

AQUA-TNET lifelong learning strategy changes E & T attitudes towards ECVET implementation and the EQF

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Abstract

In 2011, the EU ERASMUS Thematic Network AQUAT-NET (representing the fields of aquaculture, fisheries and aquatic resources management) began a study on lifelong learning needs in the sector in order to find ways to tackle issues of articulation between different types of qualification frameworks. The survey (1913–1915) (37 organisations (universities, research institutions, associations and private companies providing lifelong learning (LLL) courses) from 16 European countries) examined their use of, and opinions concerning, the European Qualifications Framework (EQF) and the corresponding European Credit System for Vocational Education and Training (ECVET). The survey, published in 2015, revealed that two thirds of the respondents (65%) agreed or strongly agreed that there was a genuine need to establish the ECVET system of credit points in education and training and a majority of those respondents (58%) considered that the ECVET system of credits should be put into force as soon as possible, though with certain caveats. If the raft of new educational initiatives created by the European Union since then is considered along with the redefinition of key terminology in the EQF (i.e. competences) and the delayed rollout of the ECVET credit system, these AQUAT-NET results take on renewed significance, e.g. the admittedly low take-up rate of ECVET credit points. According to Reports and Evaluations on the state of ECVET implementation (e.g. CEDEFOP (2016) and the much later 2019 European Commission study on VET instruments ECVET and EQAVET), both the concept and the definition of ECVET credit points need to be revised (rather than removed). One acknowledged obstacle to the acceptance of the entire ECVET package lay in the absence of a large, well-organised peer learning group able to disseminate up-to-date relevant information. Within the small aquatic sciences sector, the steady flow of information concerning new lifelong learning

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initiatives to all stakeholders accounted for the success of the AQUA-TNET approach in promoting informed decision-making at the relevant level. This continues to be one of the recommended best practice approaches, while surveys such as ours are relegated to the vast unread mountains of EU studies.

Keywords ECVET · Lifelong learning · EQF · Fisheries · Aquaculture

Abbreviations

CEDEFOP	European Centre for the Development of Vocational Training
CVET	Continuing Vocational Education
ECVET	European Credit System for Vocational Education and Training
ECTS	European Credit Transfer and Accumulation System
EQAVET	European Quality Assurance in Vocational Education and Training
EQF	European Qualifications Framework
ESCO	European Skills/Competences, qualifications & Occupations
IVET	Initial Vocational Education
LLL	Lifelong learning
LA	Learning agreement
LO	Learning outcome
MOU	Memorandum of Understanding

Introduction

ECVET implementation in Europe

The creation of a European credit system as a tool for Vocational Education Training (VET) was first raised and agreed by the European Commission as long ago as the 2002 Copenhagen Declaration (European Commission 2002) which laid down future priorities for enhancing European cooperation in VET, stating that there was “a need for a system which supported ‘the transparency, comparability, transferability and recognition of competence and/or qualifications, between different countries and at different levels’.”

Seven years later, such a system, the ECVET system, was established by the European Parliament and the European Council (18 June 2009) to run according to the following timescale: the new ECVET system was to be implemented in 4 years by 2013, with both a report and a review to be published by 2014. This duly came in the form of an Implementation Report published in July 2014 (European Commission 2014). For the purpose of this article, it is important to quote its findings in some detail.

“During the evaluation period of 2009–2013 the European Credit System for Vocational Education and Training (ECVET) had limited progress at the national level. It was not considered by all EU Member States to be equally useful, with commitment to it depending largely on their VET and credit systems.....

The most valuable elements of ECVET as perceived by stakeholders were the (units of) Learning Outcomes and the ECVET documents (Memoranda of Understanding and Learning Agreements), but there was no particular relevance or demand for credit points due to their unclear technical specifications.”(Implementation Report, p. 12).

Two years later, CEDEFOP (CEDEFOP 2016) fleshed out these findings, stating that for the ECVET system to be properly functional, it should be supported by several points:

- (a) qualifications to be described in units of learning outcomes (LOs), with associated points (ECVET points)
- (b) LOs should be assessed, validated and recognised
- (c) ECVET partnerships to be supported by complementary documents: Memorandum of Understanding (MoU), Learning Agreements (LA) and complementary documents.

In the most recent study (January 2019) on the EU VET instruments EQAVET and ECVET, the European Commission view reaches some significant conclusions as to what should constitute the proper and effective future of ECVET and EQAVET. While reporting that ECVET system use is increasing, it also points to the undeniable fact that “very few countries apply the concept of credit points”. The Report therefore recommends that “ECVET should incorporate the ECVET principles within a wider VET strategy framework and should aim to integrate the ECVET Memorandum of Understanding and Learning Agreement into EUROPASS while making their use mandatory for Erasmus+ beneficiaries of VET mobility actions.”

These conclusions and recommendations are in parallel with studies carried out by the Thematic Network AQUAT-NET, as revealed in detailed and painstaking research surveys carried out from 2011 to 2013, in advance of the above-mentioned EU monitoring reviews and reports. The results of the final AQUAT-NET survey (Eleftheriou and Seixas 2015), viewed against the findings of the CEDEFOP Implementation Report on ECVET (2015) and the 2019 Report on ECVET and EQAVET, take on increased relevance in the current situation.

Survey background

The AQUA-TNET network founded in 1996 had become, by 2015, the largest multidisciplinary European Education Network covering the large and increasingly important area of aquaculture, fisheries and aquatic resources management. There were 91 partner organisations involved from 26 different countries (Eleftheriou et al. 2015).

The increasing importance of the sector derives from the following:

- Globally, according to the FAO (FAO 2018), food fish consumption per capita grew from 9.0 kg in 1961 to 20.2 kg in 2015, at an average annual rate of about 1.5%
- the area made use of by these activities is immense: the area exploited by industrial fishing takes place in more than 55% of the ocean, with a spatial extent more than four times that of agriculture (Kroodsma et al. 2018)
- almost all these resources are over-exploited
- climate change is no longer a disputed concept but a reality

For a sustainable development of the world aquatic resources, an integrated vision of fisheries, aquaculture and environmental aspects is essential. It goes without saying that the only sustainable way to fulfil the growing demand for fish products is to produce more farmed fish via aquaculture which, unsurprisingly, is the fastest growing food-producing sector according to the FAO (2018). However, to respond to this need in a sustainable way, it is necessary that both fisheries and aquaculture activities be carried out by skilled and responsible

workers at all levels. Recognising that training for specific needs provides the most efficient solutions, it seemed to the partnership that certain of the ECVET measures and instruments could provide the right kind of learning pathway for the multidisciplinary needs of the European work force.

In 2011, AQUA-TNET was engaged in several studies relevant to its thematic remit; one of these was a study of lifelong learning pathways within its partner organisations based on the steady flow of information on new measures disseminated by the network. This task had been undertaken in order to ensure that all partners were aware of the new measures emerging regarding the development of the ECVET credit system. Specifically, AQUA-TNET stakeholders were to be given more information about:

- (i) the importance of life-long learning (LLL);
- (ii) the recognition and accreditation of non-traditional formation and experiential learning;
- (iii) measures to guarantee the quality of LLL courses with valid accreditation bodies;
- (iv) information concerning LLL courses around Europe.

Thus began a continuing process of transferring information from official publications to institutions and individuals concerned with the education and training needs of the sector. The AQUA-TNET partners responsibly collected, collated, then circulated to all partners a regular electronic digest of the official information concerning all new LLL measures. The Steering Group partners were well aware that remote dissemination by itself is no guarantee that the communication in question will be read, understood and trigger a response. Each annual network conference therefore was scheduled to include one session devoted to the Lifelong Learning Work Package. These face-to-face partnership meetings revealed that all too frequently the formal dissemination of information concerning these new measures had been held up or even not carried out at all within the organisations themselves due to a variety of reasons, such as unwieldy administrative infrastructures, or a lack of available staffing, or even a disinclination to carry out the extra work involved without extra remuneration. These negative aspects are also referred to in the above-mentioned EU Reports on the implementation and the evaluation of the ECVET system.

In 2012, the AQUA-TNET study of Lifelong Learning Pathways took another step forward by formally taking on board the following tasks in a new Work Package:

- i) to analyse possible articulation between different educational sectors, in particular linkages between formal and informal learning;
- ii) to contribute to the setting up of the ECVET system in the EQF within the AQUA-TNET network;
- iii) to promote LLL within the network and the wider sector, by providing regular information and updates on the ongoing Bologna and Copenhagen reforms, as they occurred or were made publicly available.

Dissemination of the information on the developments taking place in the implementation of ECVET included guidelines for the use of learning outcomes (Kennedy 2006), guidelines for the construction of learning outcomes (the VALLA Tool (www.vallaproject.com)), exemplars of the ECVET Learning Agreement and exemplars of the ECVET Memo of Understanding.

The next important part of the study was the carrying out of a survey in 2013 covering 37 entities from 16 different European countries (comprising universities, research institutions,

associations and private companies which provided lifelong learning (LLL) courses). By means of the survey, AQUA-TNET intended to find out if its dissemination work had been effective, that is, whether regular dissemination of up-to-date, relevant new information concerning the knowledge and use of lifelong learning in its wide partnership which included the main aquatic resources education and research organisations in Europe, had had any measurable impact. The study, positioning lifelong learning in aquaculture: challenges and opportunities, was published in Aquaculture International Special Issue (Eleftheriou and Seixas 2015).

The study revealed that the AQUA-TNET approach of regularly providing relevant information on both HE and VET reforms taking place in Europe had, to some degree, successfully incentivised its partners with regard to knowledge and use of lifelong learning strategies; a higher percentage of AQUA-TNET partners (54% of respondents) had a lifelong learning strategy in place than those HE organisations which had also been surveyed by the European Universities Association, where the average was considerably less (39%) (Sursock and Smidt 2010, p.68).

The 2019 Report on ECVET and EQAVET clearly states (p 68) that “Peer learning activities were considered to be key enablers in implementing ECVET by most respondents, in particular for the opportunities for knowledge sharing, dialogue and networking they provide.”

The Report (op.cit, p.67.) further highlighted the importance of the peer learning group in its recognition that “Interviewees acknowledge that the success of a PLA in terms of reaching those who are implementing ECVET depends on participants’ success in cascading information and outcomes at national level. One perceived barrier in relation to the PLAs was that they are limited in number, so that they effectively only reach a few stakeholders.”

It is a reasonable proposition that a thematic network is a good example of an effective and well-organised peer learning group. From the data provided in the survey results, it can be shown that the AQUA-TNET network did operate as a fully functional peer learning group as described above. Since AQUA-TNET comprised a large number of institutions (91 in 16 countries, yielding 37 survey respondents with lifelong learning courses), it is perhaps not surprising that its steady cascade of relevant information over its 18-year existence reached a wide audience and even succeeded in changing some entrenched academic attitudes.

Current need for revising and repositioning training responses in the aquatic sciences sector

In the last few years, the EU has created a raft of new measures and major new initiatives such as the December 2016 Investing in Youth initiative (European Commission 2016b); A European Solidarity Corps (European Commission 2016d); Improving and Modernising Education (European Commission 2016c); the New Skills Agenda for Europe (Working together to strengthen human capital, employability and competitiveness (European Commission 2016a); the Upskilling Pathways initiative: New Opportunities for Adults (Official Journal of the European Union 2016) and the European Quality Framework for Apprenticeships (Council Recommendation on a European Framework for Quality and Effective Apprenticeships (Official Journal of the European Union 2018).

Yet, in 2017, the EU repealed (Official Journal of the European Union 2017) the 2008 European Qualifications Framework (EQF), as in need of updating and revision: the successful elements were retained (*8 levels defined by a set of descriptors*); the revision of others was

recommended (*learning outcomes relevant to qualifications at a specific level in any system of qualifications*) and the term ‘competence’ was rejected as inadequate for purpose (to be replaced by ‘responsibility and autonomy’).

Currently, the European Commission continues to place emphasis on lifelong learning in Europe, with both initial (IVET) and continuing (C-VET) as valuable instruments of economic importance. It is therefore worth reconsidering AQUA-TNET’s lifelong learning survey results, especially since the AQUA-TNET results anticipate (by several years) the findings/recommendations of the 2019 ECVET/EQAVET Report concerning those ECVET measures deemed to be successful (i.e. Learning Outcomes, Learning Agreement, Memorandum of Understanding). It was AQUA-TNET’s repeated dissemination of information and circulation of the above concept (learning outcomes) and innovative documents (Learning Agreement, Memorandum of Understanding) which made a valuable contribution to the positive reaction of the AQUA-TNET partners to ECVET. The survey results also highlight the importance of a steady and regular flow of information as an essential part of an effective knowledge transfer strategy capable of changing even entrenched attitudes.

Survey methodology

The AQUA-TNET survey targeted those European universities, research institutions and associations that provide what may be termed lifelong learning courses in marine and aquatic resources.

The survey was carried out by means of a Lime Survey. The emails of each partner of AQUA-TNET were inserted into the programme and a specific link was created for each contact and sent by email. This methodology avoided the transmission of duplicate answers.



Fig. 1 Countries where partner institutions responded shown in red: Belgium, Denmark, Greece, Finland, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Norway, Poland, Portugal, Spain, Turkey and United Kingdom

Results and discussion

Area and locality of institutions

The number of institutions represented in responses was 37, coming from 16 different European countries (Fig. 1). This was considered a robust sample with results from a wide range of European countries, northern, central and southern, representing different attitudes and cultures.

Analysis of the responses demonstrated that 89% of responses were from universities and research institutes.

The institutions concerned carried out courses or trainings mainly in aquaculture, followed by aquatic resources management and lastly fisheries. To this question, more than one answer was acceptable (Fig. 2).

Form of course delivery

Though the course delivery in operation was mostly face-to-face, nevertheless blended-learning and e-learning were also well represented with values near 30% (Fig. 3).

Use of ECVET

There was considerable evidence that the respondent institutions had not provided information about the ECVET system because 79% of responses said that their information had come from outside their institution, i.e. from AQUAT-NET.

The results of the question: *Does your organization use the ECVET system of credits for its Lifelong Learning courses?* are shown in Fig. 4.

Less than 50% of the institutions were capable of putting the ECVET system of credits into operation in their institutions. More than 60% stated that they had never used the ECVET system of credits in their lifelong learning courses. There were no significant differences between answers by region or type of institution.

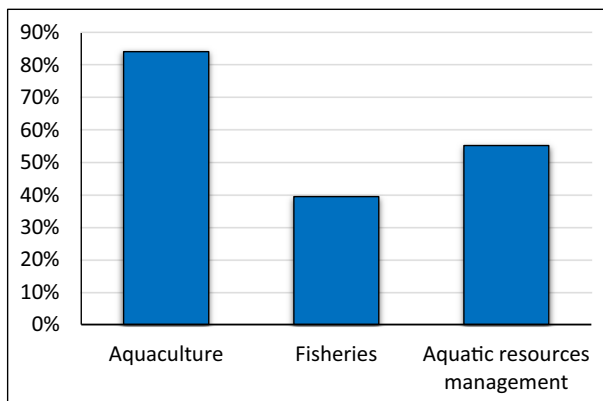


Fig. 2 Courses or trainings that institutions concerned carried out. Multiple answer was acceptable

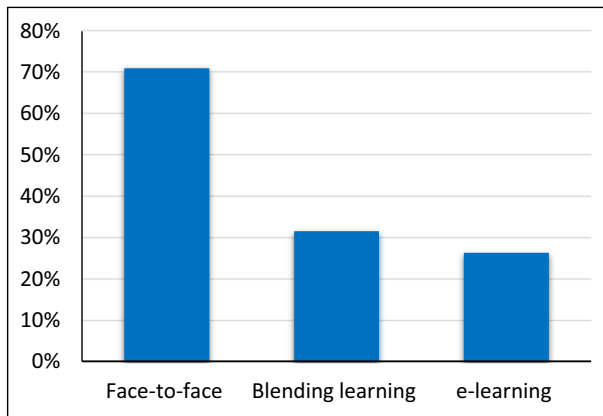


Fig. 3 Form of course delivery

Use of EQF as reference for NQF

Only 53% said that they used the EQF (European Qualifications Framework) as a reference for NQF (National Qualifications Framework) concerning LLL (lifelong learning). There were no significant differences between answers by region or type of institution.

This demonstrated the low implementation of the ECVET system in these fields and showed that much work would have had to be done to instigate and/or promote the implementation of ECVET as a regular practice.

Importance of ECVET system of credit points in education and training

Answers to the question: *How important is it to establish the ECVET system of credit points in education and training?* as shown in Fig. 5, reflect the growing realisation in the AQUA-TNET partners, mainly HE institutions, of the importance of knowing and using EU VET measures and instruments in these fields.

Respondents agreed or strongly agreed, 65%, that there was a need to establish the ECVET system of credit points in education and training. There were no significant differences between answers by region or type of institution.

When asked: *Do you think that the ECVET system of credits should be put in force as soon as possible?* (Fig. 6), a majority (58%) responded positively (Fig. 6). There

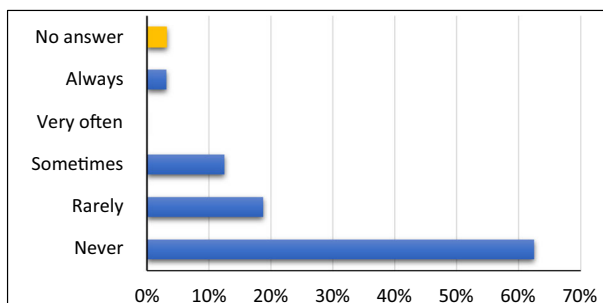


Fig. 4 Does your organisation use the ECVET system of credits for its lifelong learning courses?

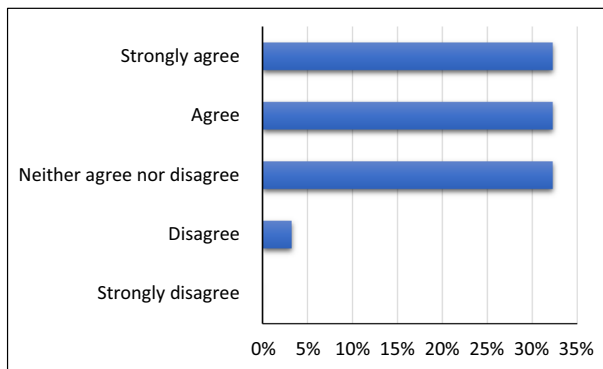


Fig. 5 How important is it to establish the ECVET system of credit points in education and training?

were no significant differences between answers by region or type of institution. This was in contrast to the statement of the European Commission (Implementation Report 2014): “There was no particular relevance or demand for credit points due to their unclear technical specifications. There is considerable potential and support for greater integration of these elements of ECVET with other EU tools in the context of the European Area of Skills and Qualifications” and the latest publication of European Commission (2019) on the EU instruments ECVET and EQAVET, “Of all the technical features, the credit points received the most negative feedback, and are considered by many as the key barrier to ECVET implementation.(...) It is recommended to remove or revise the concept and definition of ECVET points.”

Importance of ECVET to mobility

Seventy-one percent of respondents agreed or strongly agreed that ECVET is important for mobility (Fig. 7) which is in accordance with two separate reports of the European Commission (2014), European Commission (2019).

Pilz et al. (2017) in a mobility study also verified that the ECVET process was helped by the fact that VET courses were taught in modules, which seemed to help mobility.

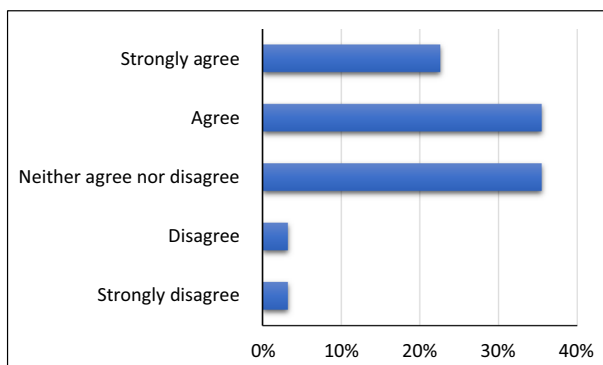


Fig. 6 Do you think that the ECVET system of credits should be put in force as soon as possible?

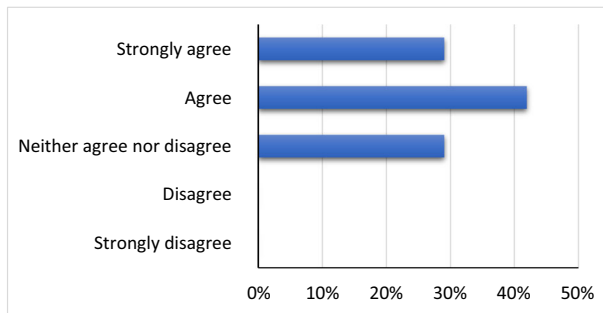


Fig. 7 Is ECVET important for mobility?

Equivalence between ECVET credit points and ECTS

ECVET is based on credit points and LO and the ECTS credit points are based on course length and number of learning hours.

As to whether there is any equivalence between ECVET and ECTS, results are shown in Fig. 8 below.

Sixty-one percent of respondents agreed or strongly agreed that there should be equivalence between ECVET credit points and ECTS. There were no significant differences between answers by region or type of institution.

But as stated in European Commission/EACEA/Eurydice (2018): “*Using a combination of the learning outcomes approach and student workload in programme design and delivery puts the student in the centre of the teaching and learning process*”. This can be a step towards accepting the equivalence desired by institutions in the aquaculture field. This idea is also found in the report of European Commission (2019) where it was mentioned that improved linkages between ECVET and ECTS could help improve permeability between vocational and higher education qualifications—though both must be focused on learning outcomes (as a redefined concept), MoU (memorandum of understanding) and LA (learning agreement).

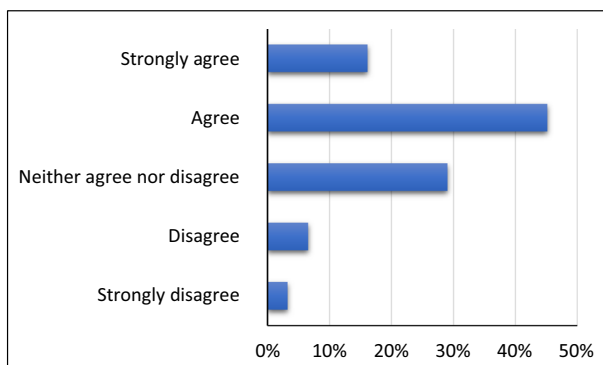


Fig. 8 Do you think that should be equivalent between ECVET credit points and ECTS?

Conclusions

Almost of responses were from universities and research institutes (89%). Seventy-nine percent of responses said that their information concerning the ECVET changes and reforms had come from outside their institutions, mainly from the work carried out by the AQUA-TNET network.

Less than 50% of the respondent institutions were capable of putting the ECVET system of credits into operation in their institutions. More than 60% of institutions stated that they had never used the ECVET system of credits in their lifelong learning courses.

Only 53% said that they used the EQF (European Qualifications Framework) as a reference for NQF (National Qualifications Framework) concerning LLL (lifelong learning). This demonstrated the low implementation of the ECVET system in these fields and there is no doubt that much work would have had to be done to instigate the implementation of ECVET as a regular practice.

Nevertheless, more than two thirds of respondents (65%) either agreed or strongly agreed that was a genuine need to establish the ECVET system of credit points in education and training, and there was even a majority (58%) who agreed that the ECVET system of credits should be put in force as soon as possible. These AQUATNET survey results from 37 mainly HE institutions covering 16 EU countries were interesting when first published in 2015 but are even more interesting and relevant now, in 2019, bearing in mind the preferred option presented in the ECVET/EQAVET study (P.13) which recommends that VET instruments should become part of a broader European policy framework for VET—and that there should be the introduction of an overarching recommendation that covers quality assurance, flexibility and recognition in VET. This would “reinvigorate the use of ECVET principles to support flexible learning pathways that enhance lifelong learning”(ibid).

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval This article does not contain any studies with animals performed by any of the authors.

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