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D4.5 Templates for CPD Progress Reporting

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About TeachHy

As the FCHT industry gradually emerges into the markets, the need for trained staff becomes more pressing. TeachHy2020, or short TeachHy, specifically addresses the supply of undergraduate and graduate education (BEng/BSc, MEng/MSc, PhD etc.) in fuel cell and hydrogen technologies (FCHT) across Europe.

TeachHy2020 will take a lead in building a repository of university grade educational material, and design and run an MSc course in FCHT, accessible to students from all parts of Europe. To achieve this, the project has assembled a core group of highly experienced institutions working with a network of associate partners (universities, vocational training bodies, industry, and networks). TeachHy offers these partners access to its educational material and the use of the MSc course modules available on the TeachHy site. Any university being able to offer 20 to 30% of the course content locally, can draw on the other 80 to 70% to be supplied by the project (and its successor entity that will support the platform post-project).

This will allow any institution to participate in this European initiative with a minimised local investment. TeachHy will be developing solutions to accreditation and quality control of courses, and support student and industry staff mobility by giving access to placements. Schemes of Continuous Professional Development (CPD) will be integrated into the project activities. We expect a considerable leverage effect which will specifically enable countries with a notable lack of expertise, not only in Eastern Europe, to quickly be able to form a national body of experts.

TeachHy will offer some educational material for the general public (e.g. MOOC's), build a business model to continue operations post-project, and as such act as a single-stop shop and representative for all matters of European university and vocational training in FCHT. The project partnership covers the prevalent languages and educational systems in Europe. The associated network has over 70 partners, including two IPHE countries, and a strong link to IPHE activities in education.



Deliverables Abstract

This report collects the forms to be used in following up on progress and success of CPD type educational activities.

1 CPD feedback collection

1.1 CPD feedback approach

Receiving (and giving) feedback is an essential element of teaching. It serves the purpose of communication between teacher/lecturer and pupil/student on the effectiveness of the teaching and the materials and approaches used. It is key in the process of improving the delivery of educational content and at the same time attempting to tailor course material more closely to the needs of students.

It has to be kept in mind, though, that feedback can be very varied and often enough, a set of questionnaires handed back by students will contain a not inconsiderable number of conflicting and contradictory statements. Therefore students feedback has to be taken with a pinch of salt and assessed along the goals of quality and consistency set out for the educational activity in question.

Whilst the TeachHy MSc course engages with students over 12 to 24 months, the CPD actions are very much shorter and can actually be limited to a day or even minutes. Therefore, interaction of the educational platform and the student is far more intense and requires a different set of feedback. Relevant feedback is also more important due to the expectations of professionals towards training activities may be more stringent, seeing that valuable working time is spent here and results want to be seen in as little time as possible. Meeting the expectations is therefore crucial in establishing a successful and sustainable CPD scheme. CPD student feedback might also be expected to be more to the point considering the professional background of the students.

1.2 Feedback form templates

This report collects a set of templates for constructing CPD module/lecture feedback forms.

It consists of a general form on the overall lecture/module content, followed by a set of more specific forms meant to be used for individual modules. A number of examples have been produced here.



2 CPD Progress Report Templates

2.1 Part 1: General Questionnaire (following page)

A. General questions

In order to continuously improve our educational programmes, we would like to receive your views on how you experienced the teaching activity. Please answer - **WITHOUT SIGNING** (anonymously) - honestly and objectively, to the questions below. Mark your answer with X in the appropriate box (VG/very good, G/good, S/satisfactory, NS/unsatisfactory/not satisfactory, Nr/cannot appreciate/no response/not applicable).

Module Title:

Module teacher(s):

Date:

Questions related to the module	Response (points)					Scores
How do you evaluate the module content against your expectations?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the clarity of the module presentation?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the interactive aspect of the module?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the existence and quality of the documentation for the module: books / module notes / PDFs / websites?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
We ask you to appreciate how the accompanying examples and explanations support the theoretical principles.	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Regarding the schedule, how do you appreciate the timing and its handling?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the behaviour of the teacher towards the students?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Appreciate the attractiveness of the module.	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How you appreciate the way in which interest in the module was stimulated?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
General appreciation of the module	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Questions about applications and practical exercises	Response (points)					Scores
How do you appreciate the content of the applications and practical exercises in relation to your expectations?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How you appreciate the way in which applications or practical exercises argue the module?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Appreciate the endowment with laboratory equipment and / or IT devices.	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Please specify how applications or practical exercises stimulate individual training.	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
General evaluation of applications and practical exercises.	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	

General questions related to the module	Response (points)					Scores
Have the students been informed from the beginning how they will be assessed?	Yes (4)	No (0)				
Was this information still correct by the time of assessment?	Yes (4)	No (0)				
Was there relevant coursework during the module?*	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
<i>The coursework quantitative appreciation</i>	<i>very few (1)</i>	<i>Suitable (2)</i>	<i>very much (1)</i>	<i>Nr(0)</i>	<i>Sum both answers and move a row above*.</i>	
<i>The coursework qualitative appreciation</i>	<i>Easy (1)</i>	<i>Suitable (2)</i>	<i>Very difficult (1)</i>	<i>Nr(0)</i>		
How do you rate the subjects for exams and coursework etc., related to the module content?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the time available to solve the exam questions?	Very suitable (4)	Suitable (3)	Too long (2)	Too short (1)	Nr(0)	
Was the teacher was fair in the evaluation?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
I attended the teaching activities in proportion of (in [%])	<25%	25-50%	50-75%	75% - 100%	100%	
Estimate the total number of hours dedicated to the preparation of the module, outside of hours spent in lectures themselves („Face to Face” or „Online”)	Hours no.					
MODULE RATING:						
D.1 POSITIVE ASPECTS: Mention some STRENGTH POINTS regarding the teachers / module / applications						
D.2 NEGATIVE ASPECTS: Mention any WEAK POINTS regarding teachers / module / applications						

D.3 OTHER PERSONAL COMMENTS / SUGGESTIONS, RELATING TO THE ACTIVITIES CARRIED OUT IN THIS MODULE



2.2 Part 2: Specific Module Questionnaires - Examples (following page)

B. Specific module questions

We would like to hear your views on the teaching content. Please answer - **WITHOUT SIGNING** (anonymously) - honestly and objectively, to the questions below. Mark your answer with X in the appropriate box (VG/very good, G/good, S/satisfactory, NS/unsatisfactory/not satisfactory, Nr/cannot appreciate/no response/not applicable).

Module Title: **Hydrogen (production, storage, handling), fuels (P2G, P2X)**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to hydrogen production from fossils and nuclear hydrogen?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to renewable hydrogen production?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to hydrogen storage and handling?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to hydrogen infrastructure and HRS?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to P2G/P2X?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Module Title: **Hydrogen Safety**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to hydrogen properties and hazards?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to Regulations, Codes and Standards (RCS)?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to unignited releases and ignition of hydrogen mixtures?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to micro-flames and jet fires?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to hydrogen permeation, compatibility and materials for hydrogen technologies?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Module Title: **Low temperature system (PEFC)**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to fuel cell, principle of operation and performances?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to types of fuel cell?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to PEFC technology?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to fuel cell power system and module hybridising?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to power electronics?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Module Title: **High temperature system (SOFC)**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to thermodynamics?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to cell and stack designs?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to cell and stack performance and electrode polarisation?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to fuels and fuel processing?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to systems, applications and BoP?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Module Title: **Energy system and storage**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to the energy system?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to the energy storage and energy storage technologies?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to hydrogen utilisation for energy storage?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to the hydrogen economy, P2G and sector-coupling?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to hydrogen corridors and critical infrastructures?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Module Title: **Fuel cell electric vehicles**

Teacher(s):

Questions related to the module	Response (points)					Scores
How do you appreciate the part of the module that refers to the transport sectors?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to FCEV basics?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to high and low pressure components of FCEV?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to high voltage components of FCEV?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
How do you appreciate the part of the module that refers to FCEV architecture and maintenance?	VG (4)	G (3)	S (2)	NS (1)	Nr(0)	
Module rating						

Thank you!