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# Enhancing a blended module in General Didactics: new contents, materials, forms of assessment and feedback

# Il corso di Didattica Generale, l'evoluzione del corso blended. La proposta di nuovi contenuti, materiali, prove e uso del feedback

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## Abstract

In this paper, we examine developments in the blended version of the module in General Didactics within Milano-Bicocca University's Master's Degree in Primary Education program, focusing on the learning activities offered to students and the use of feedback to support their learning processes. Over the three years since the introduction of the blended format, the number of students enrolled has quadrupled. The interactions between teachers and students on the e-learning platform offer a set of valuable insights concerning amongst other aspects cooperation among students during on-campus activities as a form of peer education, new forms of assessment, and the provision of feedback on individual learning activities. We discuss the overall experience of the past three years and how the blended module may be further enhanced in the future by increasing the level of interaction between lecturers/tutors and students, as well as among students.

Keywords: General Didactics; teaching-learning; feedback.

## Sintesi

Il presente contributo vuole presentare una riflessione sull'evoluzione del corso di Didattica Generale, del Corso di Laurea in Scienze della Formazione Primaria, Università di Milano-Bicocca, erogato in modalità blended. Nello specifico l'attenzione si è concentrata sulle attività proposte ai corsisti, unite all'uso del feedback come modalità di sostegno nel percorso di formazione. Durante i tre anni che hanno visto la creazione di un nuovo progetto legato a questo corso, il numero degli studenti iscritti è più che raddoppiato. Dalle interazioni dei docenti e da alcune risposte raccolte risultano particolarmente significativi alcuni elementi, ma qui si vuole fin da subito sottolineare l'importanza sia del lavoro tra studenti in presenza, nell'ottica di una proposta di peer-education, come pure dell'individuazione di nuove prove richieste ai frequentanti di questo corso, unite alla modalità di risposta legate alle singole attività. Il contributo racconta di una prima esperienza che vuole svilupparsi nell'ottica di un maggior incremento delle interazioni di docenti e tutor con gli studenti, e degli studenti tra loro.

Parole chiave: didattica generale; insegnamento-apprendimento; feedback.

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## 1. Transforming a traditional learning format into a blended format

The General Didactics module within Milano-Bicocca University's Master's Degree in Primary Education represents a core building block in the joint construction, by students and academic staff, of the personalized background knowledge required by future teachers. This module is part of the Year 2 syllabus and is a key component of the overall master's degree program that covers many major teaching-learning themes. It leads the student teacher to actively reflect on the relationship between instruction and education in the broader sense, between cognitive development and social and emotional learning, and between teaching methodologies and the teacher's communication style, as well as the need to problematize the epistemological frameworks and notions of teaching-learning underpinning different didactic models. A key focus of analysis is the relationship between experience and learning.

The module is divided into four discrete sub-modules: the first concerns the analysis of educational action and key concepts such as the educational contract, didactic transposition, and competence-led teaching-learning methods; the second addresses the relationship between models of learning and teaching methods, with a particular emphasis on active methods; the third is focused on the organization of space, time, and materials; finally, the fourth deals with communication in the classroom and the relational dimension of education. A wide range of topics are explored and studied during the module. The following is a non-exhaustive list of contents: a historical overview of educational theory and methods, educational action, choosing instruments and materials, designing learning environments, the educational contract, classroom communication, didactic transposition, educational methods, relations between school and community (Nigris, Teruggi, & Zuccoli, 2016). A series of classes and laboratories offer in-depth treatment of active teaching methods: from brainstorming to debating, group work, tutoring, autobiography, role play and drama, in addition to traditional lessons and lesson-planning (Nigris, Negri & Zuccoli, 2007). Components of the module that are key to developing in-depth knowledge of educational action include the testimonies of expert young teachers, both nursery and primary, who are invited on campus to share their experiences and good practices with the undergraduate students. International guest lecturers are also invited with a view to fostering an intercultural perspective on the part of the students. The teaching methods chosen for the module are themselves predominantly active and interactive, and include practical activities, analysis of authentic classroom video footage and excerpts of school children's conversations, and constant use of a questioning and conversational style, with a view to encouraging direct participation on the part of individual students, and small and large groups. The module alternates experiential-laboratory work with theoretical framing and synthesizing. At all stages, students are encouraged to actively problematize, engage with, and develop the key course themes. Attainment of learning outcomes is fostered via participation in online and face-to-face lessons, and workshops. The latter are characterized by the use of active learning methodologies such as group work, discussion, role-play, brainstorming, and also by the analysis of case studies and documentation produced by students and teachers (including journals, observation protocols, and accounts of real-life teaching-learning paths implemented in primary and nursery school settings).

In our view, it is crucial for a course in General Didactics to effectively showcase best practice in teaching methods in terms of the design and presentation of the coursework, management of the teacher-student relationship, the materials used in the classroom and made available online, the forms of assessment adopted, and clarity of communication. In other words, the course should itself constitute an excellent example of the teaching and

learning process advocated by the academic staff, with a view to stimulating the students to reflect on their own future educational practice and to consciously choose what aspects of this approach to implement during their pre-service and in-service teaching assignments. Given the large number of students enrolled on the general didactics module (over 350), some years ago, the academic board of the master's degree program approved a plan to expand the offering to two modules. It was decided to introduce a blended learning version of the module, with fewer on-campus classes that were scheduled in the late afternoon/evening to facilitate the participation of working students. In designing the new module, the academic team thoroughly analysed what had been offered to students via the previous format, and what should continue to be offered: in sum, whether the blended format should be a reduced version of the traditional module or a completely different offering informed by a series of key insights.

In this paper, we analyse how the e-learning module has evolved over the three years since its introduction, discussing the type of learning process it has offered and the associated intrinsic and extrinsic feedback (Laurillard, 2014a). We focus on the course's core themes following a bottom-up and inductive approach. Engaging in continuous development, evaluation, and reformulation of the module is of vital importance, given that blended learning is now a key area of education (Ligorio, Cacciamani, & Cesareni, 2006), especially at third level. A mixed approach in which on-campus learning is alternated and integrated with distance learning maximizes the benefits of e-learning and makes the educational offering richer and more varied (Vivanet, 2014). Indeed, this is the whole rationale for blended learning as stated by Diana Laurillard (2014b): "the thoughtful integration of conventional and digital methods of teaching and learning as the means to achieve our greatest ambitions for 21st century education" (p. 3).

## 2. Choosing learning contents, materials, and tools

The two professors in charge of the module, the authors of the present paper, opted to completely redesign the course when the blended format was first introduced in the 2016-2017 academic year, continuing to tailor it over the two following years to meet the needs of the students and more fully exploit the potential offered by e-learning technologies. First, scheduling classes for the blended format in the late afternoon/evening means that the majority of those enrolled are working students, who would have difficulty attending classes in the morning/early afternoon. These students have already gained significant experience working in schools (as substitute teachers, educators, teaching assistants, support teachers, etc.) and thus have already developed a knowledge base of their own in relation to teaching. However, they have not yet had the opportunity to systematically reflect on this knowledge with the support of targeted learning. We might describe their prior knowledge as naive (pre-conceptions) and sometimes erroneous (mis-conceptions) (Damiano, 1994; 2004), based on opinions developed during a period of work experience that is often narrow in scope, and not yet sufficiently reinforced by specific learning and reflection or by a cycle of focused discussions with peers and university teachers. If the blended learning module fails to take its students peculiar characteristics into account, attendees will perceive their university studies as marginal to their school experience, generating two parallel learning pathways that rarely dialogue and sometimes clash. In contrast, the ideal outcome would be a teaching community that constantly shares and discusses its best practices. Recent studies have shown that teachers' initial concept of what a *good teacher* should be like, if no further input is given, will remain a mix of common

sense and inspirational outlooks that fails to reconcile the humanitarian with the professional (Meazzini & Soresi, 2002). It was thus decided to work with the students *where they are* at, helping them to articulate the ideas they have developed during their prior work experience, and laying the ground for a second level of reflection by proposing shared learning activities designed to facilitate the emergence of possible new modes of educational action, design, and reflection.

The aim is to foster a reflexive and proactive approach to educational practice and the ability to connect theory with praxis, such that knowledge continuously informs action, and vice versa (Schön, 2006). Completing and assimilating the blended module should therefore foster self-reflexive awareness, epistemological self-awareness, and the adoption of a particular assessment philosophy (Calvani, 2014). If the students successfully acquire these competences, their ability to reflect will be enhanced, enabling them to interpret educational events, attribute meaning and value to educational practices and settings, and design targeted educational intervention (Mortari, 2003). To effectively engage the students and orient their reflection, we have based the module on a set of educational materials, discussion and conversation protocols, and videos drawn from teaching-learning paths implemented in nursery and primary schools. This is a reverse teaching approach that consistently takes authentic materials (exercise books, conversations, exercises, videos) produced during teaching practice in school settings as the starting point for developing students' capacity for independent critical thinking and sharing their critical observations with others.

The entire module is informed by the concept of effective teacher defined by Zanniello (2014): "effective teachers have an in-depth knowledge of the subject they teach; they connect the new knowledge proposed to students with their previous knowledge and experience; they facilitate their students in acquiring personal study methods; they empower their pupils to assess the outcomes of their own learning processes; they conduct valid and reliable assessments of their students' learning; they modify their teaching activities in light of assessment outcomes; they clearly communicate to the class the goals to be achieved and provide individual students with periodic feedback on their progress; they foster an atmosphere of cooperation and a sense of belonging to a community among their pupils" (p. 41).

Hence, a small number of assignments are individual, but most are based on collaborative methods (group projects). One assignment, for example, involved developing a conceptual map illustrating for a prescribed topic a set of concepts and their interrelationships (Cottini, 2008; Damiano, 2004; Novak & Gowin, 2008). Another group project required students to produce short video clips on specific active methods. Importantly, jointly planning and carrying out such assignments requires the students to invest time in studying and discussing the project topic, continuously exchanging views, and coordinating their efforts.

## 3. How the blended module changed between the first and third editions

In the first year of the blended learning module, the number of students enrolled was 22. The following year this number more than doubled (52), and in the third year (2018-2019) it rose again to 95 (of whom 10 were Erasmus students). This rise in student numbers made it imperative to revisit the structure of both the on-campus classes and the e-tivities.

The following is a brief summary of how the module changed between its first and third editions (Figure 1).

| | First year | Second year | Third year |
|---|---|---|---|
| Structure | Dialogical face-to-face lessons | Dialogical face-to-face lessons | Flipped lessons |
| Methodological approach | Deductive | Deductive (5 lessons) & Inductive (2 lessons) | Inductive (5 lessons) & Deductive (2 lessons) |
| Recommended reading | Optional before or after classes | Optional before or after classes | Must be completed prior to attending classes |
| Evaluation of e-tivities | Criteria provided by the teacher | Criteria provided by the teacher and discussed with students | Criteria constructed together with students |

Figure 1. Changes of the module from the first to the third year.

First, the *structure* of the on-campus classes was completely inverted (*flipped*): in the first edition of the module, the lecturers would first present a conceptual framework and then assign practical exercises to the students, whereas, by the third edition, on-campus sessions began with the presentation of a potentially problematic situation, demanding immediate active participation on the part of the students, and ended with a debriefing by the lecturer that summed up both the students' ideas and salient theoretical concepts. This implied a shift from a mainly deductive approach to learning to a mainly inductive, discovery-led one. Another aspect that has changed concerns the supplementary course reading: initially, the recommended reading materials were presented as an optional extra, whereas in the most recent edition of the module, they are presented as indispensable preparation for effectively addressing the problematic situations illustrated in class. A final change that is currently ongoing concerns assessment of the e-tivities. In the first two editions of the module, the students were presented with the assessment criteria for each e-tivity a priori, with a view to guiding their work; in contrast, in the third and most recent edition, and specifically for the e-tivity involving the making of a video, the students themselves were asked to work in small groups to define and weight the assessment criteria.

To carry out this task, they first analysed five videos produced during the previous editions of the module, and then discussed and devised an assessment chart in small groups. A large-group discussion followed, in which the students were required to debate the rationale for each of the proposed assessment criteria and establish its relative weight. In this way, compared to the previous editions, the students became more conscious of what was required of them and identified more appropriate strategies for implementing the e-tivity.

## 4. Digital spaces

The module presented here is part of the overall blended learning offering of Milan - Bicocca, which, in relation to e-learning is entering a "third phase of innovation, that […] aimed at the digitalization of its on-campus classes […] alongside the technological updating of its classrooms" (Garavaglia, 2019, p. 122). In fact, the Faculty of Education has been working to gradually introduce internet and online learning formats over the past twenty years, going through distinct phases of development and experimentation.

"Choosing to innovate and develop requires a long-term strategic vision and, given the current state of Italian third-level education, it also requires courage: constructing 100% e-

learning courses and immediately obtaining high quality ratings demands certain prerequisites, including on the part of the key human resources, the university's teaching staff, who need to be highly competent in the design and management of online learning paths, not only at a purely technical level, but above all, in terms of developing and managing learning processes via ad hoc methodologies that are suited both to online learning activity and to their own disciplinary field. This prerequisite is anything but widely in place" (Garavaglia, 2019, p. 122). Nevertheless, our own interest in online learning methods, which we understand as a valuable new means of supporting the learning trajectories of working students in particular, along with continuous advances in digital environments, have encouraged us to experiment with the different digital tools available to us.

In a blended course, the kind of digital space adopted undoubtedly plays a key role, as do the modes of online interaction and type of e-tivity proposed: these three aspects are interconnected in a way that depends on the desired learning outcomes. In the course of years of experimenting with and implementing an innovative educational approach, our department has shifted from using the Docebo platform towards the implementation of Moodle and, in recent years, has also installed the Google Suite for Education.

Over our own three years of experimentation, we have used both Moodle (in line with the rest of the university) and some of the key tools offered by G Suite in an attempt to exploit the potential of both environments as well as our own digital competences.

Thus, the General Didactics Blended Module is organized by key theme and currently uses the tools presented in the following table:

| Environment | Instruments | Function for which used |
|---|---|---|
| **Moodle** | Forum | Discussions asynchronous between participants and professors/tutors and communication of guidelines for assignments |
| | AssignmentS | Collection, inspection of, and feedback on, students' e-tivity work |
| | Folder | Storage of groups of related files to be accessed by the students (ex. pdfs of the on-campus schedule, supplementary course materials, etc.) |
| | File | Uploading of individual documents |
| | URL | Links to external webpages: supplementary materials/gdrive, etc. |
| | Lesson | Presentation of information in a structured format |
| | Choose | Deciding between a small set of pregiven alternatives. Making an appointment to receive feedback. |
| **Gsuite** | GDrive | Sharing of large files needed to complete assignments. |
| | Gdocx | Distance planning and collaborative writing for assignments |

Figure 2. Environments, instruments and functions designed by the course.

To date, implementing Moodle has led us to minimize our use of GDrive, given that it is generally more efficient and effective to use only one online space, but as we revisit the design of the module for the 2019-2020 academic year, we are considering introducing Google Classroom. This has been requested by the students of the blended module because this environment is now widely used in the primary and lower secondary schools where our student teachers work.

## 5. E-tivities and feedback

In Section 3 above, we outlined some of the changes in the blended module over its three years in operation. In this section, we focus on the module's e-tivities, which are a distinctive component of our blended learning framework.

The students who have chosen the blended module in place of its on-campus or non-attending equivalents, have always been required to complete four compulsory e-tivities (to be carried out individually, in pairs or in small groups) on content presented during on-campus sessions and via the recommended reading materials. These e-tivities are designed to verify that the students are familiar with the course reading materials and able to analyse case studies/examples provided by the lecturer (classroom conversations, pedagogical documentation, accounts of the hands-on experience and practices of nursery school and primary school teachers), to help them make the transition from theory to practice. Each e-tivity assignment has its own specific reading list. Students receive detailed feedback and a mark for each of these e-tivities, which form part of their overall assessment for the module. In the first edition of the blended module, a *symbolic* mark was assigned ranging from one to three stars per assignment. The maximum possible score of 12 stars corresponded to a mark of 30/30. In that year, the assessment of the e-tivities contributed to the mark for the final oral examination (also based on the e-tivities). However, from the second year onwards a mark out of thirty was assigned to each activity, and the average mark for the four assignments taken as the final mark for the module given that the oral examination was dropped. Each e-tivity is related to topics and practical activities conducted in class and is accompanied by a related discussion forum that serves as a vehicle for both in-depth insights and general feedback as in the following example:

"Dear students, We attach a PowerPoint document that sums up what we have distilled from your second assignment. Your memories and narrative reports have brought to light aspects that are relevant to your ongoing course of studies and, for those of you who already teach, also to your professional practice. In the PowerPoint we have analysed and summarized what you wrote from our own perspective. Some memories emerged partially or in a more veiled form, others in a more direct manner. We believe that it is important for you to reflect on and become more consciously aware of them and so avoid, as some of you wrote, reproducing approaches and situations that make pupils act according to what they think the teacher wants. On the forum, you can read the reactions of your fellow students and give your own input. Thank you for your valuable contributions"[2].

Using supportive, simple, and clear language, the academic staff made every effort to value the students' input and work, often citing it in the classroom and thereby illustrating the genuinely mutual listening process underway. Two forms of feedback were provided for: intrinsic feedback built into the assigned tasks, which to be completed required the students to revise their own work as necessary to meet given criteria without external input; and extrinsic feedback supplied directly by a tutor or lecturer suggesting how the students could further improve their work in relation to the task learning objectives (Laurillard, 2014a). The extrinsic feedback was delivered both individually (in the dedicated online space, but also in the context of individual face-to-face discussions) and via global syntheses of the work carried out. The following commentary is an example of the last-mentioned form of

[2] 2016-2017 Academic Year: Excerpt from the E-tivity 2 discussion forum: "Tell [us] about that time when you acted in a way that was not in line with what you thought or believed in, but what you thought the teacher expected of you".

feedback. It concerns an assignment in which the students were asked to work in groups of four to devise a conceptual map of teacher, child, and teaching in the thinking of a key historical author:

"Dear students, First of all, thank you for the hard work you put into your first assignment. We have synthesized your maps into one conceptual map per author, in relation to his or her concepts of the child, the teacher, and teaching. We attach maps for Montaigne, Lodi, Montessori, Comenius, and Agazzi, respectively. We are at your disposal to provide clarification, answer questions, or offer further information and we suggest you review the Joseph Novak chapter on the reading list and the video-lesson on the topic that is already available for viewing".

The following e-tivitiy was repeated across all three editions of the module and viewed by the students as of great learning value:

"Make a 2-3 minute videoclip to be broadcast during the culture section of a news programme that explains why the methodology or method that has been assigned to you is effective. The video clips must be saved in MP4 format and uploaded to a shared folder on Google Drive for which you will receive the dedicated link.
You should also upload the draft outline of the video that you produced during the dedicated on-campus session"[3].

The feedback for this e-assignment took the form of a strengths and weaknesses analysis as well as the compilation, with explanatory comments of an assessment chart drawn up with the students' input as described in Section 3 above.

## 6. Conclusions

Despite the steps taken to date, we still have outstanding questions concerning how continue improving the module going forward. One current proposal designed to further increase interaction among students while carrying out group assignments involves adding new functions to the discussion forum, such as monitored chat rooms, which we would expect to facilitate exchange and help overcome the distance barrier (Calvani, Fini, Molino, & Ranieri, 2010). We also intend to implement forms of synchronous communication, thanks to our newly equipped multimedia classrooms, thus augmenting the opportunities for in-depth inquiry available to both students and teachers. We are already thinking ahead and planning when and how to use current and future tools so as to integrate even more synergically theory and practice, didactics and experience, and make our teaching even more tailored to our working students' needs by "extending the classroom in terms of space and time". We are encouraged, as we pursue this change trajectory, by feedback received from our students in spontaneous emails to their tutors. The following are some representative excerpts:

"Dear Prof. Bassi, as this short journey comes to an end, I would first like to thank you for your support, advice, and guidance particularly in relation to conducting the e-tivities. I am sorry to disturb you again, but I wanted to ask you whether the mark assigned for e-tivity 4 was influenced by the fact that the video was too long, as we had already realized was unfortunately the case, or because of something lacking in the content. We would just like

[3] Excerpt from the forum for the 2018-2019 academic year.

to know so that we can correct and improve [our work] in the future. Thank you for your time. (June 2019)".

"Dear tutor, I am writing to you because three months on I feel that I have improved. Despite the fact that for working students it is not always easy to submit assignments on time, I would like to thank you for always supporting me. I feel that I now have a better relationship with technology and have grasped the importance of group discussion. Exchanging views with the other students, you and the lecturers has enabled me to reflect on my own practice and on the scope for integrating theory and practice. I hope I will have other opportunities for exchange with you. Thank you. Goodbye" (June 2018).

In conclusion, the blended module has allowed us to reflect more systematically, as teachers ourselves, on: what course content may be viewed as essential, what lesson formats to implement, and what forms of course work and assignments to offer. Nonetheless, we are ever more aware that much remains to be done to enhance the students' levels of active participation, discussion, and exchange. In this regard, we plan to focus on getting the students to provide one another with feedback as a possible new line of action (Hattie & Yates, 2014).

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