



TRANSITION FROM EDUCATION TO EMPLOYMENT: CREATING MEANINGFUL MULTILINGUALISM IN THE EUROPEAN LABOUR MARKET WITH ADVANCED ICT

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Contexts

A key issue in the development of employment in Europe has been the creation of free movement of labour. This foundational principle of the European Union was initially designed to remove barriers as well as to increase labour mobility in contexts of progress and economic growth. The impact of the banking and fiscal crisis of 2008 has challenged this concept profoundly. Migration is now part of a wider global concern that has seen a dramatic redistribution of resources in terms of equality of access and the very structure of work itself. The underlying demographics of an ageing European workforce and escalating welfare demands of this population mean that labour market policy has been forced to locate its methodological analysis within the context of parallel European policies regarding diversity, migration and multiculturalism.

Parallel to this macro-economic context is the growing impact of the emerging digital world and the contours of employment it is shaping. This new and emerging digital world has created a range of new professions and skill sets which are literally and figuratively unprecedented. In other words, these new professions cannot be studied in advance and they represent a range of professional skills, behaviours and attitudes that professionals are obliged to learn in a hands on manner, in dynamic and evolving job configurations. This has been seen most acutely (as this paper will reference) in the field of digital writing.

Among other issues, this has also put a renewed light on the importance of multilingualism and development of skills and competences in learning materials' design and promotion of policies and technologies that enhance the acquisition, practice and development of additional languages for mobile workforces. Second languages are taught – or not taught – for a variety of reasons at national levels. European policy has been slowly evolving in this field. Apart from declarations of principle and promotion of best practice exemplars, the European Union still does not have executive authority over schools' teaching methodology, curriculum or policy. This is left, under the principle of subsidiarity, to Member States. This masks the fact that multiculturalism and the direct impact of significant levels of migration (both intra-European and from third countries) is increasing exponentially in the European Union.

Teaching a second language therefore becomes part of a wider agenda. Teaching a second language – or developing basic awareness and competence among learners around additional language skills - is educationally engaging but also part of a wider strategic orientation that reflects policy towards growing diversity in Europe. In turn this relates directly to the development of human capacity by creating ICT enhanced work-based learning strategies and techniques that meet the needs not only of learners but also employers, e-learning designers, employment policy makers and communities.

Shaping digital content to need

There is the need to ensure that the multilingual aspirations of an emerging European workforce are met. The Commission of the European Union has a Commissioner specifically responsible for multilingualism. While language policy is national, Article 22 of the Charter of Fundamental Rights of the European Union recognises the right to linguistic diversity. The official role of the European Union is to support and promote multilingualism – while responsibility for methods and implementation is left to Member States. The stated goal is that European citizens will speak two additional languages in addition to their mother tongue.

The role of advanced technological tools and e-learning has also become a key focus in the literature and research undertaken internationally. The use of advanced technologies can powerfully reinforce learning for adults and provide a rich resource in terms of techniques and methodologies for teaching staff and facilitators. Among the new professions that have emerged are digital content designers, digital writers, graphic artists, rich media experts and project managers for digital content.

The Centre for the Study of Learning and Performance (CSLP) in Concordia University, Canada undertook extensive research in this area for a special issue of its journal on technologies and higher education in 2013.

In light of the above studies, when it comes to implementing web 2.0 technologies such as blogs, wikis, podcasts, virtual environments, and social networks in higher education, university instructors need not reject their previous teaching approaches. Instead, they could attempt to develop integrated pedagogical strategies that bridge the old-school instructivist lecturing and relatively newer constructivist styles. Several scholars have underscored the need to provide instructors with training on the best ways to integrate technology in their classrooms according to subject areas and teaching plans. (IJTHE, 10(3), p.11.)

Bilingual and multilingual abilities are increasingly important for participation in contemporary society. Second language instruction is compulsory at all levels of the Canadian school system, and for many adults meeting personal and professional goals also requires learning additional languages. CSLP studies on how second languages are learned and used by

adults has an underlying objective to identify best practices for enhancing second language proficiency. It develops supportive instructional and testing materials, and designs research tools for use in learning, workplace, and community centre contexts.

CSLP created *Team Alphie*, for example, as an innovative project to enhance such skills. *Team Alphie* is a computer programme designed to support small group tutoring for early literacy development. In teams of two to three students, this computer-based reading intervention programme supports struggling readers in grades 1–5. The reading intervention programme provided is based on instruction and practice in phonemic awareness, phonics, fluency, vocabulary, and comprehension. However, because this programme is targeted at struggling early readers, special emphasis is placed on developing their decoding and fluency skills.

The *Team Alphie* tutoring model enables one instructor to work with small teams, of two to three students, in a resource room. Following individual assessment, students are grouped based on their ability and practice needs. Once the teams are selected, the software creates an instructional plan based on assessment results. This plan consists of sequenced computer activities appropriate to each team's skill level. Learning styles have also changed with less face-to-face and more independent self-learning.

Each day, teams work on the interactive computer activities, designed to facilitate turn taking, resource negotiation and mutual support. *Team Alphie's* strength as a powerful reading software is also due to its support of teachers in assessing the students, grouping them into teams, developing instructional plans, and delivering effective, fun instruction. Tailored activities, frequent assessments and collaborative practices make *Team Alphie* a unique and effective tool in Early Literacy intervention in bilingual contexts.

Researchers agree that input plays a leading role in language acquisition, either in the form it takes and/or in the nature of the input content itself. In this sense, computer technology is being widely used as a medium of inferring instruction in all types of learning settings. Although there are many studies which support the application of new technologies, much research needs to be conducted in order to gain insights how computers can be introduced into workplace language learning effectively and how technology affects learning process and productive outcomes.

Developing human potential has been a persistent EU policy aim. It requires re-educating existing professions and featuring education as a major lever to achieve skilled competence development. With present economic trends and the shockwaves of financial crisis and public sector restrictions, key questions around growth and employability are highly important. One of the main problems that the EU has faced is that the traditional courses offered do not properly respond to the needs of employers and that most of the work continues to be learned in the workplace. Among the greatest needs in the world of education and training as applied to workplace development, is a huge and significant lack of trained digital content writers.

Framing the needs

The key purpose of this investigation is to raise the question of how to train experienced writers from the world of print, so that they can adapt and learn how to become digital content writers. The knowledge of experienced writers and content specialists is valuable and it is important that individual learning skills are not lost. Besides being experts in their subject matter, digital writers are further expected to:

- Be able to deal with rich media (pictures, sound, video);
- Be able to tag rich media and attach it to the written activities;
- Know about judgmental scoring;
- Know about writing closed items, suitable for PC, tablets , mobiles;
- Understand and visualize what can be written for different sizes of screen;
- Write content in a way that will be clear to many people involved in the process: graphic artists, script writers, actors and production studios and integrators.

The ability to maintain all these dimensions and to keep all these balls in the air requires retraining of traditional writers and a smart management tool that allows all these different kinds of professions to “talk” to each other, understand and be well coordinated. In real terms it also means one language and one tool for all.

When considering the process of retraining writers to be digital content writers we need to take into the consideration the following points:

- A writing environment they are used to working with such as WORD;
- A structure and clarity of what the product is going to look like. Unlike print, they cannot visualize the product until it is on the screen;
- A system to help them relate to different screen sizes;
- A way to deal with rich media such as audio, video, and graphics;
- A simple tagging system of meta-data;
- A simple system to deal with ICT people that will convert the content to interactive activities.

The issue is how we solve these problems and begin to train an entirely new generation of digital writers in the shortest and most effective way possible. This requires thought on how we create vast amounts of quality content in a rapid way as well as how we deal with different language conversions and localization of digital content.

Over the past years, educational hypermedia applications, different from ordinary websites and multimedia software have appeared. These adaptive hypermedia systems, categorized by Brusilovsky, have all in common that users are guided towards paths considered optimal for learning. In cited cases, the possibilities of an adaptive navigation rely on the presentation of items according to the estimated level of learners’ language and cognitive abilities. So, if learners respond correctly, the next task will convey a higher difficulty level, being presented as an easier question if the learner misses the item presented, selection which is done by the

computer algorithm which adjusts the selection interactively to the successful (or failed) responses of the student. This approach stems from the realization that we learn little about an individual's ability if we persist in asking questions that are far too difficult or far too easy for that person. We learn the most about a learner's ability when we accurately direct our questions at the same level as the learner's ability.

Adaptive technology consequently enhances learner involvement in the learning process and develops autonomous access to learning material. In this sense, some other advantages of adaptive hypermedia could be based on:

- *Self-Pacing*: adaptive systems allow learners to work at their own pace acting as filter to affective connotation (learners are challenged but not discouraged by the presentation of items that are far above or below in front of the group). The speed responses could be used as additional information for research purposes.
- *Immediate Feedback*: the test can be scored immediately and provide instantaneous feedback for learners.
- *Multimedia Presentation*: tests can include text, graphics, photographs, and even full-motion video clips. The influence of multimedia formats on language learning can provide teachers with an important frame of research hypothesis.

Course books are considered a very important element in teaching languages. 'Using course books appropriately is an art which becomes clearer with experience' (Jeremy Harmer, *How to Teach English*, 1998). Course books play a major role in the classroom. They work as a learning resource as they are usually accompanied by cassettes, videos and teacher's guides. For new or inexperienced teachers, a course book works with the teacher's book as a "medium of initial teacher training". In terms of practicality, it saves time and effort for teachers when planning lessons. Additionally, it provides a focus for the teacher that allows her/him to follow and eventually achieve the aims and objectives of the syllabus. From the students' point of view, they present authentic language models to use in real life situations as well as provide more interesting and motivating materials for them to use and apply. They also give students a sense of progression in their learning as most course books are organized in units. In addition, course book restrictions can be dealt with by omitting, changing, replacing, re-writing and re-ordering.

The activities that are constructed and built in to language instruction also are very engaging and worthwhile - they have authentic language and experiences and encourage cooperative learning as stated in the programme philosophy. The nature of evaluation will help to reflect the concerns of the evaluator and assist in evaluating the course book more effectively and accurately. Authentic literature is also included which can provide 'real' language structure and vocabulary, in addition to building learners' knowledge of the world. Evaluating skills and their variation is practical in terms of deciding if we can use it to teach what is important while teaching language. The language content, however, needs to be well designed in the course book. Written evaluation makes the 'thinking' tangible and the decisions reviewable.

LANGO: project example and learning point

Language on the Go (LANGO) is an EU funded project developed to explore the opportunities offered by the new information and communication technologies to encourage learners to maintain and build upon their existing language skills. The project developed a multilingual language tool to apply interactive learning approaches and innovative e-learning platforms, which provide computer assisted and mobile assisted language learning within a framework of attractive and easy learning content. The LANGO innovative e-learning tool supports learners of Bulgarian, Maltese, Greek and Russian languages. Evidently, the methodology and technology can be adapted at later points to other languages.

The language tool aims to support language acquisition of adult learners who have a number of challenges including diverse educational backgrounds, literacy levels and migrant economic status. The LANGO tool integrates technology and uses innovative applications, which do not require advanced computer skills on the part of the learner. This allows for more individualized and independent learning in terms of pace, time and place (home, work, on the move). It provides benefits particularly for those with lower formal education levels - and supports improvement of their linguistic and digital competence at the same time.

The LANGO product offers users:

- introduction and practice of frequently used language patterns;
- initial development of communicative skills;
- easy language input through real life communicative situations;
- entertaining learning activities to practice language patterns;
- expanding intercultural awareness through language learning.

Apart from the purely linguistic knowledge, LANGO addresses levels of cultural awareness: this embeds cultural information about the countries where the target languages are spoken. LANGO language learning activities are delivered in a calendar format, aiming at the type of mastery which can be achieved in about sixty hours with only ten minutes per day during a year: an excellent return for a limited effort. The project is structured around delivery of mini-lessons, which require a little effort on the part of the learners and are easy to absorb. LANGO users learn the language literally on the go, at any time and place on flexible electronic platforms (web-based and iPhone). Moreover, part of the motivating learning activities is designed to be provided via widgets on Facebook. The content is delivered inside a specifically designed template. The program is designed to include different kinds of interactive activities and a game template. These include:

- Multiple choice;
- Multiple choice with media;
- Matching pairs (text or pictures);
- Ordering sequences;
- Media triggers;

- Categorizing different language areas;
- Listening to model, recording and hearing back one's voice;
- Listening to dialogue, choosing a role, record oneself and listening to own recording;
- Wordsearch games based on a sound trigger.

Translation of the introductory part of each lesson – as well as all learner instructions – aims to support learners and increase comprehension. The English language in the LANGO tool is used as a 'lingua franca' to reach out to a great number of learners who may be native speakers of various languages. However, the design of the tool allows for further transferability. In post project exploitation, translations into native languages can easily be integrated and replace the English translation (e.g. on a customer request: thus specific customer-tailored editions of the tool can be produced in the future).

Conclusions

Although free movement of labour in Europe is an economic, not a social concept, it creates many problems of a social nature: transfer of pensions and social benefits, entitlements of migrant workers to unemployment, social security and other benefits, family issues of education, housing, and so on. These social issues came to be dealt with not as independent social concerns, but under the rubric of economic free movement of labour. This created a tension in the balance between the economic and the social perceptions of free movement of workers. Policy initiatives, legislative provisions and court decisions were concerned with economic and not social consequences – that is, with possible restraints on free movement and not with the social implications of free movement of workers.

This has immediate implications for shared learning in an increasingly complex Europe and in the social context of effective language learning as shaping a new digital skills agenda. Developing digital content provides solutions that help and facilitate employment generation and the free movement of labour. At the same time developing digital content provides three important by-products:

1. Innovative training methodologies and pedagogy for self-learning users
2. Development of rapid authoring tools that can create quality content
3. A trained group of future digital writers.

Integration, free movement of labour, language learning and new future digital skills are thus cogently linked in new paradigms of innovative competence construction.