## CAPTION THIS: AN INSTAGRAM-DRIVEN FLIPPED CLASSROOM APPROACH TO INCREASE STUDENT ENGAGEMENT

## CAPTION THIS: INSTAGRAM IN APPROCCIO FLIPPED CLASSROOM PER ACCRESCERE IL COINVOLGIMENTO DEGLI STUDENTI

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#### ABSTRACT

The use of new media can help to engage students in traditional lectures, stimulating "a sense of belonging" (Ganjoo et al., 2021). Through its combination of pictures and captions, Instagram allows for a fresh and intriguing way of presenting school subjects contents. With this project we mean to propose the use of Instagram in a flipped classroom context to promote students' motivation and the acquisition of writing skills and didactic contents.

L'uso dei nuovi media può aiutare a coinvolgere gli studenti in lezioni tradizionali, stimolando "un senso di appartenenza" (Ganjoo et al., 2021). Attraverso la combinazione di immagini e didascalie, Instagram permette di presentare in contenuti del curriculum scolastico in modo nuovo e intrigante. Con questo progetto intendiamo proporre l'utilizzo di Instagram in modalità flipped classroom per promuovere la motivazione degli studenti e l'acquisizione di capacità di scrittura e contenuti didattici.

#### **KEYWORDS**

Instagram; writing skills; education; flipped classroom Instagram; abilità di scrittura; educazione; flipped classroom

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# Introduction (Chiara Scuotto)

Young students from industrialized countries worldwide are completely immersed in the *onlife* (Floridi, 2015), a dimension in which no clear boundary can be traced among reality and the virtual world. Kids and adolescents alike live in a world that is completely imbued with technology (Lenhart et al., 2015), to the point that online and off-line environments can't be seen as different environments anymore (Yau & Reich, 2018); by now learning and communication processes take place both in the real and the virtual world.

Speaking of technology, one of the most relevant innovations consists in the emergence and the diffusion of social media. Using social media, which has turned out to be one of the most common activities among young generations (Rideout & Fox, 2018), has led to a revolution investing our perception of the world and the way we manage social relations.

The success of social media – "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010)- is mostly linked to the way they respond to our need for connection and sense of belonging, a common human need which is particularly urgent among adolescents Savonardo & Marino, 2021; Longobardi et al., 2020). Thanks to social media we can attain constant connection with other users, creating and sharing different kinds of contents, such as texts, images, videos, sounds and animations (Mantiri, 2014). As means of socialization and mass participation (Song, 2010) whose users are not just passive recipients of content -digital content, in this case- but are personally involved in the creation said content (Selwyn, 2012), social media emerge as active, manipulative, collaborative, complex and reflective, "constructivist" environments (Selwyn, 2012).

Therefore, social media have emerged as the best possible digital context for informal<sup>1</sup> learning processes (Hawkey, 2004; Selfton-Green, 2004), on account of the way they support interest, motivation, collaboration and social interaction of

<sup>&</sup>lt;sup>1</sup> By "informal learning" we refer to a kind of spontaneous and self-regulated learning (Rogers, 2014).

individuals (Degner et al., 2022). In addition, they have turned out to be great learning facilitators, allowing for clear multimodal representation through different interactive modes such as video and image sharing (Civantos et al., 2016)<sup>2</sup>.

As social media affect every area of life, contemporary education can't disregard them and their use as an object of interest and study (Ozcakir et al., 2015), but should instead try and use them to attain better knowledge acquisition and to enhance student participation (Paton et al., 2011). Introducing digital media in formal education contexts (Ganjoo et al., 2021; Suess & Barton, 2022) seemingly results in improvements both for the development of critical, soft and transversal skills (Bannert, 2006; Lin & Chen, 2017; Moser et al., 2017) and for the acquisition of school subjects contents, positively impacting on short and long term learning alike (Krause & Coates, 2008; Trowler & Trowler, 2010). In addition, providing that they are used in the right way, social media allow for the creation of interactive learning activities which facilitate knowledge sharing, social support and reflection while enhancing self-expression and reflection (Gan et al., 2015); they support engagement (Junco, Heiberger and Loken, 2011), thanks to the use of external feedback and other features. When it comes to teaching, social media: a) allow for clear and straightforward presentation of learning content through multimodality and multicodedity b) support learning activities connecting traditional teaching content with multimedia materials, c) increase students' productive and creative opportunities, d) support communication among students, e) help student assessment (Petko, 2020).

Despite the growing interest in the use of new technologies and social media for didactics and educational purposes (Seaman & Tinti-Kane, 2013; Manca & Ranieri, 2016), the school system has not received or integrated the change yet (Pereira et al., 2019). Bridging the existing gap between formal and informal learning tools would allow for better responses to the needs and demands of a new generation of students (García-Peñalvo et al., 2012; Arnold & Paulus, 2010). Still, in order to take full advantage of the new technology, introducing its products within the educational practice is not enough. Innovate measures have to be taken, and new interventions proposed, in order to fully integrate traditional, cooperative and rigorous project-based modes with new technologies such as social media, thus creating new teaching practices.

While the tech revolution has generated a paradigm shift, affecting us and our habits with an impact that might be only compared to the one that has been

<sup>&</sup>lt;sup>2</sup> This kind of representation allows for better knowledge retention (Brame, 2016).

produced by the invention and the diffusion of the press, and if the technological innovation is finally bound to produce a real cognitive revolution, we, as scholars, scientists, teachers and educators, clearly haven't finished dealing with it yet. New cognitive skills would in fact call for a complete revision of our teaching methods. Therefore, a new literacy pedagogy should be created, so that traditional literacies such as reading and writing in print-based environments, and new literacies, namely knowledge, skills, and strategies needed for comprehending and communicating via new technologies (Zheng et al., 2018) could finally come together. Time has come to integrate technology and didactics for good, or not integrate them at all, keeping in mind both scientific rigor, completeness and accuracy of information, while taking advantage of technology and its positive impact on motivation in dealing with younger generations<sup>3</sup>.

# 1. Inclusion-oriented technologies in the school context (Eleonora Pera)

New technologies have an impact on many aspects of society, including education and training; they have also come to be under the spotlight as valuable tools for people with disabilities and special needs, that are a consistent portion of students in Italian schools (316 thousand in school year 2021-2022, + 5% compared to the previous school year – Istat, 2022). The use of new technologies in education makes it possible to improve the quality of life, reducing social exclusion and increasing participation, as well as presenting opportunities to make quality learning and career opportunities more accessible worldwide (Goger et al, 2022). Speaking of new technologies for inclusion, we generally refer to the use of any technology to support learning in inclusive environments. In this sense, both "conventional technologies" (off the shelf, affordable devices such as laptops, tablets and peripherals, multimedia whiteboards and cell phones) and other accessible digital learning materials are involved. For many people with disabilities, connectivity is a lifeline. A recent Canadian study featuring over 700 students with disabilities reveals that they spend an average of 18 hours a week using social media for school and leisure activities (Taylor, 2011). Well over half of the subjects involved in the same study declared that social media make them feel less isolated, even helping disfigured people or people having a distracting appearance to overcome their sense of isolation and stigma. However empirical evidence of the educational impact of social media on vulnerable populations is scant.

<sup>&</sup>lt;sup>3</sup>Younger generations can in fact be motivated through the use of new technologies and modes of communication with whom their world is currently imbued.

One thing for sure, though, social media provide a learner-centered environment which supports the development of metacognitive skills (monitoring, evaluating and optimizing) in the learning process (Dumont et al, 2010), and their use enhances inclusion through cooperative learning activities (Johnson & Johnson, 2014) and by developing the motivation to learn (Marzuki, 2022).

That's why, we think, we should now learn how to take advantage of social media's potential in confronting inclusion issues in the school context, by working on student's motivation and independence while moving along with the ever-changing concept of learning (Al-Samarraie e Saeed 2018).

# 2. New Technologies and gamification (Angelo Mirra)

Another way to enhance motivation is the use of gamification.

When we talk of "gamification" we usually refer to the use of game dynamics in non-gaming environments, such as corporate, training or marketing environment (Ludgate, Becker, & Johnson, 2015; Deterding et al., 2011).

Besides enhancing motivation, the aim of gamified activities is to increase productivity and one's sense of personal fulfilment (Petruzzi, 2015).

6 kinds of devices are usually involved in gamification: **Points or credits** (which are gained by completing specific activities), **levels** (useful in highlighting different steps in a path marked by increasingly difficult objectives), **badges or achievements** (awards given to the player for the achievement of a goal or for the completion of a challenge), **leaderboards** (a method to rank players based on their experience and skills enhancing their motivation to play), **challenges or missions** (tasks and obstacles to be overcome to proceed in the game), **virtual goods** (valuable objects that could be spent or traded within the games' fictional universe) (Petruzzi, 2015).

Gamification can be thought of as one among the many forms of immersive technology for user engagement (Christodoulou et al., 2018).

According to tests, thanks to its immersive power, gamification can be used as a learning method that can help enhance transversal skills (Alsawaier, 2018; Dochie et al., 2017) and acquire new knowledge (Boudadi & Gutiérrez-Colón, 2020).

Social media are particularly prone to gamification (Terlutter et al., 2013). Advergames, game-like advertising used to promote brands or products, are a typical example: These ads engage the user by making him actively participate in the multimedia content, thus bringing him into the core of the message itself (Triberti e Argenton, 2013).

The use of this kind of techniques in educational and media environments promotes the active interest (engagement) of the learner towards the didactic content while enhancing his performance and personal satisfaction (Petruzzi, 2015; Apostolopoulos, 2019), this thanks to the fun elicited by the game. Gamification is useful for students to improve their practical knowledge (Sailer and Sailer, 2021). Studies have shown that, if applied in a flipped classroom context, gamification can enhance the learning environment by improving students' motivation and concentration, therefore increasing their performance (Aşıksoy, 2018). When we talk of flipped classroom, we talk about a specific learning methodology that forces students to take charge of their own learning and decisions before class, during class and after class (Prust et al. 2015). Students are asked to develop a theme by researching information in an active and cooperative way. The information will later be presented to the class (Zhang, 2018). Safapour and colleagues (2019) agree that the use of flipped classroom and gamification along with social networks have a positive impact on student motivation, lifelong learning and creative intelligence.

# 3. Caption this an Instagram-driven flipped classroom approach to increase student engagement - project presentation (Fabrizio Fulio Bragoni)

Instagram, a social networking platform revolving around photo and video sharing, can be used in education to encourage young people's engagement in learning school subject contents and skills (Ganjoo et al., 2021). In fact, the platform can be used as a useful means to create activities that promote learning as a "participatory social process", supporting individual goals and interests (Lee & Mcloughlin, 2010).

Instagram allows for the production and diffusion of contents based on a combination of pictures, images or video and brief texts. On account of their brevity - which is tightly bound to the medium's own immediacy - the texts must be vivid, creative and captivating: on Instagram, clarity, immediacy and appetibility go hand in hand. This is the one and only way of using the medium's full potential, be it for education or not.

The need to produce texts which are short but informed, vivid and captivating but based on precise and complete information compels the user to work both on contents and style. Our project relies on these characteristics. Previous studies have

shown how Facebook-based instructional interventions lead to an improvement in creative writing and problem-solving skills (Alias et al., 2013); they have revealed how beneficial the use of social media is for student struggling with verbal and orthography skills (Packiam et al., 2013) and for language learning (in particular as far as English as L2 is concerned (Brevik 2019; Lantz-Andersson, 2018; Lomicka & Lord, 2016). That's why we have decided to combine traditional contents and creative writing by using social media in a cooperative and gamified flipped classroom approach. This way, we are even trying to bridge formal and informal learning. This project outlines an innovative teaching method through which the contents of school subjects are transmitted by teachers and processed by students to be presented through the use of Instagram in a flipped classroom fashion.

This intervention is intended for use in secondary schools but might be extended to third year of middle school. Its objective is to facilitate the acquisition and the deepening of school subjects contents, while building or strengthening transversal skills such as critical reading, understanding and interpretation of the text, synthesizing skills and creative writing abilities.

The use of social media helps keep students away from the so-called "blank page syndrome" -as Taffs & Holt would put it: "the supplementation of useful resources, such as online educational resources, can ameliorate classroom teaching and provide students with the necessary knowledge, thereby reducing their anxiety" (Taffs & Holt, 2013). Our intervention uses technology and gamification and the flipped classroom approach to improve motivation.

In this intervention, the use of Instagram takes place in a protected and controlled environment: for each class involved, a private page will be created and only students and teachers will be given access. Passwords will be changed after every lesson and will be privately given to the students in charge of the next presentation, thus establishing good practice in terms of online security.

It is divided in two distinct phases:

1) For this phase we propose a cycle of 5/7 lessons each one of which should last 2 hours to be articulated as follows:

- a. Introduction and brainstorming (15 minutes).
- b. Traditional "chalk and talk" creative writing lessons, based on discussion and analysis of one or few specific figures of speech or

narrative techniques through a session of guided brainstorming (30 minutes).

- c. Students are divided into small groups (max 4 people). Each group is asked to work with figures of speech or techniques that have just been presented, elaborating an ideal presentation for a brief content (at this stage, the presentation does not have to be produced yet). Gamification can be attained by introducing specific constraints ("Use at least four figures of speech"; "do not use the word x" etc.) or by awarding bonus points under certain optional conditions (30 minutes).
- d. The groups present their solutions to the class (30 minutes).
- e. Final discussion (15 minutes).

2) the second phase, played in a flipped classroom fashion begins by the end of the cycle of lessons. A specific educational content (e.g. a few pages of history, the theories of a philosopher, etc.) are assigned to a small group of students. Once the basic notions have been acquired, the students will have to enrich them with personal knowledge and research. Then they will be called to elaborate a lesson, through which they will present the contents by using Instagram as support.

The "Questionario sugli stili di apprendimento" (Mariani, 2000), a questionnaire concerning learning styles will be administered to students. The questionnaire is articulated into three areas which are useful to describe learning styles: Area A: sensory/perceptual modes: *visual verbal, visual nonverbal, auditory or kinesthetic;* Area B: mode of information processing: *analytical or global;* Area C: mode of work: *individual or group work.* This questionnaire can be used to check whether the proposed teaching methodology presents different effects in relation to different subjects' learning styles. Quantitative and qualitative tools will be used to evaluate the effectiveness of the intervention. At the beginning and the end of the project, an ad hoc questionnaire will be administered to students, to assess their level of confidence with writing strategies and techniques. Another questionnaire will be used to assess learning quality for school subjects content. Moreover, again at the end of the project, a third questionnaire will be administered to students and teachers alike to evaluate their satisfaction with the project.

## Conclusions (Fabrizio Fulio Bragoni, Chiara Scuotto)

The use of Instagram in a flipped-classroom context, as an innovating teaching methodology, can be useful in promoting writing skills while acquiring traditional school subjects content.

The combination of text and images stimulates a creative use of writing techniques that have been discussed with the teacher, and other social media or television related techniques which are already part of the students' expressive toolbox, although they might have never used them before. Our intervention works in two different directions, prompting students to work on style in a gamified atmosphere and leading them to acquire, deepen and synthesize learning content. This methodology appears to be in line with the digital competencies required of teachers and educators within the European framework. In fact, speaking of DigCompEdu (Redecker, 2017), the European Framework for the Digital Competence of Educators states that the purpose of "digital" education is to be able to use one's pedagogical and didactic knowledge in accordance with new technologies, in order to promote communication, critical thinking, knowledge acquisition and creativity among students (Ranieri, 2022). In Italy, the DigCompEdu construct was redefined in Ministry of Education's Guidelines for Integrated Digital Didactics (DDI) as a set of competencies that include the ability to create digital educational resources, manage technologies in teaching and learning processes while fostering students' digital skills.

Therefore, this project, which fosters the development of digital and writing skills while empowering the acquisition of school subjects content, can be seen as useful teaching mode for teachers in today's onlife context.

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