ADOLESCENCE AND SOCIAL MEDIA: ECS-BASED WORKSHOP FOR DIGITAL AWARENESS

ADOLESCENZA AND SOCIAL MEDIA: ECS-BASED WORKSHOP PER LA CONSAPEVOLEZZA DIGITALE

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ABSTRACT

Pedagogical action is founded in the context of the classroom as a learning environment. An environment that is complex, systemic, physical and relational at the same time (Massa, 1997). With the adoption of integrated digital didactics, we need an approach that is not assistive but existential, substantial, attentive to everyone's particularities, open to everyone, each according to his or her possibilities.

L'azione pedagogica si fonda nel contesto della classe inteso come ambiente di apprendimento. Un ambiente complesso, sistemico, fisico e relazionale ad un tempo (Massa, 1997). Con l'adozione della didattica digitale è necessario un approccio non assistenziale ma *esistenziale*, sostanziale, attento alle particolarità di ognuno, dichiaratamente aperto a tutti, ciascuno secondo la propria possibilità.

KEYWORDS
Embodied Cognition, Social Media, Learning
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1. Introduction

Before proceeding to the discussion, it is appropriate to epistemologically ground the trajectories of thought that have guided the construction of the research perspective: *trajectories* that run through the entire pedagogical, didactic and scientific action. Trajectories that open up the discovery of new directions of meaning to the reflection on social media and their use as informal learning environments (Checchi, 2015). We must start from the primary place in which every learning dynamic takes place and, contextually, is situated. The body as the locus of embodied cognition (Gomez Paloma, 2013). In a dynamic of continuous relationship with itself and the environment, the body shapes its knowledge of the world. It overcomes the scientific conception that would have it as a mere object of evaluation to ultimately acquire the dignity of a *subject* of cognition. As an interpretative lens of corporeity understood as the nodal point of every cognitive acquisition of the human being, we use the scientific approach of Embodied Cognitive Science (hereafter ECS). In particular, we refer to the Embodied Cognition paradigm (Borghi, Caruana 2013). We must leave behind the theories that theorised the primacy of the brain in biological, psychic and social processes of adaptation and learning (Damasio, 2000). We refer to the strand of EC as a psycho-pedagogical paradigm with which to understand, design and, ultimately, operate in places of learning and teaching.

2. The place where the body learns: the classroom and the advent of digital

Pedagogical action is founded in the context of the classroom as a learning environment (Damiano E., 2013). An environment that is complex, systemic, physical and relational at the same time (Massa, 1997). A place that dematerialises in order to re-compose itself of the digital, opening up new perspectives and creating numerous points for theoretical and practical reflection. From the perspective of a properly intentional and formative action on the part of the teacher operating in the classroom or digitised classroom environment, considering the uniqueness and unrepeatable individuality of all the actors involved, the lines of Universal Design for Learning (Savia, 2016) help us to implement inclusive processes.

An approach that is not caring but *existential,* substantial, attentive to everyone's particularities, open to all, each according to his or her possibilities. In order to further root the experience of learning that can be said to be situated, regardless of the context in which it takes place, it is necessary to deeply understand the connection between the functioning mechanisms of the body-brain system and our cognitive and social skills.

Subjectivity and intersubjectivity are linked in the experiential synthesis, a synthesis that produces, with the same biological structures involved, a plurality of different meanings (Gallese, 2013). It is, therefore, in this context that a didactic practice understood as laboratory practice, pedagogically structured (Gomez Paloma, 2013), is developed. The laboratory, therefore, as a *place within a place*. As a possibility of activating the cognitive, physical and emotional resources of the person in reference to the possibility of expressing and experiencing relationships with oneself, with the other from oneself, with physical objects and *cultural artefacts* (Griswold, 1997). A place where the body can learn, according to the main lines of reflection of the CSE. Is it possible to *re-create* the laboratory setting in a digital learning environment? Basically, no. It is possible, however, by reversing the perspective in a positive way, to *re-create it.* That is, we must avoid believing that it is possible to simplistically *transfer* meanings from one environment to another. We cannot take for granted the profound differences that exist between the two settings. For instance, Mitchell notes that the web has the characteristic of not being, by its very nature, bound to a conception of space (Mitchell, 1995). The Internet appears as a semiotic sphere of increasing dimensions that tends to absorb all communication (De Carli, 1997). Socials are sometimes seen as a context in which the boundaries between formal and informal dimensions dissolve almost naturally, placing the learner in an environment that is, by its very nature, informal (Raviolo, 2012). What is the role of the body in this new spatial dimension? How do young people perceive these virtual places in their human formation and relationship building? If by formal dimension we mean a series of modes, attitudes and projects set up to facilitate and encourage learning, then we can think that this dimension will necessarily also be present when among the tools we use, we consider communication and social media technologies (Fantasia, 2014). In fact, the social and relational nature of these technological tools does not guarantee that they automatically translate into an accelerator of relational learning. In *Network without a cause*, Lovink (2012) highlights how social networks actually seem to escape all dialectics. The essence of these media, for the author, lies in a simulacrum of sociality, based on weak and depthless ties. Hence, we could ultimately state that the environment provided by social media may favour some collaborative activities but may also be dysfunctional with respect to others (Raviolo, 2012). Intentionality, planning, goal-setting, as postulated by an ECS Based approach are indispensable reference aspects for those working in dematerialised learning contexts (Gee, 2010). Furthermore: the experience of the network, in its conception, is essentially in the present (Rivoltella, 2003). In addition to space, time itself changes. In a clear flattening of thought in the illusorily continuous present of expression, web time lacks depth. It does not allow the different textual fragments of which it is composed to be organised according to a three-dimensionality that could be the result of their placement on different temporal planes (Castells M.,

2002). It is therefore the false synchrony, characteristic of Internet temporality, that distorts the very perception of the flow of events. *Internet time* is a different and differently perceived time than the real experience that each of us experiences in our existential corporeity. How is internet time perceived in learning processes by the subjects of learning themselves?

3. Pandemic and digitisation: how digital has invaded education.

In the recent pandemic crisis, the school place has dematerialised to re-materialise in digital space. *Digital citizenship*, (Rivoltella, 2013) has become immediately experiential, real. And with it the problems related to the knowledge of the tools, and the full awareness and full freedom to use them (Falcinelli, 2012). It is necessary, before resorting to technology-based and digital teaching, to reflect on the need for media and digital education (Laneve,2020). It is necessary to bear in mind that school is a dimension to be inhabited also and above all in its physicality. It is necessary to remember that the body learns in space and time (Gomez, 2020). It is also - and above all - a place of learning and, in a broader sense, of human formation (Gadamer,2014), a place where it is possible to appropriately *humanise* life (Ricoeur, 1954). When access to digital resources became necessary, what scholars refer to as the *Digital Divide* emerged with all its force. With the risk that learning can only develop for those who can afford it. (Stella, Riva, Scarcelli, Drusian, 2014). A long settling-in time was necessary. In the end, teachers and learners were able to find the *right medium* between the need to *tout the* need to transmit knowledge and to experience the human relationship; in the *right medium* by finding in the digital environment a tool (not a goal) through which it is possible to access the relationship with the other when the relationship in presence is impossible (Sarsini, 2020).
Digitalised learning can never replace the in-presence educational relationship (Gui, 2016). **We can** identify its transitional and supportive function but never a substitute for the in-presence educational relationship (Gomez Paloma, 2019).

4. The perception of social as a place of learning: methodological framework of the research and structure of the workshop meetings.

To answer the questions outlined above, we tried to present young students with an ECS Based workshop activity on their perception of social media in learning processes.

Context and participants

A class of the Liceo Classico 'Vittorio Emanuele II' in Jesi and a first grade class of the Istituto Comprensivo 'Dante Alighieri' secondary school in Monte San Vito were involved. This was done in order to allow a comparison of outcomes between different ages but very close chronologically, also in continuity between different school orders.

Method

The research method is that of action-research (Lewin, 1946), with particular reference to participatory action-research (Cunningham, 1976) with the intention of comparing traditional didactics with alternative, laboratory and body-based didactics, in order to be able to appreciate the differences in approach and the possible effects on learning. The following steps were taken for their qualitative analysis:

-Manual content analysis of the first kind (Rositi, 1971);

-counting of occurrences;

-breakdown of texts into a limited number of categories;

The study adopted a qualitative approach, for which a subscriber survey was administered with open-ended questions that allowed for in-depth study of valuable aspects for the research, such as students' freely expressed impressions and perceptions. The qualitative part is based on the analysis and interpretation of the answers provided by the sample to the open-ended questions with the aim of reducing the complexity and breadth of the information collected, against which the answers deemed useful for the research were considered. The open-ended questions were intended to delve into the theme of the perceived effectiveness of the approach, leaving the opportunity to motivate the answers in order to broaden the reflections on its strengths or weaknesses.

Timing and modalities

Over a period of about three months, the course was developed through four workshop meetings lasting about two hours each for a total of eight hours for the secondary school class. On the other hand, it was developed through a total of 10 hours divided into two-hour meetings for the secondary school class.

Contents and steps of the workshop

The *first phase involved the* activation of the experiential workshops in the two classroom contexts, according to the ECS Based project lines. The main theme of the proposal was the perception of social media in the student's educational experience. Various activities based on corporeity and cooperative learning were proposed (Johnson&Johnson, 1987). Teachers were involved in the reflection,

together with whom the design was developed. In a *second phase*, the students were asked to develop simple digital artefacts accompanied by a short cognitive autobiography, in order to be able to appreciate the effects of the action in a processual and narrative manner, bringing the experience directly back to the student's experience. The *third phase* involved comparing and searching for points of convergence and points of criticality deduced from the reading of the feedback, observations and cognitive autobiographies produced during the course.

Methods of observation and data collection

In this phase, a method for observing and recording the salient data during the workshop meetings was outlined, in agreement with the teachers, based on ethnographic observations by the workshop leader; at the end of the course, the students were offered a cognitive autobiography in order to narrate their experience. In this case, a semi-structured observation grid was produced to be filled in after each meeting by the teachers and workshop leader. Students were given a cognitive autobiography with guiding questions: *What do you think you learnt in this course? What aspects have you been most involved in? What critical aspects did you find?*

Structure of meetings

Each meeting was structured in several stages, the purpose of which was to recreate a circular structure of reasoning, starting with a brief introduction in which the topics to be covered, the working methods and the time structure of the intervention were stated. In a second moment, the students were stimulated to produce a digital artefact. The characteristics of this artefact responded to a number of general indications, namely: it must be realised taking into account the topic chosen for discussion, autonomously retrieving useful information and references; it must be realised taking into account the social channel for which it is intended; it must be realised taking into account the audience to which the communication is addressed. Each meeting, therefore, follows a defined but elastic structure, subdivided into different phases of realisation that we could summarise in this way:

Phase 1: *Introduction of work.*

Activation of prior knowledge, prejudices and stereotypes on the topic to be addressed and collegial and reasoned analysis.

Phase 2: *core activity.*

Students are offered work to be carried out individually or in cooperative learning, on the topic covered in the introductory phase. In particular, they are asked to produce a simple digital artefact.

Step 3: *Sharing of work.*

Students present their work, reporting on the processes that led to the operational

choices and presenting their artefact to the class

Step 4: *Feedback and discussion.*

The students are invited to give feedback on their own experience in the first instance and on the work of their peers that they have enjoyed. The discussion is mediated by the presenter who acts as moderator and facilitator.

Step 5: *Synthesis.*

Pupils and teachers are invited to briefly summarise the meaning of the experience they have just had, reasoning about their own involvement, the pleasant and the critical aspects, trying to make their own contribution to improve it.

The workshop project was created with the intention of proposing alternative learning paths, capable of combining reflection on media and web 2.0 technologies with artistic languages and workshop practices pertaining to the fields of different artistic languages with particular reference to theatre and theatricality, and primarily to educational, pedagogical and didactic needs.

5. Adolescence and Social Media: Research Findings

Analysis of the results of workshop activities

The project teachers were asked to compile a cognitive autobiography for the narrative report of the activities. According to the teachers, the course was useful from several points of view: firstly, for the relational aspect, as it fostered knowledge between pupils and between teacher and pupil. Secondly, it confronted the pupils with issues very close to them, helping them to become more aware of the world of social media (Jenkins et al., 2010). In addition to gaining awareness, the children were stimulated to take a critical and reflective attitude towards what is offered to them on a daily basis by these tools and the web in general. Restrictions due to the pandemic undoubtedly limited the opportunities for collaboration among children in the development of classroom activities. It might be valuable for teachers involved in the project and the workshop leader to share the issues addressed during the workshop hours (prior to the activities). According to the teachers, during the workshop the pupils were able to express themselves, bringing out certain sides of their personalities that, in a more usual teaching context, are not so easily known. Moreover, they had the opportunity to use media that are very close to them and their creativity could be observed. We can detect, as a result of the data analysis work, the students' perception of the use of social channels. They note that these channels have different types of communication and require a very specific social engagement. They also point out their criticalities.

Channel	Type of communication	Social request	Criticalities
INSTAGRAM	Iconic/Photography Using images to communicate 'moments of existence'	Social image; Sharing moments of life; Gratification and approval;	Narcissistic drift; Social desirability bias; Excessive worship of image and perfection
FACEBOOK	Textual/Visual Use of texts accompanied by videos or images to substantiate one's 'doing' and 'thinking'	Social image; Sharing one's thoughts; Approval;	Social desirability bias;Self-confirmation bias; Group-thinking; Radicalisation of ideological positions;
YOUTUBE	Visual Use of videos to show one's specificity/individuality; Showing others one's capabilities;	Social image; Sharing one's know-how; Building engaging and entertaining content;	Narcissistic drift; Self-confirmation bias; Extremisation of risky or provocative attitudes; Spreading false news; Myth of the 'Follower';

Table 1: Table of social media characteristics according to students

Analysis of cognitive autobiographies

An analysis of the cognitive autobiographies reveals students' need to be able to talk, discuss and explore social media issues. The risks of exposing the self on the digital agora are particularly felt. From the students' papers, it is possible to deduce a particular focus on the issue of insults and cyber-bullying. In one group paper, the students proposed a WhatsApp chat in which they imagined themselves to be cyberbullies grappling with body-shaming, denigration and heavy-handed insulting of their classmate who had exposed herself in a video in which she was seen dancing. One of the participants in the fictional chat reality acted as a moderator mainly using the tool of empathy to bring the bullies to their senses: "how would

you feel in her place?". From the reflections following the viewing of this interesting artefact, the students pointed out that virtual actions cause real consequences (Aroldi, 2015). While watching the video (the students in fact recorded a real time chat using a programme specifically researched on the web), the whole class showed agitation and anxiety as soon as the app signalled that someone was intent on writing a comment. The waiting time was particularly distressing for the students, who identified themselves as the person subjected to the body-shaming. In this sense, the experience of the digitally mediated relationship takes on physical and psychological repercussions from their perspective. According to the students, the course undertaken seemed useful and interesting as it provided access to new knowledge in relation to their previous knowledge of social media. In some elaborations, the same demand for more in-depth knowledge by the students towards the educational institution with respect to these issues can be found. They grasped different nuances of the human relationship experienced on social media, with particular reference to time, understood as a commodity/product through which social media make the functionalities of their platforms free of charge: not a properly human time, therefore, but a commercial one aimed at consumption. The students grasped the relationship between benefits and risks in the use of social media, consequently drawing inspiration for greater awareness in their use. They were particularly interested in human functioning on Web 2.0: in fact, one of the students' most heartfelt topics referred to the internal dynamics of the ego and personality. They seized the opportunity that arose of an effective comparison between their own opinion and that expressed by their classmates and curricular teachers, as well as the course leader. The references to their subjects of study (Philosophy, History, Greek, Latin) used to ground the treatment of the theme in the humanities and anthropological research were appreciated. Finally, the students highlight how awareness and prudence are necessary tools for managing the use of social media. The students' thinking on social media is very mature and relevant. They believe that social media can be useful places of learning but also note that the school tends to consider them only superficially, without trying to integrate them into everyday teaching practice. This hybridisation/integration, according to the students, could be a useful teaching tool for conveying learning in a way that is pleasant and close to their feelings. The theme of pathological addiction is also particularly felt: the association of the gesture of "scrolling" with the activation of the brain areas normally associated with pleasure (La Pierre et al., 2019) received much interest during the meetings. In this sense, students perceive the danger to which they expose themselves if the use of social media escapes the autonomous management and self-control of the person, to become a mere habitual practice. The perception of the danger of pathological addictions, which emerged little in secondary school, emerges with particular force in this more advanced phase of adolescence. Formally, the students requested to be able to

further explore these issues, both with their curricular teachers and with further project meetings on the subject.

Conclusions

The convergence of all media to digital over the last two decades has made these media themselves polysemous platforms, in that they contribute to constructing ever-changing meanings. Polysemic insofar as the same media simultaneously offer several tools for the construction of such meanings, moving from multimedia to *intermediality* (Rivoltella, 2016). The communicative landscape through which these media operate, therefore, is constantly being modified by these very media and the use we can make of them. This transforms the media into a connective tissue (Siemens,2004). Thanks to the widespread diffusion of devices, the protagonists of cross-media are increasingly the users, who become the focus of any new online proposal, in the sense that they are increasingly called upon to contribute (Jenkins et al., 2010). We are facing a fundamental shift: the birth of the *prosumer* (Stella, Riva et al., 2014). From a relational and social point of view, therefore, the network amplifies the possibility of extending the range of interactions and that of being active users, in the sense that the *Internet is a text both read and written by its users* (Hine, 2000). *How can these new communication systems be integrated into teaching and learning processes*? We move from identifying them as *means* (McLuhan, 1967) to Meyerowitz's (1993) reconceptualisation of them as *environments*. All this reconfigures the anthropic landscape of communication firstly and, secondly, has obvious repercussions in the very fabric of society, establishing an inescapable link between virtuality and reality that cannot be ignored. Although not completely transparent, the new media seem in any case to guarantee inclusivity and universality for citizens (Levy, 2006), favouring horizontal communication and freedom of expression for individuals, groups and institutions. According to Livingstone (2010, 2015), the Internet is not a very welcoming place for young people, despite the rhetoric of the digital natives and the Internet generation claiming the contrary, and all considerations about the risks and opportunities of the Net can never be considered definitive, but remain open. *What, then, is the role of schools in approaching this scenario?* One can no longer simply prohibit the use of digital devices in the classroom, institutionalising more passable and structured didactic forms such as the various Lims, Tics and educational software. We must take *responsibility for* research, in an effort to fully understand the new dynamics we are going through, otherwise we would end up falling into a dialectic without mediation. (Jaquinot, 2000). Extremising this dialectic could only make things worse, increasing the cultural and behavioural gap, with the result that schools find themselves propagating systems far removed from those that adolescents adopt throughout their lives.

To conclude in the words of Wolf (2009): teachers and students should not be put in the position of having to choose between books or monitors, between real and virtual. Rossi (2016), takes a decisive step in the direction of a simplistic reasoning based on neuroscience research (Berthoz, 2013; Sibilio, 2014) on the relationship between action and perception, contextualising it in the didactic mediation that takes place in the use of digital artefacts. Damiano (2013) bases teaching theory precisely on mediation, wondering whether mediation and teaching do not end up coinciding tout court. If, therefore, the transformation in which teaching consists is the replacement of the real with something else that corresponds to it, we could recognise it as *metaphorisation* (Rossi, 2016), i.e. the same function that we find at the origin of languages, which are, to all intents and purposes, metaphorical substitutes for experience. The most recent artefacts are favouring fluidity between iconic, symbolic and analogical mediators and many of the current apps are a synthesis of the three previous types to the extent that *mash-ups* also define an educational proposal. In the light of this research and of the scientific, pedagogical and philosophical literature that has so far enabled us to highlight some of the key issues in relation to the innovations introduced into the very way didactics and everyday school life have been conducted since the advent of Web 2.0, it is necessary for schools to re-invigorate themselves and make the quest for research and understanding that animates the experience and reality of their students their own. Schools are required to make a necessary effort to be able to assess and make full use of the opportunity offered by informal learning environments such as those of social media, precisely because schools are communities of practice immersed in the real community and cannot fail to make their own the demands of the human communities in which they operate. In conclusion, taking into account the products developed during the pathway implemented in the two school orders, there is clear evidence of the new awareness and knowledge acquired by the students. By activating a coeducational design (Fornasa, 2014), targeted, extensive, aware of its own resources and tools, never self-paying and in continuous evolutionary tension, it is possible to pedagogically and didactically reconstruct significant learning in students who are no longer passive objects of knowledge transmission, but active subjects in the construction of new contents and new knowledge.

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