjunction with the IT technician where necessary) to ensure that the location of the Mahara platform is known and accessible to the students.

Once the students were at the local Mahara welcome page (it should be noted that while the software comes from <u>http://mahara.org</u>, students accounts once created were all stored exclusively on the departmental server), a PowerPoint presentation was given to demonstrate the registration process for Mahara. A screenshot of the welcome page can be seen in figure 1. It was necessary to monitor the students to ensure they found the correct location, as any who registered at the main Mahara website (<u>http://mahara.org</u>), which looks identical in all but location, would not subsequently be able to partake in the activity. This was due to the fact that the entire activity was stored on an internal server and was not published onto the internet.

| Usernan                               | newuser 📀   |
|---------------------------------------|---|
| Passwo                                | rd * •••••••••••••••••••••••••••••••••••  |
|                                       | Your password must be at least six characters long and contain at least one digit and two letters |
| Confirm passwo                        | rd * waaaaaaaaa   |
| First nan                             | le* New   |
| Last nam                              | le * User   |
| Email addres                          | ss * new.user@fh-joanneum.  |
| I agree to the Terms and Conditions * | <mark>is</mark> ≛ . O Yes O No  |
|                                       | You must agree to the Terms and Conditions  |
| CAPTCHA Imag                          | ye* 7840<br>w7zy0   |
|                                       | Enter the characters you see in the picture. Letters are not case sensitive                       |
|                                       | Register Cancel   |

Figure 2: registration

The registration stages were demonstrated for the students using a PowerPoint presentation while students were using the Mahara program. PowerPoint was used rather than a live demonstration as the students were divided into three separate groups, which would have necessitated signing up for the program on three separate occasions and thus the creation of three new profiles. Using the PowerPoint presentation, the students are led through the registration process realistically, without the need for the teacher to repeat the signup steps.

The Mahara software creates an automated response to registration, confirming login information, which could take up to twenty minutes to arrive in the student's email inbox. This, unfortunately, made any further use of Mahara during this session, at least according to this lesson design, impractical, and is the one of two reasons for dividing the Mahara sessions over a two-week period.

Once it had been established that students were correctly registered, the final component of the first part, demonstration of the creation of an e-Portfolio could begin. Figure 3 represents a completed *view*: "My C.V.". Such an example was shown to the students to demonstrate the end product they were expected to produce.

# Amahara Open Source ePortfolios [math-hath-rath;verb]: to think, thinking, thought

### Search Users

### Home Profile My Portfolio Groups Settings Logout

# My C.V. by Johanna

**Contact Information** 

**Personal Information** 

Austria

Female

single

Sports: I like all kinds of sports especially

skiing, mountain biking and running.

and get to know people of different

Travelling: I love to visit other countries

Date of birth

Place of birth

Citizenship

Visa Status

Marital Status

Interests

cultures.

No public feedback

Music: I play piano.

Gender

### **Education History**

October 2006

1998

September June

Start date End date Qualification present Graduate Engineer

(Vehicle technologies) at

(general qualification for

university entrance) at HIB

U.A.S. Graz

secondary school

| Postal Address | Johanna (Carlos Carlos) |  |
|----------------|-------------------------|--|
| Town           | Graz                    |  |
| City/Region    | Styria                  |  |
| Country        | Austria                 |  |
| Mobile Phone   |                         |  |

# Saalfelden

2006

#### **Employment History**

| Start date End date Position |                          |  |
|------------------------------|--------------------------|--|
| Summer                       | research work at         |  |
| 2006                         | Veterinarian medical     |  |
|                              | university               |  |
| Summer                       | Waitress at Loewenhof -  |  |
| 2005                         | Leogang                  |  |
| Summer                       | babysitter at Mr. & Ms.  |  |
| 2004                         | Verworna – Bologna/Italy |  |

### Work Skills

#### IT-Literate

Basic computer skills, including literacy in various basic software packages such as Microsoft Office, as well as industry specific software such as Catia, MatLab or Simulink, Knowledge of programming languages Visual Basic and C++.

#### Languages

German, C1 level of English, B1 level of French and A2 level of Spanish according to the Common European Framework.

### Driving

Full clean driving license.

#### Personal Skills

#### Adaptability

It is easy for me to cope with different situations and different peple. Working under pressure

Worked productively in a time pressured situation for projects like the Formula Student competition.

### An Image



#### Cover Letter

#### **JOB APPLICATION REF. 2576**

Dear Mr. Pietersen,

I am writing in order to submit my résumé in response to your advertisement for the position of the Graduate Mechanical Engineer in Peterborough, which was advertised on www.monster.co.uk on Monday the 15<sup>th</sup> of October. I am currently studying Vehicle Technology at the University of Applied Sciences FH JOANNEUM in Graz and I will complete my degree this summer coming. I believe my qualifications are ideally suited to your requirements. I am interested in a long term international career and as such am willing to relocate outside Austria. I am willing to learn and to take part in different training schemes. If my qualifications are satisfactory, I would appreciate an interview at your convenience. Please let me know of a time when we may meet. I would be glad to provide you additional details about my qualifications if you wish. Thank you for your consideration. I look forward to speaking to you.

Yours sincerely. Johanna 🌔



Place feedback Report objectionable material Print Add View to watchlist

Figure 3: an example e-Portfolio

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A *view* is created by combining various *artifacts* to make the complete finished piece of work (e.g. a résumé). *Artifacts* are located in the *Profile* section and must be filled out by the user according to category. The categories are:

- 1. Books & Publications
- 2. Contact information
- 3. Covering Letter
- 4. Education history
- 5. Employment history
- 6. Goals
- 7. Interests
- 8. Profile information
- 9. Skills

The *artifact*, therefore, represents a single section of the overall e-Portfolio and by combining selected artifacts, the user can create an e-Portfolio as a *view*, an example of which can be seen in figure 3 on the previous page.

A résumé can also be uploaded as an entire entity, although in this case, the Mahara program itself selects the content to be displayed. For this reason, all students are required to select the information to be included in their resume individually.

Finally, students are informed that during the period between parts 1 and 2 of the Mahara lessons, they should create and upload their own professional profiles to their Mahara account. In addition, they are also required to befriend their classmates, as well as join their particular class group (FZT\_G1, FZT\_G2 or FZT\_G3). The deadline for creation and upload is the beginning of the next Mahara lesson, which is outlined as Part 2.

**Part 2**: after a two-week break (in lesson ten of ten in the course) students are required to have created and uploaded their own version of a professional e-Portfolio. This second, longer, lesson on the topic of Mahara has two major objectives:

- Through teacher student contact, ensure as far as possible that students goals will be met in the final assessment of the submitted e-Portfolio
- Teacher & peer evaluation and advice. The teacher can circulate and monitor giving advice where they deem appropriate. However, at this stage students have joined the groups, which allow them to see each others' work. In this session, peer evaluation is encouraged, so that students may improve their final e-Portfolio for submission. This process begins in the classroom, but submission date for final teacher evaluation and grading is delayed by a further week, to allow students the chance in their group community to advise one another and improve their e-Portfolios.

# **Content & Language**

Language production consists of online written documentation, specifically an e-Portfolio in English, which contains a resume and covering letter, as well as other artifacts that students may have deemed to be relevant when pursuing future employment.

Targeted language includes phraseology, syntax, spelling, dialect and register appropriate in application documents for the USA and Great Britain. Students are instructed in the first five weeks of the course in these language specifics and required to write trial resumes and covering letters in paper form, which are corrected and returned (ungraded) in preparation for the final e-Portfolio activity. For this reason, language level and correctness in the final e-Portfolio is expected to be high.

Content is also discussed in detail in terms of components required in application materials in the early parts of the Professional English course. Owing to both peer evaluation and the more traditional monitoring role of the teacher in the classroom, as well as the previously mentioned ungraded, but corrected, submitted work, again appropriateness of content is expected to be high.

# Evaluation

Official (i.e. graded) evaluation is carried out by the course trainer and is worth 20% of the overall course mark for Professional English 2. This takes place beginning a week after the final meeting between students and teacher. The purpose of this pause between the final meeting and the official submission, as it should be remembered that students are required to post their e-Portfolio before the final class begins, is to allow time for student peer correction and evaluation. This takes place beginning in the final lesson of the course and then continues amongst the students in their defined group.

# **Student Feedback**

At the conclusion of the course, students were asked to voluntarily and anonymously complete a short questionnaire giving their views on Mahara. The main objective behind the questionnaire was to ascertain whether students could perceive any practical reason for using the Mahara platform. For this reason, they were asked if they would use Mahara, or a similar social networking platform, in the future for professional purposes. Of the fifteen students who responded, all fifteen stated they believed they would do so (in fact two respondents already had membership with such sites) even though nearly 50% of the students (6 out of 15) who answered the questionnaire also found the Mahara layout complicated or difficult to use. Clearly, such a response warrants further investigation and clarification.

# Conclusion

The last decade has seen incomparable technological changes, which may be applied in the classroom. While this paper has dealt with *webquesting* and *Mahara* and their possible use in the language classroom, there remain many unexplored opportunities for language and non-language teaching alike to make use of Web 2.0 technologies didactically, also at the tertiary level.

This paper has demonstrated the technological evolution in didactics within the language curriculum for Vehicle Technology, beginning with the intermediary step of integrating a webquest and the more recent implementation of a social networking platform. In both cases, the activities sit within the wider pedagogic syllabus, where activities are designed to be as directly applicable to international industry as possible. The transparency of this link to the real world and the use of modern software, which plays a central role in the lives of the "Net Generation", has been proven to be a major motivating factor to students.

Indeed, this will continue to be the case, as more Web 2.0 technologies are implemented into classroom curricula, as we are currently seeing only a minor fraction of the possible advances these technologies

can contribute to classroom didactics. Alongside social networking websites such as Mahara, Facebook etc., much research is also being carried out into the use of blogs, wikis, twitter, RSS feeds and other Web 2.0 technologies. While this paper does not want to suggest that all courses should become exclusively "online" and be restructured so as to be accessed by the student solely through a computer terminal, it is apparent that these new technologies are of great benefit and can be used to as a useful additional supplementary tool for learning. This of course, gives cause to academics and teachers alike to reassess their *modus operandi* in the classroom.

# Acknowledgements

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# Appendix A

# Webquest: Automotive Dreams

The information on the next two pages is the same as is given to the students taking part in the activity. All information under the dotted line is the student hand-out.

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# Introduction

You have been asked to organise a trip to a car show in the United States of America later this year (2008/09). You will be accompanying members of staff from the department and should organise all elements of the trip. There will be a total of six people attending, including you.

The car shows which the group could visit are:

- <u>The New England International Auto Show</u> (3/12-7/12, 2008)
- The Charlotte International Auto Show (20/11-23/11, 2008)
- <u>*The Chicago Auto Show*</u> (13/02 22/02, 2009)

You should choose which show the group will attend and prepare a short itinerary, including your reasons why you chose the show.

# The Trip

To organise the trip, you will need to find the following information:

- o Flight times and ticket costs
- o Accommodation and prices
- Transport (to the show from the hotel etc.)
- Sightseeing activities: the last day is purely for sightseeing at the end of the trip, for which you should prepare an itinerary of activities.

# Note

Do <u>not</u> reserve or book anything. Your job is to find the information and put it together as written report which you can present for approval.

Please quote all prices in euros. You have a budget of €7,500 for the trip.



# Links\*

# Flights

http://www.britishairways.com/ - British Airways http://www.aua.com/at/eng/default.htm - Austrian Air http://www.aircanada.com/en/home.html - Air Canada http://www.lufthansa.com – Lufthansa http://www.swiss.com – Swiss Air http://www.united.com – United (American) http://www.nwa.com – Northwest Airlines (American) http://www.aa.com – American Airlines

# **Currency Converter**

http://www.xe.com/ucc/

# **Car rental**

http://www.hertz.com http://www.avis.com http://www.budget.com

# **USA General**

http://www.lonelyplanet.com/worldguide/usa/

# Boston

http://en.wikipedia.org/wiki/Boston http://www.boston.worldweb.com/ http://travel.yahoo.com/p-travelguide-191501945-boston\_vacationsi; ylt=ApZG.OsE9Fz5RaCzC2FpUJ4nFmoL

# Charlotte

http://en.wikipedia.org/wiki/Charlotte http://www.charlotte-nc.worldweb.com/ http://travel.yahoo.com/p-travelguide-191501983-charlotte\_vacationsi; ylt=AiBK.xKR.60693oyjCrbdQsnFmoL

# Chicago

http://en.wikipedia.org/wiki/Chicago http://www.chicago.worldweb.com/ http://travel.yahoo.com/p-travelguide-191501928-chicago\_vacationsi; ylt=Aqe1c2xQuZ3jOLob02xz3\_wnFmoL

<sup>\*</sup> If a website prompts you to enter your country or language, then select *English* or an English speaking country.

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<sup>2</sup> Allwright R., (1977), p.5

<sup>3</sup> Gardner R. & Lambert W. (1972), reprinted in Ur (1991), p.274

<sup>4</sup> Bischof G., Bratschitsch, E., Casey A., & Rubeša D. (2007)

<sup>5</sup> Dodge B. (1997), retrieved 21<sup>st</sup> December 2008

<sup>6</sup> Ibid

<sup>7</sup> http://news.bbc.co.uk/2/hi/uk\_news/1235945.stm, retrieved February 5th, 2009

<sup>8</sup> <u>http://www.coe.int/t/dg4/linguistic/CADRE\_EN.asp</u>, retrieved 29<sup>th</sup> December 2008

<sup>9</sup> <u>http://mahara.org/about</u>, retrieved: 30<sup>th</sup> December 2008

<sup>10</sup> Lorenzo, George & Ittelson, John, An Overview of E-Portfolios, p.2

<sup>11</sup> For a list of universities involved in the project in the US, see Lorenzo pp. 11-15.

<sup>12</sup> <u>http://studivz.net/l/about\_us/1/</u>, retrieved: 30<sup>th</sup> December 2008

<sup>13</sup> Ibid

<sup>14</sup> Eldon, E., retrieved: 30<sup>th</sup> December 2008

<sup>15</sup> http://www.fh-joanneum.at/e-learning/

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Ur, Penny, A Course in Language Teaching, Cambridge: CUP (1991)

### Websites

http://www.educase.edu/

http://mahara.org

http://www.facebook.com

http://www.linkedin.com

http://www.webquest.org

http://www.coe.int/

http://webquest.sdsu.edu/

http://dict.leo.org

http://www.onestopenglish.com

www.myresumeonline.org

StudiVZ and its variants

http://www.studivz.net (German)

http://www.studentix.pl (Polish)

http://www.studiqg.fr (French)

http://www.studiln.it (Italian)

http://www.estudiln.net (Spanish)