

# Positioning lifelong learning in aquaculture: challenges and opportunities

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**Abstract** Lifelong learning has been one of the building blocks of the Bologna Process since 1999. The Thematic network AQUA-TNET (Aquaculture, Fisheries and Aquatic Resource Management TN—2008–2011—142245-LLP-1-2008-1-BE-ERASMUS-ENW) in its response to each development has made a significant contribution to the network members' knowledge and understanding of the different aspects concerned in the provision of university lifelong learning. Various definitions and interpretations of the concept led to relatively slow implementation of lifelong learning in many European universities; however, the EUA European Universities Charter of Lifelong Learning Surveys undertaken by AQUA-TNET showed that the AQUA-TNET approach has successfully incentivised its partners, since a higher percentage of AQUA-TNET partners (54 %) have a LLL strategy in place than the HE organisations surveyed by the EUA (average 39 %).

**Keywords** Aquaculture · Lifelong learning · Bologna reforms · Vocational education · Charter Lifelong Learning

## Abbreviations

C-VET Continuing-vocational education and training  
EU European Union

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EUA	European Universities Association
HE	Higher education
HEI	Higher education institution
I-VET	Initial-vocational education and training
LLL	Lifelong learning
LLP	Lifelong Learning Programme
OECD	Organisation for Economic Co-operation and Development
RTD	Research and technical development
VET	Vocational education and training

## Introduction

### Background

Lifelong learning has long been seen as one of the building blocks for the creation of a knowledge-based competitive Europe (Lisbon Declaration 2000). It was stated in successive Bologna Ministerial Communiqués (Prague 2001; Berlin 2003; Bergen 2005; London 2007) that the Lisbon Declaration goals of sustainable economic development, more and better jobs and greater social cohesion could best be achieved using lifelong learning in its strategic framework.

In November 2006, the European Commission unveiled its action programme for education and training, the Lifelong Learning Programme (LLP) running from 2007 to 2013. The title gave renewed emphasis to the EU commitment to the principle of lifelong learning, while the programme itself brought together several previous education and training programmes (ERASMUS, LEONARDO DA VINCI, COMENIUS, GRUNDTVIG). The LLP's major objectives were, *inter alia*, to contribute to the development of quality lifelong learning and to support the realisation of a European area for lifelong learning. However, in the wake of the 2008, global financial crisis extraordinary and largely unanticipated changes took place; in order to cope with this “economic crisis without precedent in our generation”, the European Commission restructured its Lisbon 2010 strategy for growth, setting out anew its vision of a stronger, more integrated Europe in “Europe 2020: Strategy for smart, sustainable and inclusive growth” (European Commission 2010a). Five areas were specifically targeted for growth, which was to be generated by seven Flagship Initiatives. Education and training have a fundamental role in three Initiatives: *Innovation Union*, *A Digital Agenda for Europe* and *An Industrial Policy for the Globalisation Era* (European Commission 2010b, c, d) and play a pivotal role in *Youth on the Move* and *An Agenda for New Skills and Jobs* (European Commission 2010e, f).

The strategic importance of these Flagship Initiatives was derived from an earlier agenda set out in Council Conclusions 119 in 2009 in “Strategic Framework for European cooperation in Education and Training 2020” (European Commission 2009); the main aim of which was to create a knowledge-based Europe and make lifelong learning a reality for all citizens.

The pivotal shift towards lifelong learning can also be seen in UNESCO's Belém Framework for Action (UNESCO 2010) where lifelong learning “from the cradle to the grave”, described as a “conceptual framework and an organising principle of all forms of education, based on inclusive, emancipatory, humanistic and democratic values” occupies a central position. The Belém Framework goes on to specify adult learning along with

inclusive education (and, by implication, lifelong learning) as a valuable investment of great social benefit “fundamental to the achievement of human, social and economic development”.

### AQUA-TNET and lifelong learning

AQUA-TNET, in its various phases spanning more than one and a half decades, made lifelong learning as one of its priority action areas. Lifelong learning is particularly relevant in aquaculture studies, with its requirements to blend both theoretical and practical aspects in order to meet the needs of a diverse and dynamic industry heavily dependent not only on knowledge bases from a series of disciplines such as biology, engineering and marketing, but also on the realisation and practical outcomes of those knowledge bases. The aquaculture industry is constantly evolving, drawing on new technologies and benefiting from innovations and the outputs of a range of RTD activities. The aquaculture industry needs highly trained and skilled personnel with specific, though varying, skill sets, some of which can be obtained only in the workplace. This is the reason for the continuing interest of the AQUA-TNET academic network in lifelong learning and related issues.

The importance placed on lifelong learning in the Bologna Process encouraged the network to get to work on the correlated aspect of learning outcomes. From its earlier work, for instance, on the Diploma Supplement (Owen et al. 2000; Eleftheriou 2004), it was evident that the academic partners found that writing valid learning outcomes were either difficult, tedious or both. AQUA-TNET took on the task of familiarising its academic community with the practicalities by producing a HELP package (Eleftheriou 2011) specifically designed to help them with what was seen as yet another burden in a time of rapid change.

The current AQUA-TNET work on lifelong learning was formulated against a background of changing policies and directions, bearing in mind that the objectives of its Positioning Lifelong Learning Workplan were first conceived, then executed within the context of the revised Lisbon Strategy (2010). Their scope and relevance for AQUA-TNET’s partners are shown in the rather surprising results of the lifelong learning strategies survey undertaken, while respondent partners were trying to cope with a storm of new initiatives devised to find workable solutions to the repercussions of the financial crisis.

The continuing downturn and deep uncertainties experienced in most European Member States do not render the EU 2020 strategies irrelevant: it is more necessary than ever to re-examine these, to see whether these ambitious policy objectives are still relevant, feasible and achievable, in the area of education and training for which the ERASMUS Thematic network AQUA-TNET is responsible.

### What is lifelong learning?

There is an acknowledged ambiguity in the use of the term, especially in relation to HE involvement in lifelong learning. Hanne Smidt (2004) commented on the limited understanding of the concept of lifelong learning in European universities, pointing to a consequent lack of strategy and failure to implement. Her preferred definition is a broad one: “lifelong learning is above all a broad cultural concept that should embrace provision from pre-primary to the doctoral cycle” (Smidt 2004), in contrast with the narrower, VET-focused definition preferred by CEDEFOP (European Centre for the Development of Vocational Training), which defines lifelong learning thus: “all learning activity undertaken throughout life, with the aim of improving knowledge, skills and/or qualifications for personal, civic, social and/or professional reasons” (CEDEFOP 2012).

This lack of clarity and loss of unanimity regarding the concept were pointed out in the Trends V Report, whose authors (Crosier et al. 2007) commented that the term was used confusingly, “to cover both continuing education and training for well-qualified graduates and initial education for disadvantaged groups, possibly through part-time higher education”. They state that they have not been able to provide a coherent picture of either understanding or implementation of lifelong learning in HE institutions, except where diversified funding and good cooperation with local partners exist. The next Trends Report (Sursock and Smidt 2010) found that there had not been much overall improvement. They continued to stress the difficulties arising from this “great diversity of meanings”. Since lifelong learning can be taken to mean either “a strategy or cultural attitude to learning or a set of different activities unrelated to an overarching concept”, two separate interpretations of the concept have emerged;

- (1) all provision of education is viewed in a lifelong perspective and includes all formal, informal and non-formal learning (Austria, Hungary, Scotland, Slovakia and Sweden); and (2) (the most prevalent view) lifelong learning is a means of providing a series of activities(“, professional upgrading, continuing education, distance education, university courses for junior, mature and senior learners, preparatory courses, and part-time education” (Sursock and Smidt 2010).

It is perhaps worth noting in this connection that Jacques Delors, former EU President, much concerned with education and training has stated (Delors 2013) that he prefers to use the term “Lifelong Education”, because the term “learning” has too many professional and not enough non-professional connotations.

These differing interpretations have had a significant effect on what is being done or not being done, in HEIs in Europe. Trends IV (Reichert and Tauch 2005) reported that “lifelong learning had been very much neglected in the Bologna discussions”, with several HEIs (Belgium, Denmark, Germany, Hungary, Latvia, Portugal, Slovenia and Spain) stating that they had made no provision for the recognition of prior learning which was highlighted in the Berlin Communiqué as an important part of the process. Hanne Smidt (2007) comments on the “sporadic implementation” and “uneven appreciation of lifelong learning”, while Crosier et al. (2007) concluded that:

Lifelong learning has failed to happen and has thus been developed more on the periphery of institutional strategy, rather than as a driving element of it.

In confirmation of these earlier findings, Bengtsson (2013) points out that on the one hand, lifelong learning is accepted in policy terms by all OECD countries as well as many other countries, but on the other hand there has been a slow and uneven pace of implementation. His view is that there are three main reasons for this, namely the lack of workable implementation strategies, the lack of a funding system and stakeholders’ resistance to change. It is in this last category that AQUA-TNET has focused its attention and efforts.

## **AQUA-TNET current lifelong learning surveys**

### **Rationale**

Because of the EUA 2008 initiative in publishing what appeared to be a mutually acceptable way forward (European Universities Charter on Lifelong Learning 2008) and because a main pillar of the “Europe 2020: Agenda for New Skills and Jobs

Initiative” (European Commission 2010f) concerned the provision of lifelong learning flexible learning pathways between different education and training sectors, the AQUA-TNET lifelong learning work package took on the task of sounding out what was actually taking place throughout the network. Consequently, in the light of the damaging strictures referred to above and the statement in the Trends V Report (Crosier et al. 2007) that lifelong learning is “only a rhetorical priority”, one of AQUA-TNET’s aims was to brief university partners as to best practice cases of lifelong learning implementation. In this context, it was also deemed important to consider how best to implement the EUA Charter on Lifelong Learning (EUA 2008), bearing in mind the Trends 2010 (Sursock and Smidt 2010) conclusion that a joint university/government approach is essential for success.

### Survey methodology

The methodology chosen consisted of two separate surveys, the first targeting teachers and the second stakeholders.

The survey targeting academic staff was designed and pre-tested in a small group and carried out as part of the AQUA-TNET Annual Event (2009), to AQUA-TNET partners (23 responses). The survey was then put online (Lime Survey) so that those AQUA-TNET educational partners who had not responded could do so (2010). The total number of responses was 71, each from a different institution and covering 22 European countries. Of these, 31 responses were from countries from southern Europe (Greece, Spain, Portugal, Italy, France and Turkey), 28 responses from northern Europe (Belgium, Denmark, Estonia, Finland, Iceland, Ireland, Netherlands, Norway, Sweden and UK) and 12 from central Europe (Bulgaria, Czech Republic, Germany, Hungary, Poland and Romania).

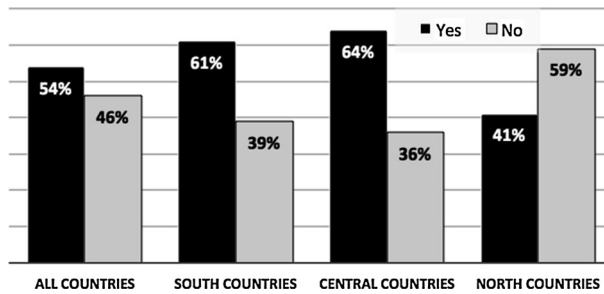
The second survey targeted professional aquaculture associations and received responses from seven countries (Italy, Norway, Spain, UK, Greece, Germany and Finland) representing the views of many hundreds of individual fish farms.

### Results: academic teacher survey

The first question was framed to ascertain whether AQUA-TNET universities were in fact carrying out the first commitment of the EUA Universities Charter: Embedding concepts of widening access and lifelong learning in their institutional strategies, stated in full as “Universities will grasp the opportunity to address lifelong learning centrally in their mission and strategy as part of a wider definition of excellence” (Fig. 1).

The responses indicated that more geographically central and southern European countries have an institutional lifelong learning strategy/policy in place (64 and 61 %) than northern European countries, where the percentage (41 %) was actually lower than the overall average (54 %).

The second question aimed to elicit information concerning the second EUA commitment: providing education and learning to a diversified student population, set out in detail as “European universities will respond positively to the increasingly diverse demand from a broad spectrum of students—including post-secondary students, adult learners, professionals who seek to up-grade skills for the workplace, senior citizens taking advantage of their increasing longevity to pursue cultural interests and others—for high quality and relevant higher education throughout their lifetime” (Fig. 2).



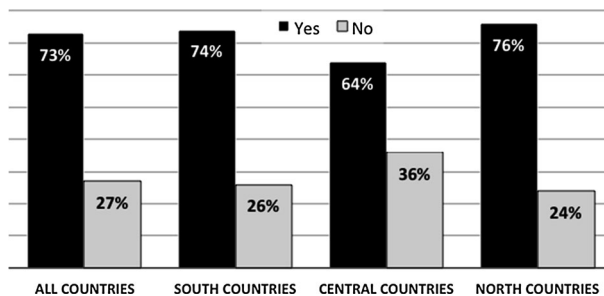
**Fig. 1** Does your institute currently have an institutional lifelong learning strategy/policy in place?

There was a positive response from 73 % of the respondents, with no significant differences between the south (74 %) and the north (76 %), though the respondents from central Europe trailed a little at 64 %.

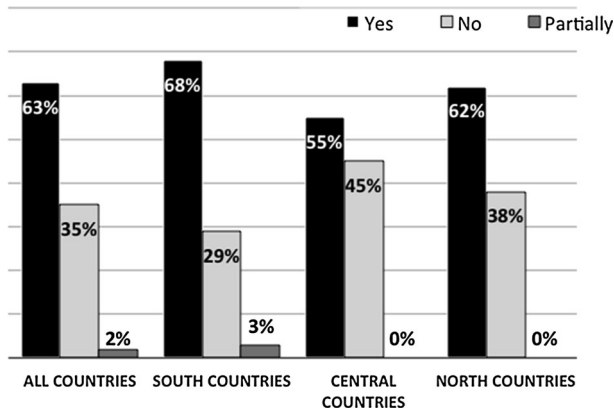
Question 3 was designed to find out only the general provision of flexible learning pathways in line with EUA commitment 3: adapting study programmes to ensure that they are designed to widen participation and attract returning adult learners described in detail as “flexible and transparent learning paths need to be in place for all learners to access and succeed in higher education in all its different forms. It is an essential responsibility of universities to ensure that this educational offer is always of high quality. European universities acknowledge the diversity of individual learner needs and therefore their responsibility to adapt programmes and ensure the development of appropriate learning outcomes in a learner-centred perspective” (Fig. 3).

Generally, 63 % of the responses indicated that they had study programmes adapted for flexibility in order to enable broader participation, with the highest percentage in the geographical south (68 %), followed by the northern respondents at 62 % and central Europe trailing once more with only 55 %.

Question 4 aimed to ascertain whether institutions were in compliance with Commitment 5 (Recognising Prior Learning), fully described: “to ensure that all with the potential to benefit from higher education provision are enabled to do so, it is essential for universities to develop systems to assess and recognise all forms of prior learning. This is particularly important in the context of lifelong learning in a global era where knowledge is acquired in many different forms and places” (Fig. 4).



**Fig. 2** Does your institute currently provide training to non-standard third level students (e.g. professionals, adult learners, senior citizens)?



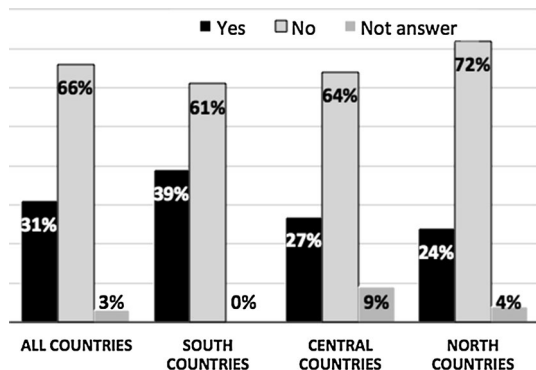
**Fig. 3** Are your study programmes adapted for flexibility in order to enable broader participation?

Revealingly, none of the respondents did well in this category: accreditation via work experience only was least likely to occur in the north (only 24 % positive replies); central European respondents fared only marginally better at 27 %, with both these areas below the overall average of 31 %. Southern respondents had the best comparative result at 39 %, but still an overall negative set of results.

Question 5 sought to understand teachers' views as to what are the basic requirements to improve the provisions of lifelong learning at the HE level. Respondents were asked to select and rank the most important aspects from the following list or to add any which were not listed.

- More information about the importance of LLL
- More infrastructure to carry out administration, marketing studies and advertising
- Recognition and accreditation of non-traditional training and experimental learning
- Guarantee of quality of LLL courses
- Implementation of e-learning technology in LLL courses
- Recognition for LLL teaching LLL and time spent in course/module design
- Uniformity of course provision of LLL around Europe
- Adapting courses to student needs

**Fig. 4** Does your institution have a system in place whereby an individual could obtain credits towards one of your programmes through evidence of work experience only?



Teachers' responses as to which basic requirements are necessary to improve the provision of lifelong learning (Table 1) again revealed differences in the priorities perceived to be of the greatest importance; both central and northern responses stress the importance of adequate funding, with financial resources (which was an addition to the above list) appearing as the first requirement. Northern responses also indicated concerns about recognition for non-traditional training courses, as well as mutual recognition for traditional degree programmes. Central European respondents felt that programmes should not only be responsive to student needs, but should also respond to market/industry needs. They also prioritised e-learning. The southern respondents prioritised students' needs and the promotion and dissemination of LLL courses, but also added another priority concerning the training of teaching in LLL methodology. It is also interesting to note that the neither quality nor uniformity of lifelong learning courses appears to be a major concern for AQUA-TNET academic members.

#### Results: stakeholders' survey

Responses were received from professional aquaculture associations from seven countries (Italy, Norway, Spain, UK, Greece, Germany and Finland) representing the views of many hundreds of individual fish farms.

Asked whether they had carried out any training over the previous 5 years, one-third replied positively and the remaining two-thirds expressed an interest in receiving such training and would welcome any possible assistance from AQUA-TNET in providing such training.

Half (50 %) of the surveyed associations considered it essential to provide short courses and onsite training at a reasonable cost.

The major aspects identified as necessary were legal requirements (e.g. fish handling, safety at sea, health and safety), whereas negative aspects included time availability for participation in training and suitability of location (i.e. not far away from work location).

The least important aspects were as follows: accreditation of the training (e.g. certification for participation) and business competitiveness and financial cost.

## Discussion

#### Trends results concerning HEI lifelong learning strategies

The AQUA-TNET survey had several common elements with the surveys carried out as part of the *EUA Trends V* and *Trends 2010* Reports (Crosier et al. 2007; Sursock and Smidt 2010), allowing for some relevant comparisons to be made.

The *Trends V* (Crosier et al. 2007) survey had looked at what priority European higher education institutions give to lifelong learning. Two-thirds of the institutions (66 %) answered that LLL either had high priority or had priority along with other priorities. However, only 17 % indicated that LLL had very high priority for their institution.

*Trends 2010* (Sursock and Smidt 2010) stated that the development of institutional lifelong learning strategies that support all educational provision in a lifelong perspective evolves very slowly evidenced by the fact that data from *Trends III* (2003) showed that 35 % of institutions stated that they had developed an overall lifelong learning strategy while six years later, only a "negligible increase to 39 %" had occurred.



**Table 1** Teachers' views as to the requirements most necessary to improve lifelong learning in universities

South European	Central European	North European
Promotion and dissemination of LLL courses	Financial resources	Financial resources
Flexibility of programmes appropriate to student needs	Flexibility of programmes appropriate to student needs and adapted to the needs of the market	Recognition and accreditation of non-traditional training courses
Adapting university and teacher training for LLL	E-learning	Mutual recognition of courses/degrees in Europe

### AQUA-TNET HEI (academic teacher) survey results

There was a clear distinction in the responses (71 from 22 countries) to the question concerning which educational institutes have an institutional LLL strategy in place. Overall, there was a fairly even split: 54 % indicated that they did have such a policy, while 46 % admitted that they had no such policy. But that itself shows a noticeable difference from the *Trends* results.

However, when the AQUA-TNET results were subjected to further scrutiny, the responses showed a clear geographical divide between northern, central and southern European countries. Only 41 % of northern educational institutes in the marine science sector represented in AQUA-TNET had a LLL strategy in place in 2009, while 61 % of respondents from the southern geographical sector and 64 % of the central European respondents stated that they had such a policy in place. Central and southern European respondents were roughly in line with the European trend at 66 %, with the northern respondents differing from the European trend. This also conflicts with Hanne Smidt's (Smidt 2007) reports of the excellent lifelong learning provision undertaken in Scandinavia, the Netherlands and the UK, along with the highly individual systems existing in France, Germany and Poland.

Nevertheless, the AQUA-TNET responses contrast strongly with the *Trends 2010* findings which had made it possible to identify and differentiate two types of academic institutes, one very large, with 15,000 to 30,000 students, with a strong research profile and a second, much smaller type with a regional or national mission. Almost all of the AQUA-TNET respondents fitted into the latter category, where the *Trends 2010* report (Sursock and Smidt 2010) found that only 39 % had an LLL strategy in place. This contrasts strongly with the similar type of AQUA-TNET respondents averaging 54 %. What is even more noteworthy is that the southern and central respondents have even higher rates (61 and 64 %, respectively).

Their second conclusion is interesting in the context of the typical AQUA-TNET academic institution:

The second type includes higher education institutions that provide lifelong learning activities, but do not necessarily have an overall strategy in place. They are smaller and more likely to define themselves as having a regional (39 %) or national (40 %) mission.

These comparisons indicate that the AQUA-TNET approach has successfully incentivised at least some of its partners, since a higher percentage of AQUA-TNET partners (54 %) have a LLL strategy in place than the HE organisations surveyed by the European Universities Association (average 39 %).

### AQUA-TNET stakeholder findings

Half (50 %) of the stakeholder respondents thought that it was essential to provide short courses and onsite training, which is more affordable for the companies (but much less convenient for university departments). Time availability to take part in training and suitable location (i.e. close to the company) were major concerns for the industrial partners, who also voiced interest in awarding some kind of recognition or accreditation for the training, even if this were only a certificate for participation.

The AQUA-TNET partnership has therefore responded to the need clearly set out in the *Trends 2010* report:

There is a clear need for European HEIs and national authorities – together – to connect policies in order to create accessible, flexible and transparent student-centred learning and to monitor and evaluate implementation continuously. (Sursock and Smidt 2010).

### *Current types of lifelong learning practice and provision*

Those European HEIs with an overarching strategy in place have started to appreciate the importance of developing student services targeted at these specific categories of learners (Sursock and Smidt 2010).

The *Trends 2010* results concerning specific types of training are also illuminating. The three main lifelong learning activities provided in HEIs are as follows:

- Professional development courses for those in employment (79 %)
- Continuing education for adults (67 %)
- Distance learning (53 %)

These figures are fairly similar to the AQUA-TNET HE organisations where 73 % currently provide training to non-standard third level students (e.g. professionals, adult learners and senior citizens) and 63 % have study programmes adapted for flexibility in order to enable broader participation.

### **Flexible learning pathways**

#### HE provision of flexible learning pathways

While the Ministerial Declaration (Budapest-Vienna Communiqué 2010) stressed that “higher education is a major driver for social and economic development and for innovation”, it also states that “flexible learning paths provide the best solution, requiring cooperation from teachers/researchers in international networks”.

Two years later, with the financial situation still remaining difficult, the Bucharest Ministerial Declaration (2012) stated the intention to “step up efforts to develop flexible

learning paths, including the use of prior learning” implying that a lot still needs to be done in this respect.

#### VET approach to flexible learning pathways

The Bruges Ministerial Communiqué (December 2010) stated: “in the knowledge, society vocational skills and competences are just as important as academic skills and competences”. This set of recommendations from the Copenhagen (VET) Process reflects, though in a slightly different way, the dichotomy that has emerged in relation to the theory and practice of lifelong learning.

The Bruges Communiqué differentiates between what it describes as I-VET (“initial” VET) and C-VET (easily accessible and career-oriented” continuing” VET. I-VET “should equip learners with key competences and specific vocational skills”; in other words, it should be linked to formal education. C-VET, on the other hand, is intended for “employees, employers, independent entrepreneurs and the unemployed, which facilitates both competence development and career changes”. C-VET seems rather to be linked with non-formal and still, in 2014, unaccredited learning.

However, the Bruges Communiqué went on to join hands with the Budapest Ministerial Declaration in also signalling the importance of flexible systems of VET

based on a learning outcomes approach, which support flexible learning pathways, which allow permeability between the different education and training subsystems (school education, VET, higher education, adult education) and which cater for the validation of non-formal and informal learning, including competences acquired in the workplace.

#### AQUA-TNET: flexible learning pathways provision

In this context, it is perhaps significant that 31 % of the 71 AQUA-TNET respondents have a system in place whereby an individual could obtain credits towards one of their programmes through evidence of work experience.

Yet according to the definitive *Trends 2010* report (Sursock and Smidt 2010), this type of provision is very rare:

In the majority of European countries, lifelong learning is considered as a set of activities provided outside mainstream education, in relation to which Bologna tools such as learning outcomes and academic credits are only rarely defined or attached.

Perhaps because of the greater integration and cooperation of the AQUA-TNET partnership which includes organisations, research organisations and industrial partners as well as universities, there is a greater awareness of the need for more flexible learning pathways and also for the recognition of prior learning, which has long been one of the pillars of the Bologna reforms.

From the data presented above, it can be seen that AQUA-TNET played a crucial role in bringing together all stakeholders to ensure that there is a flow of information and knowledge transfer to partners. Its long-term approach has succeeded in translating at least some of the concepts promoted in the evolving Bologna/Copenhagen dialogue. Klug et al. (2014) commented that it is the attitude of teachers as the central agents for promoting LLL concepts and the will of students to use their capacity for learning across a lifetime, both of which require motivation and competence in self-regulated learning. The authors consider

that both are modifiable, for example, by training, experience and reflection, which again points to the role played by AQUA-TNET in providing all three types of modifiers.

AQUA-TNET's-wide sectoral support is now represented in the EATIP Technology Platform, which offers a new knowledge transfer pathway.

### European Universities Charter on Lifelong Learning

The EUA actively promoted emphasis on the lifelong learning agenda by developing the “European Universities’ Charter on Lifelong Learning” in 2008 (EUA 2008). The Charter is a call for European universities and governments, together with the social partners and other stakeholders, to support the lifelong learning agenda and to assist Europe’s universities in developing their specific role in this context. The Charter places all types of higher education—formal, non-formal and informal—within the framework of lifelong learning.

Two EU-funded projects, SIRUS (with a partnerships representing 29 universities) and ALLUME (with a partnerships representing ten universities with six additional “testing” partners) which were undertaken in order to show how the European Charter for Lifelong Learning could be implemented, are briefly described here. Their findings show clearly why, in the present economic situation, so few new developments seem to have taken place (Bengtsson 2013).

#### The SIRUS (2011) project findings

Most universities go through a three-step sequence in developing an institutional LLL strategy involving an adaptation stage, an organisation stage (where strategies are put in place) and finally a cultural stage (where universities adopt a new way of thinking, a LLL culture and a shared vision across the institution).

SIRUS hoped, by looking at the positioning of LLL in different types of European higher education institutions, to demonstrate different ways of incorporating LLL activities into institutional portfolios. The SIRUS project therefore gave an opportunity for a diverse group of universities to develop and enhance their strategic LLL approaches through interactive discussions with colleagues from across Europe. Specific goals were to test the implementation of the ten commitments adopted in the European Universities’ Charter on Lifelong Learning; to support universities in developing, embedding and enhancing lifelong learning strategies; and to ensure wide dissemination of existing best practices.

The framework conditions crucial for supporting the successful development of lifelong learning were funding and legislation. Only 12 of the 18 SIRUS countries believed such “supporting legislation” was in place and only four countries had specific funding for the development of lifelong learning activities. Many of the universities also pointed out that their respective governments had been slow to respond to the commitments in the EUA Charter on Lifelong Learning. Universities agreed that for successful implementation, both support from the university leadership and the proactive engagement of staff was crucial. Partnerships and cooperation with other universities and also with non-university partners, including the private sector, were identified as another strategic priority for the success of LLL.

#### The ALLUME project findings

ALLUME’s main objective was to find ways of increasing university participation in lifelong learning and to produce “A Lifelong Learning University Model for Europe”

intended to assist universities by providing guidelines based on the European Universities' Charter on Lifelong Learning (2008). However, it became clear that the idea of a unique model or a one-size-fits-all approach was not only out-dated but also seriously inadequate, given the diversity of universities, environments and the heterogeneity of LLL strategies and processes. ALLUME therefore diverted its main impetus towards the development of flexible "Pathways for Lifelong Learning Universities" in order to tackle the diversity in LLL strategies and tried instead to find ways for universities to develop flexible "Pathways for Lifelong Learning Universities" as one method of tackling the diversity in LLL strategies. ALLUME produced a useful methodology from 10 case studies based on structured peer visits, with essential tools for self-analysis and benchmarking. The ten case studies were presented in workshops in Brussels and Barcelona (2011). The final results were published both online and in print (<http://allume.eucen.eu/documents>):

- Pathways and Policies: the main findings of the two transversal analyses on content and on process, as well as recommendations addressed to strategy deciders in universities like (vice) rectors and regional, national and European public authorities
- Tools and Results: the three flexible tools for self-analysis and benchmarking, the two transversal analyses in full length and background papers addressed to LLL practitioners.

### Conclusions from SIRUS and ALLUME projects

The rather depressing findings from SIRUS could certainly be a consequence of the severe financial climate throughout Europe, in which European universities have had to make many severe cutbacks. It is not surprising therefore that universities are reluctant to commit to those actions of the Charter such as "adapting study programmes to enhance widening participation", catering for "a diversified student population" and "providing appropriate guidance & counselling service". In particular, when governments do not appear eager to engage in their commitments, such as "recognising the university contribution to LLL as a major benefit to individuals and society" and "promoting social equity & an inclusive learning society". However, even the rather promising findings from the ALLUME project do not appear to have been taken up by European Universities as the present financial situation does not warrant the taking up of costly new programmes, no matter how worthy the aims and the ultimate benefit to society.

### Challenges and opportunities for lifelong learning

Lifelong learning has been on the European agenda since the European Year of lifelong learning in 1996, and its importance has been highlighted in the Bologna Process, the Lisbon Strategy and EU 2020. Nevertheless, the integration of lifelong learning strategies into the mission of higher education institutions is still marginal across Europe even if lifelong learning activities (e.g. part-time studies, continuing education, professional up-grading, children's and senior universities) have formed an important part of universities' contribution to societal development. Some progress did occur up until 2008, led by the EUA, its Charter on Lifelong Learning, and some European-wide-related projects which made a valiant attempt to embed and develop LLL in their activities and curricula.

While there is absolutely no dispute that formal education is an essential part of lifelong learning, there is also no doubt that the acquisition of knowledge, skills and wider

competences at the workplace is also important. The European Skills, competences, qualifications and occupations (ESCO), a ET 2020 initiative, intended to bridge education and the labour market, aims to carry out its European-wide job-matching remit with qualifications directly linked to lifelong learning courses described in terms of learning outcomes (ESCO Launch, Oct. 2013). Yet from the *Trends 2010* report (Sursock and Smidt 2010), it is evident that a more systematic development of flexible learning paths to support lifelong learning is needed, supported by some hard evidence as to what the current state of play in European universities is.

Lifelong learning needs to be implemented in such a way that all users can fill their gaps in lack of knowledge and skills. All of the surveys referred to here note that the challenges are different depending on the role of the individual: university teachers, students, employees and employers.

Challenges for teachers:

- Courses need to be designed more in line with the needs of industry and stakeholders
- There should be dialogue and interaction between teachers designing LLL courses and EU Technology Platforms
- Courses should be designed to meet the needs of post-graduate students
- Courses should be updated according to the needs of the industry
- Teaching, learning and assessment methodologies need to be improved
- Courses should be more flexible, including courses in e-learning, which would allow workers to acquire or update the skills necessary for the company
- The system should change in order to allow the recognition of previous experience

Challenges for students

- Students should be encouraged to enrol in those courses such as generic skills and other short courses which can improve their performance. LLL courses can fill these gaps.

Challenges for employees

- LLL courses are an effective way to improve workplace skills

Challenges for employers

- Allow employees to update knowledge concerning, i.e. legal requirements, in particular new European legislation
- Improving employees' knowledge and skills can result in improving company efficiency.

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