

E-innovations

E-innovations & ICT approaches to CPPB training

As information and communication technologies and approaches to eLearning continue to develop and evolve, so too do the opportunities to integrate or use e-learning methods, approaches and platforms to improve CPPB training and preparation of staff and personnel for working in the field. Though eLearning approaches have now been around for more than three decades, recent years have seen an exponential growth in innovation and development of technologies, as well as how they are being applied to learning and capacity development, opening potential new frontiers for the advancement of CPPB training. Particularly from the early 2000s eLearning and e-approaches had already begun to enter the CPPB training field. Today, utilisation of eLearning courses, training and platforms can be seen at the European institutional level (e.g. EEAS), in international organisations (UN, OSCE etc.) and in the NGO and private sectors.

This Unit identifies and explains existing concepts and technologies in eLearning and ICT-based approaches to training, explores the state-of-art of their implementation in the CPPB training field and draws recommendations for their further utilisation and ‘future evolution’ frontiers for how e-learning and ICT can improve training and performance and operational competencies of both practitioners and organisations / missions in the field.

The Unit provides a typology of eLearning approaches and explains blended-learning, technology-rich instruction as well as full online training in a formal and informal settings. The second section looks at e-approaches to learning and training in the CPPB field and briefly explains how these modules are built, what functionalities they contain and to whom they are targeted. The third contains an overview of key concepts in e-learning and ICT approaches to CPPB training that can help in the further development and use of ICT in the field. The fourth section looks deeper into web rosters for training and providers, observing how they are built and their structures. In addition, more detailed Notes on the following e-Approaches and Methods have been developed to support trainers and training institutions in the field, building on this Unit and providing further definition of characteristics, strengths, challenges, and issues to consider when using in CPPB training. Readers may click on the links to visit the Notes.

E-Approaches & Methods

E-Learning Approaches

Learning Management Systems

Online Courses

Gamification and Simulation

State-of-Art eLearning Forms and Technologies

The term eLearning which stands for “electronic learning” can refer to distance learning approaches as well as to educational technology used either to facilitate learning on site, such as using multimedia tools and Information and Communication Technology (ICT); complementing on-site-learning with further materials that support learners to digest the lessons learned, develop core competencies, practice or collaborate with fellow learners; or create fully virtual learning environments where the overall learning, training and interaction is carried out online.

This section describes the typology of eLearning concepts and technology types behind each of the concepts - as observed across a range of teaching and training disciplines including CPPB, medicine, business and military training and education. It further discusses the benefits and challenges of implementing some of the most advanced technologies and approaches in the CPPB training context.

Blended Learning

Blended learning is an educational approach that combines both traditional learning on-site and online digital media and it is applied in the educational environment as well as in training settings (*Defining Blended Learning*, 2012). The combination of both approaches can happen in different forms and varies from one educational or training context to another. One of the most comprehensive taxonomies for blended learning in the educational context was developed by Staker and Horn in 2012 (see. Figure 1).

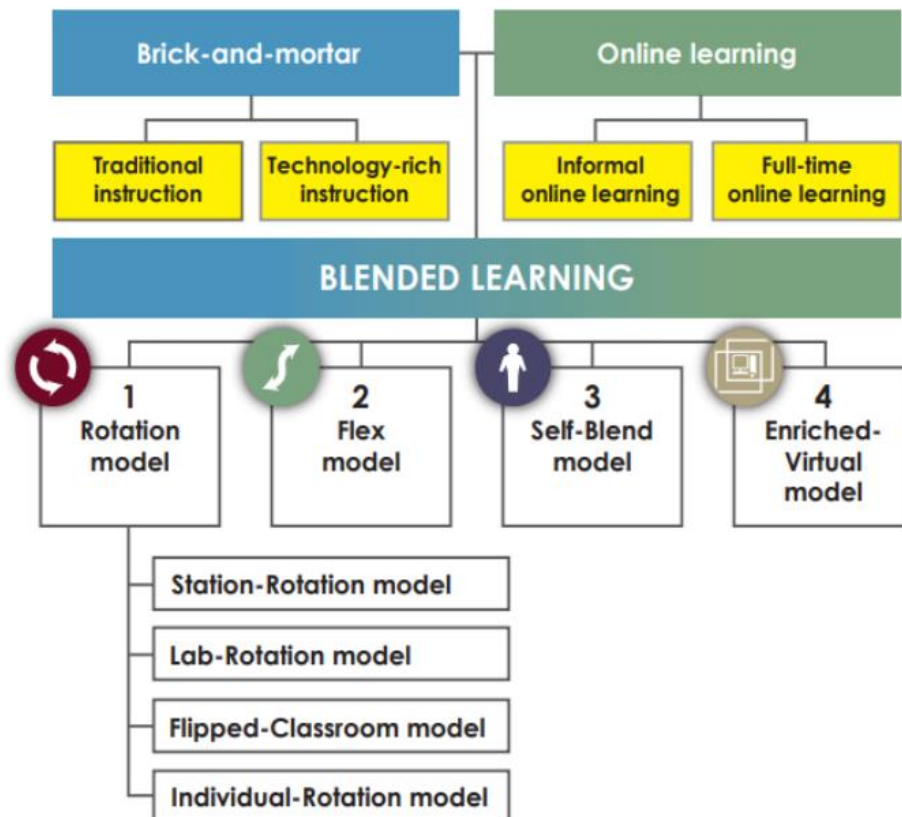


Figure 5 Blended-learning taxonomy in relation to other educational forms (Starker and Horn 2012)

As the picture shows the taxonomy includes at least four existing forms of blended learning briefly described below:

1. **The rotation model:** online engagement and face-to-face forms are combined in a cyclical (or layered or sequential) manner.
2. **The flex model:** most of the leaning takes place through an online platform but the teacher/trainer is also available physically.
3. **The self-blending model:** learners choose to take additional online courses independently.
4. **The enriched-virtual model:** the entire course is online but periodical physical meetings are arranged.

Figure 2 illustrates a scheme that seeks to enhance the understanding and categorisation of courses as blended learning or otherwise.

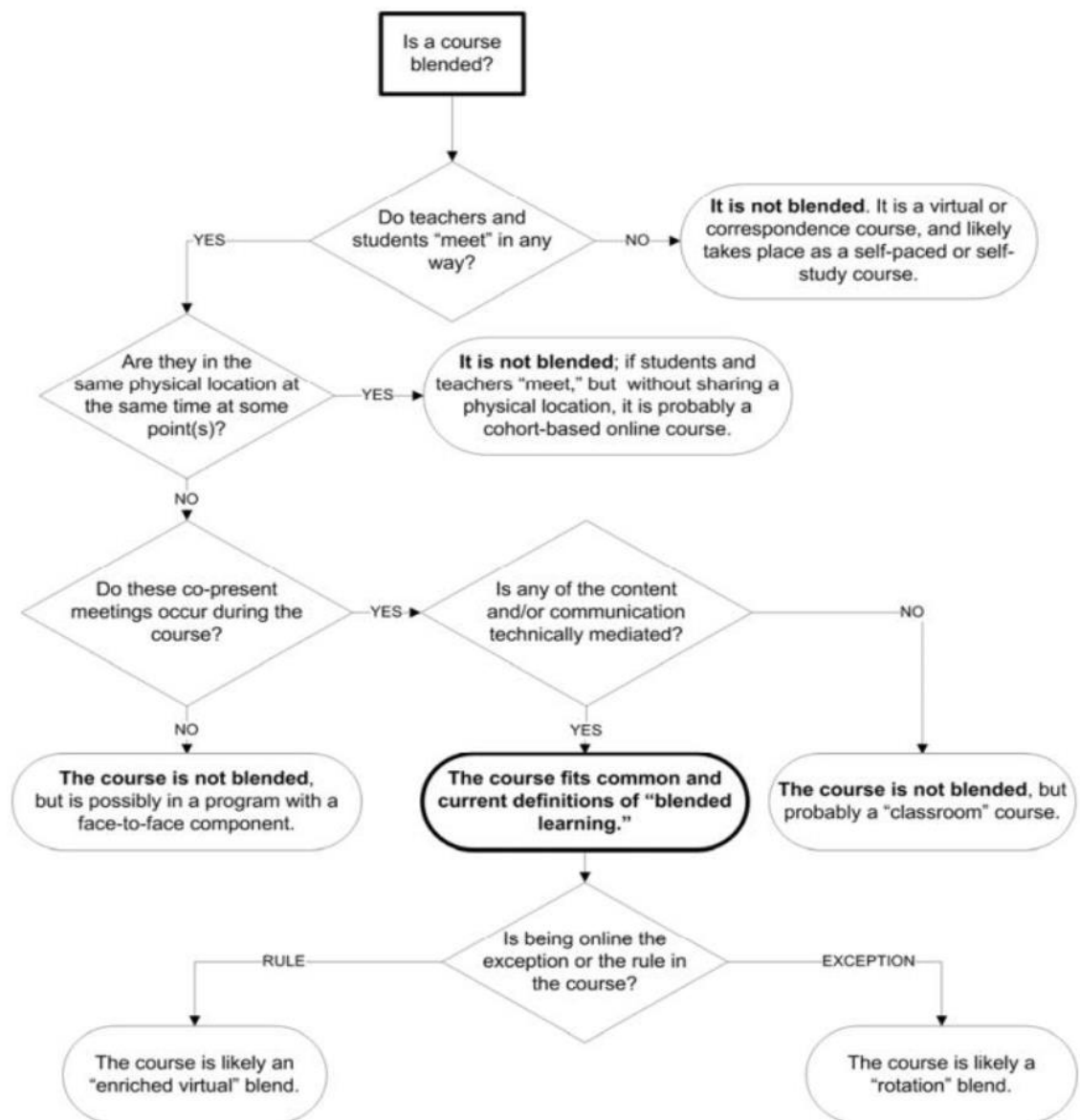


Figure 6 Is a course blended-learning? (Friesen 2012)

Besides this taxonomy of blended learning, Figure 1 also draws a distinction with other traditional forms: traditional instruction, technology-rich instruction as well as informal and (formal) full-time online learning. Traditional instruction is face-to-face based while **technology-rich instruction** involves face-to-face instruction combined with the use of multimedia and other technologies such as whiteboards, tablets and other Internet devices etc. The following sections describe the concepts and technologies behind technology instruction (Computer Supported Training), fulltime online learning (Traditional online courses, Webinars and Massive Open Online Courses) and informal online learning.

Computer Based Training

Computer-based training (CBT) is one of the most traditional eLearning forms involving the use of traditional devices such as a CD, DVD or MP3 devices that play multimedia. Other more recent additions in this category of training include tablets and smartphones that enable playing / teaching software/programs or applications. Common uses of traditional CBT involved learning languages, computer programmers or other fields that involve static learning processes. CBT may also involve assessment processes in the form of multiple choice questions, drag and drop menus etc. **Smartphone applications** and tablets are the latest innovations in this category and are currently gaining popularity in the overall eLearning field, giving birth to the term **m-Learning** (m = mobile).

Mobile Learning (m-learning)

m-Learning refers to “the use of portable computing devices, such as iPads and other tablets, laptops, personal digital assistants (PDAs) and smart phones connected to wireless networks.”³ With increased memory and storage capacity on smart devices, devices also no longer require to be connected to a wireless network or even have internet access but can download learning resources for use when out of range. This enables teaching and learning to extend across both space and time including in remote locations or areas where learners lack access to traditional training rooms and facilities. Relevant to the CPPB field, m-learning can provide: quick guides, toolkits, interactive learning media such as video tutorials and pre-packaged coaching, case reports and lessons learned, exercises and templates for improving task implementation and much more and templates and guided application of tools and processes such as peace and conflict analysis or planning a dialogue or training programme. As the NATO e-Learning Concept notes: “With the GPS capabilities of phones and other mobile devices, courses can be dynamic in nature and guide students during familiarisation training or provide immediate access to support on demand, whether in the workplace or in the field.” (*NATO e-Learning Concept*, 2014) There are a breadth of exciting potentials for better integration of mobile learning in CPPB and ensuring improved access to learning opportunities and resources for practitioners in the field or wherever they may be.

Fully online learning

Fully online learning implies courses that are fully conducted online. Online courses can differ in both the technologies and methodologies used, objectives of the learning and in the audience. An interesting evolution in online learning over the last decade has been the rise of free education and Massive Open Online Courses (MOOCs) described further below. While there are only a limited number of MOOCs specifically in the field of CPPB, their relevance for enabling large numbers of people to become familiar with core concepts, competencies and knowledge areas in the field holds interesting potential.

Traditional Online Courses

Traditional online courses are usually available to a limited audience of registered users and involve online materials in the form of texts, slides, infographics and videos. The learning method is usually linear but may also offer the opportunity to jump from one lesson to another. Some of the most traditional or first-generation eLearning forms include slide-sharing and limited texts. With the evolution of technology, videos and other interactive materials have become more commonly used. Many training institutes in the CPPB field offer traditional online learning courses in which the curriculum is available online together with an assessment method, however with little or no interaction to the instructor or among the participants (see following sections).

Learning Management Systems (LMS)

An LMS is a software application used either in the form of blended-learning or to conduct fully online courses. Main modules and functionalities of an LMS include sharing documents (Learning Content Management System), collaborating with the instructor and with other peers through a forum, assessment through quizzes or open questions (Computer-aided assessment), progress tracking and reporting (Electronic performance support system) etc. In a fully online course, the LMS also includes audio and video materials that replace the face-to-face training. According to the Global LMS Software market size which analysed market shares of LMS software providers covering almost all world regions, the main providers of LMS worldwide include SumTotal Systems, Blackboard, Cornerstone OnDemand, NetDimensions etc. In the European and North American market, Moodle and Canvas are also positioned in the first places for market shares⁴.

³ NATO *e-Learning Concept*, 2014, p. 8

⁴ <https://www.wiseguyreports.com/reports/3005320-global-lms-software-market-size-status-and-forecast-2025>

Massive Open Online Courses

Massive open online courses (MOOCs) are an evolution of Open Educational Resources (OER) with the aim to make educational materials accessible to everyone. As such the number of participants attending one course is unlimited. Educational materials in MOOCs may include texts, infographics, publications links, video lectures, assessment methods in the form of quizzes but also in open questions and online collaborations spaces such as discussion boards where course participants can interact with each other and with the course facilitators. The existence of a collaborative environment, a course facilitator and open assessment differentiates among two types of MOOCs:

- **Self-paced courses (asynchronous)** are courses in which the material can be accessed anytime. The assessment method may be through multiple choice questions, drag and drop menus etc. and the certificate can be acquired at any time.
- **Instructor-paced courses (synchronous)** have a definite starting and ending date and are facilitated by an instructor who take the audience through all lessons in a linear way. The assessment methods can be a combination of multiple choice questions and open parts (essays) which are evaluated by the instructor at the end of the term. All materials remain online accessible also after the end of the course, however receiving a certificate is no longer possible since the instructor cannot evaluate open assignments. The collaborative environment is also active only during the course duration. After the termination enrolled users can view all discussion boards but no longer contribute to the content.

According to the pedagogical model employed, MOOCs can also be divided into two further categories first defined by Stephen Downes

- **cMOOCs:** The “c” in this term refers to the connectivist pedagogy based on the practice of having open and collaborative materials that enable learners to shape the content by opening discussions and working on joint projects. The collaborative aspect means that such courses are not self-paced and have a start and end date. The four major sorts of activities that can have a benefit for learners are defined by Downes as: aggregating information (rather than predefining it), remixing, re-purposing, and feeding-forward (or making it relevant for future use). Ravenscroft argues that connectivist MOOCs can better support collaborative dialogue and knowledge building.
- **xMOOCs:** or expert-led MOOCs follow the traditional pedagogy of having a fixed syllabus and materials predefined by an expert who is the course instructor. The interaction between the course participants is limited to technical questions and discussion forums for the participants to

collaborate may not exist. Prpić et al. argue that xMOOC are courses that employ elements of an MOOC but in effect are branded in IT platforms that offer content distribution.

Both forms of MOOCs, but especially the cMOOCs are a modern phenomenon of the early 2000s, with the OpenCourseWare (OCW) movement first started by the University of Tübingen in Germany ([Tübingen Multimedia Server](#)), followed by the Carnegie Mellon University ([Open Learning Initiative](#)), Massachusetts Institute of Technology ([MIT OpenCourseWare](#)), Harvard university ([HarvardX](#)) and other Ivy League universities. Though the MOOCs phenomenon started in the academic field many international organisations and initiatives are now embracing it on issues of global importance. One example of this is the [SDG Academy](#) which, among others, offers CPPB related courses.

Many no-profit and for-profit consortia or universities, foundations or corporates have built extensive platforms offering MOOCs on a broad spectrum of fields. The most worth mentioning and rich on CPPB related course include edX and Coursera. A longer list of MOOC platforms with links can be found in Annex 1. [MOOC-LIST](#) on the other hand is portal that lists courses from a big variety of providers and enable fast searching and filtering options.

Webinars

Webinars stand for a combination of the terms “Web” and “Seminar”. In other words, they are traditional seminars broadcasted live on the web seeking to reach massive audiences. Webinars might mean that the seminar is held in front of a physical audience and also broadcasted online to a broader audience which can participate by typing questions online, or it can be held from a referent to a fully online audience thus creating the so-called **virtual classroom**. Contrary to Webinars are **Webcasts** which involve streaming the educational session online however without giving opportunity to the viewers to be engaged by asking questions or making suggestions that are integrated in the conversation. Technological tools enabling webinars are so-called **videoconferencing tools** such as AdobeConnect, Cisco Webex etc. Such tools allow the referent to share slides or the screen, stream a video stored in the computer or online (YouTube videos), talk to the audience and simultaneously type in a chat, conduct surveys and polls etc. A list of the highest rated videoconference tools can be found online at the software platform Captterra

(Informal) Web-based learning

With the evolution of the Internet and the development of Web 2.0 as a virtual space where users no longer just receive and digest information (Web 1.0) but instead are producing as much as consuming it, several platforms and functionalities with relevance to learning and training have emerged. Benefits of using Information and Communication Technology (ICT) in the CPPB context have been pointed out by several initiatives such as the [ICT4Peace Foundation](#) or the [PeaceTechLab](#). While a typology of ICT for peace approaches may extend as well to many aspects of conducting CPPB operations in the field, many of these aspects are also relevant to training. ICT or web-based tools may include **knowledge platforms, blogs, wikis, social media channels, virtual games and simulations** etc. These tools and approaches have gained attention from research not only on specific to peace training but also for

training on other fields such as medicine. Much of the research observes their benefits to training while also pointing out challenges. Since one of the main aims of PeaceTraining.eu is to enhance CPPB training through ICT-based approaches, the next sections present some of the ICT approaches most relevant to peace training and look deeper into the potentials and challenges.

Transmedia Collaborative Learning (TLC)

Transmedia Collaborative Learning (TLC) is a new eLearning concept referring to learning which involves collaboration and utilisation of a range of available social and multi-media platforms. The combination of *collaborative* and *transmedia* refers to learning and training models in which learners *collaborate* in the creation of knowledge and content or interact in problem solving or task implementation, engaging with (*transmedia*) multiple social and multimedia technologies and platforms including (for example) *chat rooms, discussion forums, webinars or webcasts, wiki* and more.

Virtual worlds

Virtual worlds are one of the exciting 'new frontiers' in eLearning and immersive training. They cover a range of technologies from the creation of online 'model' worlds and contexts in which participants can 'engage' using immersive technologies or avatars used as graphical representations of people. New developments are also seeing increased integration of virtual worlds with traditional eLearning approaches where learners can move back and forth between the two, "jumping" into virtual worlds and then out again to test skills and capabilities and then acquire further knowledge and understanding to contribute to improved performance capabilities. The potential of virtual worlds to enable learners to 'experience' situations they will face in the field and exercise, test and develop skills is significant. It can also improve learner's capabilities to interact across stakeholder groups and improve core 'employability' or CPPB-assets. Another potential application is the use of virtual worlds to facilitate communities of practice – a key professional learning and competency development approach in the field – when practitioner learners are separated across distances.

Field simulations based on cloud resource planning (CRP) systems

This links with the range of concepts explored above from *immersive learning, serious gaming* and *virtual worlds* to *performance-oriented design, organisational, sectoral or field-level knowledge management systems and learning and learning content management systems*. Here, the specificity of *cloud resource planning systems* is that information relevant to mission / CPPB performance is collected, stored, managed, interpreted / made sense of *on a dedicated / shared* cloud-based information management system to improve mission-performance and identify 'real world' / field-based needs, performance contexts and 'problems' that need to be addressed. Data gathered from this can then be fed into the development of eLearning (and off-line) training and modules, gaming and virtual world simulations.

Serious Games

Serous games are designed to engage students with ‘real world’ situations and experiences using game-play to educate and develop understanding and capabilities. Examples of current, already existing serious games in the CPPB field are detailed further on in this report. They allow preparation for in-the-field CPPB experiences and development of performance capabilities with opportunities to retry, re-learn, advance, adapt and improve, and test current-level understanding, knowledge and capabilities while facilitating learning evolution. One value of serious games is they can be replicated and engaged with ‘on demand’ both prior to and during field deployment – and can be used to make real world situations available to a wider-range of learners including both current and future practitioners and professionals in the field.

eLearning Concepts and Considerations relevant to CPPB

The previous section provided a brief overview of some of the key eLearning concepts more widely discussed and known in both the education and eLearning fields. In this section we go further into exploring key eLearning concepts specifically relevant for current and future developments in CPPB training. Three levels or dimensions of eLearning concepts relevant to the CPPB training field are addressed related to: practitioner learners; organizational-field performance, knowledge management and learning; and learning technologies and approaches. These are concepts in many cases widely engaged with and known by experts in ICT and eLearning, but which may be less familiar or engaged with in the CPPB training field. The purpose of this section is to begin identifying some of the key elements / nodes in the ecosystem of concepts and approaches to eLearning that can feed into next generation thinking and evolution of ICT and eLearning support for CPPB training, both by training

providers and trainers and deployment agencies – to improve the quality of training, capacity development and professional support available to their staff. The specific concepts listed have been selected for their centrality to the field and relevance to providing improved CPPB training methodologies and approaches. Taken together they form a ‘landscape’ for thinking through an improved approach to CPPB training which can better equip participants with capabilities and competencies needed for improved field performance. Their value can be if they assist trainers and designers of online platforms and learning technologies to think through key dimensions and approaches which can improve CPPB training and eLearning provision.

Student-Centric Learning

Student-centric learning is a concept more and more widely embraced in both on- and off-line education and training. The flexibility and adaptability of tools and new possibilities available with advancements in eLearning increases our capacity to develop robust bespoke learning. In student-centric learning the learner is able to significantly influence the content, activities, materials and approach to learning and capacity development, and the pacing of their approach. This enables the learner to take a more active role in transforming learning into a “process of discovery and knowledge construction” more than “merely a transfer of knowledge from instructor (or electronic medium) to student.”¹³ With advances in e-technologies and learning functions this enables providers to develop increasingly customised and tailor-made learning experiences suited to the specific needs and context of individual learners while better enabling them to achieve performance competencies needed for the field, and at lower costs.

Levels of Interactivity

When designing eLearning platforms and modules / trainings, training designers need to think through the *levels of interactivity* needed to achieve performance competence and learning. The following table is adapted and developed from the NATO e-Learning Concept which initially identified levels 1 – 4, with level 5 added by PeaceTraining.eu:

Table 2 Level of Interactivity

| # | Level | Description |
|---|-----------------------------|--|
| 1 | Passive | Learner participants act solely as receivers of information. |
| 2 | Limited Participation | Learner participants engage in simple responses to instructional cues and interact with learning resources and materials not only as 'receivers' but in responding to or summarising knowledge gained or providing narrative or multiple-choice responses. |
| 3 | Complex Participation | Learner participants engage in increasingly complex response and interaction with learning materials and instructional guidance and cues. Learning becomes increasingly interactive with the learner no longer only 'receiving' but also interacting, creating and contributing to knowledge internalisation and development. |
| 4 | Real-time Participation | The learner participant is directly involved in immersive or life-like sets of complex clues, responses and learning-doing environments. This may include simulations, problem-solving and more. |
| 5 | Collaborative Participation | Varying degrees of collaborative participation may be involved in Levels 1 – 4 above. This level has been added by PeaceTraining.eu as key for learning designers and platform creators to consider. Collaborative participation refers to joint response and interactive problem solving, learning and participation by <i>multiple learners</i> working / interacting with each other in responding to learning clues and processes. |

Customised Learning Profiles

Customised learning profiles enable learners to introduce their preferences in what type of learning works best for them. This can involve selecting from available learning mediums with learners identifying which approaches and systems work best for them, as well as enabling learners to 'rate' different methods, instruments and content. Learning profiles can also be *customised* for learners by intelligent computers / learning systems able to identify patterns and draw upon previously provided information to better differentiate and customise each individual learner's experience.

Differentiated Instruction

Differentiated instruction is an approach to learning and training stemming from the understanding that people have multiple approaches to learning competencies and skills development. ICT enables a high degree of customisation of learning platforms and processes to serve different learning needs and *approaches to learning*. The point is: this can be built into the system and doesn't require additional effort – after initial design – to improve provision of customised training to each participant. This includes the ability to select and customise levels of interactivity, modalities for delivery of content, timing of learning and more. Kathleen Scalise in the International Journal of Learning Technology identified 5 'Types' of *Differentiation* including differentiation of: *content, process, product, affect and learning environment*. Differentiation – selecting what learners should receive or how their learning experience should be crafted – can be .

- **Diffuse:** with learners receiving the same content but having multiple opportunities and different approaches for ‘making sense’ of the materials provided;
- **Self-Directed:** with learners *themselves* choosing preferred content and methods of learning;
- **Computer or model-based differentiation:** in which the learning system itself differentiates the learning path based upon information received and learning (being able to adapt based upon information) from the patterns and needs of the individual learner

The need for differentiation has been recognised in both traditional learning, training and eLearning. With the evolution of artificial intelligence and SMART technologies, opportunities for improving customisation through differentiation are becoming more and more realistic and achievable. In this way, eLearning can provide improved opportunities for assisting learners to achieve necessary competencies and performance capabilities for the field by intelligently learning and knowing their needs and ‘best approaches’ to learning.

Work Place Learning

The concept of *work-place learning* has been standard for years in the business sector but is still relatively new to CPPB, where the traditional concept is that staff either are hired with the existing competencies needed or that 1) they are sent to training to develop competencies or 2) training is arranged on site for competency development. In *work-place learning*, learning and the acquisition of skills and competencies takes place in / at the work place – often integrated into or parallel to the learners’ job performance. This can include both *on-line* and *on-site* components. *Work-place learning* emphasises aligning individual and organisational learning needs, and the “connection between learning and work performance.”¹⁷ eLearning can be an integral component of *work-place learning*. At the moment, however, there is very little customisation of CPPB eLearning for specific, actual work contexts. While the UN and others have developed a range of online courses or ‘learning modules’ for basic level knowledge development on some aspects related to ‘in the field work’, very little has been done by most organisations, agencies or missions to provide customised eLearning platforms and opportunities to develop or improve staffs’ knowledge, capabilities and skills. This represents a *frontier*

that should be more actively engaged with to ensure staff are able to gain the precise CPPB skills, attitudes and knowledge they need to improve job and organisational performance in the field, and to contribute to peacebuilding and prevention impact.

Activity Theory / Activity System

Activity theory directs focus not towards individual learners but to the ‘activity system’ in which individual learners operate. An ‘activity system’ is made up of a group or constellation of actors or ‘stakeholders’ of any size “pursuing a specific goal in a purposeful way”. An example would be of agencies engaged in peacebuilding in a specific conflict context, or staff in an organisation or mission engaged in specific CPPB activities or working towards a precise *specific objective* or *impact goal*. It could also refer to the constellation of actors / stakeholders involved in a specific ‘sector’ in a conflict context – e.g. working in DDR and Security Sector Reform. *Activity Theory* and *Activity Systems* as *concepts* in eLearning draw attention towards the competencies and performance capabilities needed at the level of the *system* – constellation of actors – and the roles, responsibilities and functions they

have to achieve CPPB goals. In this way, eLearning courses and approaches might be developed which would (for example): engage staff from different agencies in the same learning platform to improve shared knowledge, understanding and inter-agency performance and collaboration; involve staff from the same agency/organisation in joint eLearning approaches or courses to improve overall staff/team capability to achieve targets (KPIs) in a certain activity. These are only some of the ways these concepts can relate to CPPB eLearning. The concept of an *activity system* is particularly relevant to the identified need to improve core CPPB skills and capabilities at a 'system' or 'field' level *across* institutions, agencies and stakeholders, and not only for 'individual' participants.

Competency-Based Learning

Competency-based learning is another concept central both to traditional learning approaches and the evolving field of eLearning. In *competency-based learning* is driven by the need to develop specific competencies needed by the learner to be able to perform effectively within a given role or environment. In CPPB this would relate to the development – at different levels of specialisation and performance capability – of competencies needed for the effective *doing* of prevention and peacebuilding.

“Employability” or CPPB-Assets

Mayes and de Freitas, in their *Review of e-learning theories, frameworks and models* define *employability assets* as “generic outcomes / competencies – not dependent on declarative knowledge – and include analytical and flexible learning capabilities, but also emphasise qualities that are much harder to specify as part of a curriculum: confidence, self-discipline, communication, ability to collaborate, reflexivity, questioning attitudes. These outcomes start to suggest a crucial role for the community of practice approach, and turn our attention to learning environments that provide maximum opportunity for communication and collaboration, such as networked learning environments.”²⁰ While again more commonly engaged with in the business field, in CPPB the concept of 'employability assets' – or more specifically 'CPPB-assets' – is relevant as well. Evolving utilisation of *communities of practice* and increasing recognition of the breadth of adaptive and flexible capabilities and 'character skills' needed for CPPB indicate the importance of first identifying and secondly considering what would be key CPPB- assets when designing eLearning courses and approaches and identifying competencies needed for the field.

360-degree Feedback

360-degree feedback is a concept used in both business and sports. It has been taken up in eLearning for businesses and is relevant to CPPB as well. In *360-degree feedback* personnel's performance can be evaluated and assessed by: the individual her or himself, line managers/supervisors, subordinates, peers and other identified relevant stakeholders. This can be in addition to standardised evaluation and testing methodologies – from on-the-job performance and achievement of KPIs, tasks and responsibilities to testing, performance on simulations and more. Course designers are also looking at how to integrate *360-degree feedback* into online learning platforms (enabling learners, peer-learners, coaches, trainers, and testing systems to provide scheduled and live/real-time feed-back) *and* to incorporate on-site (offline) feed-back into design of customised learning profiles.

Systems Approach to Training (SAT)

Standard within much of the corporate approach to eLearning, SAT provides an integrated approach to instructional strategies and learning technologies intended to aid in the transfer of learning – of knowledge, skills and attitudes – to implementation and performance in the real world. The model includes 5 'phases': Analysis, Design, Development, Implementation and Evaluation (ADDIE). The phases are intended to bring about continual evaluation and feed-back to ensure the suitability of eLearning for the field, and integration of the needs of the field into eLearning.

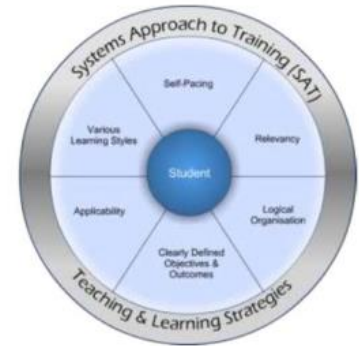


Figure 7 Systems Approach to Training

State-of-Art e-Approaches in the CPPB field

This section looks deeper into the CPPB training field and related areas and describes how the tools and concepts in the previous chapters are being implemented. In doing so it seeks to create a typology of existing e-approaches in CPPB training classified by their audience.

Online courses for practitioners/mission staff

These include eLearning options for practitioners applied by the organisations deploying them. The trainings are mainly offered in CPPB-related areas (e.g. Security Awareness in the Field). Some of these courses are delivered completely online while other approaches use an LMS as a blended method to

ICT tools related to training and learning

Besides the classical formal online training and learning approaches in CPPB described so far, this section looks deeper into ICT tools existent in the CPPB context that have a relation to the development of knowledge and improved field understanding, and which can be utilized in conjunction with training. These tools involve information on the specific conflict-torn areas, lessons identified in the field, and resources including analysis, toolkits, handbooks and key publications in the field.

Interactive Maps

Interactive maps with a crowd-sourced features are currently on the rise. One of the pioneering providers for this field is the India-based social enterprise [Ushahidi](#). They help field practitioners acquire a better understanding of the conflict zones and types while also engaging the community. Some examples of such approaches are listed as follows:

ICT & E-Innovations in CPPB Training

ICT and innovations in e-learning represent a crucial and exciting frontier in CPPB training. Together with front of the field 'on site' practices they can enable enhanced approaches and *approaches of scale* to improve performance competencies and capabilities for the field.