Learning and Teaching From and by Social Media. Instagram to Support Blended Learning Models

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Abstract
The experimentation discussed in this article investigates the relationship between design studio teaching and visual social media. It implements an experiment on Instagram as a channel to build a "social" form of the augmented classroom. Technologies are considered here from different points of view both as a platform for interaction and sharing of information between teachers and students and among the students themselves, as a channel to support the different project phases and last but not least, as a creative stimulus. The research presents some results of ongoing experimentation within design courses on using a social platform, Instagram, as a channel to support teaching activities used as a highly visual medium, stimulated student learning and facilitated teaching through dialogue, engagement, and interaction.

The Relationship (Or Even Dichotomy)
Between Communication and Teaching

In recent years, we have increasingly witnessed the pervasiveness of social media, which have taken on the role of personal communication channels, but above all, as tools capable of defining engaging modes of interaction between companies and consumers, institutions, and users.

In the different areas of creativity, "visual" social media (especially Instagram) have increasingly consolidated their role both as sharing channels and a tool that allows cooperation to create new ideas, entering the sphere of technological communication tools, typical of active approaches (Linfante & Manciaracina, 2021).

Educational communication represents a particular case of human communication, characterised by two processes, teaching and learning, and generally asymmetrical and intentional. Education has always passed through the communicative processes that regulate the relationship between teacher and learner, allowing the transmission from the former to the latter of cultural contents, behaviours, and ways of reasoning, which is the natural outcome of an educational and social relationship. The relationship between didactics, communication tools and technologies is inherent in the very concept of education because any communicative relationship between subjects with different degrees of competence can be educational. In this sense,

the transformations that have occurred in the processes, tools and forms of communication also have repercussions in the field of education, where there is a weakening of the functions performed by traditional institutions and a greater investment of the new generations in the media (Weaver & Cotrell, 1986).

Without the appropriate communication tools, there is no access to knowledge, either through actions of imitation or through more complex actions of elaboration and reorganisation of the information received. In fact, following Skinner's thought (2008), the first level of learning occurs through imitation, through processes of systematic two-way association. At the same time communication is also a set of rules that the learner must progressively discover and elaborate; in this sense, following Chomsky's perspective (1966), communication becomes an active and creative process.

Hence, effective communication strategies are becoming more and more fundamental (Orefice, 2005) for the optimisation of the education and learning process. Effective communication is indispensable for developing new skills and competencies for creating constructive relationships within the class group and the school community.

Moreover, it should also be considered that thanks also to the opportunities offered by the implementation of digital technologies and channels, training can be carried out through the exchange of messages in four different forms: diachronic (with time intervals) or synchronic (at the same time), in physical presence or not.

It is interesting to observe, for example, that television, in Italy during the economic boom, became an essential tool for the literacy of millions of Italians. RAI, anticipating in a certain sense the concept

of *edutainment,* on November 15, 1960, aired the first episode of *Non è mai troppo tardi*, a program created in collaboration with the Ministry of Education, curated and conducted by the elementary school teacher Alberto Manzi and broadcast for about eight years. It was designed to educate the adult public through the new television media increasingly present in Italian homes (Manzi, 2017).

In a certain sense, the experience of *Non è troppo tardi*, even if "unconsciously", introduces concepts and methods that are incredibly relevant today, such as the school without backpacks or MOOCs, and on the other hand, reinforces the importance of the role of the teacher. In recent years, technological innovations in communication have been welcomed as disruptive innovations that would have overcome and replaced traditional forms of teaching.

The Role of Communication Technologies
in Today's Fluid Context

It seems appropriate to think of technologies as potential agents of change, capable of influencing the educational setting and, ultimately, the learning process. New technologies need to be integrated with extra technological conditions that need to be set up for this to happen. The introduction of technology is bound to dry up in the short term, and technology should be seen as a resource capable of bringing out new forms of didactic planning. As Calvani (2000) states, the conquest of higher levels of reflection represents one of the essential contributions that technologies can provide to learning.

It thus becomes essential to understand that to establish and carry-on good dialogue, it is necessary, even if not sufficient, to know how to use multiple modes of communication, allowing both the teacher and the learners to implement a "mix" of communicative exchanges. The teacher should be able to train the students' communicative competence, whose learning is closely linked to the behavioural and communicative model used (Zannoni, 2009). Considering the above, therefore, digital technologies and channels can offer multiple possibilities to:
- improve and increase the communication modes between teachers and students;
- create a circular system of interaction between teachers and students;
- stimulate the active participation of students in the learning process;
- implement new modes of design and creative stimulation.

Digital technologies (fluid and multifunctional) can be considered more effective tools to support teaching and learning. They allow faster interaction between teachers and students and among peers. Still, they offer multiple solutions to enrich educational activities and potentially define a new meaning to the Net as real support of the learning experience (Sancassani et al., 2019). Understanding which resources to use and how to use them is nowadays as fundamental as it is critical. Still, these resources can add value to the teaching experience, impacting the course and developing digital skills and competencies that could be applied in working environments.

But it is once again important to remember that their introduction into learning processes can only produce positive effects if the different variables at stake are taken into account: such as the type of course, the Expected Learning Outcomes, the subject matter, student involvement, group participation, connection and interaction with the real context, receipt of feedback from teachers and peers (Sternberg & Preiss, 2005) and, not least, students' prior knowledge of the tools and channels. Using a device that users already know could leverage the instrument's potential without facing the resistance that often arises when new technologies are introduced. And social media, among the most familiar tools for students and increasingly for teachers, has become, in this sense, an interesting stimulus for the design of new forms of teaching mediated by technology. Considering the inevitable pervasiveness of social media and digital in general (accelerated by the pandemic), the research project was set up as a reflection on the unexpressed opportunities of some tools, now in daily use, such as Instagram. Thus, following what Roberto Casati expressed (2013) we have not considered that form of progress that comes about when we first look at the use and then look for the right technology to support or assist it. Digital and social media, and Instagram in particular, in this context, can represent an interesting field of experimentation of an undisciplined form of didactics (Marshall & Bleecker, 2010) to test ways and processes capable of defining a form of self-transcendent (Scharmer, 2001) knowledge. Consequently, the teacher and the student, potential Digital Masters who give life and build content through technology, are increasingly important (Casati, 2021).

Before getting into the merits of the experimentation, it is crucial to define some of the main functions of Instagram, their nature, and possible uses to better frame the reason for this choice. The main functions are:

Timeline:
The Timeline is essentially the profile. All posts live on the Timeline and are visible whenever someone clicks on the profile. The Timeline is where people will quickly get an overview of all posts.

Main Feed:
The main feed is the first thing visible when someone opens the app; this is where you can see your followed accounts.
Thanks to Instagram's algorithm, the user mainly receives content to engage with frequently. This is where community interaction begins, and it's where you can engage with the profiles you follow to build a direct and ongoing relationship.

Post:
The post is the generative module of Instagram. It is the first feature implemented, which allows you to share pictures or short videos on your profile Timeline, typically long-lasting content because it will remain on your profile Timeline. In addition to photos and videos, you can insert short texts, tag people (draw their attention through their profile on the image) and insert locations or hashtags. In posts, you can share single photos, sequences of images (up to a maxi-

mum of ten) and short videos, allowing the creation of a sequence of contents that can enrich the browsing experience and implement different types of content.

Stories:
Instagram Stories are a space where you can create more extensive, richer content by uploading photos, creating content like polls, sharing content, or posting short videos. Stories are "live" for 24 hours, then disappear for the public (but they also live in the archive). Stories are a way to engage with your audience more deeply and more frequently. They are also a great place to get feedback (via polls); use the Ask a Question feature to interact with your audience for fun and feedback and encourage them to share your content when you post shareable things. You can use stories to link to external content with the See More/Swipe Up feature.

IGTV:
IGTV is a long-form video space viewable in the Instagram app that allows you to upload longer videos than stories and posts. It is a place to upload video tutorials, Q&A sessions or interviews (like recordings of an Instagram Live or webinar), creative content like behind-the-scenes footage or streaming an event.

Reel:
Instagram Reels are 15-30 second multi-clip videos with sound that are editable with effects and tools to make them interactive and engaging. They're essentially Instagram's answer to the popular TikTok app. You can make these videos directly on the app or upload some you've previously created. Viewers love watching fast clips and endlessly scrolling through reel content. Instagram Reels capture a wider audience than TikTok, as not everyone may be comfortable using the TikTok app. These reels can be informative (like how-to or tutorials), funny, impressive, or even filmed talks.

Instagram Live:
Instagram Live is a feature that allows you to broadcast to followers live. Going live is a way to connect with your audience in real time. During a live broadcast, you can share reactions or have chats. It is also possible to go on Q&A to answer questions from the audience.

Highlights:
Highlights are an area where you can group your past Stories. They live permanently on your profile as curated collections of your stories that followers can watch anytime. Highlights allow people to quickly find information about previews of content shared in Stories.

Save:
Save is a feature that allows you to save any post you see while scrolling through your main feed or searching for an account on Instagram to view later. This is a way to gather inspiration, save ideas in folders, and organise competition, prospects, and inspiration.

Considering the review of the literature on the evolution of design education and the development and use of new technologies in education, as well as considering the pervasiveness of social media in everyday life and many creative fields and finally, considering the results of some case studies of applications of Instagram in education, we proceeded to develop the experimentation within several design studios in the Fashion Course of the School of Design of the Politecnico di Milano, during the academic year 2020-2021.

The first two experiments were carried out during the first semester in the Metadesign Studio in the second year of the Degree (46 students) and the Textile and Print Design for fashion course in the third year of the Degree (31 students). The second part involved two Visual Communication Design Studio from the first year of the Degree (85 students in total) and two Fashion *Retail* Experience Design Studio from the first year of the Master's Degree (77 students total).

The choice of this type, of course, all of which are project-based, was made to experiment with a highly visual social platform, such as Instagram, as a tool:
- to deepen and explain contents presented during the lessons
- to support the understanding of the design process
- to stimulate creativity
- to share information
- to facilitate peer-review
- to share the different design and creative processes of the students

In defining the experimentation, it was considered an iterative process well described by the framework defined by Rizzo, Deserti & Pous (2017). This is a framework that combines experimentation and learning, integrating the methodology of Design Thinking (Brown, 2009) in the form of an iterative design process with Kolb's cycle (Kolb, 2015). This approach is based on the idea that design processes can be leveraged to create and drive experiential learning within organisations. This model helped shape an iterative form of the design process, based on cycles of understanding design and redesign that integrate with the situated nature of experiential learning. The "4A" model was applied here, which, starting from the concrete experience of the current situation (Actual), moves towards the design of experimentation (Act) by reflecting (Analyse), interpreting and imagining different alternatives (Abstract).
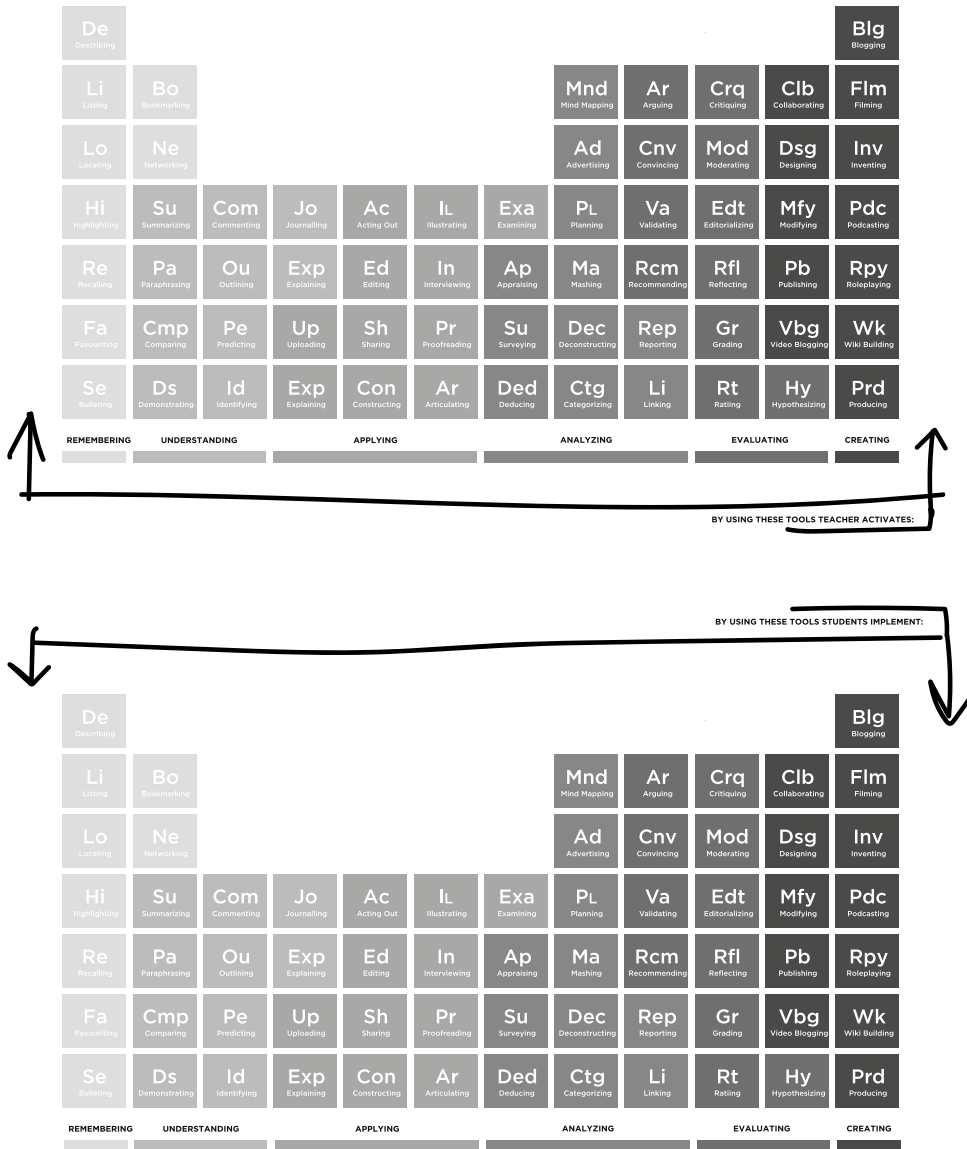
The experimentation phase has given form to various models representing the concrete implementation of the formulated hypotheses concurring. Therefore, it is possible to estimate their effectiveness, have feedback on the hypotheses, and refine the solutions. In doing so, we designed and prototyped new solutions in real contexts (the courses examined). In doing so, course after course, we proceeded both by modifying methods and tools, and by implementing new forms of tools and actions, and abandoning actions and tools results, all thanks to the comparison with the teachers of the various courses, the results of focus groups of surveys with students.

Fig. 1
The design-based learning framework map the DT cycle with Kolb's model (2015) of reflective learning.2017. Ph. Rizzo et al.

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The modalities, profiling and results of the experiment (Linfante & Manciaracina, 2021) led us to analyse the different points of view of the users (student and teacher) concerning the activities conducted and tools implemented, considering the Bloom Taxonomy Periodic table (McNulty, 2020).
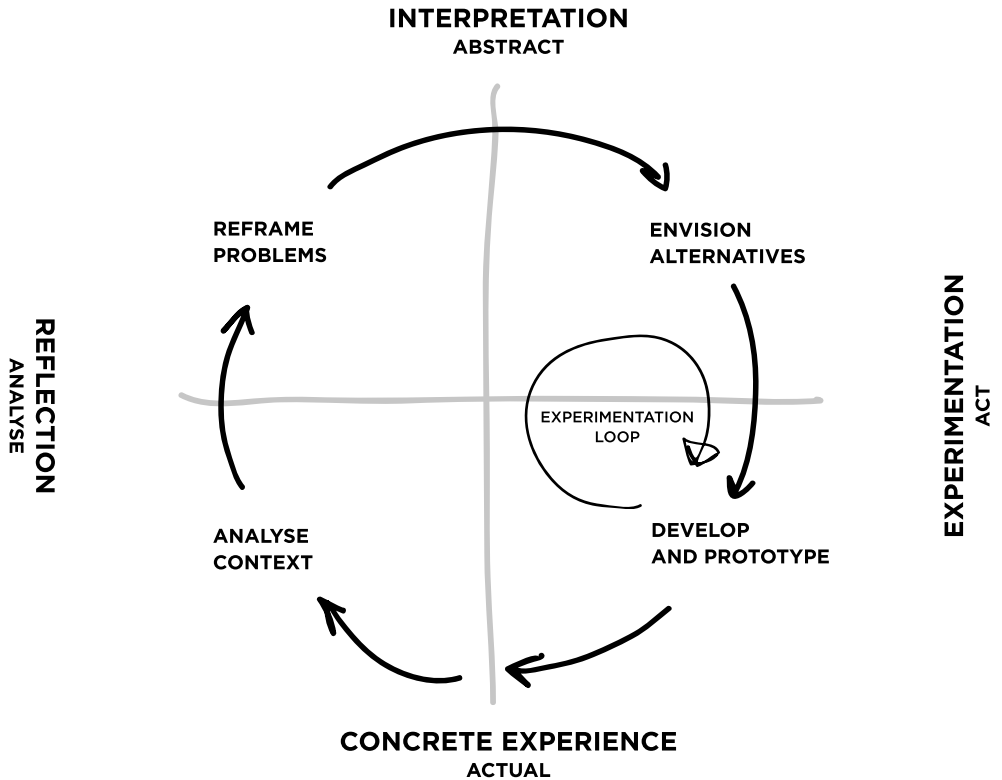
It is interesting to underline how it is possible to cover almost all the levels of Bloom's Taxonomy with a mix of the different tools. Another element to be considered, and not to be underestimated, in defining a model based on a social approach to teaching is the time variable. It is crucial, in fact, not to lose sight of the objectives and timing of the project to stimulate adequate action or response at the right time and optimise the opportunities offered by the agile and informal mode of interaction typical of social media.

In light of this last consideration, maybe we could implement a new form of interaction between teachers and students, considering teachers as Social Media Managers of the course and students as Content Creators.

Fig. 2
The Bloom Taxonomy Periodic table was used to analyse the actions implemented by the students in the different phases of the design process. This tool was constructed considering both: the actions implemented in response to the stimuli received from the teachers and those implemented when the students were directly involved in the creation of content on the social channels of the working groups.

Teacher as Social Media Manager

In the context of social media-assisted teaching, the teacher can thus consider social media as an additional tool for structuring more effective and persuasive didactic actions and, at the same time, for stimulating more active participation by the students in the different project phases. In this sense, considering the increasing pervasiveness of digital communication in the educational sphere and various design fields, social media has become not "the" solution but an opportunity to be exploited. Therefore, teachers need to understand and manage the potential offered by social media to use them effectively, borrowing and transferring some of the characteristics and strategies typical of the activity of a social media manager within the educational process.

The teacher becomes an ever more key player, the one who not only defines ILO and course structure but also becomes the one who manages the online presence of a course by developing engagement strategies, producing content, analysing usage data, and facilitating the different stages of class learning.

To summarise, in addressing a course using social media, it becomes crucial for the teacher to be able to:
- Develop creative and engaging social media strategies;
- Manage the course social channel periodically;
- Periodically supervise group or class channels;
- Plan and deliver effective content for different project phases;
- Create engaging multimedia content (and/or outsource it effectively);
- Manage and facilitate the classroom and students by responding to social media posts and developing discussions;
- Monitor, track and analyse the results of any quizzes or surveys and the various interactions implemented across the course and group channels;
- Keep up to date with the latest trends and techniques to find new ways to engage students
- Educate the class on the conscious use of social media;
- Encourage collaboration among students (inside and outside the social platform).

Although this list may seem, at first sight, far from the role of the teacher and provide a series of actions that further complicate and burden the already complex work of teaching most of the actions and features listed are nothing more than a digital and social form of actions and activities that should already be implemented during traditional teaching. Involving, managing, supervising, planning, creating content, facilitating, monitoring, analysing, and encouraging collaboration are essential elements for the realisation of effective teaching in general.

Student as Content Creator

In social media-assisted teaching, the student also expands the range of actions and skills they must implement and manage. On one side, in the interaction with the course channels (managed by the teacher), students realise the typical dynamics of followers. On the other side, when students actively manage the group or class channel, they implement skills specific to the figure of the Content Creator, someone, responsible for defining the content and presenting it in the most appropriate and effective form.

To summarise, in addressing a course using social media, in addition to defining the project required by the course, the student implements the following actions:

- Develop the communication project, defining the recipients, the objectives, the type of language, the contents, the graphics and any multimedia contributions, etc.;
- Coordinate textual contents and images defining a visual identity of the project;
- Periodically update the contents according to the teachers' requests and the different project phases.

Although managing a group or class channel is an additional task, the students stated that the effort required is manageable during the focus groups. This is also because the students demonstrated higher confidence and speed in handling the tools and dynamics of social channels.

Conclusions

This research aimed to investigate the effectiveness of the use of Instagram in particular, but more generally, of the typical dynamics of social media within a teaching activity. This research assumes that social communication is defining itself as an increasingly significant element not only for the staging and narration of all creative systems. The digital transformation drives new visualisation, promotion and storytelling processes of the design system, defining new relationships between physical and virtual spaces in which users are not just spectators of the creative phases but are increasingly involved in processes of "value co-creation" and "cooperative investment". Within this framework, the digital channel seems to offer an opportunity not to be missed for implementing innovative hybrid and interdisciplinary learning models. Thanks to the web spread in extensive networks, social media and social networks highlight social and collaborative character. It is also a place that erases the space of the here and now by extending the places, methods, tools and times of learning.

Thus, it is essential to highlight that the effectiveness of the various actions depends on the correct use of social channels and the definition of the content by the teacher-social media manager. Regardless of the subject, the design, planning and organisation of specific learning activities supported by social technologies become central.

Regardless of the learning environment, it is essential to remember that people learn best when actively involved. It is, therefore, necessary to structure the different activities according to a flow

that can support effective learning. Furthermore, the implemented learning sequences and structures must be constructed to be easily repeated, shared, reused and implemented later and in other contexts. It is therefore important to:
- define which tools to use according to the teaching purposes;
- plan a proper workflow;
- structure the different activities, contents and resources needed;
- schedule a timetable in such a way as to be able to involve students effectively;
- verify the process implemented for possible modifications and improvements.

Central to this phase is the need to abstract the learning process experienced to make it usable and transferable in such a way as to allow its easy reuse and implementation in the future. The attempt, for future research developments, is to define tools and processes to create different scenarios that can be of reference for teachers as creative support to design and structure educational activities and provide tools for further experimentation to be shared and reused on future occasions (Manciaracina, 2022).

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