ColLab Intellectual Output 1 Report

COLLab

Erasmus+

Contents

1. Introduction

This report is intended to provide both background information to the actions of Intellectual Output 1 (IO1) and present the results from the three principle actions. The general aims of IO1 are: to provide a theoretical grounding for the project as a whole; and to provide data, mainly quantitative, but also qualitative. These data will inform Intellectual Output 3 - the creation of an online platform to host Communities of Practice (CoP). In order to do this, IO1 comprises three Actions: 1. A Literature Review; 2. A Scouting Exercise; 3. A Survey. These Actions and the resulting outcomes are detailed in Section 3 below.

In order to better frame the report in the context of the project, it might be useful to be reminded of the ColLab Project's aims as a whole:

To create Communities of Practice (CoP). and multi-institutional collaborative networks between higher education teachers, faculty staff, staff of Centers of teaching and learning, researchers as well as other stakeholders in a common educational endeavor: to support and enhance learning and teaching at university[1].

From discussions during initial partner meetings and from personal experience it is safe to say that in certain contexts the concept of Community of Practice is not familiar to a large section of the academic community. This was borne out by the survey itself (see section 3.3.4.2 below). Therefore, to provide a clear conceptual framework within which the actions of Intellectual Output I were developed, and indeed the whole project, the partners decided to adopt the Wenger & Wenger-Trayner (2015) definition:

A community of practice is a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly. […] the key elements are: The domain: members are brought together by a learning need they share […]The community: their collective learning becomes a bond among them over time […] The practice: their interactions produce resources that affect their practice.

2. Context of Implementation

While CoP originate in the world of business, they have migrated to many other fields of operation, in particular health services and not least to education at all levels, including HE. This is reflected in much of the literature.

Obviously HE also operates in the broader social and global context. As with all aspects of life, HE has had to adjust to the Covid-19 pandemic, not least in its mode of delivery. Preparedness for such an unforeseen and challenging situation varied greatly across contexts.

2.1. Operational Context

The final output of ColLab, IO3, will be a fully functional Online Platform to provide a home for Communities of Practice and all the necessary tools and resources to support and grow such communities. These will be freely accessible to the institutions of the European Consortium of Innovative Universities (ECIU)[2], of which ColLab is a sub-project, and to institutions across the European Higher Education Area (EHEA) and beyond.

However, even though the small group of universities involved in ColLab are all members of ECIU, there are vastly varying contexts regarding both the enhancement of the quality of teaching and learning through institutional Faculty Development Centres or Programmes and, more specifically, familiarity with and participation in CoP. These differences are to be found across the EHEA, where familiarity with CoP often depends on whether Faculty Development is an integral part of a teacher's academic career.

For example, in northern Europe in particular, CoP have a fairly long tradition within Faculty Development programmes, be they for professors, lecturers, tutors. In fact, membership of a CoP in these contexts, can be recognised as meeting formal Faculty Development contractual requirements or for career progression purposes. Whereas in other contexts, especially in southern Europe, e.g. in Italy where the author of this report is based at the University of Trento, there are rarely formal (national) requirements to undergo any form of training either prior to teaching in HE or formal Faculty Development once in the classroom. What little training is provided is often piecemeal and voluntary. In these contexts, if present (a rarity) active participation in a CoP has no formal recognition, as also emerged in the comments in the Survey (3.3 below). Nonetheless, and perhaps more interestingly, there is evidence that informal CoP sometimes emerge in these contexts and are deemed extremely useful as indicated in the Literature Survey (Annex 3). However, anecdotal evidence (e.g. during Focus Groups run as part of IO2) would suggest that those engaged in such informal groups are often an enthusiastic, dedicated minority.

What is more, in contexts where there is no tradition and it is not a contractual obligation, there has until recently been widespread disinterest in, and even resistance to, Faculty Development or ad hoc initiatives aimed at enhancing teaching practices and scant enthusiasm for the introduction of innovative teaching practices of any form. Though it must be said in most contexts there are trailblazers, be it single universities, departments and teachers.

Other than lack of provision and/or contractual requirements, in great part this reluctance to embrace training/ innovation can also be explained by a general lack of recognition for excellence in teaching, in particular in career progression and financial gain. Time and effort spent on teaching is still too often seen by many academics as a distraction from their "core business" of research and, of course, publishing.

If enhancing the quality of teaching and learning through Faculty Development cannot be assumed to be part of the academic culture of all institutions or even nations in the EHEA, one might also assume, for whatever the reason, there may be a similar disinterest in/resistance to participating in a CoP dedicated to enhancing teaching and learning, whether face to face (f2f) or online.

Additionally, in some HE contexts, there has also been a widespread resistance to using online platforms and tools in contexts where it is not an institutional requirement to do so. And even where using educational platforms is an institutional requirement, it is often used merely to upload reading materials or lecture slides rather than as an integral

part of teaching and learning activities. This necessarily changed due /thanks) to the Covid-19 pandemic.[3]

Breaking down these resistances and reaching out to those who do not currently feel a need for Faculty Development of any form or participating in a community dedicated to enhancing their teaching might be considered the major challenge of the ColLab Project.

2.2. Corrent Context - Covid-19

While the ongoing pandemic has caused and continues to cause much disruption in the academic life of students, teachers and support staff, impacts which have also affected the ColLab project, it has also had some positive spill over effects. For example, forced to deliver courses online, Covid-19 has meant many professors have become, willingly or not, more familiar with online tools and platforms whether for teaching, student office hours, institutional meetings or research. This forced familiarity has had its own positive spill-over in that teachers (and also students) not only started calling for training in using the technology, but also for training in teaching approaches and assessment forms that work when teaching remotely.

In many contexts, Universities scrambled to address these needs by offering ad hoc seminars and workshops, with a far higher attendance rate than any similar pre-Covid training programmes. Unanticipated outcomes of these events were: an exchange of experiences, practices and tips between teachers of different disciplines (often taking place in Zoom chats in the Context of Trento); a more widespread realisation of the value of such workshops; and not least, an awareness of the usefulness of and willingness to participate in exchanges of experience and practice with colleagues[4], namely Communities of Practice.

ColLab, like all projects, is therefore operating in vastly varied and constantly changing contexts. This can play in the project's favour, in so far as an online platform lends itself to being flexible and able to adapt to changing circumstances. The project can also take advantage of the positive impact on the perceptions, practices and participation of HE teachers that the pandemic has brought.

3. Intelectual Output 1 - Actions

Intellectual Output 1 consisted in three main actions each with specific complementary aims:

a) Literature Review;

b) Scouting of Existing Communities of Practice;

c) Survey of Perceptions and Current Usage of Communities of Practice.

All these actions had the overarching aim of providing input to the team of experts designing and creating the platform to ensure our platform and the CoP it hosts meet the needs and desires of the broader HE teaching and learning community.

3.1. Literature Review

The Literature Review aimed to help define the terms and give a general overview of what the science says so far. More specifically, it aimed to identify key issues which could be addressed in both the quantitative survey (see below) and the qualitative Focus Groups (Intellectual Output 2).

The Review consists of 6 sections:

1. What are Communities of Practice (main concept, subjacent theories)?

2. What kinds of Communities of Practice exist?

3. How is the Concept of Community of Practice Applied in the Field?

4. What Works and Does not Work?

5. Method

6. References.

Without wishing to repeat the whole contents of the Review, it might be handy to provide a brief summary of the main findings from the literature.

3.1.1. What are Communities of Practice? - Concept and Theories

Other than defining the term (our chosen definition provided above), the Review identified certain essential concepts which characterise CoP: the sharing of knowledge and experience (old + new); providing an interactive learning process; forging intimate relationships based on trust; creating a supportive network; solving common problems; pursuing projects through interaction and collaboration; bridging boundaries (cross-boundary connectivity). All of these depend on three fundamental factors: regular interaction, sharing and cooperation.

3.1.2. What Kinds of Communities of Practice Exist

The Review identified the three main modes of meeting and the different kinds of organisational structure of formal CoP. Communities of Practice can meet face to face, virtually/online or both face to face and online (hybrid). The organisation of formal CoP can be at every conceivable level: meso, macro and mega. More specifically formal CoP can be found at curricular, degree course, department and faculty level, through institutional and cross-organisational level, to regional, national and international level. CoP also present a similar variety in the make-up of the group membership, from course and discipline colleagues through to International Project partners, from teaching staff only to wider groups including any or all from among students, teachers, tutors, support staff/admin, external stakeholders, professional experts.

3.1.3. How is the Concept of Community of Practice Applied in the Field?

As with level of organisation and membership, the Literature Review identified an equally varied range of reasons for creating formal CoP. Among these the most common are as a:

learning and training resource, including use in Faculty Development: semi-structured training in teaching approaches and methods, techniques etc;

- forum for sharing: personal experience, case studies, concepts, perspectives, contacts, materials, equipment etc;

- mutual support system: for answering questions, queries, doubts, providing suggestions to resolve problems and giving proactive help, etc;

- discussion forum: discussing new/possible approaches, planning new courses, identifying strengths and weaknesses;

- resource bank: curricular module materials, teaching materials, scientific papers, bibliography, webography (links to useful sites), etc;

- news outlet: journals, newsletters etc;

- place to create networks, organise events, collaborate on projects, etc;

- forum in which to identify Indicators of Excellence in Teaching.

This list is not exhaustive, each individual formal CoP has its own specific purpose(s), aims and objectives which will shape how it operates. One characteristic not listed is the timescale of a CoP. This will necessarily depend on the aims and purpose of the CoP and can be as short-lived as the period of a short training programme,   i.e. a matter of weeks or even days, or open ended. In the case of open-ended CoP, longevity will obviously depend on the success of the CoP itself.

3.1.4. What Works and What Doesn't

Obviously to enable most of the above the CoP needs to be supported by the necessary tools and resources, and support systems, as well as having a clear conceptual framework. More specifically, the Literature identifies the following essential structural ingredients to ensure the smooth functioning of a CoP:

- Administrative support;
- Creating spaces (virtual and non);
- Providing the tools needed for full participation;
- Recognition of the time and effort needed;
- Allowing space for a degree of self-regulation

On a more conceptual level, the essential ingredients of a successful CoP found in the Literature are:

- a sense of mission;
- a sense of mutual engagement;
- a sense of community based on trust;
- a sense of continuity;
- a sense of autonomy/self-regulation.

The other defining characteristics of successful CoP, which contribute to are identified as "organisms" which:

- evolve: demonstrating both change and continuity over time;
- reproduce themselves;
- are flexible and organic: members can join and leave;
- engender negotiation of meaning;
- foster continued sharing and exchange;
- engage members actively, also in running the CoP.

The flip side of these positive characteristics are the most frequent reasons for the short shelf-life of less successful

CoP, namely: lack of institutional/administrative support; lack of clear organisation in terms of time and activities (sporadic and inconsistent); lack of general commitment (left to a few enthusiastic individuals); the organisational culture does not foster trust and the competitive context (fighting for research funds) thwarts cooperation; insecurities (based on lack of training in teaching approaches) lead to feelings of being judged.

3.1.5. The Importance of Connectivity and Networking

While this might technically belong in the previous section of essential characteristics of long-living, successful (formal) CoP, given the emphasis placed in the Literature on the added value of these aspects we will afford them their own section. Communication, Connectivity and Networking are seen as fundamental for Professional Development in any context. Focusing on Teaching in HE, the Literature outlines in particular the importance of:

- fostering communication between members of the Community outside the formal space;
- communicating and cooperating with entities and actors in the broader context;
- being part of or having links with/access to other CoP or a CoP network;
- exploiting members' joint memberships to further enrich exchanges and evolution withing the Community.

Given the ColLab Project's main purpose – to create a collaborative platform for multiple CoP - these last "recommendations" are particularly reassuring that our objectives are well grounded in the literature.

3.1.6. Observations on the Literature Review

What is apparent from the Review, is that the literature deals primarily with formal CoP, scant investigation has been made to date of more informal groups of teachers and staff or of how members choose to communicate "outside the official space". In all likelihood this is because it is difficult to gather data on such CoP, as we found ourselves in the Scouting Exercise we carried out, reported in the next section. However, there is some anecdotal evidence, reported in one paper in particular of Faculty Development initiatives being a springboard to the creation of informal CoP, something which we have also found to happen at Trento.

One other factor not specifically addressed in the literature reviewed, is the timescale of a CoP. This obviously depends on the aim, level of organisation and scope of a CoP. And in the case of open-ended CoP, its longevity (or not) will depend on how successful it is.

The complete Literature Review can be found in Annex 1.

3.2. Scouting Existing Communities of Practice

Given the time-lapse between research and final publication, and given the fast-moving nature of the online space, we thought it would be useful to carry out a Scouting Exercise to see what kinds of CoP are currently active in the realm of Education, and more specifically Higher Education (though not exclusively), i.e. an overview of the State of the Art. Given the nature of the Scouting Exercise (an online search) it is likely that face to face only CoP are underrepresented as a type.

3.2.1. Method

Step 1. A "Dirty Search" on Google to find a wide selection of CoP in particular relating to teaching and learning in Higher Education.

Step 2. Based on the Dirty Search and the Literature Review, we identified 5 criteria by which to classify the CoP :

- the Coordinating Organisation;
- the Target User;
- the Topics Addressed;

- the Type of Access (open, restricted etc);
- place Where Conducted;
- And finally, the link to the website is provided.

Step 3. Selecting 30 CoP to represent the kinds of CoP currently found on the internet.

Step 4. We decided to include informal CoP in this Exercise in order to try to fill what seemed like gaps in the literature. In practice, this was found to be more difficult than envisaged and relied mostly on anecdotal evidence from personal contacts. For this reason, this section of the Output is glaringly brief (Nos. 29 and 30 on the list). However, some of the more formal CoP, and/or CoP platforms, have active Facebook (FB) pages as part of their functionality and communication through FB is encouraged (e.g. Teach For All – No. 17 on the list).

3.2.1. Findings

A wide variety of CoP are to be found online. Many have restricted access, and for those with open access it is impossible to analyse how successful they are. The EU itself has a vast range of platforms, educational and otherwise. A selection of these can be found in the final list. There are also a wide range of CoP at the High School Level, in particular regarding teaching enhancement and innovation. Perhaps because Faculty Development is part of a school teacher's professional duties, differently from in tertiary education. At the HE level, many of the CoP found during Step 1 were module or programme related. While their aim was to promote the learning and development of members also through sharing and exchanging practices and experiences (the students'), they were not included in the final list as not specifically focused on enhancing teaching practices. The Scouting Exercise DID, however, raise the issue of including students in such CoP . This was discussed during the April project meeting.
The Output of the Scouting Exercise can be found in Annex 2.

3.3. Survey

As mentioned above, the Survey was designed to get as much input as possible from prospective future users of the ColLab Platform. The ultimate aim is to create a flexible, accessible, user-friendly resource for the creation of CoP which respond to a wide range of purposes and formats. One of the problems of CoP is engagement. To this end, it was hoped to collect input from respondents who were NOT familiar with, had little experience of or little interest in CoP so that we could try to respond to this broader, potentially new user-base.
To cover as many aspects, features and characteristics as possible, and to address (different) questions to active CoP members and those unfamiliar with or not active in CoP, the complete survey is necessarily long – a total of 53 questions. The complete survey can be found in Annex 3.

3.3.1. Aims and Objectives

While the Survey had the overarching aim of informing Intellectual Output 3, the Survey had these more specific aims:
- to have an overview of both **familiarity** with and **current perceptions** of CoP in HEIs;
- to establish the current **degree of active participation in CoP** in HEIs;
- to find out **what form these CoP** take;
- to find out, from **teachers familiar** with CoP, the **formats, features and tools** they would hope - to find on a well-functioning online CoP platform (Desiderata);
- to find out what **formats, features and tools** might **encourage teachers unfamiliar** with or not actively engaged in CoP to become active members (Desiderata).

3.3.2. Method

Step 1: Initial drafting

Based on the Key Features, Characteristics and Formats identified in the Literature Review and the Scouting Exercise, a questionnaire was drafted to encompass all this input.

The Survey was divided into three main sections:
   1. Personal Data (anonymous);
   2. Familiarity with and active participation in CoP;
   3.The CoP I would be likely to participate in/my desiderata for a functional CoP based on my experience .

Although anonymous, Section 1 questions were all compulsory. There were no compulsory questions in Sections 2 and 3 other than the Y/N/NA questions as the Survey also aimed to gauge interest in CoP.

To gain as much information as possible on the Format and Features questions, multiple answers were always possible and text boxes were provided for further comment on all questions. The final question consisted in a comments and suggestions box.

Given the different populations of respondents (those active in and those not active in CoP) with the exception of Section 1, it was necessary to create forks in the initial questions of Section 2 leading to two separate sets of questions and in Section 3 the wording of each question tends towards wordiness to account for the two different populations.

The Survey consists in a total of 53 questions, respondents could choose whether or not to answer all questions other than Personal Information.

Step 2: Editing

The paper version (more complex than the online version given the various forks with multiple answers) was submitted to all Project Partners and discussed during the April and May meetings and edited according to the input.

Step 3: Creating the Online Survey

A Pilot Survey was then created. The online webapp LimeSurvey was used for the simple reason it is the App used by the University of Trento, the ColLab Partner coordinating IO1.

Step 4: Piloting and Editing the Final Version

The Pilot Survey was submitted to all members of the ColLab Project and a small number of colleagues from other projects. The Survey was then edited according to the feedback from the piloting exercise.

Step 5: Launching the Survey – by invitation

Each partner institution nominated a person who would decide how and who to send the invitation to complete the Survey to in order to maximise the number of respondents. The Survey was Open Access and therefore open to anyone in HE, not only staff from the partner institutions.

The Survey was live from 15 June until 10 September 2020 and can be found at the following

Link: https://survey.unitn.it/index.php/129981?lang=en

3.3.3. Preliminary Observation on Survey Results

Before going on to look at the statistical results of the Survey, which is intended as data collection for a practical purpose and not a scientific exercise, some more general observations should be noted regarding.

Firstly, the great majority of the **respondents** come from **ColLab's partner universities**, all members of ECIU. As such they place great importance on innovation in teaching and faculty development. As partners developing a project on CoP, one might expect greater familiarity with and sensitivity to such a topic among the teachers of these institutions. As a result, the respondents may **not be wholly representative of the broader population** of all institutions in the EHEA. Secondly, the context of **Covid-19** had various **impacts on the project**, in particular on the project time-line. All actors involved in the project had to continue providing a quality education for students under lockdown (no need for detail[5]) making huge demands on time and effort – a steep learning curve for all. Though project meetings continued, as did work on all parts of IO1, priorities were elsewhere, as a consequence, completion of the **Survey was delayed** until mid-June and subsequently extended until 10th September 2020. During lockdown, university staff were inundated daily with demands on their time and attention (new software, new rules and regulations, new procedures and protocols, multiple questionnaires) resulting in i**nfo-overload and survey fatigue**. A further Survey was unlikely to be met with great enthusiasm. On a more practical level, **overworked IT support staff and understaffed Online Teaching team** resulted in an initial delayed access to the Survey platform and a subsequent reluctance on the part of the Survey drafter to bother the team with technical issues.

Despite the situation, the Survey totalled some 346 responses and generating some interesting and more importantly useful results for the Platform Design Team.

3.3.4. Survey Results

The Survey produced three kinds of results: quantitative, in terms of numbers, qualitative, in terms of respondents' comments and combined, in terms of input for IO3. The quantifiable results are presented in the tables and charts which follows. Many of these are self-explanatory and therefore observations are provided only when of relevance to the specific aims of the ColLab Project. For each macro area of questions, a summary of the nature of the more qualitative data is provided. Once the data had been cleaned of multiple respondents, and incomplete submissions there were a total of 346 responses.

3.3.4.1. Survey Section 1: Personal Information

Table 1. Personal Information

Gender	Female	48,8%
	Male	46%
	Prefer not to say	5.2%
Age	Range	23-70
	Average	48
Role	Teacher	83.5%
	Researcher	12%
	Admin	1.8%
	Tutor/TA	0.9%
	Other	1.2%

Country	Denmark	6
	France	1
	Germany	8
	Ireland	9
	Italy	118
	Lithuania	21
	Norway	31
	Portugal	119
	UK	1
	N/A	32
Discipline	Social Sciences	22.5%
	Engineering and Arch.	20.1%
	Humanities	15.3%
	Physics & Maths	11.4%
	Medicine, Vet, Dentistry, Nursing	7.2%
	Law	4.5%
	Art & Design	0.9%
	IT	3.3%
	Other	14.7%
Course Levels	Pre-sessional/Bridging	17
	Bachelor's	257
	Master's	247
	PhD	148
	Professional	33
	Other	6
Years of Service	> 1 year	6%
	1-5 years	14.6%
	6-10 years	11.9%
	11-15 years	16.1%
	16-20 years	22.4%
	< 20 years	29%

Observations

COUNTRY: As explained above, due to the pandemic, the timing of the Survey had to be delayed to the summer months accounting for an imbalance between the number of respondents according to Country. While no comparisons can thus be made between the different contexts (e.g. comparing responses in those countries which recognise CoP as Faculty Development and those where there is little or no Faculty Development and no formal CoP), the qualitative results from Intellectual Output 2 indicated that broadly speaking there is little difference in the various contexts.

3.3.4.2. Survey Section 2: Prior use of/Familiarity with CoP

The first section of the Survey proper dealt with respondents familiarity with and/or prior participation in CoP. The introduction to this section of the survey included a brief explanation of what is intended by CoP, based on Wenger and Wenger-Treyer's (2015) definition.

Are you familiar with the concept of Community of Practive	n. Total	%
Yes	134	48.4%
No	143	51.6%
Total	277	100%

Observations

While 48.4%% of respondents are familiar with the concept of a Community of Practice, only 21.3% of these said they actively participate in either a formal CoP, i.e. coordinated by an institution, organisation or project, or an informal CoP, i.e. initiated and coordinated by the members themselves. Therefore, the results presented in this section refer to the answers provided by this sub-population.
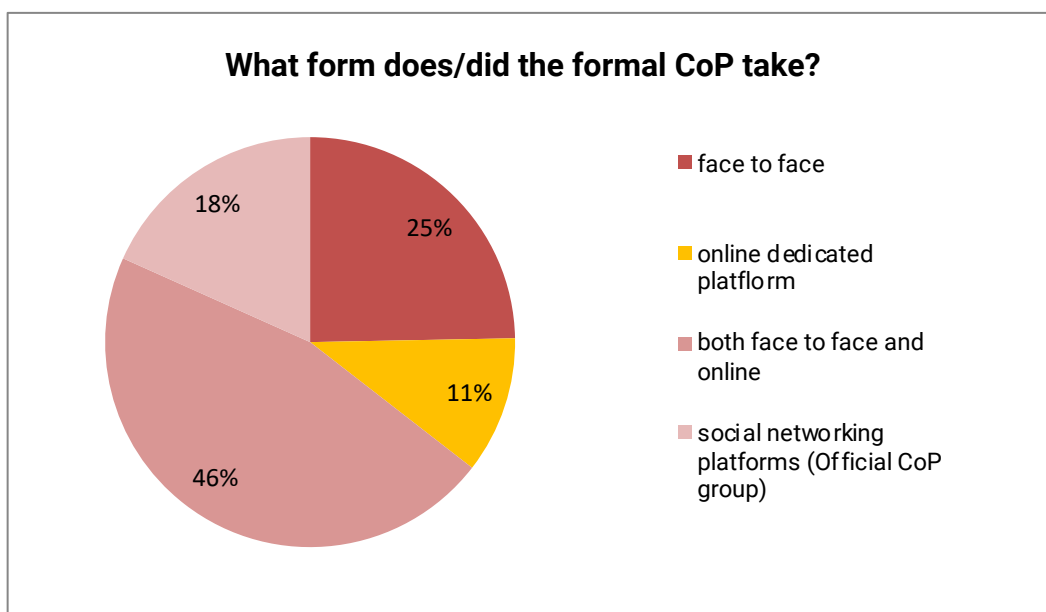

Figure 1: What form does/did the formal CoP take?

Observations

By far the most frequent format is hybrid, though the full impact of the current Covid crisis may not yet have had an impact on this finding. Nonetheless, a mixture of both online and face to face is by far the most common format. This may well be because for a community to have a sense of belonging, and to forge relationships of trust, there is a need to meet in person.
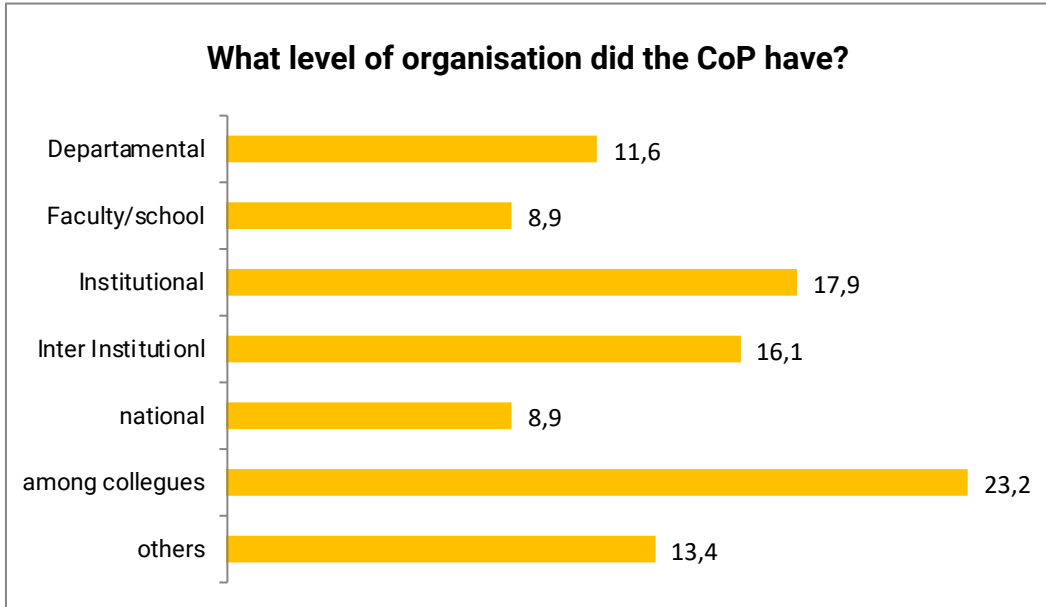
What level of organisation did the CoP have?

Level	Value
Departamental	11,6
Faculty/school	8,9
Institutional	17,9
Inter Institutionl	16,1
national	8,9
among collegues	23,2
others	13,4

Figure 2: What level of organisation did the CoP have?

Observations

Self-coordination by colleagues is the most frequent form of organisation, though whether they are colleagues from the same programme, department, institution etc is unclear.

When summed, over 38% of CoP are within the same institution. To this figure, we might reasonably add a fair proportion of the CoP which are coordinated by colleagues. This would indicate that currently the majority of CoP are at the local level.
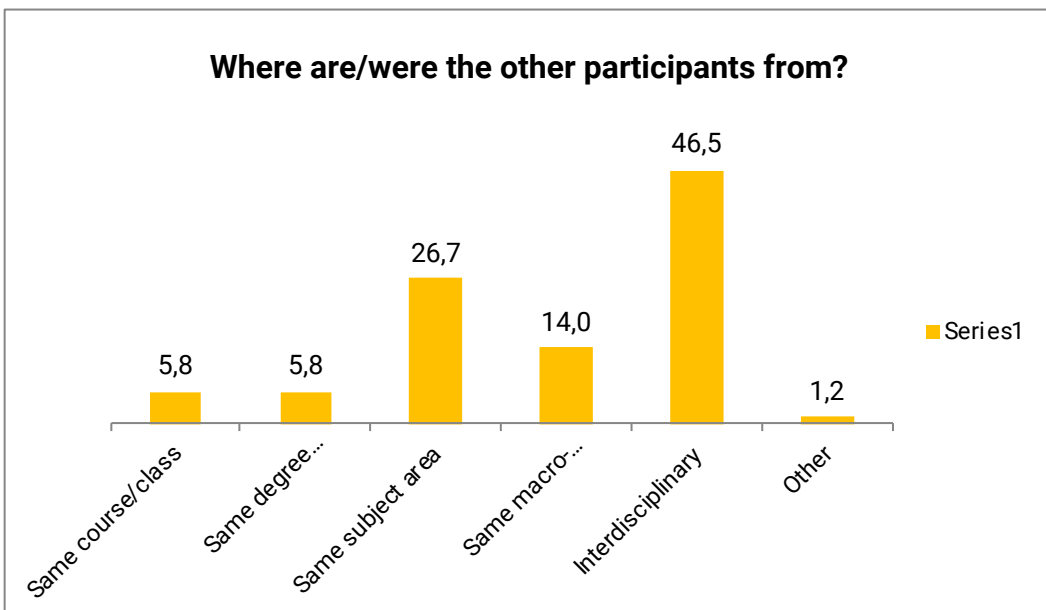
Where are/were the other participants from?

Category	Value
Same course/class	5,8
Same degree…	5,8
Same subject area	26,7
Same macro…	14,0
Interdisciplinary	46,5
Other	1,2

Series1

Figure 3: Where are/were the other participants from?

Observations

The greater majority of CoP by far are interdisciplinary.

What role do/did the participants in the CoP have?

■ Students ■ Teachers ■ Researchers ■ Professionals ■ Other
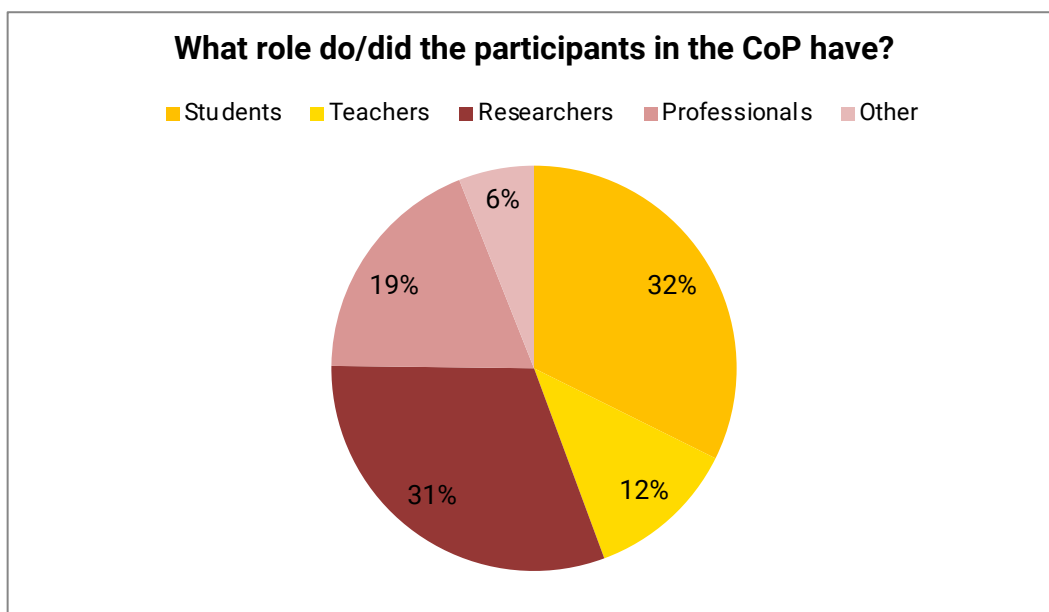
6%
19%
32%
31%
12%

Figure 4: What role do/did the participants in CoP have?

Observations

As found in the Scouting Exercise (though not addressed in the Literature Survey) many CoP are functional to course and programme teaching and learning and involve students (32% of the membership).
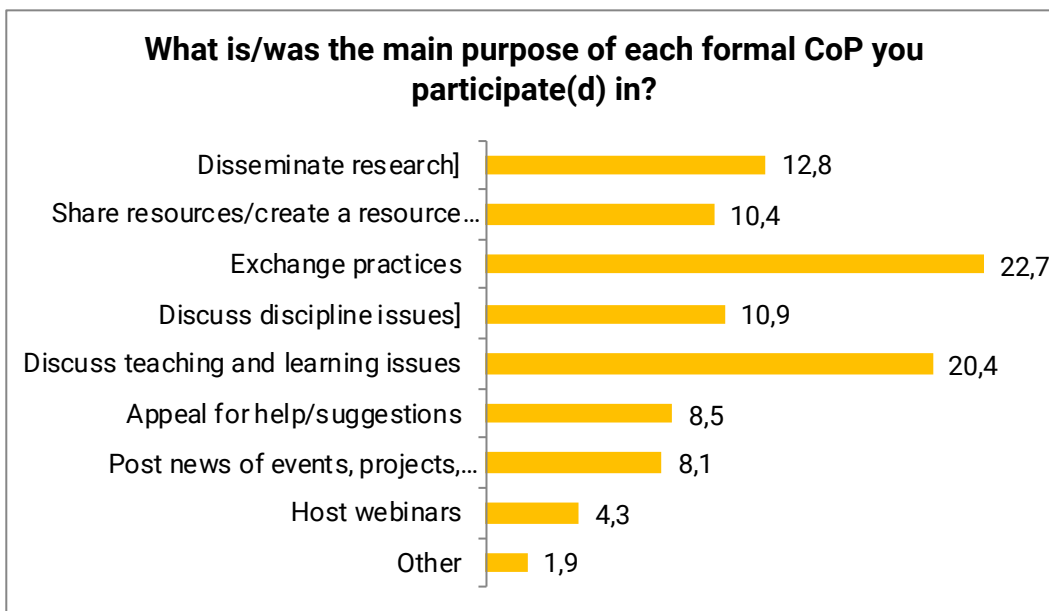

What is/was the main purpose of each formal CoP you participate(d) in?

Disseminate research] 12,8
Share resources/create a resource… 10,4
Exchange practices 22,7
Discuss discipline issues] 10,9
Discuss teaching and learning issues 20,4
Appeal for help/suggestions 8,5
Post news of events, projects,… 8,1
Host webinars 4,3
Other 1,9

Figure 5: What is/was the main purpose of each formal CoP you participate(d) in?

Observations

Given the purpose of ColLab this question, like all the others, was formulated within the restricted concept of a CoP, namely for the purpose of enhancing teaching and learning and addressed mainly to teachers. Thus if the purpose of the CoP (as suggested in the previous question) was to support courses and programmes, the options may not be wholly appropriate.
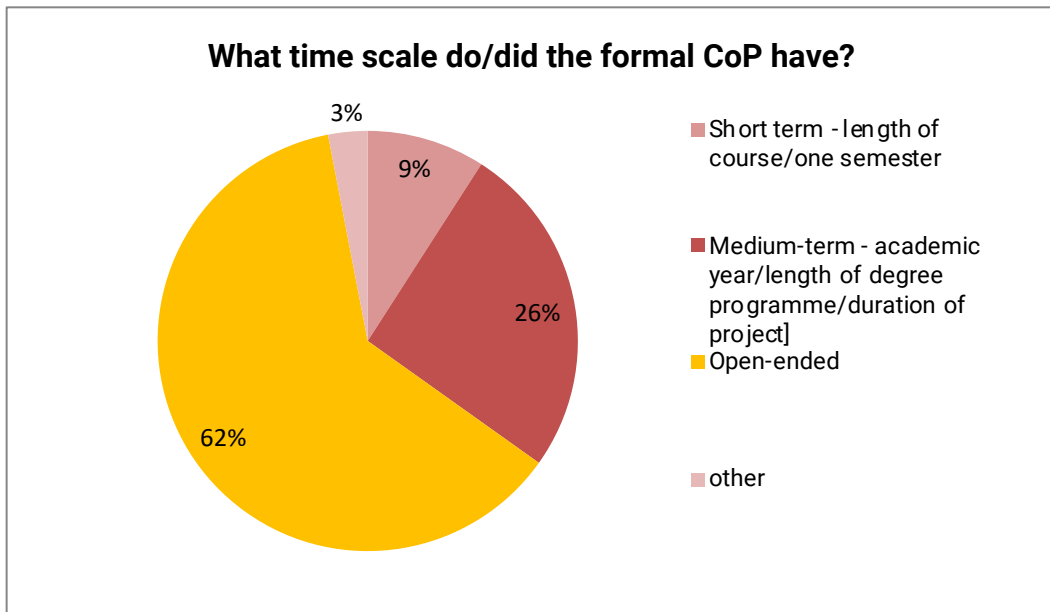
What time scale do/did the formal CoP have?

Figure 6: what time scale do/did the formal CoP have?

A similar series of questions was asked regarding Informal CoP:vv

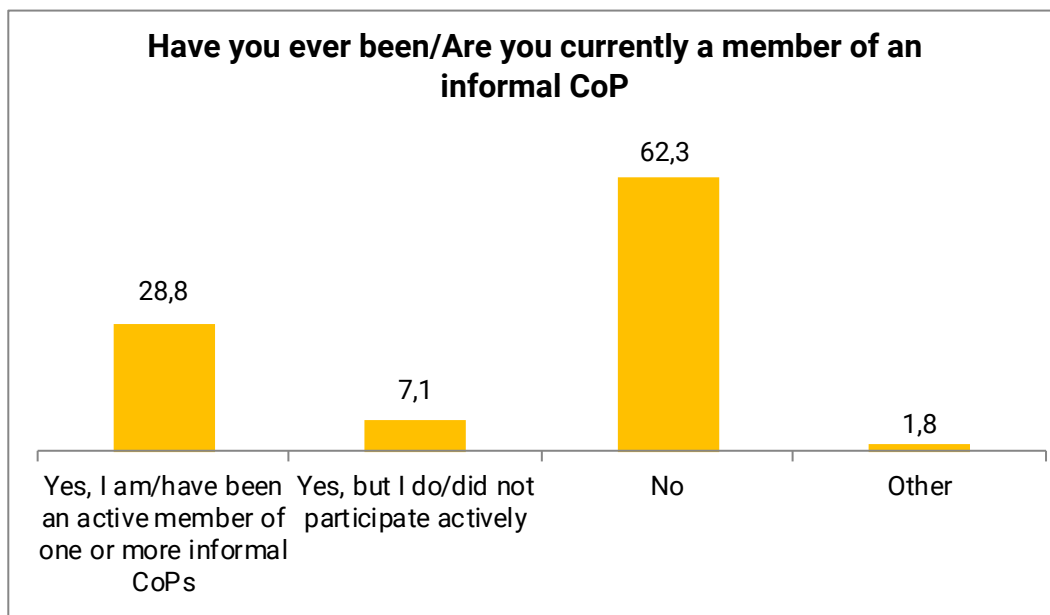**Have you ever been/Are you currently a member of an informal CoP**

Figure 7: Have you ever been/Are you currently a member of an informal CoP?

Observations

Interestingly, more respondents participate(d) actively in an informal CoP (28.8%) than an informal one (21.3%).

Why have you never actively participated in a CoP?

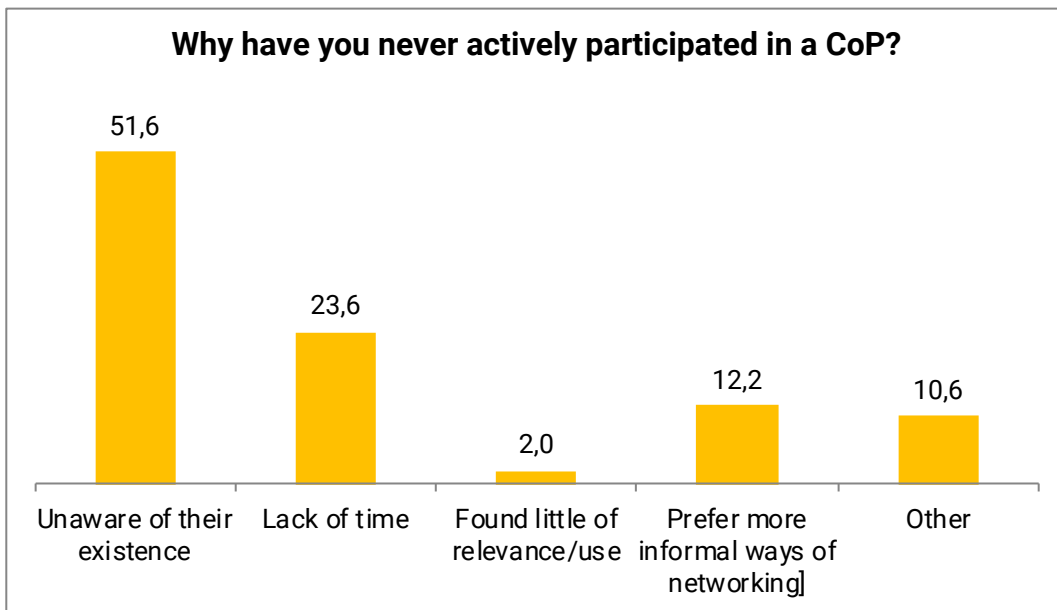|				
51,6				
	23,6		12,2	10,6
		2,0		
Unaware of their existence	Lack of time	Found little of relevance/use	Prefer more informal ways of networking]	Other

Figure 8: Why have you never actively participated in an informal CoP?

Observations

Awareness of the existence of CoP seems to be the major factor, though it might be appropriate to remember that the Country of origin of the majority of respondents to this survey (i.e. contexts where Faculty Development and CoP are only very recent introductions to Academic life).

The following question addressed those who currently do not participate actively in any form of CoP:
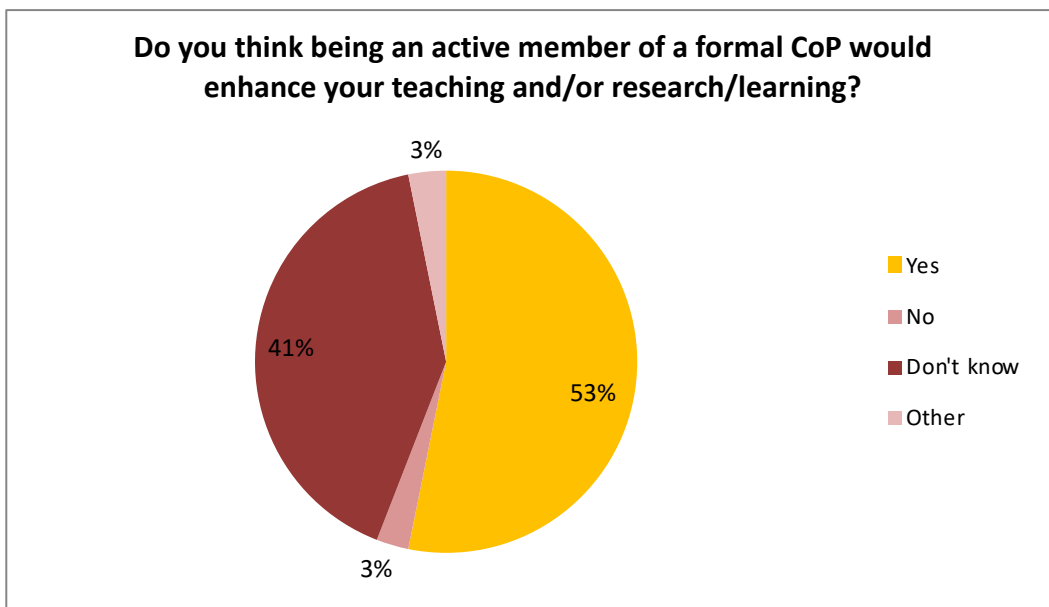
Do you think being an active member of a formal CoP would enhance your teaching and/or research/learning?

3%

41%

53%

3%

- Yes
- No
- Don't know
- Other

Figure 9: Do you think being an active member in an informal CoP would enhance your teaching and/or research/ learning?

Observations

Taken in sum this would indicate that 96% of respondents who currently do not participate in CoP either would be willing to or might be encouraged to do so.

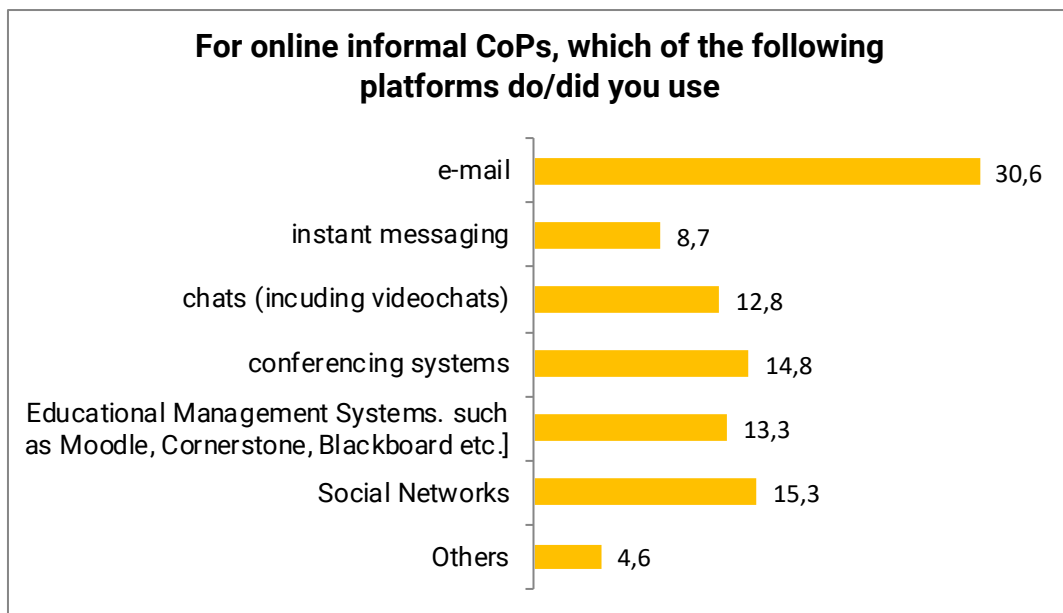The following question was addressed to those who do participate actively in informal CoP.

For online informal CoPs, which of the following platforms do/did you use

Platform	Value
e-mail	30,6
instant messaging	8,7
chats (incuding videochats)	12,8
conferencing systems	14,8
Educational Management Systems. such as Moodle, Cornerstone, Blackboard etc.]	13,3
Social Networks	15,3
Others	4,6

Figure 10: For online informal CoP, which of the following platforms do/did you use?

Observations

The use of e-mail still seems to predominate, though it might be interesting to cross data from age-group and use of social networks. If this question were to be answered after a second semester of partial lockdown and remote working, the results might differ slightly, in particular the use of conferencing systems.

What do/did you use these informal CoPs for, primarily?

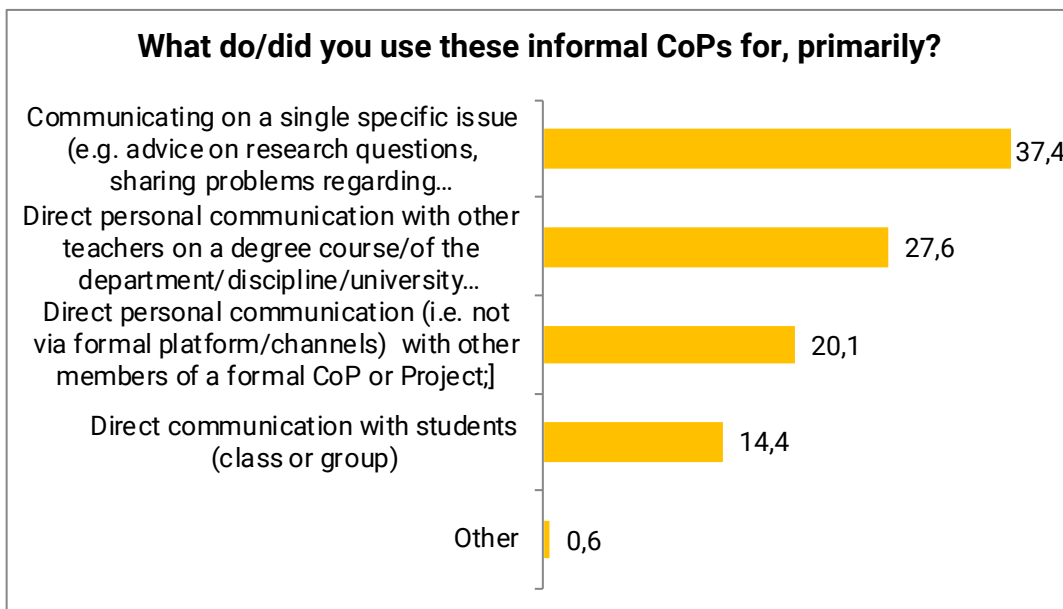| Option	Value
Communicating on a single specific issue (e.g. advice on research questions, sharing problems regarding…	37,4
Direct personal communication with other teachers on a degree course/of the department/discipline/university…	27,6
Direct personal communication (i.e. not via formal platform/channels) with other members of a formal CoP or Project;]	20,1
Direct communication with students (class or group)	14,4
Other	0,6

Figure 11: What do/did you use these informal CoP for, primarily?
Complete text of options:
Communicating on a single specific issue (e.g. advice on a research question, sharing problems regarding teaching/ learning or assessment practices; tips on using Zoom);
Direct personal communication with other teachers on a degree course/of the department/discipline/university committee etc;
Direct personal communication (i.e. not via formal platform/channels) with other members of a formal CoP or Project;
Direct communication with students (class or group);
 Other (please specify)

Observations

It is interesting to note that even within a formal CoP/Project, members often prefer to use more informal methods of communicating (20.1%) than those provided by the Project/CoP.
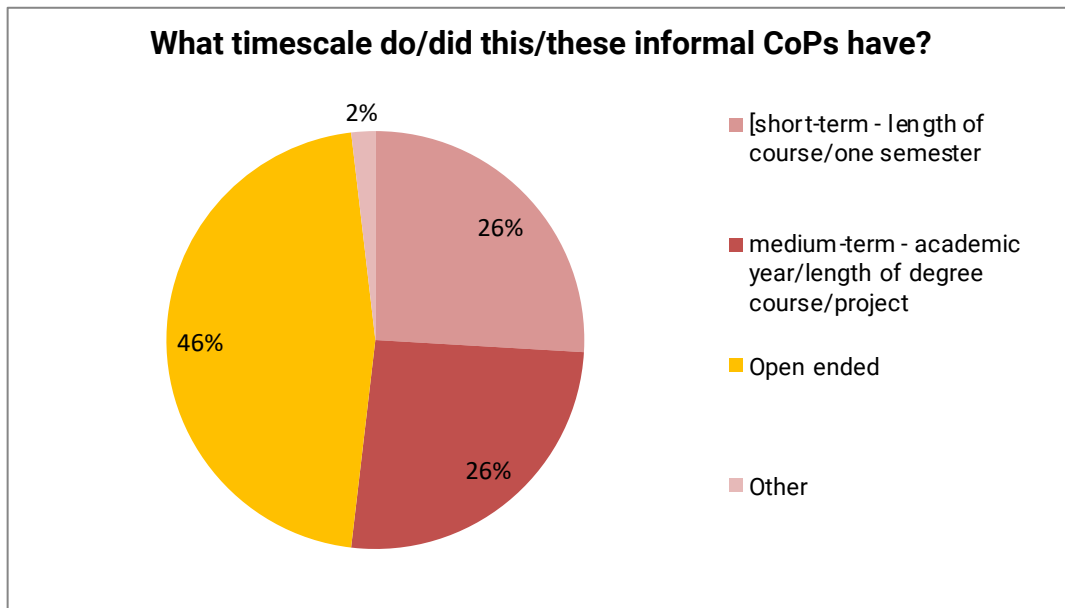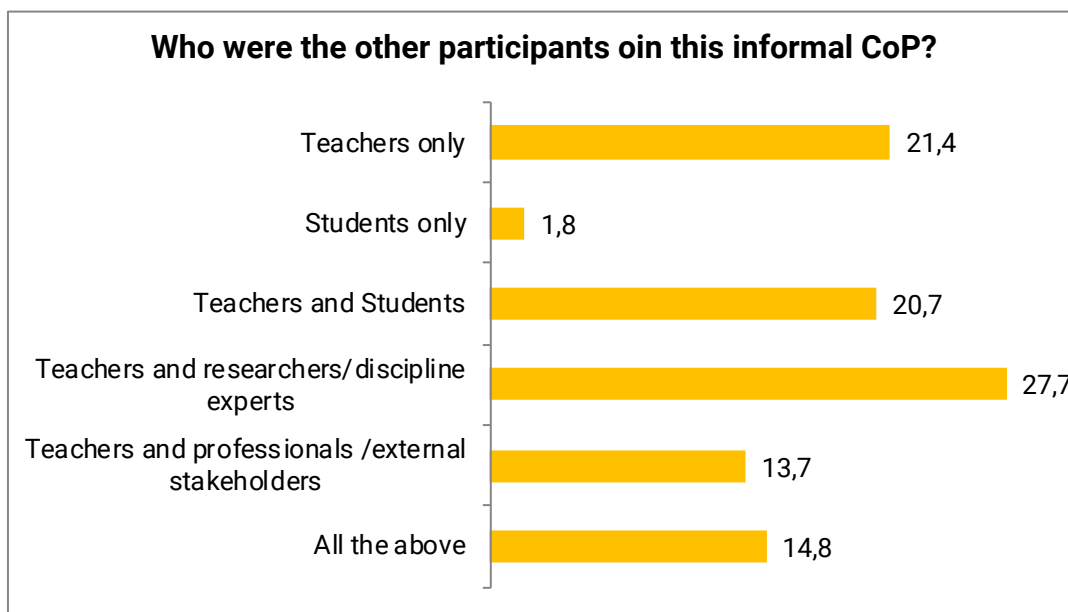
What timescale do/did this/these informal CoPs have?

Figure 12: What timescale do/did this/these informal CoP have?

Who were the other participants oin this informal CoP?

Figure 13: Who were the other participants in this formal CoP?

Observations

The perhaps unforeseen/unexpected element, yet again, is the consistent presence of students in the CoP which respondents to the Survey participate in.

Also of interest is the inclusion of experts, external stakeholders and professionals in the CoP.

3.3.4.3 Survey Section 3: The Kind of CoP I am Most Likely to Participate in.

In the following charts and tables are the responses to the series of questions on The Kind of CoP I am Most Likely to Participate in. The questions in this section aimed at understanding what kind of organisation, tools and features prospective users would like to find on the platform and would increase the likelihood of them participating actively or even initiating a CoP.

Differently from the previous section which was only completed by those who actively participate(d) in a CoP, the results in this section represent the sum of the responses of both populations (participants and non-participants in CoP). This is because during our analysis, we extrapolated the results from these two populations and compared them and found that there was no significant difference in the responses of the two populations. Two such comparative charts are provided at the end of this section.

Table 2: Types of Organisation/Administration you deem most functional

Select wich of the following types of Organisation/Administration you deem most funcional		
Degree Course	16	16.2%
Departmental	16	16.2%
Home Institution	14	14.1%
National Inter-HEIs	9	9.1%
Internacional HEIs	12	12.1%
National Scientific/Professional Bodies	4	4%
Internacional Scientific/Professional Bodies	8	8.1%
International Projects	10	10.1%
This criteriation is not important for me	9	9.1%
Other	1	1.05%
Tot.	99	100%
N/A	292	

Observations

No chart was generated for the data in this table as an error was made in setting the conditions when creating the Survey and only the second population, those unfamiliar with CoP, could visualise the options. This also explains a proportion of the low level of responses. However, it should also be noted that less than half of this second population selected preferences on this question, which might be an indication that as a criteria, the level of organisation is not a priority. The number of all respondents on most of the other questions was relatively high.

Even though the options were not visible, the question generated several answers in the comments box from Population 1, those familiar with CoP. These will be discussed later.
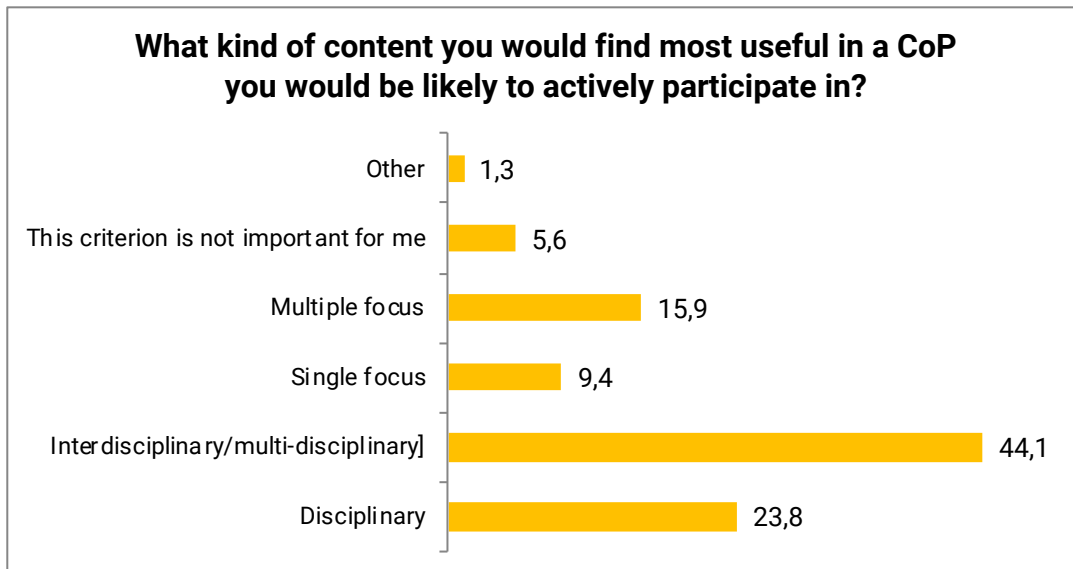
What kind of content you would find most useful in a CoP you would be likely to actively participate in?

Category	Value
Other	1,3
This criterion is not important for me	5,6
Multiple focus	15,9
Single focus	9,4
Interdisciplinary/multi-disciplinary]	44,1
Disciplinary	23,8

Figure 14: What kind of content would you find most useful in a CoP you would be likely to actively participate in?

Observations

It would be interesting to correlate the discipline area of respondents with their choice regarding Disciplinary vs Inter/multi-disciplinary. From the comments and from anecdotal evidence elsewhere, there are indications that the sciences tend towards the former and the humanities the latter. In any case, on a platform such as ColLab which aims to host multiple CoP, there is place for both.

Select which 3 purpose(s) you think are most useful for a CoP to pursue

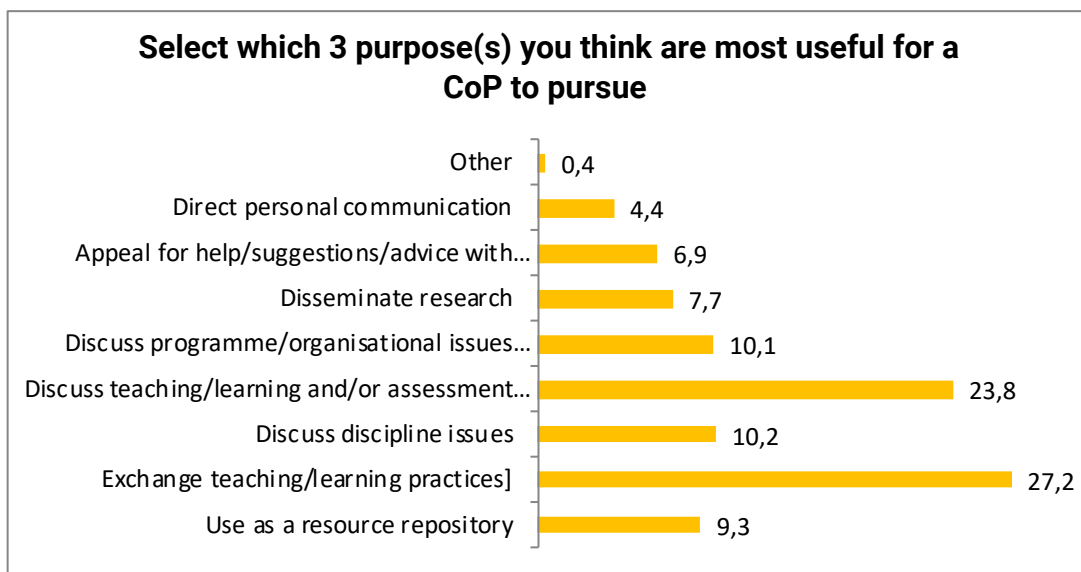| Category	Value
Other	0,4
Direct personal communication	4,4
Appeal for help/suggestions/advice with...	6,9
Disseminate research	7,7
Discuss programme/organisational issues...	10,1
Discuss teaching/learning and/or assessment...	23,8
Discuss discipline issues	10,2
Exchange teaching/learning practices]	27,2
Use as a resource repository	9,3

Figure 15: Which 3 purposes are most useful for a CoP to pursue?
- Use as a repository
- Exchange teaching/learning practices
- Discuss discipline issues
- Discuss teaching/learning and/or assessment issues and practices
- Discuss programme/organizational issues (e.g. on double degree programme)
- Disseminate research
- Appeal for help/suggestions/advice with research
- Direct personal communication
- Other

Observations

There is a clear preference for teaching and learning related activities, which might be equated to the interdisciplinary focus indicated in the previous question. Taken together the exchange of teaching/learning practices along with discussing issues and challenges regarding teaching, learning and assessment account for 51% of preferences.
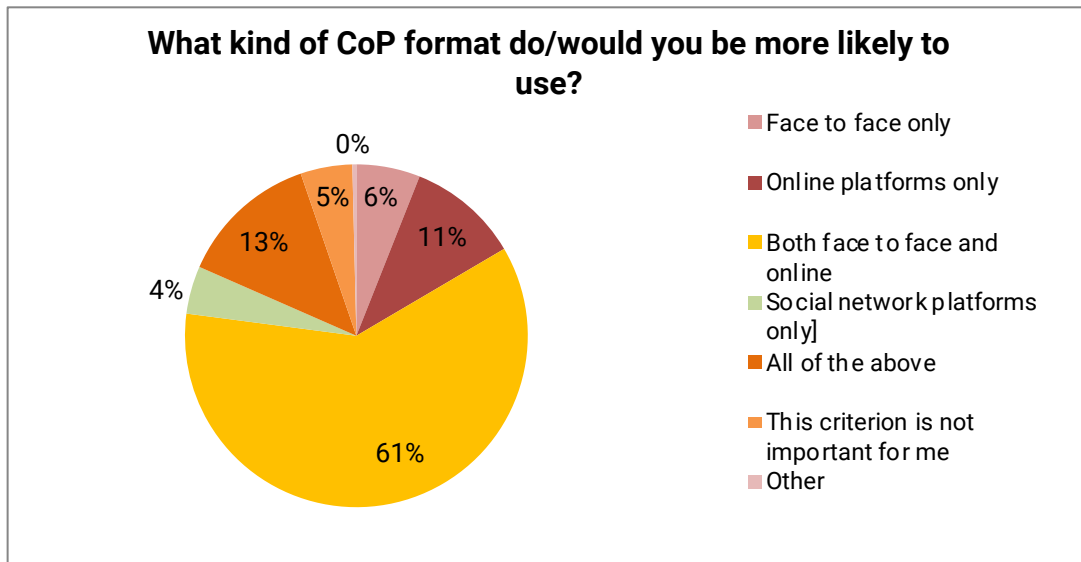
Figure 16: What kind of CoP Format.. do/would you be more likely to use?

Observations

Overwhelmingly, the most preferred format is a combination of face to face and online. It would appear that some form of direct contact is deemed an essential characteristic of an "attractive" CoP. After a prolonged period where we have all experienced online meetings, lessons and social occasions, it would be interesting to find whether this preference for a combination of physical and online meetings is still the same.
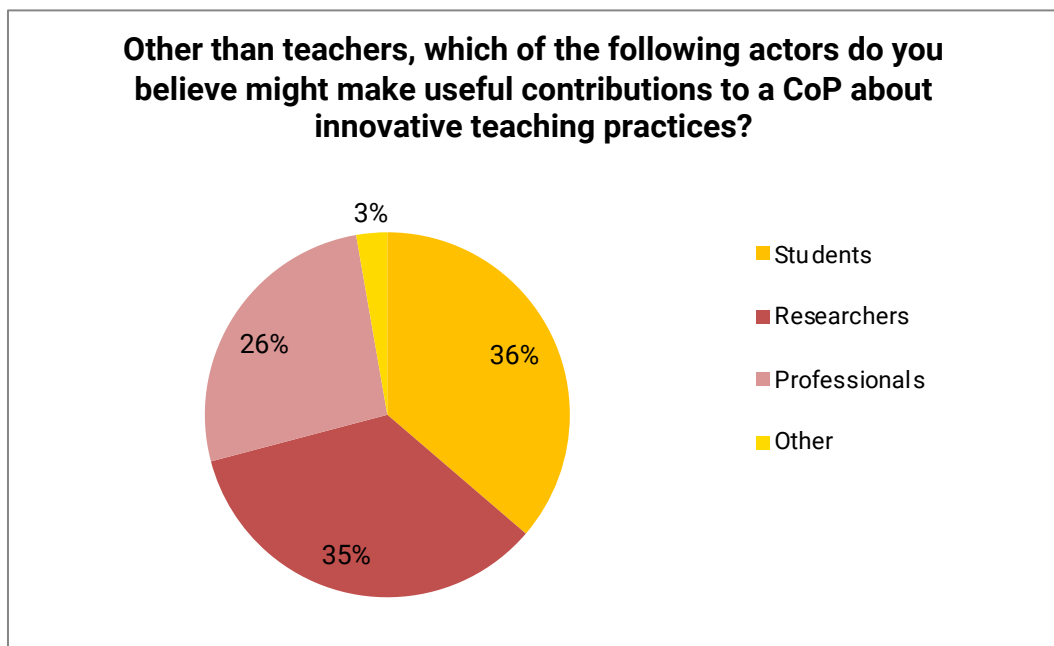

Figure 17: Which actors would make useful contributions to a CoP, other than teachers?

Observations

Given the general format of the question, it is unclear from the responses whether by researchers the respondents meant those engaged in pedagogical or discipline research. From the raw data it can be assumed,, though, that participation of other actors in CoP is thought to be useful as 474 options were selected (respondents could select more than one option)..
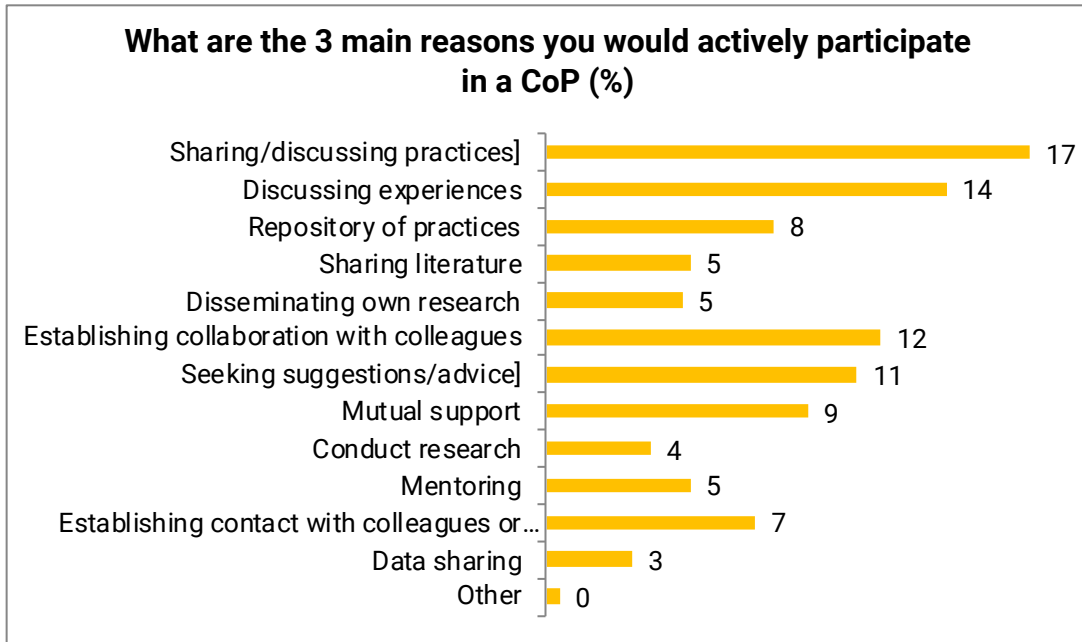
What are the 3 main reasons you would actively participate in a CoP (%)

Reason	%
Sharing/discussing practices]	17
Discussing experiences	14
Repository of practices	8
Sharing literature	5
Disseminating own research	5
Establishing collaboration with colleagues	12
Seeking suggestions/advice]	11
Mutual support	9
Conduct research	4
Mentoring	5
Establishing contact with colleagues or…	7
Data sharing	3
Other	0

Figure 18: What are the 3 main reasons you would actively participate in a CoP?

Observations

This question is the flip side of the question about a CoP's main purpose(s) above. It was deemed necessary when drafting the questionnaire to keep both questions as they concern different perspectives. This question regards more the social functions of a CoP and what is likely to bring members together to create the community and engender a feeling of community rather than the specific ends, which are illustrated in Figure 15. This question, more than any other, resulted in multiple answers.

What kinds of Outputs would you expect from a CoP? (%)

Output	%
Other	1
[Database of models	5
Research papers resulting from…	14
Database of teaching tools and strategies	27
Guidelines and handbooks to support…	23
Library/repository of practices…	17
Limited to a discussion forum…	12
None	2
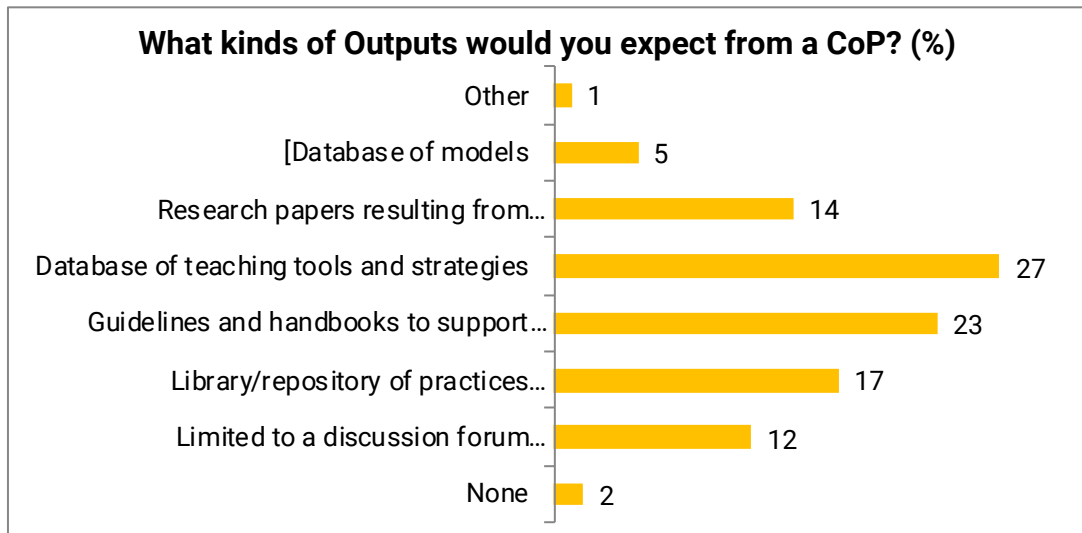
Figure 19: What kinds of outputs would you expect?
Options:
- None;
- Limited to a discussion forum exchanging/illustrating practices;
- Guidelines and handbooks to support teaching and learning;
- Database of teaching tools and strategies;
- Research papers resulting from collaboration among members of the CoP;
- Database of models;
- Other.

Observations

It is clear that the majority of respondents see a CoP as not being a mere forum for discussion but also as providing more concrete support in the form of tools, materials, guidelines and a repository of practices to draw on.
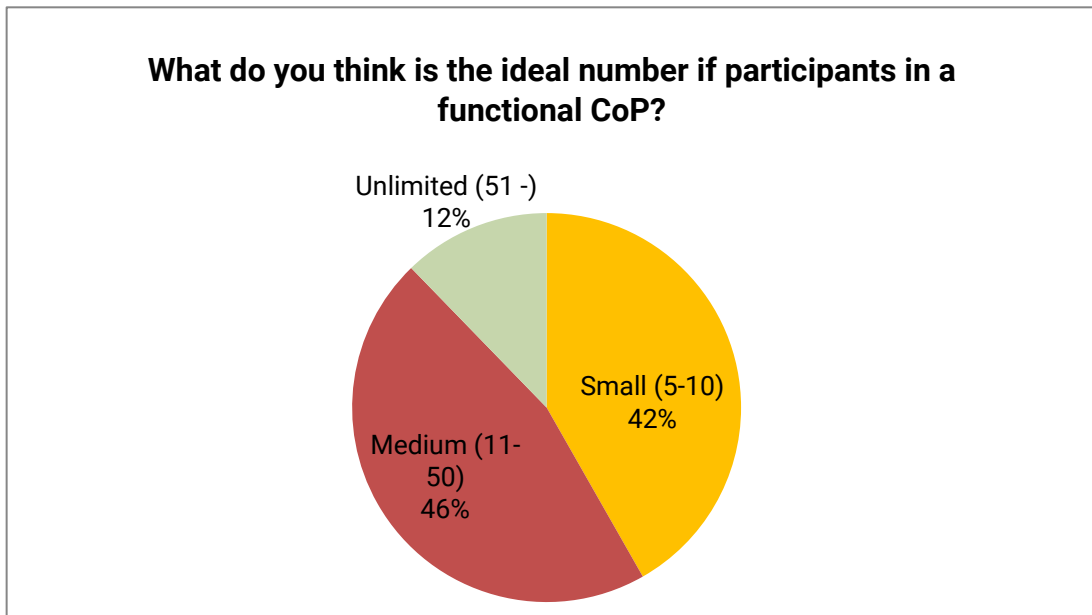
24

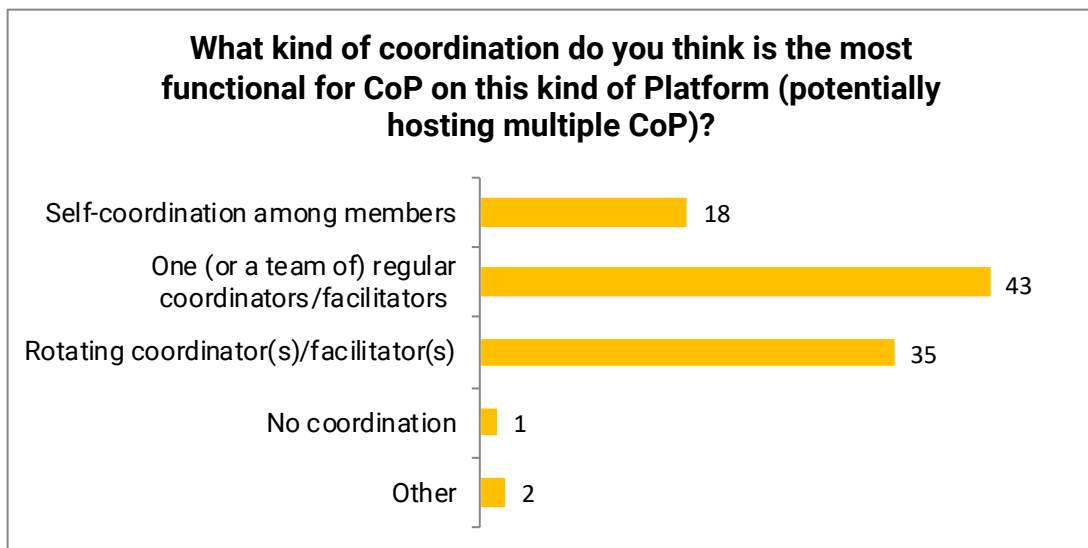Figure 20: What is the ideal number of participants?

Figure 21: What kind of coordination is the most functional?

Observations

Some form of structural/organised coordination is evidently deemed necessary, whether as a permanent team, or, as with the EU itself, with rotating **coordinators/facilitators**.
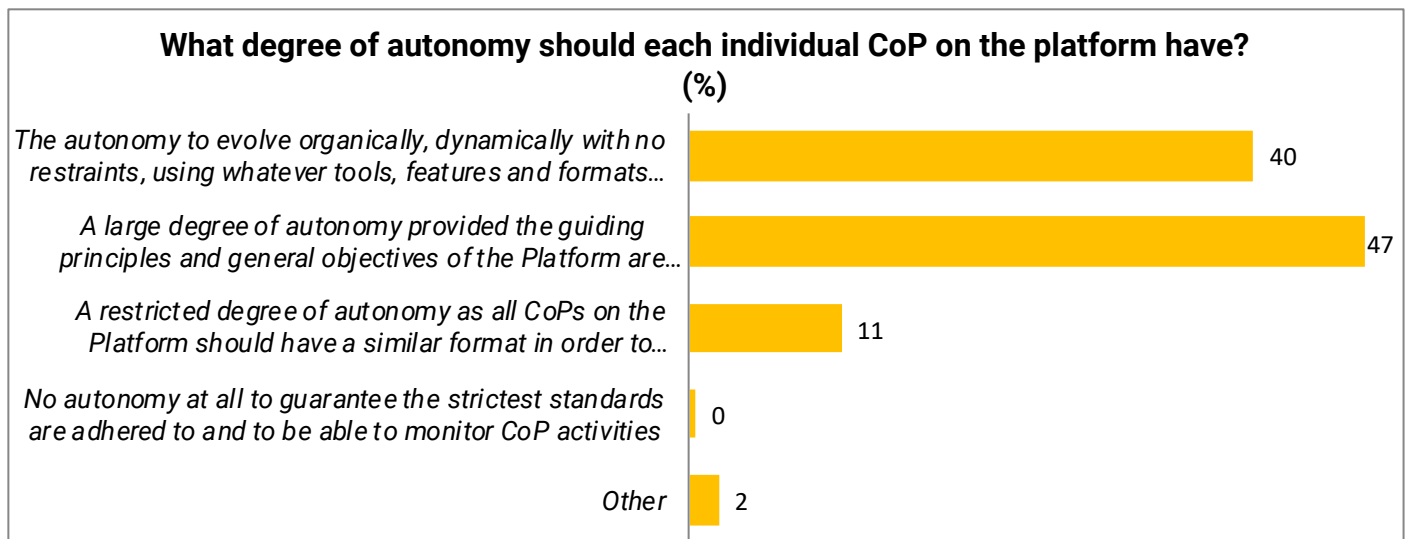
What degree of autonomy should each individual CoP on the platform have? (%)

Option	Value
The autonomy to evolve organically, dynamically with no restraints, using whatever tools, features and formats…	40
A large degree of autonomy provided the guiding principles and general objectives of the Platform are…	47
A restricted degree of autonomy as all CoPs on the Platform should have a similar format in order to…	11
No autonomy at all to guarantee the strictest standards are adhered to and to be able to monitor CoP activities	0
Other	2

Figure 22: What degree of autonomy should a CoP have?

Options:
- The autonomy to evolve organically, dynamically with no restraints, using whatever tools, features and formats members choose in this development;
- A large degree of autonomy provided the guiding principles and general objectives of the Platform are adhered to;
- A restricted degree of autonomy as all CoP on the Platform should have a similar format in order to facilitate monitoring the achievement of the objectives and aims of the Platform;
- No autonomy at all to guarantee the strictest standards are adhered to and to be able to monitor CoP activities; Other.

Observations

It is clear that most respondents feel that the platform should take a back seat and let each CoP have total or a large degree of self-determination.

What 3 features and tools would you find the most useful on a Platform hosting potentially multiple CoP? (%)

Feature	Value
Asynchronous Discussion Forums	10
Blog	3
Q&A	5
Top teaching/learning tips (including using…)	14
Resource repository	11
News	1
Events announcements/notifications	3
Showcase of good practices	15
Peer feedback on practices	10
Student feedback on practices	10
Tools for creating co-teaching initiatives	10
Jointly created bibliography/bibliographical resources	3
Data-sharing tools	3
Other	1

Figure 23: What 3 tools or features would be most useful?

Options:
[…] Top teaching/learning tips (including using technology);
[…] Jointly created bibliography/bibliographical resources; […].

Observations

The responses here indicate that a platform hosting a series of CoP should offer multiple tools and features in order to satisfy a wide range of expectations.
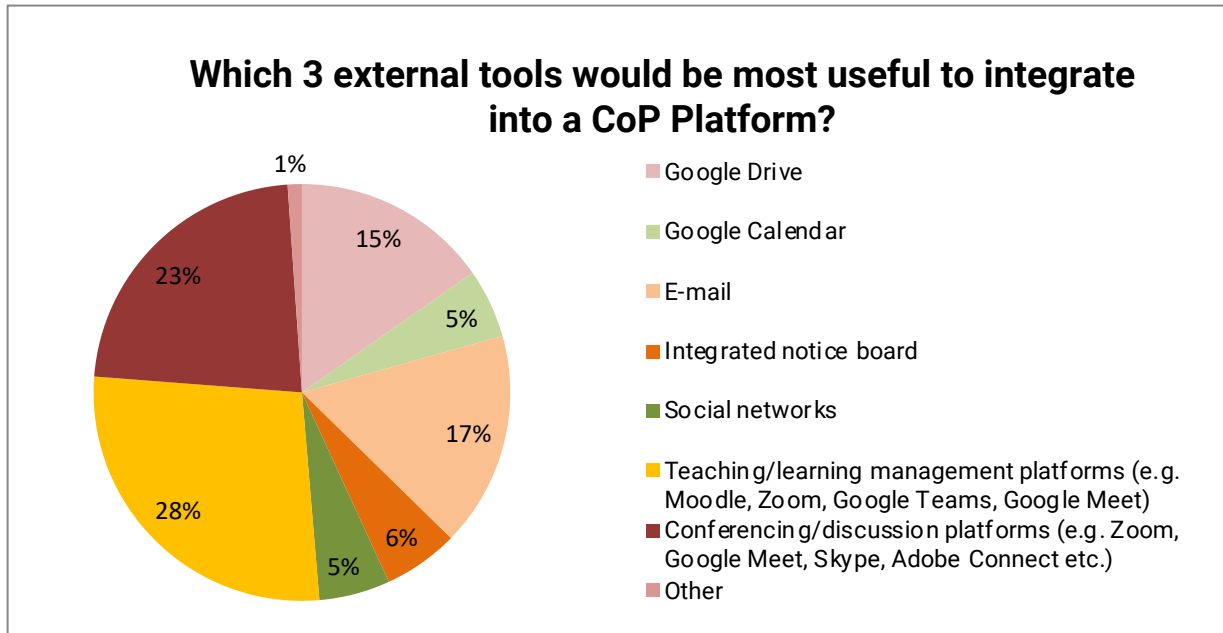

Figure 24: Which 3 external tools would be most useful to incorporate?

Observations

Perhaps the context of the pandemic had an impact on the responses here, given that all academics were required to use both learning management platforms and conferencing platforms in the second semester these are seen as the most useful external tools, with email and Google Drive following. All tools most academics are all called upon to use as part of their day-to-day work.
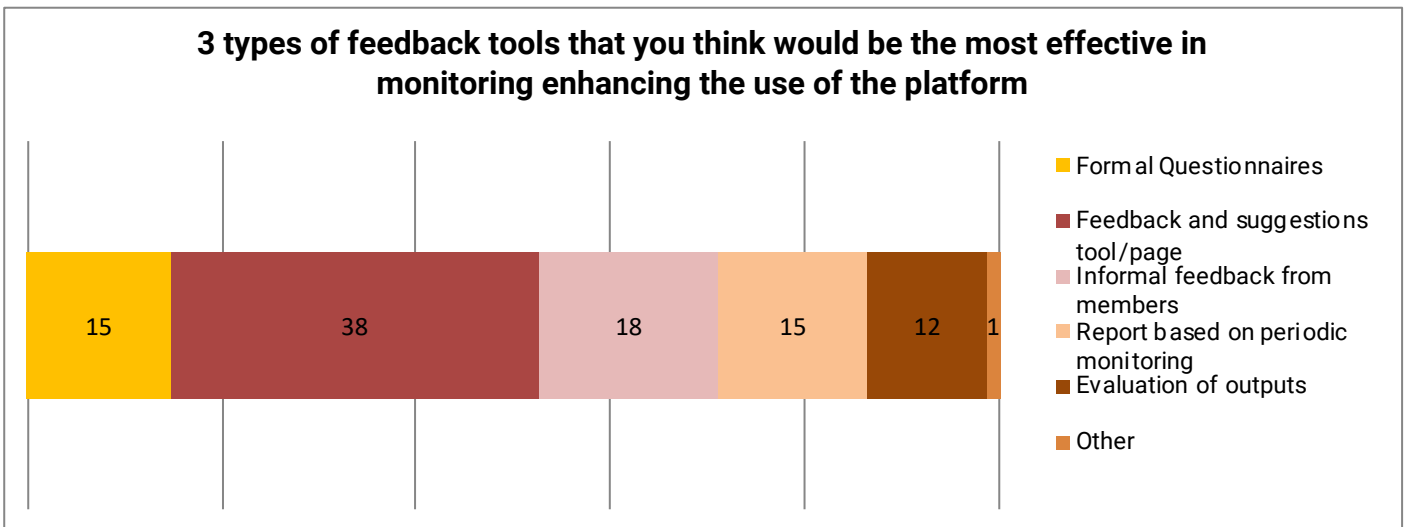
Figure 25: what 3 types of feedback tools do you think would be most effective in monitoring and enhancing the use of the platform.

Observations

The number of multiple responses to this question would seem to indicate that feedback is important. This suggests that respondents see a CoP as something which should evolve and improve over time.

3.3.4.4 Post Script to Section/Methodological note:

The two comparative tables below, chosen randomly from all the questions, provide the responses of the two populations, those familiar and those unfamiliar with CoP, along with the total responses. They clearly illustrate how there is statistically no difference between the responses of each population. As already mentioned above, this is why the charts presented in this report are an aggregate of the two populations' responses. While perhaps not strictly scientific, they answer the main purpose of the survey, namely to provide input to the design team. They also make for easier reading than the charts below.

3 purpose(s) you think are mos useful for a CoP to pursue
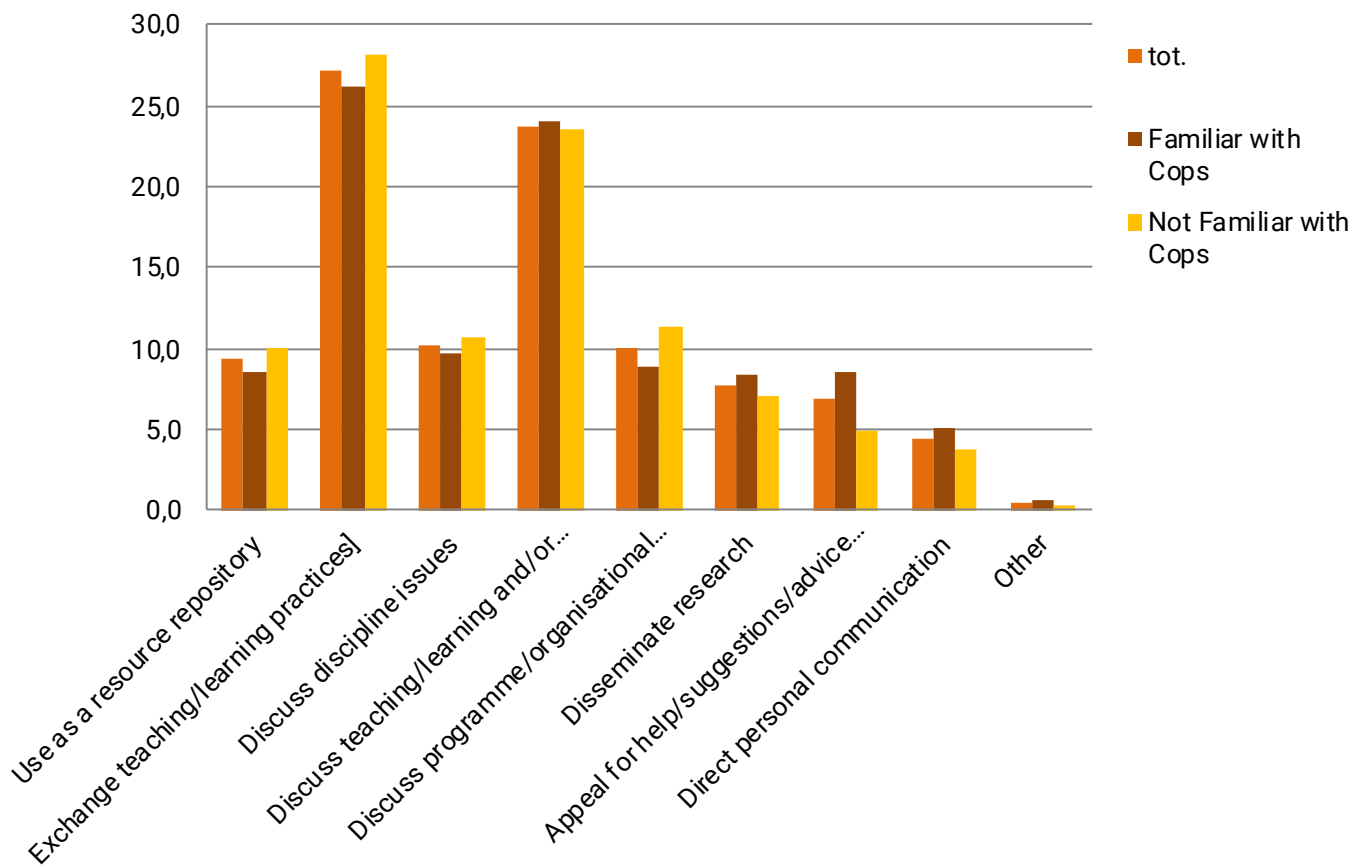
Figure 26: Comparative chart of 3 most useful purposes of a CoP

What kinds of Outputs would you expect from a CoP (%)
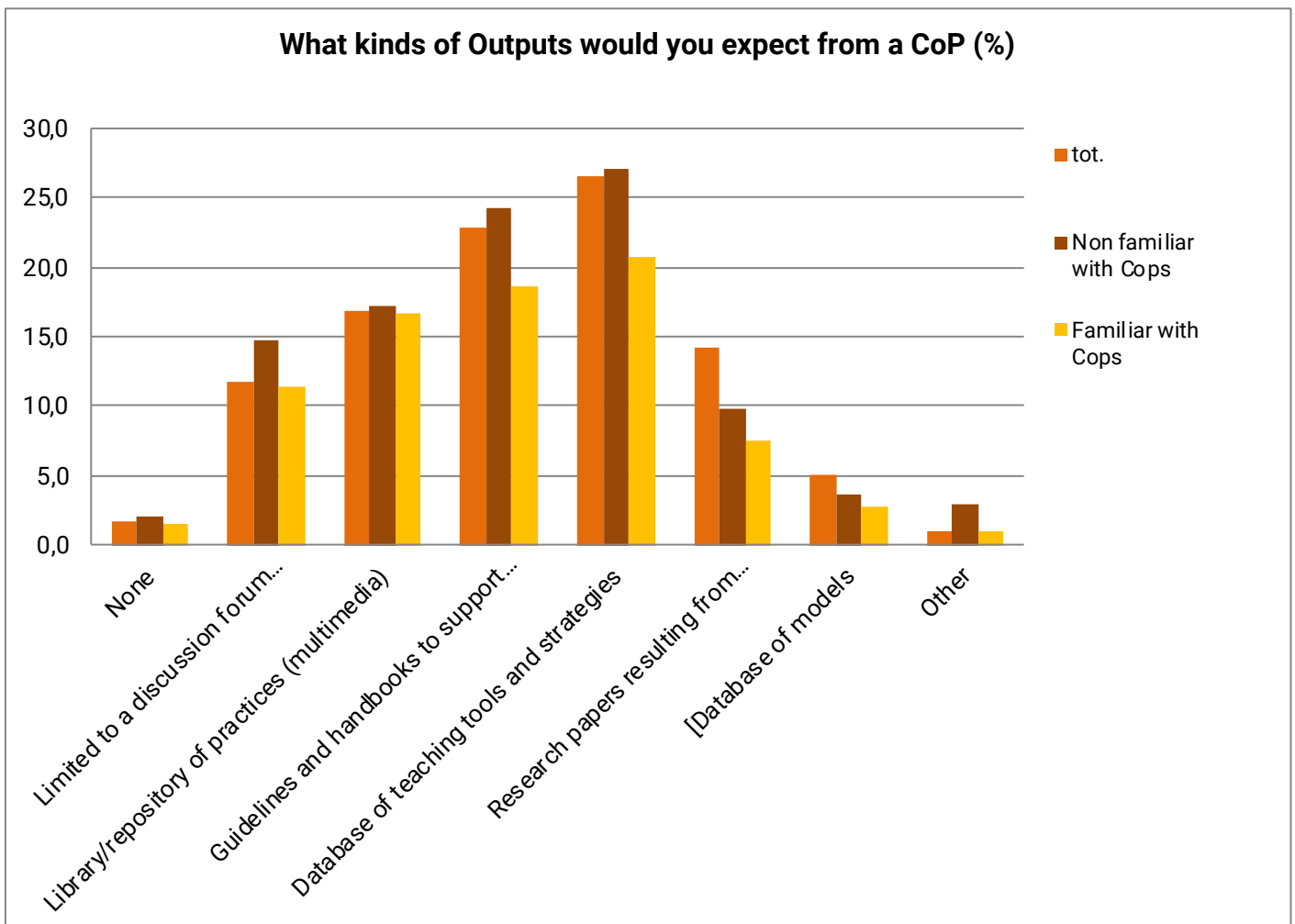
Figure 27: What kinds of output would you expect from a CoP?

3.3.4.5 Survey – Qualitative Responses

While Intellectual Output 1 is primarily quantitative, each question included a comment box for respondents to provide, should they so wish, their reasons, insights and thoughts on each item. These comments, which also inform many of the observations above, provide further input for IO3 to take into consideration when designing the platform.

It should perhaps be noted that as the survey was relatively long, respondents were probably already sensitive to, and/or believed in the importance of, and/or feel a need for teacher development. This might explain both the relatively high volume of comments, in some cases over a hundred for a single question, and their general positive, encouraging nature. Here follow some samples from the comments provided.

While the vast majority of the remarks were positive, there were some which were more doubtful or set down conditions, and a very few were negative:

*I do not intend to take part in any CoP until the participation is **formalized as "working time"** by my institution, and all the hours devoted to it (including preparation hours, when/if needed) accurately calculated.*

*It has to be built upon **empathy** between the members. Not a ""have to"" job."*

*I do not think it will work if this is one more platform **in line with all the other platforms**, systems, networks we work with. We are already tired of that. This will only work if it is integrated in to the systems and platforms we already have and use. **Life is too short** to remember one more password, link or whatever.*

*Like other projects it grows and survives as long as it is useful to the **members who support it**.*

Others gave constructive advice on the pitfalls to avoid and challenges to meet:

*It has to be built upon **empathy** between the members. Not a ""have to"" job."*

*I do not think it will work if this is one more platform **in line with all the other platforms**, systems, networks we work with. We are already tired of that. This will only work if it is integrated in to the systems and platforms we already have and use. **Life is too shor**t to remember one more password, link or whatever.*
*Like other projects it grows and survives as long as it is useful to the members **who support it**.*

*I do not intend to take part in any CoP until the participation is formalized as **"working time"** by my institution, and all the hours devoted to it (including preparation hours, when/if needed) accurately calculated.*

*It also requires a **degree of privacy**, so that you can say things to the point. At the same as keeping it civilised and constructive*

*To participate in a CoP and on a specific platform requires it to be low-threshold, well-known technology, **keep it simple**. Better to have a well-known platform with a few reliable functions than many advanced apps and modules, that only work, when they work, and if you happen to have the latest (correct) browser/operating system/App.*

Puts a boundary on the content addressed so you know what you are [are] going to find and do not waste time disregarding items that really do not interest….

Whatever is set up must be really straightforward to use and not time consuming.

*I would be a very active member of any CoP that can offer me **clear and tangible benefits**.*

Yet others identified what these benefits might be if they were to participate actively in a CoP and/or the role CoP can play in their development:

*…a **low threshold** way in is to be able to read a discussion **forum, notice board, Q&A**, what other people have written.*

*Become inspired, **get ideas** and then the opportunity to actually **get in touch with the author** and ask for more information. Then one may always set up more concrete projects and applications, if time permits.*

A CoP that would deal with blending, making the best use of time and efforts; finding the best strategies to use flipped lecture/peer interaction strategies.

In academia the thin line between teaching and research is often a hard wall. Teaching is too often seen as an unfortunate incident. The challenge is to smooth this divide and CoP could play a role towards this.

3.3.4.6 Survey – Recurring Themes in Comments

In addition to selecting some illustrative examples, given the volume of comments provided (9739 words), a word frequency list was created using the concordancing programme AntConc on the corpus of comments. This enabled us to identify the most frequent semantic fields, or recurring themes, in th e responses and thus have a more detailed idea of the issues, concerns and wishes of the respondents.

In a normal frequency list the first 50 words are usually function words (e.g. the COCA word frequency list[6]). And even though the comments analysed are not long prose texts and sometimes written telegraphically, the presence of so many content words in the list made this exercise particularly interesting. Teaching ranked 9 with 123 instances or tokens, followed by CoP at 16 (83 tokens), learning at 20 (69 tokens) and sharing at 25 (57 tokens). Perhaps unsurprising, given the focus of the survey. The more qualitative data confirm the results illustrated in Figure 15 above that the preferred main purposes of a CoP is to discuss or exchange ideas about teaching and learning (more than 51% combined). Other words in the top 50 were practices, ideas, informal, experiences, exchange, knowledge, colleagues.

Frequency word lists do not distinguish between the different forms of a single lemma, for this reason, after creating the word list, the concordancing tool was used to extract more qualitative data for each word family (e.g. teach, teacher, teaching, taught) and more importantly its context of use, not least the most common collocations used with each[7]. As an example, Figure 28 below shows an extract from the concordance of the word family teach* (162 tokens) illustrating some of the most common right-hand collocates (those following the word). These are methods and practice(s). Other common right-hand collocates are experience, skills, strategies, tools, techniques etc. Running a concordance for left-hand collocates with all forms of the lemma teach gives improve and innovate as the most common in the corpus. While none of this may be surprising, it provides further evidence of the respondents' perceptions and potential interest in the desired contents of, purposes and reasons for participating in CoP.
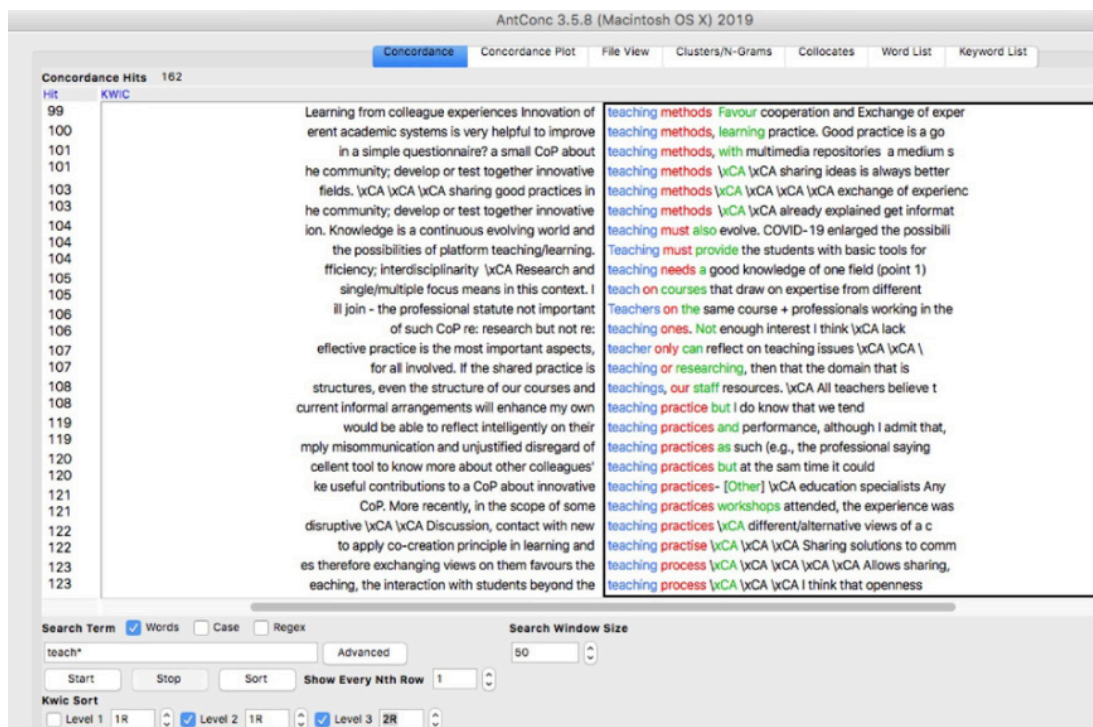

Figure 28: Extract from the concordance of the word forms from the lemma teach

Combining results from the frequency list and concordancing tool several semantic families indicating areas of particular interest to the participants can be identified. The largest in terms of frequency, again unsurprisingly, is the idea of a "CoP as a Forum". We can group together semantically related verbs with their object nouns (collocates). This group of verbs comprises *share (99), exchange (44), learn from (23), discuss (19), get(13), compare(4), gather, obtain collocating with the nouns experiences (81), practices (79), ideas (49), knowledge (39), problems (19), points of view (17), information (15), feedback (12), perspective (9), resources (9), expertise (7), solutions (7), opinions (4), difficulties (4), competence (3), advice (2).*

Figure 29: Extract from the concordance of the word forms from the lemma *share*

Another semantic field which emphasises the social, interactive aspects of a CoP, related to that of Forum, is that of "Community", collegiality. We find the verbs *collaborate (12), cooperate (12), support (10), communicate (7), contact (6), interact (4), contribute (2) in addition to co-create and co-construct. The most frequent nouns and adjectives falling into this semantic field are: colleague (36), network (16), interaction (12), common (8), communication (6), contact (5).*

In the following examples, the lemma is given in each case as the root word form to represent a family of words unless only one form of the word is found.

Regarding the perceived purpose of a CoP the predominating theme is that of "improvement". In fact we find *improve (42), innovate (16), enhance (15), develop (8), quality (7), enrich (5). The CoP provides an opportunity (15) or possibility (3) to do this.*
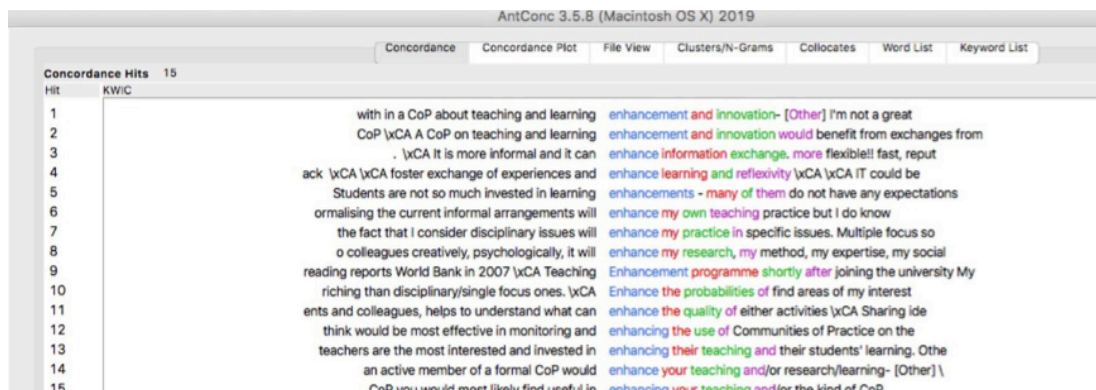
Figure 30: Extract from the concordance of the word forms from the lemma enhance

A related grouping might be the ways in which a CoP can "promote" this improvement: *promote (14), inspire (14), reflect (11), motivate (6), stimulate (5), potential (3), facilitate (1), foster (1). It does this by bringing together a group of people who are the same (11), similar (3), display homogeneity (2), are like-minded (2), alike (1), and get along with (1) each other.*

Other than other teachers, the Community should count among its members *professionals (25), stakeholders (5), and people from companies (2, in addition to educational/didactic specialists(5).*

Figure 30: Extract from the concordance of the word forms from the lemma enhance

When discussing the desired characteristics of a CoP, the most frequent adjectives are *useful (28)*, *specific (22)*, *effective (10)*, *clear (7)*, *stimulating (5)*, *flexible (4)*, *practical (4)*, *easy to use (4)*, *simple (3)*, *up-to-date (3)*, *fast (2) quick (2)*, *user-friendly (1)*, *rapid (1)*, *quick (1)*, *[few] reliable [functions] (1)*.

Another semantic field to emerge is that of "openness" with word families from *open* (10)*, *free (6)*, *access (4)*, *trust (3)*, *place (3)*, *safe (2)*, *honest (2)*, *low-threshold (2)*, *transparency (1)* and *privacy (1)*. We also find the flip side of this concept of openness illustrates we find *fear (2)*, *afraid (1)*, and *judge(ment) (1)*.

Other frequent concepts with relatively high frequency counts are *online (10)* and *face to face (8)*, *focus (42)* and *specific (22)*, *dissemination (8)* and *spread (2)*, *mandatory versus voluntary*. Two interesting if not highly frequent concepts were that of intergenerational exchange, with senior faculty mentioning the benefit of new ideas from *younger (2)* members.

Figure 31: Extract from the concordance of the word forms from the lemma specific

One word which had a high frequency count is *time (51)*.

One final observation regarding the analysis of key terms, in the comments informal *CoP* were mentioned almost twice as many times as f*ormal CoP*, 44 versus 23 respectively, and where formal is mentioned, the context frequently suggests either the lack of formal structures, no awareness of their existence or preference for more informal channels.

In providing an online platform for the creation of CoP, generated from the bottom up by its members, a user-friendly yet structured platform with easy to use tools, in times of Covid-19, ColLab could not be a more timely and welcome initiative.

3.3.4.7 Survey –The Outcomes

The Outcomes of the Survey can be summarised as:

- confirming the findings of the literature in the Literature Review;
- providing insights into how the end-user envisages using the platform (see Qualitative responses above);
- illustrating that there is little difference in the desiderata of those familiar or unfamiliar with CoP, differences depend on the kind of CoP envisaged (e.g. formal/informal, disciplinary/interdisciplinary etc.);
- engendering recurring themes, interests, concerns in both groups of respondents;
- providing the Design team with specific input on which to base their choices while creating the platform.

4. Reflection and Final Recommendations

From the Literature Review and both the quantitative and qualitative data from the Survey, certain characteristics and features can be identified as being fundamental to the success and longevity of a Community of Practice.

First and foremost, the idea that a CoP, as its name implies is a community, a social entity, a place for people to meet and interact. Therefore any platform hosting such communities should facilitate communication, cooperation and collaboration. Sharing, interacting and exchange are cited as the most important purposes, which implies the possibility to meet, which, as we have learnt under lockdown, does not necessarily mean face-to-face. Though the f2f brown-bag lunch approach is greatly favoured by some.

The platform should also be easy to access, user-friendly and easy to navigate. Speedy up- and downloading files, quickly locating what the user is looking for, simple, familiar tools are all recommended.

Administration and coordination, while not the focus of much discussion, are nonetheless seen as essential to the functionality of a CoP. This implies the platform has to allow for multi-level access: from visitors, to active participants, to facilitators, to administrators. Ease of use/navigation at all these levels is essential.

At the same time, from both kinds of data we can also understand that respondents see a CoP as dynamic, evolving over time. So while functionality of the platform is a priority, a functionality which provides space for a CoP to develop, the platform should take a back seat and let each CoP have total or a large degree of self-determination to allow for this "natural evolution". It should be noted, however, that this places considerable responsibility on the CoP **coordinators/ facilitators.**

While the Platform needs to have its own inbuilt growth mechanism, allowing it to evolve alongside the CoPs, this growth needs monitoring, if not supervision if high standards, and ultimately success are to be maintained. To this end feedback from CoP **coordinators/facilitators**, CoP participants, and even casual users is essential to understand when and why things do and do not work well. This has to be coupled with at least some oversight of coordinators/facilitators within the CoPs and the more general oversight of administrators. Such tools need to be easy to access and transparent.

5. Beyond Creating the Platform

Many of the respondents have an awareness of the difficulties that the project faces. Even once the platform is created, the challenge is by no means over.

Not least, as illustrated quite clearly in the survey, awareness raising, publicising, engaging, disseminating the project's very existence is a major challenge. Over half those surveyed were unfamiliar with the concept of CoP and were unaware they existed. And even among those who are familiar with CoP, getting the word out about the ColLab Platform, getting people onto the platform who want to create a CoP (beyond the members of the project itself), and engaging them immediately, will in part determine the project's success. As stated by one of the respondents:

> *Cop would only work if there is a genuine initial interest. The **challenge would be to instate this interest in people.***

As observed in the literature review, once a CoP has been created and has (active) members, the role of one, or more, enthusiastic facilitator(s) is fundamental to keep it alive and kicking. In the case of ColLab, once a prospective member has registered on the platform, the challenge is not over, he/she must be convinced that time dedicated to the CoP is well spent. And, depending on willingness and experience, may be interested in becoming a facilitator. To this end, ideally, the platform should provide some form of training, in the form of videos, brief guidelines, pathway to follow or inter-generational exchange for the formation of facilitators, both on using the platform and running a CoP.

The platform will not run itself, however sophisticated the tools and software may be. So alongside the facilitators, the driving engines of the CoP, the Platform will also need administrators and overseers to ensure the platform maintains both its functionality and efficacy. These are essential if the main characteristics of a healthy CoP are to be nurtured, not least its capacity to foster exchange, enhance teaching and learning, and evolve over time. .

6. References

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7. Annexes

Annex 1
Intellectual Output 1: Literature Review

The main purpose of this review is to inform the choices our expert technical team will make in the creation of the online ColLab platform. To that end, we need to have both an understanding of the theoretical underpinnings of Communities of Practice (CoP) and gain insight into the different types of communities of practice in existence, most importantly those which are most functional and respond to the needs and desires of the Higher Education (HE) academic community. Given the pragmatic aim of this Review, namely, to inform the Platform Design, it in no way is intended as an exhaustive or detailed overview, but rather a starting point for our discussions.

Contents:

1. What is a Community of Practice: concepts and theoretical underpinnings?

2. What kinds of Communities of Practice exist?

3. How is the Concept of Community of Practice Applied in the Field?

4. What Works and Does not Work?

5. Method

6. References

1. What are Communities of Practice?

Generally speaking, a **Community of Practice** (CoP) is a practice-oriented community of people who want to learn from each other through **interaction**. This learning is the collective sharing and creation of knowledge, as the community evolves and develops through continued interaction between the members of the community over time. What links the members is the common interest in a topic, project, or challenge. The practice originates in the business world, where synergy and shared knowledge can lead to greater efficiency giving projects, products and practices the cutting edge. Brown and Duguid (J. S. Brown and Duguid 2000) suggest that in a CoP one shares know-how (practices) in a rapidly changing and complicated environment to improve the operational efficiency of the organization. Indeed, CoP soon spread to contexts such as public administration and services, in particular the health service where both shared knowledge and learning are fundamental for advancement.

The term Community of Practice was **coined by Jean Lave and Etienne Wenger** (Lave and Wenger 1991). In this paper, they evidence how this new knowledge is created through participation in a CoP. Following on from Bandura's earlier idea (Bandura 1977) that communities can provide a foundation for sharing knowledge, and that individuals in the community can learn by observing and modelling themselves on others (Bandura 1977) in (Alkaher and Avissar 2018, p.2), Lave and Wenger (Lave and Wenger 1991) place learning in the context of **social relationships**. They see a CoP as "a system of relationships between people, activities, and the world, developing with time, and in relation to other tangential and overlapping communities of practice" (Lave and Wenger 1991). In a later paper, Wenger defines this social learning as 'an interplay between social competence and personal experience' (E. Wenger 1998). Bolylan (Boylan 2010), among others (McLoughlin et al. 2018; Tseng and Kuo 2014), has looked at the positive role of CoPs in social learning and knowledge networks and how they drive innovative thinking (Stone et al. 2017) and assist in professional development (P. Brown 2015; Khalid and Strange 2016) in both educational (deChambeau 2017) and industrial settings (Hafeez et al. 2019; Huang and Perng 2017; Pattinson and Preece 2014).

The concept of CoP evolved to include three principle components: (i) mutual engagement, representing the members' passion and interest in the CoP's survival and continuity (common purpose); (ii) joint enterprise, referring to the unified goal towards which the practice of the community strives (entwined participation), and (iii) shared repertoire, involving the explicit and implicit norms, values, roles, routines and artefacts that guide the way in which members interact within the CoP (E. Wenger 1998). In a paper entitles Cultivating Communities of Practice: A Guide to Managing Knowledge, (E. Wenger, McDermott, and M.

Snyder 2002) revised these concepts and renamed them as domain, community, and practice, concepts later adopted by many others including (Alkaher and Avissar 2018). The **domain** creates the common ground and defines the boundaries that enable members to decide what is worth sharing and how to present their ideas. The community creates the social structure that facilitates learning through interactions and relationships with others. The **practice** is a set of shared repertoires of resources, e.g. documents, ideas, experiences, information, and ways of addressing problems; it is the specific knowledge the community shares, develops, and maintains (Alkaher and Avissar 2018; Li et al. 2009).

A CoP, then, fosters an interactive learning process within a learning community setting and facilitates sharing and exchanging members' perceptions, experiences, and knowledge (E. Wenger 1998). Focusing on the institutional level, Wenger, McDermott and Snyder (E. Wenger, McDermott, and M. Snyder 2002) define CoP as "groups of people who share a concern, a set of problems or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis". According to this definition, despite being organic and self-directed, CoP can be used in organizations as a management tool to improve combined capacity to develop and share new knowledge (E. Wenger, McDermott, and M. Snyder 2002).

The idea of CoP as a **supportive network** is proposed by among others Ruikar, Koskela and Sextonn (Ruikar, Koskela, and Sextonn 2009). Indeed, a CoP can provide task in hand benefits (shared workload), social benefits (support from like-minded individuals), and career benefits (development of confidence and expertise).

A CoP is started by a core group, grows organically and the structures adapt to the needs of the CoP, which Snyder and Wenger (Snyder and Wenger 2004) refer to as the Design of Evolution. For Clarke (Clarke 2009), the CoP framework, sees the community as "a living curriculum for the apprentice" or novice learner, giving them the opportunity to participate, observe and imitate more competent members of the community (Alkaher and Avissar 2018). CoPs allow for Legitimate Peripheral Participation (LPP) (Lave and Wenger 1991), that is the entry and gradual progress of newcomers in a community by means of observing, mimicking and learning from more experienced others, through a desired degree of participation (Eggleton et al. 2019). With LPP, newcomers go through a journey of enculturation and gradually move toward greater levels of knowledge and competency (Boylan 2010). Nonetheless, this does not necessarily preclude more experienced members learning from these relative novices, CoP can be home to intergenerational exchange and support (Levine and Marcus 2010).

CoP appear to demonstrate both continuity and change over time. They reproduce themselves through the gradual introduction and assimilation of newcomers, and they also evolve as new members join, negotiate different meanings, and learn from each other.

In sum, a CoP is a group of people who share a concern or a passion for something they do and want to learn how to do it better and they do this as they interact regularly (Allee 2000; Lave 1988; E. Wenger 1998; 2011). "They are a peer-based model of learning with colleagues, which works well for professionals such as faculty [...] A CoP draws on the natural motivation of individuals that share a common practice and connect in a similar domain, a new pedagogical approach" (Kezar and Gehrke 2017, p.57).

The same concepts are transferable to the context of HE. McCarver (McCarver 2003) defines the university-based learning community as an entity that has a specific goal regarding creating new knowledge, promoting individual- and group-level growth, and academic learning. (Miller 2000), instead, represents the HE learning community as a bar where members meet and learn through social relationships. According to Oh (Oh 2005), also highlights the more social characteristic of CoP, which pursue the goal of learning based on intimate relationships. Lee and Kang (Lee and Kang 2005) emphasise member interaction and commonality of goals. For them, the HE learning community is a group that creates and shares relevant knowledge to solve common problems through member interaction. For Kim et al. (Ji Hyun Kim et al. 2018), a CoP in HE also promotes the exchange of knowledge among colleagues. However, given the nature of academic research and career progress in academia, they point out that CoP can also bring out the competitiveness of individuals and organizations.

It might be said that in the context of education, and more specifically regarding CoPs for Faculty Development (rather than research), the learning within these communities of practice is about learning (and teaching) itself. In order to promote this development, Baxter Magolda (Baxter Magolda 2007) outlines the importance of the involvement of educational leaders to provide the right environment for the free-flow of ideas. For her, CoPs are "about building community through meaningful conversations about teaching and learning. From the outset, it unites excellent teachers and educational leaders who share similar passions and creates a strong bond through the central mechanism of a retreat, which can be understood as a developmental learning opportunity that enables the formation of new ideas and inspires confidence in fellows' abilities through free-flowing conversation and dialogue." ((Baxter Magolda 2007) in (Acai et al. 2018, p.64)).

Beyond individual institutions, the literature also points to the benefit of cross-institutional boundaries, with Whitchurch (Whitchurch 2008) in (Coombs et al. 2017) describes a concept of bounded, cross-boundary, and unbounded professionals to explore the concept of a "third space." She argues that through working collaboratively on projects, professional services and academic staff in higher education can create a third space, which is neither purely academic nor purely administrative/managerial. Members "see the building of communicative relationships and networks as more significant than the observance of organisational boundaries, so much so that third space work may occur in spite of, rather than because of, formal structures" (Whitchurch 2008, p. 386) in (Coombs et al. 2017, p.5).

2. What kinds of communities of practice exist?

There are various ways of classifying CoP, depending on the context of use and purpose. Thus, we might choose to classify a CoP according to its membership (within an organisation/institution or cross-organisation/institution, departmental, discipline/cross-discipline), according to its purpose (specific project/course or more general development), according to geographic location (local, national, international etc), mode of meeting (online/virtual, face to face, hybrid), timeline (short duration for specific purpose or ongoing, evolving), formal or informal. These different classifications are not mutually exclusive, and one form might evolve into another.

CoPs are typically located within a single organization and involve people who work in the same or related areas. CoPs may also cross organizational boundaries and be more loosely connected, resembling what is referred to as a distributed CoP (E. Wenger, McDermott, and M. Snyder 2002; Gehrke and Kezar 2017). Cross organizational CoPs can be communities that span across spheres, such as education and industry (Albats 2018; Iskanius and Pohjola 2016). Through this kind of connection, formal education programs can be supported by industry professionals, while simultaneously being augmented by authenticity, by which we mean learning that is informed by real-world problems, needs and evaluation criteria (Bhatnagar and Badke-Schaub 2017).

Project based CoPs provide different examples of these at national level, regional level, institutional level, curricular level. Kezar and Gehrke (Kezar and Gehrke 2017) provide examples of such project-based CoPs. Project Kaleidoscope (PKAL) is a national community of STEM faculty that focuses on creating innovation among faculty so that they change their practices; The POGIL Project is a national professional development and curriculum reform effort whose mission is to connect and support educators from all disciplines interested in implementing, improving, and studying student-centred pedagogies and learning environments, Science Education for New Civic Engagements and Responsibilities (SENCER) is a faculty development and STEM education reform initiative that approaches STEM education reform through complex, capacious, contemporary, and contested civic challenges and an interdisciplinary approach. The BioQUEST Curriculum Consortium supports undergraduate biology education reform.

At curricular level, Coombs et al. (Coombs et al. 2017) present an analysis of the experiences of academics during a university-wide curriculum reform exercise in a public research university. Each academic may belong to several CoPs. For example, a research group or network, a professoriate, subject teachers, teachers on the same degree programme or a formal group such as a curriculum design team. Different CoPs may have different personal relevance, which is why people engage in actions differently. In order to carry out this curriculum reform exercise, dialogue across the boundaries of the various CoP was essential. This illustrates the need for a space where members of the academic community can mutually engage (Coombs et al. 2017).

Given the purpose of this literature review, i.e. to inform the Design Team in their creation of an online platform to host multiple CoP, the main focus in this section is on online communities of practice (OCoP), also known as a virtual community of practice (VCoP). Given the current context, the timing of this project could not be more timely, given the fact that all pre-existing face-to-face (f2f) CoP have had to move online due to the pandemic.

Hafeez and colleagues (Hafeez et al. 2019) assert that technology comprises four components: tools, features, platforms and configurations: a) tools: software for specific purposes (e.g. email) (Cherry and Latulipe 2014); b) platforms: packages that combine tools (Spagnoletti, Resca, and Lee 2015) for instance Google's G Suite, used for communication, productivity and storage, with common access and functionality; c) features: specific properties supported by the user interface (i.e. filtering, sorting); and d) configuration: the entire arrangement of the above mentioned platforms and tools (Hafeez et al. 2019). A course could employ, for instance, a Learning Management System (LMS), supported by a social network (SN) (deChambeau 2017) (Gunawardena et al. 2009) as well as domain-specific software, like a Creativity Support Tool (CST) to accommodate the specific needs of a domain (Cherry and Latulipe 2014). CSTs refer to software for the development of creative artifacts e.g. a written article or a design item.

In their framework for VCoP, Wenger et al. (E. Wenger, White, and Smith 2009) propose a further nine major categories of activities or 'orientations' in VCoP: meetings; open-ended conversations; projects; content; access to expertise; relationships; individual participation; community cultivation; and servicing a context. Orientations are useful to map against specific (i.e. software development) activities as they can directly translate into technical requirements for the community setup (Mavri, Ioannou, and Loizides 2020).

It is worth noting that in the context of HE many prior the pandemic, most CoP were at the institutional level and therefore f2f. VCoP were mainly for cross-organizational communities (e.g. university and industry stakeholders), international projects or inter-institutional VCoPs (Khalid and Strange 2016; Rourke and Mendelssohn 2017; E. Wenger, White, and Smith 2009) in (Mavri, Ioannou, and Loizides 2020).

Henri & Pudelko (Henri and Pudelko 2003) described four principal types of Virtual Communities: **community of interest**; **goal-oriented community of interest**; **learners' community**; and **community of practice**, according to the goals they set for themselves and to the strategies they apply to achieve those goals. They identified three principal components of the social context of the activity of virtual communities: 1) the emergence of intention (goal of the community); 2) the methods of initial group creation; and 3) the temporal evolution both of the goals and the methods of group creation. According to the authors, the dynamic and interdependent relationship between these components expresses the idea that the process of creation and evolution of a virtual community is co-determined by the intentionality of the creation of the group and by its nature.

Different forms of virtual communities depend on: i) **the emergence of intention**, as it starts by the declaration of the intention of existence of the community (and eventually by the definition of a goal) which is formalized by: creating a list of its members; choosing tools of communication; building an environment offering various types of resources (information Web site, databases, collective management and production tools, voting devices, etc.); and adopting rules of operation; ii) **type of group or gathering** that determines the participation of the members, which can be described in terms of involvement, provision of mutual help and support, sharing of common meanings and affirmation of common identity; iii) **evolution of intention and gathering**, as the activity of a virtual community can change according to the evolution of its goal and of the social relationships within the community.

At the lowest level of involvement are **communities of interest** and **the goal-oriented communities of interest**. Commitment, participation, mutual support, negotiation of meanings and the affirmation of a common identity are at the lowest level. At a higher level of social cohesion and intentionality, **learners' communities** emerge. More oriented to academic learning and training contexts, they are made up of students, trainees, teachers, from one or more institutions, which may be geographically dispersed. The construction of knowledge occurs during the development of projects, through the negotiation of meanings and the participation of its members. Collaborative work promotes solidarity within the group, awareness of the division of labour and individual responsibility to the community. It remains active for the period of the educational program. In the highest degree of social cohesion and intentionality, communities of practice emerge. These are groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly (Henri and Pudelko 2003).

Participation is the key concept. Wenger, McDermott and Snyder (E. Wenger, McDermott, and M. Snyder 2002) describe three main levels of participation, '**peripheral**,' '**active**' and '**core**,' representing different reasons or interests for participation in a VCoP. **Peripheral** participants 'keep to the sidelines, watching the interaction of the core and active members. **Active** participants are the community members that surround the core members, participating in the community discourse but at a lesser intensity than that of the core group. **Core** participants are the community members who are at its heart, and who take on much of the community's leadership. They often carry out community projects and initiatives, identify topics for the community to address, and promote the community agenda (Henri and Pudelko 2003).

Hybrid CoP are communities which meet both online and face to face. Given the importance of the social aspects, moments for f2f interaction through workshops, conferences etc. will foster the sense of community and establish social relationships (Berthoud and Gleste 2018).

3. How is the Concept of Community of Practice Applied in the Field?

As we have seen above, CoP in HE can operate at different levels and involve various actors: teachers; administrative and support staff, students, as well as external stakeholders, including members of other communities. Members of a CoP engage in conversations that matter at multiple levels to achieve commonly shared goals. How this happens in practice will depend on the type and reach of the CoP and the success of the CoP will depend on multiple factors.

The Literature present many instances of CoP in practice in HE at the course level engaging students in innovative teaching practices. While the ColLab platform is primarily intended for the creation of CoPs dedicated to faculty development, the platform may be home to CoPs which experiment with innovative practices and include students.

Kim, So, Lim & Kim (Ji Hyun Kim et al. 2018) propose a systematic CoP model for higher education from a learning organization standpoint. Since a CoP is an effective means of creating and sharing new knowledge, providing opportunities for students to actively participate in CoP activities is an essential agenda to be pursued by educational institutions. Researchers expect CoP-based networks and activities to support institutional-level efforts to increase students' competitiveness in the job market (Choi 2015; J. H. Kim 2011). In higher educational settings, many universities are adopting CoP-based educational practices and activities as alternative educational approaches to facilitating informal learning and knowledge-oriented, self-motivated learning for students (E. C. Wenger and Snyder 2000). A student CoP (e.g., learning community, study group) in higher education is typically operated by individual students, and does not usually involve any university administration.
(Ji Hyun Kim et al. 2018)

The ultimate aim of most HE CoP is enhancing student learning, whether this be at the individual course level, programme level or across the institution. The CoP can have as its objective learning which goes beyond the bounds of curricular activity to include other learning experiences, such as internships. (Lough and Toms 2018) investigate such a cross-organisational 'community of practice' on the theme of Global Service Learning (GSL). The CoP is a conglomeration of private and public service providers mingled with university administrators, scholars, and internship coordinators. These diverse stakeholders meet regularly to consider the strategies and tactics of Global Service Learning (GSL) and to make iterative improvements to GSL practices through repeat interaction (M. K. Smith 2003; Lave and Wenger 1991). This emerging form of CoP works to combine the pooled knowledge of volunteering and service-learning to: 'develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems – in short a shared practice' (Wenger-Trayner and Wenger-Trayner 2015) in (Lough and Toms 2018, p.68).

When considering educational **CoPs involving faculty**, these often follow the 5-stage lifecycle model identified by (E. Wenger, McDermott, and M. Snyder 2002): developing textbooks, developing materials, conducting meetings at disciplinary societies, and obtaining grants that were focused on reaching new disciplines (Kezar and Gehrke 2017).

Berthoud and Gleste (Berthoud and Gleste 2018) looked at a specific **CoP involving faculty only**. In this instance the CoP is explicitly viewed "as a learning resource – [a]shared repertoire of case studies, contacts, questions, equipment, concepts and perspectives." The main purpose of the CoP is to support teachers striving to provide the best learning

experience for their students by learning themselves. They describe how the CoP defined its domain of interest during an initial workshop. It's resource bank includes: case studies of practical teaching ideas; incident investigation reports for space mission failures; class resources such a videos clips, icebreakers; useful articles on scholarship of teaching and learning; question bank of questions on specific topics with topic tagging for search purposes; database of guest lecturers and topics; database of external examiners; database of laboratory and test facilities; links to careers website. And while communication is limited mainly to a mailing list with newsletters listing events (either for students or for staff), jobs, research collaborations etc. the monthly newsletter also shares new website resources and initiatives and includes an interview with a different member each month. The CoP runs annual workshops on topics of interest to members (Berthoud and Gleste 2018).

Kezar and Gehrke (Kezar and Gehrke 2017) list some of the features and activities found in CoPs involving mainly faculty, these include: organizing events; interacting with leaders; developing communication strategies; and creating and accessing resources. More precisely, "They host events; have resources such as curricular modules, journals, and newsletters; and provide on-going networking opportunities for the faculty who participate" (Gehrke and Kezar 2017, p.3). Some are free, but they may charge for publications, curricular resources, and major events.

These case studies illustrate the multi-varied nature of the CoP panorama in education, whether on the level of members or context. What unites them all is their aim of creating a community whose purpose is to enhance the teaching and learning experience.

4. What works and does not work?

CoPs are sometimes used as indicators of excellence of teaching in Higher Education Institutions, with members often receiving awards for teaching (Acai et al. 2018). This implies that when a CoP works well, the outcomes are laudable. However, CoPs frequently encounter problems. The literature outlines the pitfalls and barriers which hinder effective development and may result in the dissolution of a CoP.

What does not seem to work in practice?

The literature suggests that many organizational requirements are needed to ensure a CoP can flourish. Organizational culture and structures play a large part in providing an environment conducive to nurturing and developing self-directed initiatives (Ruikar, Koskela, and Sextonn 2009). (Reaburn and McDonald 2017) mention "the importance of 'managing up' and engaging the senior leadership/management of the university to ensure the sustainability of CoPs" without this support the CoPs may falter.

Nonetheless, other authors claim that if CoPs are self-defining and self-developing (as situated learning theory suggests, (J. S. Brown, Collins, and Duguid 1989), it is not clear how external support can assist them (Arthur 2016). In fact when some originally informal CoPs were transformed into a heteronymous and formal unit regarded as a part of the organization's management strategy, this somehow stymied the relational-social nature which fosters a **sense of community** (Brehm and Brehm 2013; Park 1996; Nistor et al. 2015).This is because informal CoPs can facilitate better open communication, with formalization often affecting the autonomy of the learning community. Smith and McKeen (H. A. Smith and McKeen 2004, p.393) go so far as to say "if management does get involved, the community often dissipates" (H. A. Smith and McKeen 2004). This would seem to imply that, at least in the context of HE, support rather than leadership should come from management, leadership should come from within.

CoP may not succeed in achieving this sense of community for other reasons. Within higher education, Henrich and Attebury (Henrich and Attebury 2010) point out the nature of a professional culture itself can hinder shared learning and a collaborative culture. They argue that "… perhaps too, higher education settings are not the places where collaborative models can be successful, given the amount of competition for research grants and publications" (Henrich and Attebury 2010, p.163).

From a different perspective, Aljuwaiber, Chase and Chase (Aljuwaiber 2016) argue that top management may see CoPs as a threat and could even stifle the initiative of the community. Using the healthcare sector as an example of a professional CoP, they contend that "bridging the boundaries between different groups…is essential for the efficient exchange of information and for the dissemination of innovation" (Amin & Roberts, 2008, p. 360). This applies equally in the HE context where sometimes small pockets of excellence and innovation exist with little overspill in the wider institutional community.

At the level of individual members, there is a more widespread concern of finding the time and space to commit to the CoP (Coombs et al. 2017). According to Alkaher and Avissar (Alkaher and Avissar 2018), almost every participant interviewed pointed out that there was too little time to interact, share and develop mutual engagement to approach curriculum change in the way that they had wanted.

Motivation and sustained commitment are also essential. One practitioner stated, "I think it works really well at the moment but I'm aware that this is mainly down to individuals making it work and wanting it to happen". (Coombs et al. 2017) Indeed, committed leadership in the form of a facilitator or coordinator from **within the community** itself is deemed one of the essential ingredients of a successful CoP (Reaburn and McDonald 2017; de Carvalho-Filho, Tio, and Steinert 2020) along with a core group of active members. Related to this point is the feeling that the CoP fulfils their needs. Without some sense of achievement or payback, the time and effort needed is deemed not worthwhile (Reaburn and McDonald 2017).

As indicated above, success also depends on practitioners having a sense of community and also a sense of trust to engage freely in the community (Nistor et al. 2015). Indeed, fear of criticism is perceived as a barrier to effective communication (Ardichvili, Page, and Wentling 2003).

There are a whole panoply of further reasons that the Literature has identified as to why CoPs might not evolve, here are a selection: some lack expertise; some are arrogant, dogmatic or blinkered; some are exclusive; some expect compliance (Cousin and Deepwell 2005; Nagy and Burch 2009; Pemberton, Mavin, and Stalker 2007; Viskovic 2006).

Wenger himself (E. Wenger 2011) acknowledges that CoPs can be dysfunctional, counterproductive, or harmful, but argues that this is counter-balanced by a degree of agency and sense-making for members and the community. Moreover, as Arthur posits, if CoPs are critical to professional development in higher education it seems important for Learning and Teaching/Faculty Development Centres to embrace this type of learning (Arthur 2016) and educational managers provide the support necessary for their sustainable development (Reaburn and McDonald 2017).

What does work in practice?
Having identified the challenges to the success of CoP, we will now look what makes CoPs tick. In fact, after an analysis of multiple CoPs operating in HEIs in different contexts and continents, several authors have proposed lists of essential ingredients for a HE CoP to operate effectively in practice. Here follow four such lists.

Wenger et al. (E. Wenger, McDermott, and M. Snyder 2002) identify the following 7 Principles that a CoP in the educational context should embrace: 1. **Design for Evolution**; 2. **Open dialogue** between inside and outside perspectives; 3. Invite **different levels of participation**; 4. Develop both public and private **community spaces** to **network and share information**; 5. Focus on **value**; 6. Combine **familiarity and excitement**; 7. Create a **rhythm** for the community ((E. Wenger, McDermott, and M. Snyder 2002) in (Gauthier 2016, p.9))

While not providing a list as such, (Kezar and Gehrke 2017) identify a series of factors which are essential if CoPs are to engage interest: a shared **vision and sense of mission** sustained over time; involvement in establishing the **value of the domain**; **motivation** for continued participation; **trust and strong relationships** among members; key avenues for **sharing information** and **creating information rich resources**; be open to greater numbers of individuals; **systematize its practices**; and create a regular **rhythm of activities**; have some form **of recognition for such activities** both at disciplinary, departmental and institutional level.
(de Carvalho-Filho, Tio, and Steinert 2020) provide 12 Tips for the success of an organically evolving CoP: Tip 1 – Gather a **core group** to launch the process; Tip 2 – Articulate the **goals and value** of the CoP; Tip 3 – Start with a specific task or project – make it **problem-oriented**; Tip 4 – Keep the CoP **open**; Tip 5 – Intentionally invite members with **expertise** (memory) and fresh ideas (**innovation**); Tip 6 – Choose a **facilitator** – "primus inter pares"; Tip 7 – Make it **worthwhile** for members and the institution; Tip 8 – Work to ensure institutional support; Tip 9 – Promote sustainability; Tip 10 – Communicate success; Tip 11 – Go online; Tip 12 – Evaluate the CoP (de Carvalho-Filho, Tio, and Steinert 2020, p.144).

Without reporting here the whole list, Raeburn and McDonlad's (2017) ten tips, include many of the above, such as the importance of value, a core group, coordination from within, expertise, using online tools, but also emphasise what matters to members personally, including time factors, fostering **personal relationships**, providing **encouragemen**t, and

setting **personal challenges** to build that all important sense of community. Indeed, other papers emphasise this personal engagement and sense of trust as crucial. (Coombs et al. 2017) found that the informal CoP worked well and members attributed this success to their shared interest, mutual support. A sentiment found in (Berthoud and Gleste 2018) study where one member reported a benefit as "Being part of a supportive like-minded community". (Henrich and Attebury 2010) state that one of the benefits of a CoP approach is for individuals to gain confidence from a shared community and enjoy increased job satisfaction. This applies equally in the context of HEIs as any other kind of organisation.

Active if not passionate participation by at least a core group, is seen as essential. For (E. Wenger 1998), active participation in a CoP is guided by reification—giving form to experience—of objects or concepts that concretely represent practice (e.g. tools, symbols, stories, documents) and thus, the CoP itself (E. Wenger 1998). Once again this brings us back to the underlying concept of a sense of sharing experience and being part of a community.

We have already mentioned motivation as a key factor. When new colleagues in the community show enthusiasm, this inspires the other members to engage in CoP discussions and activities. This is true also when participants from different CoPs are involved in an encounter (E. Wenger 1998). In fact, the negotiations of meaning took place across boundaries and within each practice (E. Wenger 1998).

Regarding the actual activities of a successful CoP, (Ji Hyun Kim et al. 2018) show that self-regulated learning activities, positive learning self-perceptions, and active participation were found to be core elements for successful CoP activities at the individual level. They too, underline that, administrative support, systematic learning support, and a positive overall learning culture are influential environmental factors at the organizational level.

Lough and Toms (Lough and Toms 2018) mention that beyond the need to share practices, participants stated a need for collaborative platforms to build a 'community of knowledge' or 'creative commons'. Participants emphasised that they can greatly amplify their shared learning by taking advantage of list servs, collective digital space, Wikis, manuals, and other means of knowledge dissemination. This was also found by participants in Berthoud and Gleste's study (2018) where "Access to high quality teaching material" was indicated as one of the main benefits along with "links for outreach activities". By sharing intelligence and resources, stakeholders can foster collaboration and 'environments of inclusivity among institutions of higher education' rather than competition (Lough and Toms 2018).
Like de Carvalho-Filho et al. (de Carvalho-Filho, Tio, and Steinert 2020), Lough and Toms (Lough and Toms 2018) also highlight the importance of institutional leadership in the form of support: "For sustainable improvements in teaching and learning to occur, it is necessary to move beyond the level of the individual leader" (Lough and Toms 2018. P.52). It is necessary to have "a leadership that engages with, supports, and coordinates development in local collegial contexts—departments, teaching teams, or programme teachers—as well as horizontally and vertically across disciplines and programs" ((Graham 2012) in (Mårtensson and Roxå 2016, p.2))."

Nistor et al. (Nistor et al. 2015) also underline that the fact that this leadership must be sensitive to the organic, interpersonal and autonomous nature of the HE CoP. In fact HE CoPs are rooted in deep personal and professional relationships and "marked by collegiality and a celebration of ... differences," with members united by their shared passion for teaching resulting in a genuine sense of community (Nistor et al. 2015). To foster this sense of community, the institutional quality culture, through its supportive leadership, must provide spaces and opportunities for CoP to flourish. In a supportive institutional environment a CoP enables the formulation of new ideas and inspires confidence through free-flowing conversation and dialogue (Acai et al. 2018). The outcome will be a renewed sense of confidence in their teaching and leadership abilities, often resulting in a greater willingness to try new things (Lough and Toms 2018, p.56).

CoP specifically in the context of Faculty Development

Teaching staff in Higher Education frequently feel a sense of isolation, lack of community, and lack of belonging (B. Smith and Smith 1993; Cox 2004). In response to that (Palmer 1999) strongly supports collegial socialization as a core component of professional development programs (Palmer 1999). Collaboration and a sense of Collegiality is key in professional development (Cox 2004). Sharing and comparing experiences with peers in small groups seems to be the most effective strategy in the HE context (Palmer 1999; B. Smith and Smith 1993)(Amundsen et al. 2005). Learning communities (i.e. CoP) are particularly relevant to faculty development and can be key in overcoming the

sense of isolation and in supporting collaboration among faculty members (Cox 2004). Further, the existence of faculty development CoPs has been shown to contribute to the evolution of Universities as learning systems (Schön 1973).

In some contexts Faculty Development is not a given in the HEI context. Indeed, in some contexts it is a relatively alien concept, as is the concept of a CoP. CoP can be a "gateway" to faculty development by developing an awareness of the need for professional development. In fact CoP have emerged as fertile ground for innovation, professional learning and developing scholarship of teaching and learning skills in Higher Education (Morton 2012; M. Brown and Peck 2016). Faculty development CoP have also been shown to have been effective in improving participants' awareness of, attitudes toward, and adoption of research-based educational approaches (McKenna et al. 2016). The CoP concept is used to provide some scaffolding and guidance for the development of groups, teams, and networks.

Conversely, there is an increasing reservoir of anecdotal evidence that other forms of Faculty Development) (e.g. workshops on assessment, or innovative teaching practices) serve as a springboard for the creation of informal CoPs, in particular across disciplines (Benoit 2014). The Literature has not yet formally investigated whether these evolve into more stable CoPs.

5. Methods

1. Database Search We carried out an initial search using two academic databases.

Database	Web of Knowledge
Terms	(TI=("community of practice" OR "communities of practice") AND TI=("higher education")) AND **IDIOMA**: (English)
Inclusion criteria	Since 1.1.2016 until 15.5.2020
Type of Document	(Article OR Book OR Book Chapter OR Review)
Result	9
Database	ERIC
Terms	(title:"community of practice" OR title:"communities of practice") AND title:"higher education"
Inclusion criteria	Since 1.1.2016 until 15.5.2020
Type of Document	Journal articles
Result	9

1. Results obtained in Web of Knowledge and ERIC were matched in Mendeley and 6 duplicates identified. In the end 12 results were retrieved:

1. Acai, A., Ahmad, A., Fenton, N., Graystone, L., Phillips, K., Smith, R., & Stockley, D. (2018). The 3M National Teaching Fellowship: A High Impact Community of Practice in Higher Education. Teaching & Learning Inquiry, 6(2), 50-66.

2. Alkaher, Iris, and Ilana Avissar. 2018. "Assessing the Impact of a Program Designed to Develop Sustainability Leadership amongst Staff Members in Higher Education Institutes: A Case Study from a Community of Practice Perspective." Environmental Education Research 24 (4): 492–520.

3. Coombs, Jenny, Mandy Thomas, Nathan Rush, and Elizabeth Martin. 2017. "A Community of Practice Approach to Delivering Research Support Services in a Post-92 Higher Education Institution: A Reflective Case Study." New Review of Academic Librarianship 23 (2–3): 159–70.

4. Gauthier, L. (2016). Redesigning for student success: Cultivating communities of practice in a higher education classroom. Journal of the Scholarship of Teaching and Learning, 16(2), 1-13.

5. Gehrke, S., & Kezar, A. (2017). The roles of STEM faculty communities of practice in institutional and departmental reform in higher education. American Educational Research Journal, 54(5), 803-833.

6. Kezar, A., & Gehrke, S. (2017). Strategies for achieving scale within communities of practice aimed at pedagogical reform in higher education. Journal of STEM Education: Innovations and Research, 18(1).

7. Mavri, Aekaterini, Andri Ioannou, and Fernando Loizides. 2020. "A Cross-Organizational Ecology for Virtual Communities of Practice in Higher Education." International Journal of Human–Computer Interaction 36 (6): 553–67.

8. Berthoud, Lucinda, and Andrew Glester. 2018. "Developing a Community of Practice to Support the Space Engineering Higher Education Community." International Journal of Engineering Education 34 (5): 1562–68

9. Arthur, Linet. 2016. "Communities of Practice in Higher Education: Professional Learning in an Academic Career." International Journal for Academic Development 21 (3): 230–41.

10. Kim, Ji Hyun Junhee, Byung Han So, Ji Hoon Song, Doo Hun Lim, and Ji Hyun Junhee Kim. 2018. "Developing an Effective Model of Students' Communities of Practice in a Higher Education Context." Performance Improvement Quarterly 31 (2): 119–40.

11. Lough, Benjamin J., and Cynthia Toms. 2018. "Global Service-Learning in Institutions of Higher Education: Concerns from a Community of Practice." Globalisation, Societies and Education 16 (1): 66–77.

12. Annala, Johanna, and Marita Mäkinen. "Communities of practice in higher education: contradictory narratives of a university-wide curriculum reform." Studies in Higher Education 42.11 (2017): 1941-1957.

2. The full manuscripts were analysed by 3 researchers (4 papers each) and the information was retrieved according to the following criteria:

1. What are communities of practive?
2. Which kinds of communities of practice exist?
3. How are communities of practice applied?
4. What works and does not work?

4. All the information retrieved was selected and organized according to the main four topics mentioned above in order obtain useful outputs from the most recent papers about CoPs.

This database search was supplemented by a supplementary analysis of papers known to members of the Project Team. The findings of this second analysis were incorporated into the Literature Review during the editing phase.

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Annex 2
Table of Results from Scouting Exercise - Conducted April/May 2020

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
1	Univesity of Washington	employers, staff, educators, veterans, volunteers, veterans etc.	different types of CoPs based on sharing perspectives and expertise and identify practices that promote the participation and success of people with disabilities in education and careers	restricted (email) Including members of other institutions	online	https://www.washington.edu/doit/resources/communities-practice
2	Adelaide University	academic and professional staff, students (ONLY intra university)	different CoPs aiming to provide an opportunity for groups of staff and students to come together on a regular basis to discuss topics of strategic relevance to the institution, and to deepen their knowledge and expertise (e-learning, student engagement, employability, virtual reality etc.)	restricted (email) university members only	face to face/ both online and face to face	https://www.adelaide.edu.au/learning/teaching/communities-of-practice/
3	University of Colorado	Educators/teachers	cross-disciplinary groups of faculty dedicated to discovering knowledge and nurturing community around the work as educators (different groups focusing on different topic)	restricted university members only	face to face, with a facilitator	http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/programs/CoP/Pages/default.aspx
4	University of British Columbia	Educators - teachers	different Cops providing spaces for critical discussion, interdisciplinarity, learner-centered thinking, and social innovation to take place. Participants can share ideas and suggestions, and engage in dialogue relevant to their specific areas of academic interest (art in health research, instructional design etc.)	restricted (email) university members only	face to face, with a facilitator	https://ctlt.ubc.ca/programs/communities-of-practice/

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
5	Elon University	Faculty staff	two Cops: mentoring undergraduate research in global contexts, and intercultural learning and development.	restricted (application) university members only	face to face, with a facilitator	https://ctlt.ubc.ca/programs/communities-of-practice/
6	University of Nebraska	faculty members	teaching innovations, actively research, share feedback, assess student learning and grading techniques, and explore new models of practice.	restricted (application)	face to face	https://www.unomaha.edu/faculty-support/campus-connections/cop.php
7	Weber State University (Utah)	faculty staff	different Cops: teaching and learning: evidence based learning, technology in classroom, inclusive excellence etc.	restricted (application) university members only	face to face	https://www.weber.edu/tlf/cop.html
8	University of Toronto (Faculty of art)	faculty members	create a forum for faculty and instructors to meet and share teaching practices and strategies across disciplines.	restricted (email) university members only	face to face, with a facilitator	https://www.artsci.utoronto.ca/teaching-learning-community-practice
9	Griffith University	faculty staff	different Cops: Art, Health, Science and Business. Teaching, curriculum and future program	restricted university members only	face to face	https://www.griffith.edu.au/learning-futures/our-practice/recognising-teaching-excellence/griffith-learning-and-teaching-academy/communities-of-practice

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
10	University of Melbourn	University researchers, professional staff and interested community members	This CoP is particularly interested in how to facilitate a high level of community decision-making about the purpose, design, conduct and use of research. The CoP will examine methods and approaches that provide people with an active and empowered role throughout the research process, and the social implications of this. explore the ethics, methods and approaches to research with organizations, groups and individuals, including people with disabilities, children, older people, Indigenous communities, female victims/ survivors of violence, and people seeking refuge and asylum.	restricted not only university members	face to face	https://socialequity.unimelb.edu.au/community-of-practice
11	University of Maine	faculty staff	different Cops: teaching innovation, sharing strategies (inclusiveness, teaching to large courses etc.)	restricted (application) university members only	face to face	https://umaine.edu/citl/programs/communities-of-practice/
12	University of Queensland	academic and professional staff, students	different Cops: learning innovations, e-portfolio, e- learning, student involvement etc.	restricted (application) university members only	face to face	https://itali.uq.edu.au/professional-learning/communities-practice
13	UCL	faculty staff	different CoPs: sharing strategies and good practises (HR, communication and marketing, planning, fincance etc.)	restricted university members only	face to face (?)	https://www.ucl.ac.uk/transforming-our-professional-services/tops-projects/communities-practice
14	Duke university-school of nursing	students and teachers	online Communities of Practice (CoP) provides a platform for collaborative learning, engagement, and building relationship with our community/clinical partners	restricted university members only	online	https://cop.nursing.duke.edu/

|	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
15	McGill university	academic staff	the aim is to bring out the best practices in the network, in particular by avoiding overdiagnoses and overtreatment of patients (clinical pertinance)	restricted university members only	online	https://www.mcgill.ca/ruisss/initiatives/community-practice
16	COMMON SPACES (UE, Erasmus+)	universitry lectures, graduate, postgraduate, students, professionals, vocational trainers, unemployed people looking for a job	different CoPs - main goal: sharing strategies, ideas, files	restricted 1. registration main pla form 2. approval by a supervisor (project) Open to everyone interested	online	La Sapienza https://www.commonspaces.eu/it/project/sapienza-university-of-rome-1/ Politecnico di Leira (Portogallo) https://www.commonspaces.eu/it/project/ipl-instituto-politecnico-de-leiria/
17	Teach for all – platform with various Communities Facebook for teachers	teachers	teaching practices (different topic: inclusiveness, strategies, projects..)	restricted members of the organization only. FB profile required	online	https://teachforall.org/communities
18	Progetto scuola digitale Liguria (Regione)	Teachers	A Regional Project which provides the technology and platform hosting multiple communities. Teacher learn about and apply in their classrooms innovative practices and share outcomes to build a successful model	restricted (registration as teacher/school staff)	online	https://www.scuoladigitaleliguria.it/community/comunit%C3%A0-di-pratica.html

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
19	MIUR – Università di Torino –	math/science middle or high school teachers	Innovative teaching methods: Problem Posing & Solving with effective use of technology	restricted	online	https://minerva.miurprogettopps.unito.it/ https://minerva.miurprogettopps.unito.it/course/view.php?id=634&section=2
20	EU e-twinning)	teachers, principals, staff, primary/middle/high schools	Enhancing teaching and learning in schools through internationalisation, innovative and inclusive teaching approaches etc	restricted (registration required)	online	http://etwinning.indire.it/progetto-etwinning/
21	EU Platform of CoPs (Erasmus+)	adult educators and trainers, guidance and support staff, researchers and academics, and policymakers.	online groups where people with similar interests from the adult learning sector can get together, members from across Europe and exchange ideas, resources and good practices. It is part of the European Union's strategy to promote more and better learning opportunities for all adults.	restricted (registration required)	online	https://epale.ec.europa.eu/en/communities-of-practice
22	EU – ACT on Gender	Researcher, experts, students, everyone interested	ACT is a Horizon 2020 project that seeks to advance gender equality at universities, research centres and research funding organisations by facilitating collaboration between experienced institutions in the implementation of gender equality plans with less experienced ones. It aims at addressing common needs and improving assessment on gender equality in HE & R&I regarding three fields: gender balance in career progression, gender balance in decision-making positions, and integrating the gender dimension into research content and teaching.	Open	online	https://act-on-gender.eu/cops

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
23	Open AIRE	The CoP is for training coordinators in communities, projects and research infrastructures.	share training experiences initiated by a group of people who coordinate training programmes of research and e-infrastructures. This initiative of starting a Community of Practice for training coordinators aims to map out the training activities of various pan-European, EOSC-related initiatives and strengthen their training capacity by improved alignment, sharing experiences and good practices, initiating cross-infrastructure training activities.	Restricted (membership)	online	https://www.openaire.eu/cop-training
24	EU – Stop-it	different groups of stakeholders on the project and is open to a broader audience (water utilities, national water associations, first aid associations, NGO's).	Water (infrastructures, use, environment, data, management…) 3 different levels, with different members.	Restricted (subscription)	online	https://stop-it-project.eu/about-stop-it/community-of-practice/
25	EAUC sustainability education (UK)	school staff and students	supporting our Members to exchange ideas, skills and experience.	restricted (purchase of the registration)	online	https://www.eauc.org.uk/communities_of_practice
26	UNESCO	Open to everyone	discuss and debate issues of common interests, and develop consensus around various issues.	open (Registration)	online	http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/open-access-community/

	Organisation	Target User	Main Topics	Type of Access	Where Conducted	Link to Website
27	ADVANCE HE CONNECT	HE teachers and staff	To connect HE staff, teaching and non, working in different contexts, create communities , post blogs, and groups, post events, job vacancies,	Open (registration)	online	https://connect.advance-he.ac.uk/
28	AGRICULTURE BIG DATA (international food policy research institute)	academic and non profit experts in agricultural sciences	aim to leverage technology and new data resources to create broader and deeper impact in programming, as well as to build capacity internally and externally on big data approaches in agriculture.	restricted (membership)	online	https://bigdata.cgiar.org/communities-of-practice/
Examples of Informal CoPs						
29	Examples of Facebook groups (university students)		Sharing information, strategies, problems, solutions…	Open (FB profile)	online	Università di Milano – studenti di medicina https://www.facebook.com/groups/unimi.medicina/about/ Università di Padova – studenti di psicologia https://www.facebook.com/groups/8102919318/
30	App and programs utilized to share information, knowledge etc.		SLACK – a team working platform	purchasing	online	https://slack.com/intl/en-it/
			Google for education (tool for teachers and students)	Free – only no profit schools		https://edu.google.com/intl/it_it/products/gsuite-for-education/?modal_active=none
			Uniwhere – university students' app (group for every class)	free		https://play.google.com/store/apps/details?id=lu.gian.uniwhere&hl=it

A Functional Collaborative Platform for Teaching Innovation in Higher Education

The purpose of this questionnaire is to inform a design team in the creation of a Collaborative Platform for Teaching Innovation that responds to the real needs of teachers and provides a space where Communities of Practice focused on enhancing teaching in HE can expand and flourish.
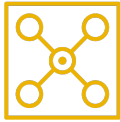
COLLab

Dear Colleague,

In the wake of the Covid-19 pandemic, HE teachers and students alike have by necessity become much more familiar with online teaching tools and platforms. In many cases with little preparation or background for this kind of teaching and learning. In this sense, the **ColLab** project (Collaborative Platform for Teaching. Innovation in Higher Education), could not be more timely. While ColLab's Teaching and Learning Community Platform will not specifically be designed for that purpose, we do hope to create a platform where (at least) one of the **Communities of Practice** we provide a home for will have as its focus the enhancement of online teaching and learning, promoting and developing innovative, student-centred approaches also in a virtual learning environment.

In brief, the idea of **ColLab**, as its name suggests, is to create an online space where those engaged in teaching and learning, be it in a f2f, virtual or mixed context, can come together as a Community of Practice, or a series of Communities, to interact with colleagues, and indeed anyone interested in enhancing the quality of teaching and learning experiences in the HEA. The form the ColLab Platform takes, the spaces it will create, tools it will provide, the networks it will create, in short the kind of Communities we create together will depend on YOUR, our future users', input.

In the next few weeks and months we will be conducting a survey (this questionnaire) and running online Focus Groups to collect this input in order to provide our expert technical team with YOUR requisites for functional, cooperative and creative Communities. To this end, we ask you to dedicate some of those most precious resources, your time, reflection and knowledge, to answer the following questions.

Thank you in advance for your cooperation and we look forward to meeting you virtually when the Platform is up and running.

The ColLab Team

[Note: The principle actors of the ColLab project are all members of the ECIU's Innovation in Teaching and Learning group of experts: https://www.eciu.org/innovation-in-teaching-and-learning)

There are 53 questions in this survey

PERSONAL INFORMATION

[]Age *

Please write your answer here:

[   ]

[]Gender *

Please choose **all** that apply:

☐ Female

☐ Male

☐ Prefer not to answer

[]Position *

Please choose **only one** of the following:

◯ Professor or Lecturer

◯ Researcher

○ Tutor/Teaching Assistant

○ Teacher trainer

○ Administrative Staff

○ Other [   ]

[]Country - Where you are based

Please write your answer here:

[   ]

[]Home Institution - Principle HEI you work at

Please write your answer here:

[   ]

[]Discipline Area *

Please choose **only one** of the following:

○ Humanities

○ Social Sciences

○ Law

○ Medicine, Veterinary School, Dentistry, Nursing etc

○ Maths and Physics

○ Engineering and Architecture

○ IT

○ Art and Design

○ Other [   ]

[]What level(s) of course do you teach on? *

Please choose **all** that apply:

☐ Presessional or bridging courses

☐ Bachelor's

☐ Master's

☐ PhD

☐ Teacher Training

☐ Professional

☐ Other: [   ]

[]How long have you worked at a HEI? *

Please choose **all** that apply:

☐ Less than one year

☐ 1-5 years

☐ 6-10 years

☐ 11-15 years

☐ 16-20 years

☐ More than 20 years

PRIOR USE OF/FAMILIARITY WITH CoPs

Before starting the Questionnaire Proper, please read through the following definition to ensure you understand what we mean when we refer to CoP (Community of Practice) in the questions.

WHAT IS A COMMUNITY OF PRACTICE

A **Community of Practice** is a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly.

In the context of teaching and learning in HE it can apply to various actors, from groups of academics who exchange ideas and data to enhance research, to periodic meetings of groups of teachers interested in enhancing teaching practices, to student-teacher groups interested in shaping the learning experience, to social-network groups of single or mixed actor groups which exchange ideas, tips and provide advice for colleagues etc. All of which may take place face-to-face, online or a mixture of the two.

Whether virtual or f2f, **all Communities of Practise share** the following: **The domain:** members are brought together by a learning need they share (whether this shared learning need is explicit or not and whether learning is the motivation for their coming together or a by-product of it); **The community:** their collective learning becomes a bond among them over time (experienced in various ways and thus not a source of homogeneity) **The practice:** their interactions produce resources and/or stimulate actions that affect their practice (whether they engage in actual practice together or separate*ly)*

[]Are you familiar with the concept of Community of Practice as described above? Please answer "Yes" if you are familiar with the concept or are part of such a group but did not use this term to describe the group. *

Please choose **only one** of the following:

○ Yes

○ No

[]Please say when and in what context you first heard of such groups/communities..

Only answer this question if the following conditions are met:
Answer was 'Yes' at question '9 [C1a]' (Are you familiar with the concept of Community of Practice as described above? Please answer "Yes" if you are familiar with the concept or are part of such a group but did not use this term to describe the group.)

Please write your answer here:

[   ]

[]Have you ever been/Are you currently a member of a formal CoP? *

Please choose **only one** of the following:

○ Yes, I am an active member of one or more formal CoPs.

○ Yes, but I do/did not participate actively.

○ No.

By "formal" we mean a CoP that is coordinated by an academic institution or group of institutions, a project, professional association or similar.

[]What form does/did it take? *

Only answer this question if the following conditions are met:
Answer was 'Yes, I am an active member of one or more formal CoPs.' at question '11 [C2a]' (Have you ever been/Are you currently a member of a formal CoP?)

Please choose **all** that apply:

☐ face-to-face

☐ online dedicated platform

☐ both face-to-face and online

☐ social networking platforms (Official CoP group)

☐ Other: [   ]

[]What level of organisation did the CoP have? *

Please choose **all** that apply:

☐ Departmental

☐ Faculty/School

☐ Institutional

☐ Inter-institutional

☐ National

☐ International

☐ Among colleagues

☐ Other: [_____]

[]Where are/were the other participants from? *

Please choose **all** that apply:

☐ Same course or class

☐ Same degree course/programme

☐ Same subject area

☐ Same macro-discipline area/domain

☐ Interdisciplinary

☐ Other: [_____]

[]What role do/did the participants in the CoP have? *

Please choose **all** that apply:

☐ Teachers

☐ Students

☐ Researchers

☐ Professionals

☐ Other: [_____]

[]What is/was the main purpose of each formal CoP you participate(d) in? *

Please choose **all** that apply:

☐ Disseminate research

☐ Share resources/create a resource repository (any media)

☐ Exchange practices

☐ Discuss discipline issues

☐ Discuss teaching and learning issues

☐ Appeal for help/suggestions

☐ Post news of events, projects, employment opportunities

☐ Host webinars

☐ Other: [   ]

[]What time scale do/did the formal CoP have? *

Only answer this question if the following conditions are met:
Answer was 'Yes, I am an active member of one or more formal CoPs.' at question '11 [C2a]' (Have you ever been/Are you currently a member of a formal CoP?)

Please choose **all** that apply:

☐ Short term - length of course/one semester

☐ Medium-term - academic year/length of degree programme/duration of project

☐ Open-ended

☐ Other: [   ]

[]Why have you never actively participated in a CoP? *

Only answer this question if the following conditions are met:
Answer was 'Yes, but I do/did not participate actively.' *or* 'No.' at question '11 [C2a]' (Have you ever been/Are you currently a member of a formal CoP?)

Please choose **all** that apply:

☐ Unaware of their existence

☐ Lack of time

☐ Found little of relevance/use

☐ Prefer more informal ways of networking

☐ Other: [   ]

[]Do you think being an active member of a formal CoP would enhance your teaching and/or research/learning? *

Only answer this question if the following conditions are met:
Answer was 'Yes, but I do/did not participate actively.' *or* 'No.' at question '11 [C2a]' (Have you ever been/Are you currently a member of a formal CoP?)

Please choose **all** that apply:

☐ Yes

☐ No

☐ Don't know.

☐ Other: [   ]

[]In what way?

Only answer this question if the following conditions are met:
Answer was 'Yes' at question '19 [C2i]' (Do you think being an active member of a formal CoP would enhance your teaching and/or research/learning?)

Please write your answer here:

[   ]

[]Why not?

Only answer this question if the following conditions are met:
Answer was 'No' at question '19 [C2i]' (Do you think being an active member of a formal CoP would enhance your teaching and/or research/learning?)

Please write your answer here:

[ ]

[]Have you ever been/Are you currently a member of an informal CoP? *

Please choose **all** that apply:

☐ Yes, I am/have been an active member of one or more informal CoPs

☐ Yes, but I do/did not participate actively

☐ No

☐ Other: [ ]

[]For online informal CoPs, which of the following platforms do/did you use? *

Only answer this question if the following conditions are met:
Answer was 'Yes, I am/have been an active member of one or more informal CoPs' at question '22 [C3a]' (Have you ever been/Are you currently a member of an informal CoP?)

Please choose **all** that apply:

☐ e-mail

☐ Instant messaging

☐ Chats (including video chats)

☐ Conferencing systems

☐ Educational Management Systems. such as Moodle, Cornerstone, Blackboard etc.

☐ Social Networks

☐ Other: [ ]

[]What do/did you use these informal CoPs for, primarily? *

Only answer this question if the following conditions are met:
Answer was 'Yes, I am/have been an active member of one or more informal CoPs' at question '22 [C3a]' (Have you ever been/Are you currently a member of an informal CoP?)

Please choose **all** that apply:

☐ Communicating on a single specific issue (e.g. advice on research questions, sharing problems regarding

teaching/learning or assessment practices; tips on using Zoom!);

☐ Direct personal communication with other teachers on a degree course/of the department/discipline/university committee

etc;

☐ Direct personal communication (i.e. not via formal platform/channels) with other members of a formal CoP or Project;

☐ Direct communication with students (class or group);

☐ Other: [ ]

[]What timescale do/did this/these informal CoPs have? *

Only answer this question if the following conditions are met:
Answer was 'Yes, I am/have been an active member of one or more informal CoPs' at question '22 [C3a]' (Have you ever been/Are you currently a member of an informal CoP?)

Please choose **all** that apply:

☐ short-term - length of course/one semester

☐ medium-term - academic year/length of degree course/project

☐ Open ended

☐ Other: [ ]

[]We kindly ask you to take the time to provide reasons for using these informal channels and platforms rather than the (tools/channels of) formal CoP Platforms/Networks.

Please write your answer here:

[   ]

[]We kindly ask you to take the time to explain why you do not participate actively in any/this/these informal CoPs?

Please write your answer here:

[   ]

[]Please indicate why you have never actively participated in an informal CoP *

Please choose **all** that apply:

☐ Unaware of their existence

☐ Lack of time

☐ Found little of relevance

☐ Prefer more formal ways of networking

☐ Other: [   ]

[]Do you think being an active member in an informal CoP would enhance your teaching and/or research/learning? *

Please choose **all** that apply:

☐ Yes

☐ No

☐ Don't know

[]In what way(s)?

Please write your answer here:

[   ]

[]Why not?

Please write your answer here:

[   ]

[]Who were the other participants oin this informal CoP? *

Please choose **all** that apply:

☐ Teachers only

☐ Students only

☐ Teachers and students

- [ ] Teachers and researchers/discipline experts
- [ ] Teachers and professionals /external stakeholders
- [ ] All of the above
- [ ] Other: [_____]

WHAT ARE YOUR PERSONAL PREFERENCES FOR THE FORMAT OF A CoP?

In order to ensure our design team creates the optimal environment and provides the most useful tools on the ColLab platform, in the questions which follow, please select the criteria you would consider most important if you were to join a (new) CoP, whether formal or informal, For each question/criterion, you can choose more than one option.

 It would be extremely helpful if you could also take the time to provide as much input/insight as possible in the text boxes after each question.

[]Select which of the following types of Organisation/Administration you deem most functional *

Only answer this question if the following conditions are met:
Answer was 'No' at question '9 [C1a]' (Are you familiar with the concept of Community of Practice as described above? Please answer "Yes" if you are familiar with the concept or are part of such a group but did not use this term to describe the group.) *and* Answer was 'Don't know' at question '29 [C3h]' (Do you think being an active member in an informal CoP would enhance your teaching and/or research/learning?)

Please choose **all** that apply:

☐ Degree course

☐ Departmental

☐ Home institution

☐ National Inter-HEIs

☐ International HEIs

☐ National Scientific/Professional Bodies

☐ International Scientific/Professional Bodies

☐ International projects

☐ This criterion is not important for me.

☐ Other: [   ]

[]Please explain why this is/these are the most important criterion/criteria regarding organisation/administration.

Please write your answer here:

[   ]

[]Please select what kind of content you would find most useful in a CoP you would be likely to actively participate in *

Please choose **all** that apply:

☐ Disciplinary

☐ Interdisciplinary/multi-disciplinary

☐ Single focus

☐ Multiple focus

☐ This criterion is not important for me

☐ Other: [   ]

[]Please explain why this is/these are the most important criterion/criteria regarding content.

Please write your answer here:

[   ]

[]Select which 3 purpose(s) you think are most useful for a CoP to pursue *

Please select at most 3 answers

Please choose **all** that apply:

- [ ] Use as a resource repository
- [ ] Exchange teaching/learning practices
- [ ] Discuss discipline issues
- [ ] Discuss teaching/learning and/or assessment issues and practices
- [ ] Discuss programme/organisational issues with colleagues (e.g. on double degree programme)
- [ ] Disseminate research
- [ ] Appeal for help/suggestions/advice with research
- [ ] Direct personal communication
- [ ] Other: [_____]

[]Please explain why this is/these are the most important criterion/criteria regarding the purpose of a CoP.

Please write your answer here:

[_____]

[]What kinds of CoP formats do/would you be more likely to use? *

Please choose **all** that apply:

- [ ] Face to face only
- [ ] Online platforms only
- [ ] Both face to face and online
- [ ] Social network platforms only
- [ ] All of the above
- [ ] This criterion is not important for me
- [ ] Other: [_____]

[]What kind of access to CoPs do you think is most functional? *

Please choose **all** that apply:

- [ ] Completely free
- [ ] Restricted to specific membership
- [ ] Open but requiring one-time only registration
- [ ] Open but requiring annual registration
- [ ] Invitation only
- [ ] This criterion is not important for me
- [ ] Other: [_____]

[]Which of the following actors/agents do you think you would be more ikely to engage with in a CoP about teaching and learning enhancement and innovation? *

Please choose **all** that apply:

- [ ] Teachers
- [ ] Students
- [ ] Professionals
- [ ] Other external stakeholders
- [ ] Anyone who is interested in joining
- [ ] Other: [_____]

[]Please provide reasons for your preferences in the previous question.

Please write your answer here:

[   ]

[]Other than teachers, which of the following actors do you believe might make useful contributions to a CoP about innovative teaching practices? *

Please choose **all** that apply:

☐ Students

☐ Researchers

☐ Professionals

☐ Other: [   ]

[]What are the main reasons you would actively participate in a CoP? *

Please choose **all** that apply:

☐ Sharing/discussing practices

☐ Discussing experiences

☐ Repository of practices

☐ Sharing literature

☐ Disseminating own research

☐ Establishing collaboration with colleagues

☐ Seeking suggestions/advice

☐ Mutual support

☐ Conduct research

☐ Mentoring

☐ Establishing contact with colleagues or students

☐ Data sharing

☐ Other: [   ]

[]What kinds of Outputs would you expect from a CoP? *

Please choose **all** that apply:

☐ None

☐ Limited to a discussion forum exchanging/illustrating practices

☐ Library/repository of practices (multimedia)

☐ Guidelines and handbooks to support teaching and learning

☐ Database of teaching tools and strategies

☐ Research papers resulting from collaboration among members of the CoP

☐ Database of models

☐ Other: [   ]

[]What do you think is the ideal number of participants in a functional CoP? *

Please choose **all** that apply:

☐ Small: 5-10

☐ Medium: 11-50

☐ Unlimited: 51-

[]

What kind of coordination do you think is the most functional for a CoP on this kind of Platform (potentially hosting multiple CoPs)? *

Please choose **all** that apply:

- ☐ Self-coordination among members
- ☐ One (or a team of) regular coordinators/facilitators
- ☐ Rotating coordinator(s)/facilitator(s)
- ☐ No coordination
- ☐ Other: [   ]

[]What degree of autonomy should each individual CoP on the platform have? *

Please choose **all** that apply:

- ☐ The autonomy to evolve organically, dynamically with no restraints, using whatever tools, features and formats members choose in this development
- ☐ A large degree of autonomy provided the guiding principles and general objectives of the Platform are adhered to
- ☐ A restricted degree of autonomy as all CoPs on the Platform should have a similar format in order to facilitate monitoring the achievement of the objectives and aims of the Platform
- ☐ No autonomy at all to guarantee the strictest standards are adhered to and to be able to monitor CoP activities
- ☐ Other: [   ]

[]What 3 features and tools would you find most useful on a Platform hosting potentially multiple CoPs? *

Please select at most 3 answers

Please choose **all** that apply:

- ☐ Asynchronous Discussion Forums
- ☐ Blog
- ☐ Q&A
- ☐ Top teaching/learning tips (including using technology)
- ☐ Resource repository
- ☐ News
- ☐ Events announcements/notifications
- ☐ Showcase of good practices
- ☐ Peer feedback on practices
- ☐ Student feedback on practices
- ☐ Tools for creating co-teaching initiatives
- ☐ Jointly created bibliography/bibliographical resources
- ☐ Data-sharing tools
- ☐ Other: [   ]

[]Which 3 external tools would be most useful to integrate into a CoP Platform? *

Please select at most 3 answers

Please choose **all** that apply:

- ☐ Google Drive

- [ ] Google Calendar
- [ ] E-mail
- [ ] Integrated notice board
- [ ] Social networks
- [ ] Teaching/learning management platforms (e.g. Moodle, Zoom, Google Teams, Google Meet)
- [ ] Conferencing/discussion platforms (e.g. Zoom, Google Meet, Skype, Adobe Connect etc.)
- [ ] Other: [   ]

[]Select the 3 types of feedback tools that you think would be most effective in monitoring and enhancing the use of the platform. *

Please select at most 3 answers

Please choose **all** that apply:

- [ ] Formal Questionnaires
- [ ] Feedback and suggestions tool/page
- [ ] Informal feedback from members
- [ ] Report based on periodic monitoring
- [ ] Evaluation of outputs
- [ ] Other: [   ]

[]Select which 3 forms of feedback you think would be most effective in monitoring and enhancing the use of Communities of Practice on the Platform? *

Please select at most 3 answers

Please choose **all** that apply:

- [ ] Formal Questionnaires
- [ ] Feedback and suggestions tool/page
- [ ] Informal feedback from members
- [ ] Report based on periodic monitoring
- [ ] Evaluation of outputs
- [ ] Evaluation of feedback from students (beneficiaries of the outcomes of the CoP)
- [ ] Other: [   ]

[]We would now ask you to kindly take the time to provide any other comments and/or suggestions you may have about CoPs, in particular the kind of CoP you would most likely find useful in enhancing your teaching and/or the kind of CoP you would most likely be an active member of.

Please write your answer here:

[   ]

THE COLLAB TEAM WOULD LIKE TO THANK YOU FOR YOUR PRECIOUS TIME AND INVALUABLE CONTRIBUTION TO THE PROJECT!

Submit your survey.
Thank you for completing this survey.