

DAD: Some Historical-Epistemological Considerations on its Judicious Use

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ABSTRACT

This paper deals with the pros and cons in relation to the teaching strategy imposed specifically in Italy by the COVID-19 pandemic, which has involved and continues to involve significant changes in the setting in which students and teachers interact. The approach is multidisciplinary, in that the perspective advanced is both historical and epistemological in nature. Particular attention is paid to the possibility of erecting an argumentative framework within the operational educational context as it takes place in the temporal and spatial dimensions of the school. Suggestions are provided regarding the set of “tools” useful for the constructive and creative management of didactic-pedagogical modalities inherent to *DAD* (acronym for the Italian “Didattica A Distanza”, i.e., distance/remote teaching and learning), including combining the quantitative facets with the necessary qualitative facets, which are expressed in the category of the “bello” (beautiful), thus introducing the aesthetic value. Therefore, the concept of “benessere” (well-being) and that of “malessere” (malaise) are associated with the concept of “bellesere” (beautiful-being).

KEYWORDS: *DAD* (“Didattica A Distanza”), distance/remote teaching and learning, COVID-19, education, teacher training

[Hereinafter, the translations from the original texts are made by the authors of this paper.]

INTRODUCTION

This contribution should be seen as a cultural journey into the territory, still partly unexplored, of *DAD* (acronym for the Italian “Didattica A Distanza”, i.e., distance/remote teaching/learning) and the effects (some positive, some negative) that this pedagogic strategy has in various educational contexts. A journey that involves a series of short stops at various “stations”.

The first station (“A bit of history... or rather, there is not much new under the sun”) concerns a mainly historical reading, provocatively underlining how, most of the time, things tend to repeat themselves in human affairs. Already in the second half of the 17th century, in fact, there was talk of “small living animals, invisible to the naked eye” that spread contagious diseases (Nuland, 2004). And, later on, Ignác Semmelweis - around the middle of the 19th century - discovered how the simple act of washing one’s hands carefully reduced the number of deaths from postpartum infections that struck young mothers in the hospitals of Vienna. From that far-off time, we come to our days, specifically to Italy, when *DAD* (a strategy to defend ourselves from the aggression of that small living animal we have called COVID-19) involves a physical distancing that we hope will not turn into social and emotional distancing. The theme of discrimination on a social basis that the use of new technologies inevitably implies concludes this section.

The second station (“Distance vs. face-to-face teaching/learning”) deals with the relationship between the form and content of distance teaching/learning in comparison with the form and content of place-based education. In both cases, the aspects that most distinguish the two strategies are highlighted, with a view, in any case, to critical-propositional readings that pave the way for new and more articulated ways of defining the student-teacher relationship. This includes cases in which learners might experience difficulties of various kinds and origins, in terms of both learning and behavior. The following is a summary of the main models that characterize the sense and value of teaching in general (according to Galimberti, 2020), whether through distance or face-to-face teaching, while emphasizing the need for teachers, of no matter what degree or grade, to be able to arouse interest and curiosity. In this regard, we recall the suggestion made by Guido Petter (Petter, 1994) that each teacher should always carry a “valigetta delle sorprese” (bag of surprises). Before leaving this station, we propose the approaches suggested by Karl Popper (Popper, 2002) and Lev Vygotskij (Vygotskij, 1981). This last reference to Vygotskij introduces the topic presented and discussed in the third station.

In the third station (“The role of play”), we note, in fact, how difficult it is to “play” in the absence of physicality. For this aspect, the hypothesis is put forward of thinking of the school as if it were a toy, and as such it should respond to three precise characteristics: form, function, and story. The disciplinary connection has been developed in this regard by interacting with the perspectives proposed by the Schools of Design (in particular of the Politecnico di Milano: see Fois, 2017). A special note concerns “ties and strings” that often gag the saying and doing of teachers, who - like it or not - must adhere to well-defined programs that do not always respond adequately to the needs of the variegated world of school. This is especially true now, at a time when the encounter between different cultures and value systems clearly requires new and different strategies of “listening” and action. Scholastic programs and the imposed pace of learning favor quantitative traits to the detriment of the “quality” of the educational system.

The fourth station (“Quality vs. quantity”) proposes a good balance between the quantitative dimension (at the end of the year, the teacher managed to flip through all the pages of the chapters and books in the program) and the qualitative dimension (degree and level of assimilation by the students of the materials transmitted). We then recall the Mozart’s theme identifiable in the opening of *The Marriage of Figaro* (1786), in which Figaro implements “quantitative” strategies (he counts and measures to establish whether the bed will fit in the bedroom assigned to the couple by the Count), while Susanna adopts a qualitative approach (the “beauty” of her hat). From this comes the consideration that music and fairy tales (music itself has a “fairy-tale” quality, with its evocative dimension that favors the abandoning of thought) are to be considered as instruments and “tools” to be kept at hand whenever we feel committed to planning, managing and governing any educational project.

In the fifth and final station (“Conclusions”) we bring things together and summarize the sense of the reasoning we have put forth and developed with regard to *DAD*, with connections and implications. The suggestion is that of committing oneself individually to “discovering” what can be recognized as beautiful, good, useful and interesting in the didactic strategies that necessarily see in distance teaching/learning the main “operational tool” in this era in which the pandemic dominates and prevails. The invitation is to reflect: *DAD*, opportunity or constraint? To posterity the arduous decision.

A BIT OF HISTORY... OR RATHER, THERE IS NOT MUCH NEW UNDER THE SUN

The Jesuit Athanasius Kirker (1602-1680) had hypothesized, back in 1658, that “small living animals, invisible to the naked eye” spread contagious diseases (Nuland, 2004, p. 41). But this was ignored by physicians in later centuries. Long before Kirker, in 1546, Girolamo Fracastoro of Verona (1478-1553) had written a book entitled *De contagione et contagiosis morbis*, formulating the same hypothesis as Kirker. Two prophets, we could say, were ignored by the entire medical class of the 18th and 19th centuries.

It is worth extending the reflection about the disregarded “prophecies” of Kircher and Fracastoro to our own time, in which the COVID-19 pandemic has imposed and continues to impose on us behavioral changes of considerable importance (see, e.g., Di Martino, 2020; Engelbrecht, Borba, Llinares & Kaiser, 2020; Bakker, Cai & Zenger, 2021; Erduran, 2021). “Contagion” was spoken of then as it is today. So - as always, after all - the past sheds light on the present.

The current spread of the virus and its variants determines psychic, economic and social “diseases”. The perspective suggested by Giovanni Battista Morgagni (1682-1771) in his *De sedibus et causis morborum per anatomen indagatis* (1761), even if in a metaphorical way, is interesting. In this regard, Nuland (2004, p. 45) notes: “If you want to understand the disease, you must identify its location, the place where it originates. Symptoms are, as Morgagni splendidly proclaims, «the screams of the organs that suffer» and must be identified by going back to the specific places where they are produced. ‘*Ubi est morbus?*’ (‘Where is the disease?’) was the question that had to be answered in any case.”

And precisely in this sense we believe that there is nothing new under the sun: then as now this is still the question to which we should try to give an answer.

Ignác Semmelweis (1818-1865) suffered the same fate as Kircher and Fracastoro (see Nuland, 2004). We are in Vienna, and in the obstetrical clinics dozens and dozens of women die immediately after giving birth. Cause: puerperal fever. These are women of the common people. The well-to-do give birth in the safety of their own homes. Semmelweis discovered in 1847 that mortality could be dramatically reduced by careful hand disinfection. But he had a hard time convincing his chief and colleagues, who thought he was being extravagant. Imagine if simply disinfecting hands could solve the dramatic situation. After all, the issue was crystal clear: doctors were assisting women in labor after performing autopsies on women who had died of puerperal fever.

And the infection was still being transmitted. However, official medical “knowledge” (represented by the chief physician) could not acknowledge that a young 29-year-old doctor, who was also a Hungarian in Vienna, had understood that more careful hand disinfection could prevent the death of numerous women. Expelled from the hospital, Semmelweis returned to Hungary, where he died insane. Now a posthumous homage is paid to him: a type of surgical gloves is called precisely “Semmelweis”.

Why this historical evocation? Simple: still today “small living animals, invisible to the naked eye” are causing considerable damage and, still today, washing hands as often as possible constitutes part of individual self-defense procedures.

Now let us get to the point: *DAD* (acronym for the Italian “Didattica A Distanza”, i.e., distance/remote teaching/learning) is among the measures adopted in Italy to contain and limit the spread of the COVID-19 virus (see, e.g., Addimando, Leder & Zudini, 2021). And the technology that makes this possible today simply enhances a form of “social and emotional distancing” which is already historically rooted in the educational strategies. *DAD*, then, does nothing more than “modernize”, and update, the procedures that have characterized and continue to characterize educational styles that, in principle, do not have as their purpose the improvement of the quality of life of pupils and students but the provision of a knowledge set definable in terms of erudition rather than culture. There is a lack of time and space to develop adequate procedures for actively listening to the needs and existential conditions that define the being in the world of each learner. After all, the oral exam is one of the most widespread of educational practices. On closer inspection, however, it is more a police concept than an educational one.

Moreover, we must also keep in mind, for example, that not all students and their families have the appropriate technology (computers) at their disposal and that not all areas have the necessary internet coverage. It is said that those who do not have a PC will be provided with one by the school. Good. But it is also necessary to know how to use it. This is an underhand form of active discrimination.

DISTANCE VS. FACE-TO-FACE TEACHING/LEARNING

As mentioned above, *DAD* (“Didattica A Distanza”) is one of the measures designed in Italy to circumscribe and limit the spread of the COVID-19 virus. In this regard, the keyword is “distanza” (distance).

Something communicatively relevant, with *DAD*, runs the risk of “breaking”: it is not about the “relationship” in the strict sense of the word; what is missing is rather physicality (see, e.g., Addimando, Leder & Zudini, 2021). If we share the idea that non-verbal and paraverbal communication plays a more important role than verbal communication (that is, that the “how” is more important than the “what”), it is clear that in *DAD* the communicative process aimed at achieving specific objectives takes on new and different connotations.

Live and in presence, the teacher is in a position to decode and interpret the weak signals transmitted mainly through the non-verbal communication channel. The mediation of technology makes this substantial form of “listening” impossible. But there you have it: that is how it is and we have to imagine a constructive management of the evident and highlighted criticalities, also considering other characteristics of distance teaching/learning that cannot be ignored: the setting changes (for example, the teacher cannot pass between the desks); novel phenomena of “distraction” and interference occur (the grandmother, sitting next to the child, who out of reach of the camera suggests and comments); the direct eye-contact is absent (and this, it should be noted, can be experienced by the shy person in positive terms); roles are exchanged with greater ease: it is the pupils and the students who at times become “masters” of the teacher (“Teacher, you have to turn on the camera, otherwise we won’t see you”). Settings and didactic-pedagogical strategies in general also change in relation to the dynamic and educational characteristics imposed by *DAD*. Which, we should remember, was not and is not an impromptu choice, bizarre, imagined by some enemy of the welfare of the actors who animate the school stage (pupils, students, and teachers). Rather it was imposed by the spread of a virus that has caused and is causing thousands and thousands of deaths. Limiting crowding and opportunities for interpersonal contact has proven to be one of the most important defensive measures. Here then, perhaps, *DAD* could be characterized as an effective strategy in the constructive management of all the critical issues related to learning and behavioral disorders in general. The point-to-point relationship could be particularly suitable, provided that it does not become permanently stabilized, excluding the indispensable forms of socialization.

It is necessary, also in this case, to call on the creative-imaginative abilities of each teacher. Guido Petter’s proposal (Petter, 1994) then acquires a metaphorical value of substance: it is necessary, however, to determine conditions of participation that see curiosity as the basic characteristic. The teacher, writes Petter, should come to

the classroom with a “valigetta delle sorprese” (bag of surprises) in order to surprise and arouse the curiosity of the students of all levels, whether they are children or young adults. And this can also be done from a distance. In this context of *DAD*, a consideration by Umberto Galimberti (Galimberti, 2020) is of particular interest: the meaning and value of didactics depend on the educational intentions of those who practice it. According to Galimberti, different didactic models derive from this:

- “Modello disciplinare” (Disciplinary model)

At the center of the relationship are the needs of the disciplinary knowledge set to be taught with consequent pre-eminence of the program over the expectations and motivations of the students.

- “Modello curriculare” (Curricular model)

The determination of the contents to be transmitted and the relative modalities are implemented within a general, non-directive framework, inasmuch as at the center of the process are the differentiated possibilities and potentialities of the students.

- “Modello attivistico” (Activist model)

The participation and active intervention of students is emphasized and valued, based on the hypothesis that each one (child, teenager or adult) truly learns only when he or she “does” things and “touches” topics. These topics become interesting precisely because everyone can “deal with” them personally, recognizing their value in relation to improving the quality of their lives (their “being in the world”).

- “Modello relazionale” (Relational model)

Interpersonal relationships are preferred over the content to be transmitted, in the belief that affective relationships and a favorable educational context facilitate intellectual acquisition and learning, which is easier when it has been possible to circumscribe and eliminate difficulties and conflicts at the emotional level.

It is reasonable that each teacher, in his or her own educational practice, has in mind each of the models described and that he or she is inspired, from time to time, by one rather than the other, in consideration of the needs that the context advances and proposes.

The question we can therefore ask ourselves is the following: does *DAD* allow for such a procedure, given that what is missing is physicality?

Let us keep in mind Karl Popper’s provocation (Popper, 2002): school exists (and makes sense) because people do not know and they “make mistakes”. If people knew, school would be useless.

Why then “punish” the error? Let us value it instead, identifying it as a basis for development and growth. Let us try to understand what exactly has not been understood and why, so that we can re-explain it with a “slant” more suited to the interlocutor, perhaps through play. In this regard, of particular interest are the observations of Lev Vygotskij (Vygotskij, 1981). Vygotskij’s argument about the theme of children’s play is clearly integrated in the general psychological theory that characterizes Cultural-historical psychology, of which he is considered the founder (see Mecacci, 2019). There are two interesting concepts pertinent to the subject of this contribution: the notion of “zone of proximal development” (that is, the place and time where it is possible to verify what the child can do more and better when he or she is helped by the adult, whether teacher or parent) and that of “stimulus-means” (a stimulus created “artificially” by the human being - child or adult - to ensure that the goals he or she aims to achieve are reached). An example, in this regard, is the knot on the handkerchief, to help remember something that must be done.

The respect for a set of rules (better if shared) is also proposed as an element of teaching which is both active and oriented to form citizens who will be free and capable of thinking because and although they have learned to respect the basic rules of civil coexistence (see Pedrabissi, 2010).

THE ROLE OF PLAY

But how do we “play” in the absence of essential physicality? Moreover, the variable “time” assumes special importance (in general, we don’t have time to do all the things we would like to do). “Time passes”, we are inclined to say, forgetting that “it is we who pass”, and not time itself.

Let us imagine then for just a moment that the school is designed and built as a toy should be designed and built. Luca Fois (Fois, 2017) highlights the three characteristics that a toy should possess: form, function, and story. From our point of view, it would be good to think of the school as if it were a toy (metaphors sometimes serve to clarify concepts otherwise difficult to understand).

As far as form is concerned, the “toy-school” should be harmonious, balanced, intriguing, simple, essential, recognizable, beautiful.

As far as function is concerned, it should stimulate creativity, produce interest, be fun, create relationships, be accessible, last in time, facilitate interactivity, serve as food for thought and distribute nuclei of (secular) ethics. As for the story, it should tell a story, express the culture of respect, highlight the “roots” (respecting differences), it should excite, so that it is constituted as a kind of ferry and is a bridge between reality and imagination (back and forth).

Let us try to discuss this a bit together, being aware that, in any case, we are dealing with a constraint that cannot be overcome at the moment: the program that teachers must adhere to. And here the quantitative aspect seems to prevail over the necessary qualitative aspect.

QUALITY VS. QUANTITY

This is one of the interesting points on which it is worth reflecting: the “quantitative” is expressed with numbers and, in this regard, mathematics is its main expression. So, our challenge is: how do we turn “quantity” into a “quality” that can meet the expectations and motivations of the pupils and the students?

Again, “let us go back to the ancient, it will be a novelty”, recalling Verdi (1871) (see Conati, 2000, p. 205). In the opening of *The Marriage of Figaro* by Mozart (1786), Figaro does the math, taking measurements (a quantitative approach) to try to figure out if the bed will fit in the room that the Count has assigned to him and Susanna (the Count’s goal being very clear to Susanna, but not to Figaro, her future husband). Figaro measures: “Five... ten... twenty... thirty... thirty-six... forty-three.” Susanna replies: “Now I am happy; it seems to have been made for me... just look at my hat.” And Figaro convinces himself: “It seems to have been made for you.”

Here is the point: we must ensure that a widespread feeling of pleasure and contentment spreads throughout the classrooms. Is this possible with *DAD*? Difficult but possible. It would be enough to consider, following Enzo Spaltro (Spaltro, 2007), that, in addition to the concepts of “benessere” (well-being) and of “malessere” (malaise), there is also the dimension of “belleessere” (beautiful-being). The aesthetic category of the “bello” (beautiful) - including emotional beauty - takes on particular importance. The lesson should be perceived as, precisely, “beautiful”, not only but also from an aesthetic point of view.

Returning to the past, Mozart describes, in the opening of *The Marriage of Figaro*, the dialectic between quantitative (Figaro taking measurements) and qualitative (Susanna with her little hat).

By the way, music is a powerful tool in relation to communication strategies of all levels, firstly intrapersonal (the teacher, before entering the classroom, talks to himself or herself). The notes on the staff, the tempos (“allegro”, “vivace”, “con fuoco” ...), the scores and the sheet music have to do with mathematics; they are “numbers” that are transformed into the “magic frame” of empathic, emotional and exciting listening, a premise for effective and lasting learning. The musical instruments (strings, brass, woodwinds) are “poor” and simple: a tube with holes, a piece of wood with metal keys, and so on. But, perhaps precisely because they are poor and simple instruments - so to speak, because an oboe costs thousands of euros -, they produce the magic of sound. A “medium”, therefore, that can be kept in mind even in the absence of “physicality”.

Music, with its dimensions of creativity, performance and sound, possesses, in fact, a cathartic and expressive value and is, in this sense, particularly suitable to externalize experiences that are difficult to express through verbal language (see Galimberti, 2020). In this regard, from the point of view of a “historical” reading of the phenomena we are discussing, it is sufficient to recall what Aristotle said about music: it should be practiced not for a single type of benefit that can derive from it, but for multiple uses, for education (specifically, ethical melodies and modes of the same nature), to procure catharsis, for recreation, relaxation of the soul and respite from fatigue (*Politica*, VIII, 7). Again, there is not much new under the sun, and Aristotle’s observations are still relevant today.

The transmission of any disciplinary knowledge can therefore make use of music, which, from time to time, is identified as the most suitable in consideration of the context, the objectives and the “characteristics” of those who will be required to enjoy the “lesson”. Notes, in a certain sense, can take us by the hand and accompany us along the path of active and productive listening.

Similar effects can be obtained with fairy tales (see Franz, 1996): in this case, the words are transformed into imagined landscapes, where the fantastic world, evoked and induced, becomes a fertile terrain for the “seeds” of

knowledge that we have the task of transmitting (see, for example, with regard to mathematics, Caprin, Leder, Rocco & Zudini, 2019).

Music and fairy tales, then, can be considered tools of a communication aimed at the achievement of precise didactic-educational-pedagogical objectives, especially when teaching/learning is done at a distance.

CONCLUSIONS

DAD, with all its limitations - starting with the technical-organizational ones: all the subjects involved (students and their families, the teachers themselves) must have available the appropriate technology (computers), with adequate network coverage, and above all must be able to use this technology appropriately, correctly and safely -, can nevertheless be seized as a constructive and creative opportunity for cultural growth that will manifest its “value” when we succeed in making “presence” the characteristic feature of every communicative path.

Let us then put ourselves in the perspective of “discovering” what distance teaching/learning can offer on a daily basis that is good, beautiful, interesting and useful (so, opportunity rather than constraint? Stimulating challenge?). This paper is intended as a contribution to help readers find useful ideas to improve the quality of their lives as educators, and, more generally, as citizens.

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