

Time to blend: why and how education should adopt the blended approach

Maria Beatrice Ligorio^a

^a *University of Bari (IT)*

Abstract

Blended techniques are considered as strategies useful for the post-pandemic educational situation. In his presentation it will be specified the features of the blended approach, which goes beyond the simple combination of online and offline teaching. In fact, the implementation of a successful blended implies: a) a careful study of the context; b) the combination of different technological supports; c) the mixing of different teaching / learning methods.

Recently, the blended approach has undergone to a few specifications. One of them is the so-called “scripted” computer supported collaborative learning (CSCL), which will be shortly described. Finally, the recent Trialogical Learning approach has been introduced as able to improve the blended effectiveness by emphasizing the construction of significant products. This approach is structured through six principles that all together guide an effective transition from online to offline and vice versa. Taking up the recommendations steaming from these approaches, the Blended Collaborative Constructive Participation (BCCP) model has been developed and a few experiences of putting it in practice, at different school levels, will be presented.

Keywords 1

Blended learning, Trialogical approach, “scripted” CSCL

1. Introduction

The blended approach is rising to the headlines in this period as it seems to be the goal to aim for overcoming the current educational situation, dictated by the pandemic. In fact, many are beginning to ask what will happen in the future of the experiences accumulated in this period of forced Distance Learning.

There are those who wish to never see a PC again and who, on the other hand, have discovered new potentials and ways of working supported by the use of digital technologies. Those who had never used educational technologies, most of the time found themselves displaced, sometimes generating obstinate rejection; other times they had some curiosity and some pleasant discovery. On the other hand, those who were already accustomed to some form of internet use have seen their experiences valued. Indeed, we found within an Italian sample a strict correlation between specific training addressed to the use of educational technology and former experience with distance learning as supporting factors in facing the pandemic restrictions [4]. But what will happen when the pandemic will be over? What form of teaching will we have once we return to the classroom?

Many suggest the use of blended teaching. But what exactly does this label mean? What are the specificities and what are the most recent evolutions of this approach?

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EMAIL: mariabeatrice.ligorio@uniba.it

ORCID: <http://orcid.org/0000-0003-3028-5046>



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2. Defining Blended Learning

Basically, by blended learning it is meant the combination of face-to-face teaching and online teaching, but many experts in the field recommend avoiding a simple reproduction of what happens in one context in another [3]. For example, it is not possible to think of offering the same lesson to students present in the classroom and to others connected remotely. It does not work, neither if this happens simultaneously, nor deferred. Face-to-face teaching uses aspects and methods that are not possible at a distance. In the classroom we catch glances, non-verbal expressions, proxemics: all aspects that help us regulate our intervention. On the net, however, we have close-ups and interactions via chat and all the background details that could interfere with the lesson or become opportunities for interaction. Communication and teaching skills required are quite different and they cannot be managed at the same time for any teacher. Elsewhere [6] we have defined “velcro” the model of substantial overlap between online and offline and we consider it by far the least profitable way.

Mixing online and offline means using two very different didactic models, each with precise peculiarities. Their integration is possible only if well studied, considering the characteristics of both contexts and the resources and limits of the educational situation.

The first to use this specific term (blended) were some prestigious brands of coffee and whiskey. The features of each ingredient had been thoroughly studied to identify those that, once combined, could mutually enhance each other. This is the philosophy of blended: combining the elements of the pedagogical scenario in order to make the most of the potential of each element.

In light of this definition, it is easy to understand that adopting blended implies:

i) A careful study of the context to understand what can be used and how, as well as the needs and limitations of the users / students to whom the course is addressed;

ii) The combination of different software and/or App, in order to provide information and content through the best communication method. It is obviously different to use, for example, synchronous communication environments compared to asynchronous ones; tools already known but never used for learning (for example social networks) or tools created specifically for training. Consider the use of mobile phones, widespread in every area of life for each of us except at school, where teachers often start the day by asking students to turn them off;

iii) The mixture of different teaching / learning methods which, however, must first be well known by the teachers. For example, the teachers must have in their professional training an adequate understanding of how to deliver a multimedia lesson or how to implement significant peer interaction even in digital environments.

In summary, careful planning and a good monitoring ability are needed, even in progress, to implement an efficient blended teaching. In the next paragraphs, a few specifications of how to apply blended learning will be shortly reported.

3. “Scripted” Computer Supported Collaborative Learning

Putting in practices the blended approach is not simple. Some authors [19] have studied how to sequence the offline and online activities and how to combine different educational strategies. This approach is called “Scripted” computer supported collaborative learning (CSCL), with clear reference to the construction of scenarios specifically designed for educational contexts. The suggestions that emerge can be summarized as follows:

Propose interesting and engaging tasks. This is certainly a valid recommendation for any type of teaching, but actually it emphasizes the need to rethink teaching activities in order to make students very active. For this purpose, it is possible to assign precise responsibilities and roles functional to group dynamics. When online retraces slavishly what happens in the classroom, the whole thing inevitably becomes boring and estranging. Therefore, the activities must be highly motivating, asking students to take initiative, to be proactive and creative;

Motivate interaction with peers, make it necessary and finalize it to achieve common goals. To this aim, any of the collaborative learning strategies could be used both in presence and online;

Provide start-up “prompts”, in order to structure and make clear what students are required to do;

Offer suitable scaffolds for both individuals and groups. Some platforms, for example Knowledge Forum [15], offer built-in scaffolds; in other cases, it may be the teacher who prepares them and introduce them to the students.

4. Trialogical learning approach

The effectiveness of blended activities increases if they are aimed at building significant products. This is the focus of the recent Trialogical Learning approach[11, 12]. The term “trialogical” emerges because this approach combines three different types of learning: the “monological” one based on individual learning, the “dialogical” approach based on social interaction and collaboration, and finally the third element which refers to the materiality, in other words an object created by the intentional and collaborative effort, useful for another external community.

The implementation of this approach is guided by the following six principles [13].

Principle 1. Organizing activities around shared objects, recognized as important and intended for real use by users outside the classroom. This principle answers to the question “what are we building?”. The reason this is the first principle resides in the idea that objects can be considered as socio-cognitive artifacts, outsourcing knowledge creation efforts [16]. Observing the object created, knowledge and skills acquired can be inferred as skills and knowledge assumed for the users.

Principle 2. Hybridization of the various knowledge practices within communities and institutions. Here the importance of creating connections with other contexts with which to interact and use the built object is emphasized. This principle answers to the questions “For who are we building this object? For who is the object intended?” Answering these questions implies that the object should not be self-referential but a community of users should be identified outside the classroom. Therefore, it is necessary to have a vision of the users, to analyze their needs and to reflect upon the skills and knowledge useful for interacting with them. This implies an awareness of the communication skills. Furthermore, the object acquires "transactional" quality that allows to connect to other contexts. Thanks to this principle, students may shift from thinking to themselves as learners to start consider themselves as "producers" / creators.

Principle 3. Promoting long-term processes for knowledge advancement. This principle is realized both retrospectively, using previous skills and knowledge, and prospectively, thinking about how the objects will evolve in time. Therefore, now the relevant questions are “To which objects already existing can we relate? Who are our "suppliers? Which practices already acquired are improved? What subsequent developments can the object have? How the object could evolve through its use?”

Principle 4. Emphasizing creativity through transformation and reflection. By transformation we refer to situations where students are required to transform concepts and ideas presented in one format into a new one; for instance, from a strictly theoretical format to a more practical one, or from a textual format to a concept map. Reflection, instead, is often activated when preliminary drafts are shared for triggering comments, ideas, insights. This type of activity, has a high potentiality to bring out tacit knowledge that may support the creative process.

Principle 5. Supporting interaction between personal and social levels by supporting both individual and collective initiative and combining individual work to group work. Here the relevant question is “How to integrate and combine individual work with group work?”. To this aim, any of the collaborative techniques can be used, ranging from reciprocal teaching to role-taking. Plenty of literature is available, showing how these techniques can be adapted to blended contexts.

Principle 6. Providing flexible mediation tools and adequate technologies. Easy to guess, the questions this principle answers are “What technologies should we use? For what purposes?”.

Educators may choose to enhance tools and environments already used by the students (such as Social networks or popular Apps) to avoid teaching how to use them and highlighting their educational potential; or educational software can be selected because considered adequate for the syllabus or for the scope of the course. Anyhow, it is crucial to activate a mind-set within which the technology can be a suitable tool for learning goals.

Examples and methods of how to implement these principles have been collected in a text co-edited by the writer [2].

From what is summarized here, it is clear enough how urgent it is to have adequate teacher training, a serious survey of digital infrastructures and most likely the inclusion of special professionals who can support the teacher in the implementation of effective blended models.

5. Blended Collaborative Constructive Participation (BCCP) model

This model has been developed through more than ten years of trials, using the Research-Based approach [18]. By now, the model has been implemented in several educational contexts – high schools, universities, specialized training courses - showing great flexibility and excellent results. BCCP, indeed, can support the development of many abilities and soft skills: academic reading and writing, effective communication, work-team, meta- reflection, collaborative problem-solving. It is based on a modular architecture of increasing complexity: teachers can select the activities deemed attractive and create their own version - more or less simplified or gradually more and more complex - so as to meet the specific needs of the educational context.

The social dimension is always strongly supported: learning is considered as knowledge building through several activities, all aimed at creating shared “objects” through active participation. The Blended Collaborative Constructive Participation (BCCP) model can be summarized into five elements [9]:

a) Structuring the content; we propose to organize the course into modules, each having a different topic; the ensemble of the modules will cover the content of the course; b) Organizing the groups ranging from minimum four to maximum ten students for each group; c) Organizing the contamination; this means detecting the community for whom the object will be built, contacting some representative and defining how she/he can interact with the learners; d) Defining the activities both the collaborative ones (by setting up collaborative strategies) and the individual ones (i.e. recurring to the setting up of e-portfolio); e) Organizing the digital environment by deciding what software and/or platform is more suitable for the educational needs.

The efficacy of the BCCP model has proven in many ways [5, 7, 8, 10, 14] and still we are committed in improving it through new instances and applications, within any type of educational setting.

So far, the model has been consistently used at the university level [1, 17] but we also had successful applications in secondary and primary school level (a rich documentation of the various cases is reported into [2]).

6. Conclusions

We are fully convinced that Blended Learning will design the next step future of education. Indeed, the blended approach will be capable to capitalize the positive experiences conducted during the pandemic and will integrate them into the face-to-face situation to which we will return hopefully soon. By adopting a blended model, such as the BCCP we developed, we should be able to train the digital skills required by the knowledge society, but also: i) social skills because of the stress on collaboration and peer-interaction; b) professional skills because of the contamination with no-school communities considered as the target of the objects built; c) soft skills such as self-assessment, creativity, innovation, problem solving, critical thinking, organizational skill, time-management; and d) communication skills fostered by the use of different communication means.

In conclusion, we hope that this text will inspire the readers to try adopting the BCCP model in their own context, so as to expand its validity and potentialities.

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