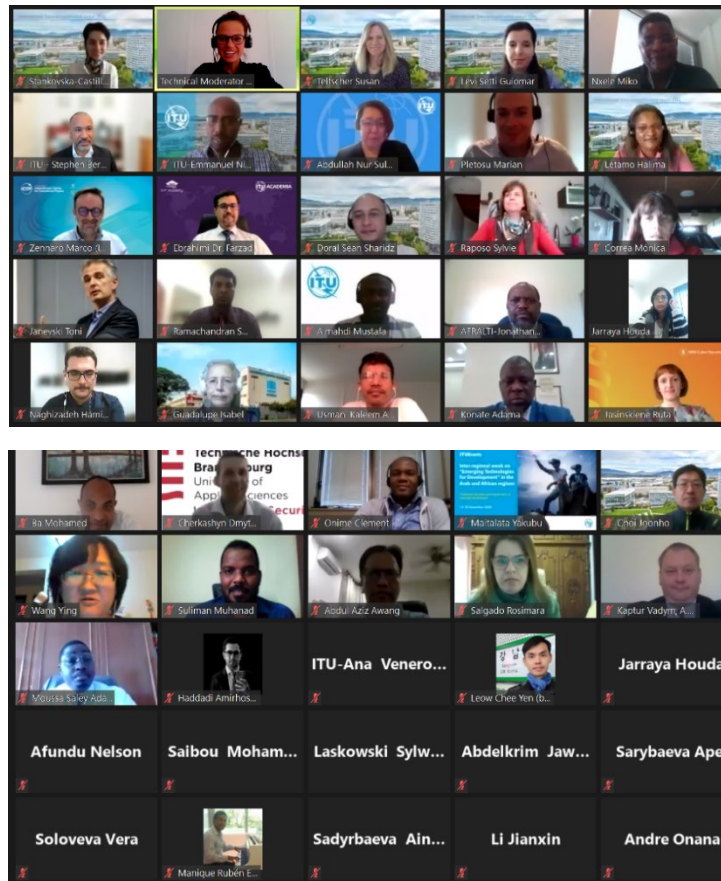# Centres of Excellence Network
Global Meeting

05 - 06 May 2021

REPORT

INTRODUCTION

The Global Centres of Excellence (CoE) Meeting took place on the 5-6 May 2021. It was organized by the International Telecommunication Union (ITU).

The meeting was attended by 54 participants representing ITU CoEs from all the six ITU regions, as well as representatives of the Group on Capacity Building Initiative (GCBI) and the ITU Secretariat. The meeting was the first global meeting of the network held since its launch in 2001. It was organized as part of ITU's efforts to facilitate collaboration between institutions in the ITU CoE network, as well as a response to the request by CoEs to exchange insights with other CoEs, especially those in other regions. The meeting was therefore organized for CoEs to share experiences, discuss pertinent strategic issues concerning the performance of the network, identify challenges that are common across the network and explore potential solutions to these challenges. The main objectives of this meeting were to gather CoEs' inputs into the network's strategic issues, promote standardization of work across the network and open channels of communication between the centres.

Further information, including the agenda, the presentation slides and photos are available at https://academy.itu.int/index.php/centres-excellence/coe-cycles/coe-cycle-2019-2022/coe-global-meeting-2021

Opening Session

The Global CoE Meeting was officially opened by Mr Stephen Bereaux, Deputy Director, Telecommunication Development Bureau, ITU, followed by Ms Lidia Stępińska-Ustasiak, GCBI Chair, and Ms Susan Teltscher, Head, Capacity and Digital Skills Development Division, ITU.

Mr Stephen Bereaux welcomed the CoEs to the meeting acknowledging representation of many CoEs in the meeting. He stated that the COVID-19 pandemic has made it difficult for people to meet physically however, it has provided an opportunity for virtual meetings such as this one, which allows more colleagues to participate. This is also an indication that mandates have to be re-evaluated and adjustments made to meet the changing demands of the digital world. For the ITU CoE network this means intensive dialogue with each other to understand the shifts that are obviously happening in digital skills requirements and to plan how to address these collectively.

Ms Lidia Stępińska-Ustasiak noted that the world has been able to observe the power of digitisation which includes the adoption of AI, enterprise transformation, development of remote education and the impact of these on different sectors. This had introduced new conditions which require a new upskilling narrative and coherent digital skills strategies. She called on CoEs to think together about how they can contribute to skills creation to ensure prosperity post COVID-19.

Ms Susan Teltscher stated that the wish to have a global meeting of the CoEs has been expressed by many CoEs in the past and this meeting is organised as a response to this request. She emphasized that this meeting is not a steering committee meeting but organised based on topics to allow the centres to share experiences and learn from each other. She also presented the main objectives and agenda topics of the meeting.

The moderator, Mr Mike Nxele, ITU, invited the participants to take a poll where they can select their expectations for this meeting. As shown by the results, most of the participants expected to have an opportunity to network with others during this meeting.
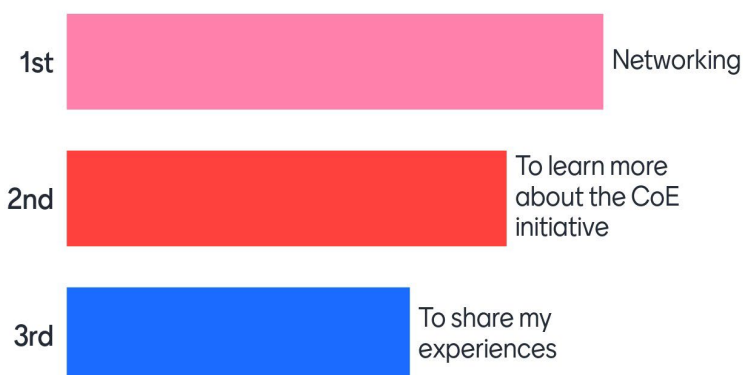
Agenda item 1: Training analysis, hot topics and new trends in training delivery

During this session, presentations were made on the following topics, 1) Priority areas and ICT hot topics for training courses by Marco Zennaro, ICTP, Italy. 2) Best practices in training needs analysis by Rodolphe Kossonou, ESATIC, Ivory Coast. 3) New trends in online training - Mohamed Ba, Digital Innovation Ecosystem, ITU. These presentations are available here.

The issues that emerged from these presentations are as follows:

Hot topics for digital skills development come from two main areas: applications of 5G, and satellite connectivity. These are aligned to most ITU CoE priority areas and will consist of topics such as 5G IoT use cases, smart cities, connected health, sensors from unconnected sites and connectivity for the next billion, among others. Emerging new topics are observed around the area of application of AI and these include topics such as applications with neural networks, low carbon footprint, TinyML, societal impact and ethical issues.

Training needs analysis is enhanced by ensuring consistent availability of data that should be gathered from potential target groups for the training. The data can be collected from organisational training plans, studies of training needs reports, recommendations from organisations, previous years training offers made by different organisations, as well as customised visits to different organisations to discuss their training offers and requirements. This data should be analysed to identify the topics that are mostly needed. Once the topics have been identified, a proposal can then be made in line with available skills and resources of the institutions. The needs analysis should be done at least once a year and used to inform the course offerings of the CoEs for the year that follows.

COVID-19 has accelerated the shift from face-to-face learning to online learning, from the use of sticky notes on boards to the use of virtual boards, and classroom conversations have been replaced with video conferencing. New trends are also emerging that are changing the world of online learning. These include micro learning, immersive content and online science labs, learner generated content and communities, and personalised learning. The online learning environment requires the use of different tools to provide full learning experience and these tools should be focused at achieving real time communication, sharing content, staying organised, creation of online content, thinking visually and engaging the right audience.

Agenda item 2: Group discussions on training analysis, hot topics and new trends in training delivery

During this session participants discussed the following topics in breakout groups and presented the results of their discussion in a plenary session.

(**Group 1**) What are the ICT hot topics currently in demand for training at national and regional level, and are these aligned to the CoE priority areas? The main points raised were:

- The emerging digital economy is a major concern particularly for citizens. To participate in the digital economy, they need access to different devices, tool and applications. The delivery of basic digital skills for citizens should be a priority.

- Blockchain technologies including cryptocurrencies is the future along with AI and cybersecurity. These are the topics that have to be present in most learning platforms.

- Other topics to be noted are cybercrime, machine learning, IoT, satellite communications, 5G, data science, mobile banking and cybersecurity.

- Topics will differ according to the skills needs of each region, country and even target group. Topics have to be varied and made specific to the needs of each target group.

(**Group 2**) How best can CoEs assess training requirements of their potential clients? The main points raised were:
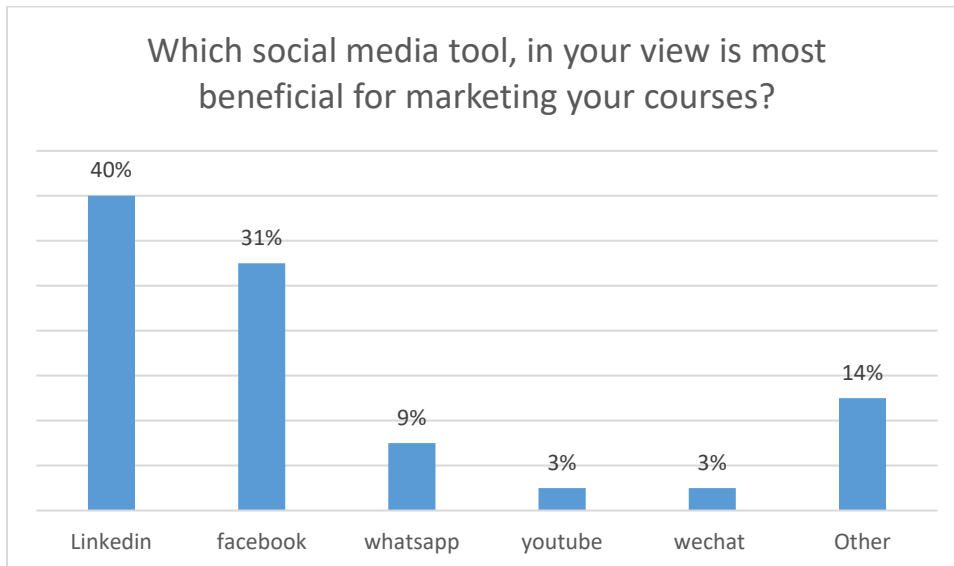
- CoEs should begin by identifying the potential participants to their courses, whether they are students, new employees, experienced employees in the sector or the general public.

- CoEs should use feedback forms after the courses to evaluate how the content was matched to the expectation of the course and use it to develop new course content.

- Use artificial intelligence to analyse data during the training to find out what was most interesting during the training and develop future courses based on that.

- Use international best practices and standards to identify areas of interest or areas that are mostly required and develop courses based on this.

- Check requirements for practical or hands-on components in training to improve the chances of meeting the needs of students.

(**Group 3**) What are the current changes that CoEs implement in online training, what works well and what doesn't work? The main points raised were:
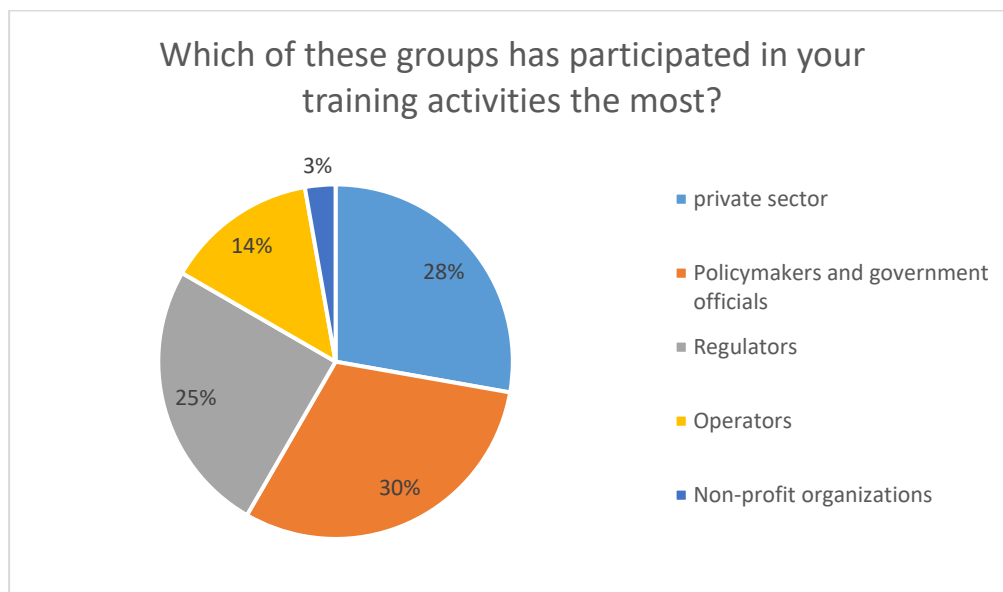
- CoEs have been forced by COVID-19 to go online, some were more prepared than others for this change. This also means a complete change in the teaching strategy.

- Most CoEs learnt how to use different technologies and online learning and teaching tools.

- Online learning allows for scaling and reaching out to more countries.

- Use of web-based training software like Articulate help standardise content development.

- Integration of some tools with LMS can be tricky to use.

- Human interaction is highly reduced.

- The feeling that one is teaching is also lost in a virtual environment as the learners depend more on the technology.

- Comparison between face-to-face and online courses in terms of value is debated with people still not comfortable paying the same amount of fees for online courses as they will do for face-to-face.

Agenda item 3: Course marketing, promotion, recruitment and retention of experts

The session began with a poll where participants were invited to answer two questions, one on social media platforms as marketing tools and another on their training target groups. As shown by the results, the CoEs indicated that they consider LinkedIn as the most beneficial social media marketing tool, followed by Facebook.

Which social media tool, in your view is most beneficial for marketing your courses?

- Linkedin: 40%
- facebook: 31%
- whatsapp: 9%
- youtube: 3%
- wechat: 3%
- Other: 14%

In relation to the target groups, the CoEs indicated that their main target groups are policy makers and Government officials at 30% of the responses, closely followed by the private sector at 28% and regulators at 25% of the responses.

Which of these groups has participated in your training activities the most?

- private sector: 28%
- Policymakers and government officials: 30%
- Regulators: 25%
- Operators: 14%
- Non-profit organizations: 3%

During this session, presentations were made on the following topics: 1) Recruitment and retention of experts for training delivery by Isabel Guadalupe Sifuentes, INICTEL-UNI, Peru; and 2) Marketing and promotion of courses (pre- and post-promotion) by Sylwester Laskowski, NIT, Poland. The presentations are available here. They were followed by a Q&A session. The issues that emerged from this session are as follows:

The use of external experts to deliver training courses provides the CoEs with access to expertise that may not always be available in their institutions. Using external experts also brings into the institution different perspectives which can strengthen the knowledge of the CoE on the topic. Due to the large amount of information on experts available in the market today, recruiting an expert requires evaluation of the

expertise, undertaking validation checks of their credentials, but also ensuring that the offer being made will be attractive. Once the job is done, it is important to provide recognition for the work of the experts and maintain a good relationship with them. This helps build a pool of experts for the institution.

Marketing of courses requires an end-to-end strategy that begins with identifying what the requirements of the clients are, creating the solution, setting the right price, delivering on the promise, making follow ups and maintaining contact with the clients. Marketing also requires innovative actions and some initial investments in terms of time and even resources. There are benefits to letting the client try the offer before they buy. CoEs can offer free content to encourage clients to buy paid courses. It is also critical to build coalitions to create synergy and strengthen credibility. The key to marketing is intensive communication such as 1. Informing customers about all planned courses at the beginning of the year; 2. Starting active promotion of the specific course one month before it begins; 3. Using all available media in the promotion process; 4. Helping customers with everything and making them the CoEs' best advocates.

Agenda item 4: Training delivery, assessment and instructor performance

The session began with a poll where participants were invited to answer a question about the use of digital badges. As shown by the results, the majority of CoEs indicated that they have not (yet) used digital badges, and some did not know what digital badges are. This indicates the need to discuss further the use of digital forms of recognition for course completion.
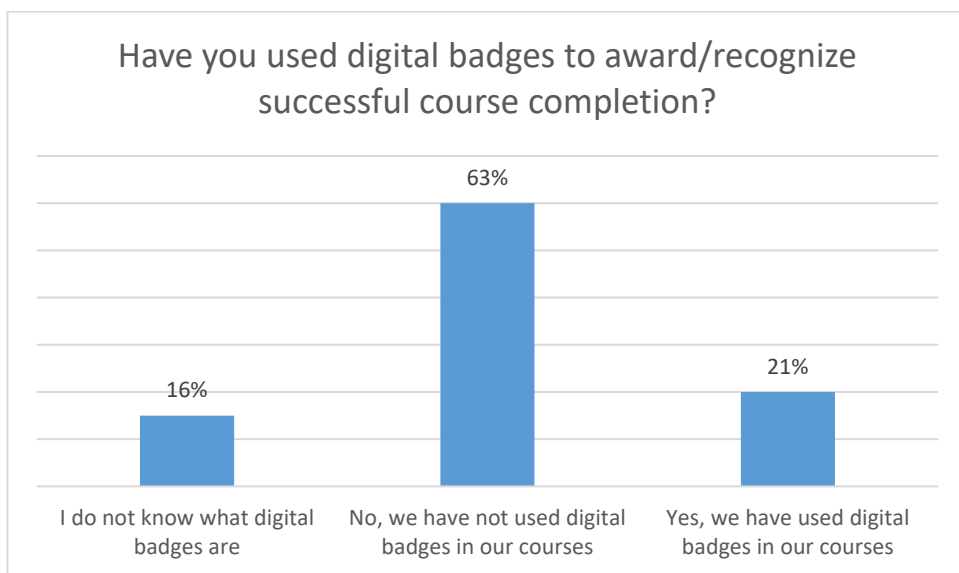
During this session the presentations on the following topics were made: 1) Best practices in training delivery by Andre Onana, ESMT, Senegal; 2) Modes of assessments of learning by Halima Letamo, Capacity and Digital Skills Development, ITU; 3) Improving teacher/instructor performance by Ruta Jasinskiene, NRD Cybersecurity, Lithuania. The presentations are available here. The issues that emerged from these presentations are as follows:

- Training delivery methods range from face-to-face through blended and hybrid methods to online learning methods. This includes the synchronous and asynchronous and co-modal modes of delivery applied in distance online learning trainings. With technology it is possible to reinvent training to ensure maximum impact. New tools can be applied in training which include simple

tools such as audio capsules, interactivity tools, collaborative tools, and more complex tools such as authoring tools. Effective delivery begins with simple steps such as:

- o writing an email to students to remind them of meetings, class times or exams,

- o class etiquette and follow-up on class discussions.

- o always be prepared as a teacher,

- o be brief and concise in presentations, give structure, prepare students and give exercises and homework.

- To determine if learning is taking place during training, formative assessments are used. The data generated from these assessments should be used by the trainers to continuously adjust their teaching and make evidence-based interventions to improve student performance. The tools that can be used for this type of assessment include group work, class exercises, forums, chats, gamified exercises, and video conferencing. At the end of the training, summative assessments are used to find out if learning has taken place or if the learning objectives have been achieved. The data from these assessments should be analysed and used to inform changes in the curriculum or course structure, but also to report on the achievement of learning objectives. The tools used for these include assignments and exams. To assess learning online has brought new complications that teachers are still trying to learn how to cope with. LMS provide different tools to improve credibility of online assessments which include use of proctored software, restricting behaviour of questions to reduce copying or guessing answers and locking new browser sessions.

- The main objective of developing competencies of teachers is to improve student performance. The skills required for trainers are broad and include adaptability, confidence, ability to engage, ability to empower, technological expertise, among others. These require a structured approach to developing teacher competencies. In addition to train-the-trainer courses, institutions can provide professional development support to their trainers by ensuring there is a coaching plan for the trainers; trainers are assigned to more experienced trainers for job shadowing; trainers are provided with on-the-job learning opportunities that are planned for and evaluated; trainers are given assignments to share their knowledge with other trainers such as leading a teacher's discussion of a specific topic once a year, etc. Trainers can also be encouraged and enabled to participate in different professional associations and events.

Agenda item 5: Group discussions on training delivery, assessment and instructor performance

During this session participants discussed the following topics in breakout groups and presented the results of their discussion in a plenary session.

(**Group 1**) What do CoEs do to ensure they deliver quality training? How can CoEs enhance this? The main points raised were:

- CoEs would need pedagogical and assessment tools.
- CoEs should have in place a marketing strategy and monitoring system.
- Improvement of the quality of the experts and trainers is necessary.
- Use standardized methodology or best practices for training delivery.
- Partnerships with other institutions. Undertake training needs assessments and understand the needs of potential clients.

(**Group 2**) How can CoEs ensure formative assessment is achieved during online learning activities? What can CoEs use summative assessment data for? The main points raised were:

- Some CoEs use only formative assessment, some only summative while others use both.
- After each chapter of the course, an activity can be introduced to understand whether students have well understood concepts or need more explanations.
- The final exam can take place online or in the campus depending on the module; it can be multiple choice, simulation, or a practical exercise.
- At mid-term of the course, CoEs can introduce a "control" assessment to find out if the first part of the course has been well understood by students and if they are ready to move to the next part.
- Practical exercises can be used to keep students engaged and keep attention high.

(**Group 3**) What can CoEs do to ensure continuous professional development of their instructors? The main points raised were:

- Association with international organizations to expand collaborations of their instructors with others, promote access to materials and enhance exposure of their instructors to best practices. CoEs need to be able to attract and maintain partnerships with organisations to improve the skills of their teachers.
- CoEs should focus on improving professional, technical and digital skills of their trainers to enable them to cope with the pandemic but also to handle the other professional challenges they may face.
- CoEs should organize teaching activities, joint support, and professional certification, noting that teachers with certification have a better chance to be hired.
- Reward teachers for professional advances.
- Arrange for teachers to take courses on online platforms such as Microsoft, Udemy, Coursera; and provide recognition or reward for these attainments.
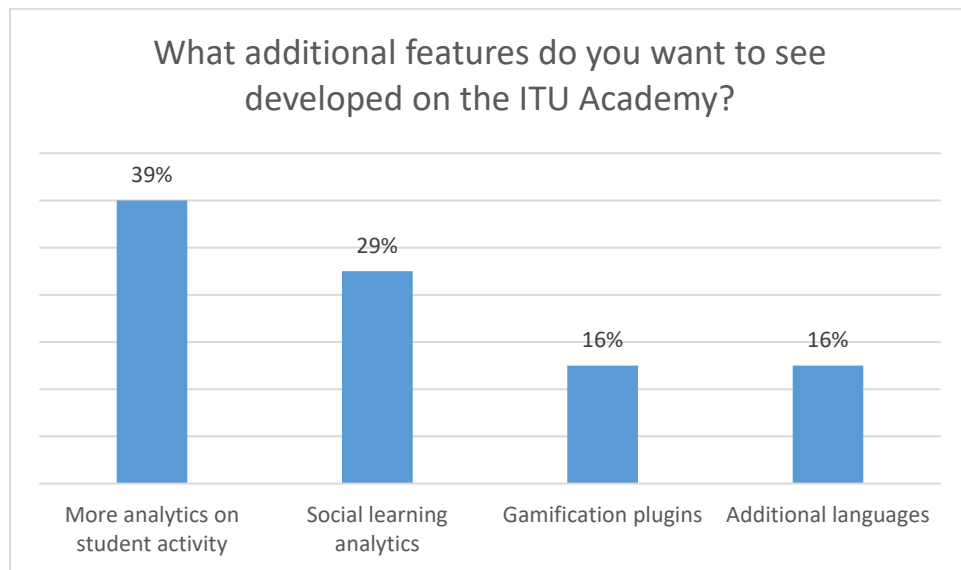
Agenda item 6: Sharing experiences on partnerships.

This session was dedicated to the discussion on partnerships and fees. The following CoEs shared their experiences with different formats of partnerships: 1) Jonathan Mwakijele, AFRALTI, Kenya; 2) Farzad Ebrahimi, IoT Academy, Iran; 3) Isabel Guadalupe Sifuentes, INICTEL-UNI, Peru; 4) Wang Ying, CAICT, China. The topic on fee-based courses vs free courses in the CoE network was addressed by Rosimara Beatriz Arci Salgado, INATEL, Brazil. This discussion was followed by a Q&A. The following issues emerged from this session:

- CoEs partner with international organisations and the private sector for delivery of training. The partners provide training content, expertise and funding and they are usually interested in specific topics and therefore will be willing to partner with CoEs that are working in the same topic or subject.
- CoEs also partner with Governments. These partnerships involve CoEs providing bespoke training to Government departments or communities on a specific topic that is of interest to the government. CoEs are providing training to regulatory authorities, parastatals, ministries and selected groups of citizens under this arrangement. Governments in this instance provide funding to the CoEs to cover the cost of delivery of training and the CoE provides the content and expertise.

- In some instances CoEs partner with other CoEs, where the CoEs can share content with each other, run training that is conducted by experts from both partners, exchange experts, market each other's courses, and arrange for student exchange programs.

- CoEs also partner with institutions of higher learning where the institutions provide CoEs with experts for both delivery of training and input into development of materials. The CoEs can also provide courses that are an input into the institution's major programs. This way the CoEs create a market for the institutions and vice versa.

- The other arrangement that helps CoEs to enhance collaboration and value of their programs is to crowd source trainers where the CoE organises a team of experts to deliver a longer course. This direct partnership with experts ensures a good supply of trainers for the CoE.

- In relation to fee-based vs free courses, some CoEs offer free courses that are short in duration and are used as a teaser for the longer courses. These courses are usually attended by a large number of participants compared to fee-based courses. Fees are mostly charged for longer courses that provide in-depth knowledge to the topic. In-depth courses can also be provided for free to participants under a partnership arrangement, where the CoE is receiving funding from a partner to cover the costs of training and the participants don't have to pay tuition.

At the end of this session, participants were invited to take a final poll where they were asked to share their views on additional features they would want to see on the ITU Academy platform and on the networking tools Wonderme, which was introduced in this meeting. As indicated by the results in the below charts, the CoEs would primarily like to see more features that help them analyse student activity and social leaning.

What additional features do you want to see developed on the ITU Academy?

More analytics on student activity	Social learning analytics	Gamification plugins	Additional languages
39%	29%	16%	16%

In relation to the Wonderme tool, the majority of respondents said yes they liked the tool, while some said maybe. It is possible that the "maybe" option was a choice selected by participants who were not able to participate in the Wonderme meeting as participation was voluntary.

Did you like the WONDERME to meet other people in virtual rooms?

- yes
- maybe

36%

64%
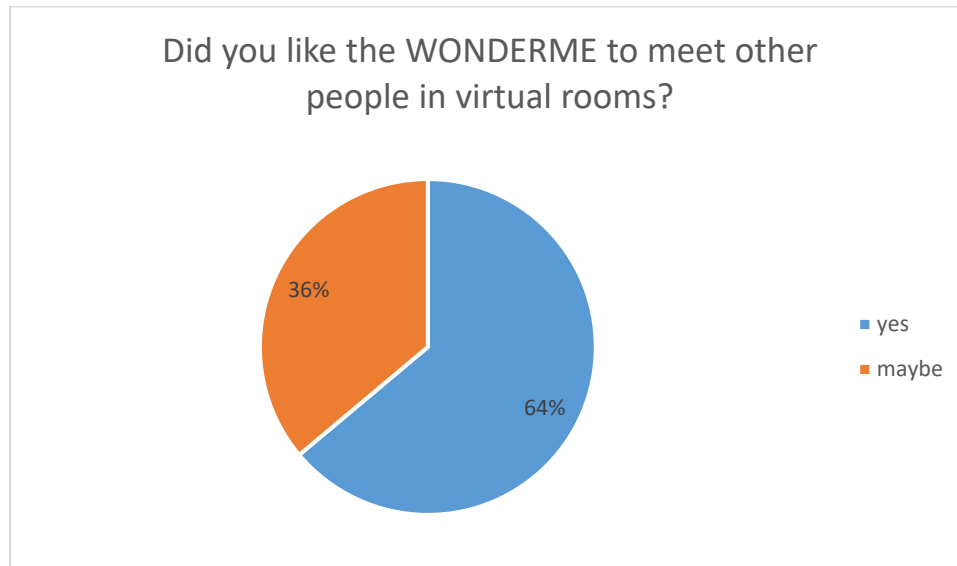
The participants were also invited to take a final poll to indicate how they feel about the meeting using one word. The following shows the reactions of the participants to this question.

Using one word what was your impression of this meeting?

Follow-up action

A number of suggestions were made during the meeting and the discussions concerning possible follow-up actions:

1. ITU to create a database of experts/instructors that could be accessed by all CoEs.

2. The CoE programme can benefit from building capacity of each CoE in a specific topic, which other CoEs can then access when they need expertise in the respective area.

3. CoEs should consider investing time and other resources in marketing, developing their trainers and improving training delivery to make their courses more attractive.

4. ITU should consider proving guidance to CoEs on standardized ways of delivery, assessment and evaluation of training.

Closing

Closing remarks were delivered by Ms Sulyna Abdullah Lim, Chief a.i., Digital Knowledge Hub, BDT/ITU. In her remarks, she encouraged the CoEs to embrace new ways of imparting knowledge indicating that the use of the latest technology and apps alone is not sufficient and requires innovation, and the adoption of new training methodologies to be able to keep up with current and emerging needs. She emphasized the role of marketing stating that form is as equally important as substance to attract people to sign up and remain engaged. As such, embracing new ways of marketing is not only the key to continued success but also, relevance. She reminded the CoEs that collaboration is critical to all of the above and trying to achieve this together will not just lessen the load but enrich experience, which will augment programmes and in turn create greater benefit for trainees. She reiterated the commitment of ITU in supporting the CoEs to achieve their mandate and encouraged them to reach out to ITU whenever they need support or assistance.