

COOPERATIVE LEARNING AT THE TIME OF COVID19: A UNIVERSITY EXPERIENCE

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Abstract

Background: over the last few months we have been protagonists of an epochal revolution. Covid19 has put to the test, in formal educational contexts of all levels, one of the fundamental dimensions of learning, especially in the humanities: participation. In this regard, nowadays more than ever, the distributed and situated nature of the learning processes requires to focus on an educational work concerning the processes of sharing, socialization and negotiation that minds carry out together while learning, and that promotes community building of learning.

Aim of the work: this contribution aims to describe, through the narration of an educational experience prepared *ad hoc*, the effort of preserving, during the second semester of the last academic year 2019/2020, the fundamental participatory dimension in cooperative learning, despite and also thanks to the teaching distance.

Methods: university students of the three-year degree course in psychological sciences and techniques of the University of Naples "Federico II", during the lessons of pedagogy of the learning processes, lessons held remotely via Microsoft Team platform, were able to experience the work in a small group at a distance, experiencing in first person the methodology of cooperative learning and the intersubjectively co-constructed nature of knowledge through educational situation prepared in this sense, situation whose process and product are described in particular.

Results: thanks to the students' reflections about cooperative distance learning experience, reflections obtained through a focus group carried out at the end of the intervention, the emergency produced by the Covid-19 epidemic, initially experienced as an insuperable obstacle to the realization of any educational project, was reread, in the light of the experience realized and described, as a possible opportunity to start new reflections, to verify in the field the effectiveness of collaborative paths, social consolidation and activation of participatory discussion, and to experience the great usefulness of new forms and new communication tools, critically evaluating their pros and cons.

Conclusions: the arrangement of the real and/or virtual 'meeting places' is crucial for the possibility of becoming aware of the importance, in learning processes, of the exchange between the personal wealth of knowledge that each person possesses as their own formative background, new acquisitions to learn and the cultural significance of each member of the community, which is always singular, peculiar and specific. Even from a distance.

Keywords: Cooperative learning, distance teaching, contextualism, digital competence, participation.

1 COOPERATIVE LEARNING ONLINE: FROM POSSIBILITY TO NECESSITY

There is no doubt about the value of cooperative learning as an educational methodology that works on the co-construction of learning, improving the student's performance, interaction, motivation and productivity (Bowen, 2000; Springer, Stanne & Donovan, 1999).

In fact, socio-constructivist, culturalist and contextualist orientations lead us to catch the importance both of the conflicts and feedback in the learning processes and of the comparison between thought processes and beliefs, of the potential of a mind that is shaped by cultural tools (Bruner, 2004) and by an intersubjective confront (Vygotsky, 1930, 1960), of learning by discovery.

Nowadays it seems rather restrictive to talk about the work group without considering its possible weight on the cognitive and moral development (Piaget, 1932), involving a methodological approach that provides for the development of contexts, the construction of a relational positive environment, preliminary skills and self-assessment processes that favour self-knowledge, also promoting motivational processes that support and guide the development of individual potential.

Precisely for this reason several research have identified not only a tendency to integrate this methodology into class work (Colbeck, Campbell and Bjorklund, 2000), but, it has also shown that cooperative learning can represent a successful teaching method at all levels of education, including the post-secondary one (Johnson, Johnson, & Smith, 2007).

Beyond the models that see the centrality of technologies for the realization of educational experiences based on collaboration, there have already been several research units engaged in the enhancement of these principles for some time (Johnson & Johnson, 1989; Johnson & Johnson, Smith, 1991; Johnson & Johnson, Holubec, 1996; Slavin, 1983, 1986, 1987; Sharan & Sharan, 1998; Kagan 1990, 1992; Cohen, 1991, 1994; Comoglio, Cardoso, 1996).

Despite the models' diversity, the authors agree on the value of the interaction between peers aimed at activating dynamics whose final result is substantially higher than that obtainable separately by the same subjects. To summarize, it is possible defining collaborative learning as "the acquisition by individuals of knowledge, skills and attitudes that result from the group's interaction or, more clearly, from individual learning as a result of a group process" (Kaye, 1994, p. 9).

Obviously, collaborating is not an automatic process, and "the various methodologies are mostly aimed at defining the operational conditions capable of promoting collaboration and increasing awareness of its value within the community" (Bonaiuti, 2005, p.15).

Specifically, online cooperative learning through e-learning would help students to share divergent opinions among their group members and to extend different mental and metacognitive models (Chen, Wu, & Yang, 2006; Glaser & Bassok, 1989), demonstrating to be relatively more effective in promoting student's performance and interaction than competitive and individual learning (Johnson & Johnson, 1989; Johnson, Maruyama, Johnson, Nelson & Skon, 1981), as well as promoting facilitation and affective factors peer learning (Hew & Cheung, 2008; Jones & Issroff, 2005).

Alongside these many advantages there is still the concern that students are often reluctant to actively participate in the work group, sometimes only one or two students are willing to do most of the work to complete the small group assignment, while others are happy to escape their responsibilities: in these cases it is difficult to assess the contribution of individual students to the production processes of co-construction. This problem of accurately evaluating members' participation and ensuring their equal involvement could be addressed through methodological dimensions that are already part of cooperative learning, such as online discussion (Nam & Zellner, 2011).

1.1 Aim of the work: is remote cooperative learning possible?

It therefore appears now established for post-cognitivist models (wanting to follow the tripartite model which includes constructivism, contextualism and culturalism proposed by Santoianni and Striano, 2003, p. 65), in particular for the constructivism that "ideas, knowledge, the information that tradition has always considered transmissible through language, also reveal themselves as constructions that each anyone have to abstract (or construct) from their own experience" (von Glaserfeld, 1999), and that in this perspective technologies are not therefore seen as tools for the 'distribution' of predetermined knowledge, but as environments for the active and meaningful construction of knowledge and which as such can find a good application for education.

However, what might be a possibility, has been transformed since February of this year, and I am speaking for the Italian context, into a necessity. Covid19 has immersively and forcibly catapulted us into distance learning, and as teachers of all levels we could only respond, driven by the ethical and moral duty not to abandon our students.

So many and varied educational experiences were born by using distance learning, and this one that we will describe below is one of the many that we had to develop during the emergency to preserve the values that our educational models intend, experiences that fortunately and propulsively gave us the opportunity to think even better about the strengths and weaknesses of methodologies applied to experiences, in this case the experience of activating collaborative learning processes during a university course of 'pedagogy of learning processes' for students enrolled in the third year of the Bachelor's Degree in Psychological Sciences and Techniques of the University of Naples 'Federico II'.

In particular this contribution aims to describe first of all, through the narration of an educational experience prepared *ad hoc*, the effort of preserving, during the second semester of the last academic year 2019/2020, the fundamental participatory dimension in cooperative learning, despite and also thanks to the teaching distance. And secondly, through a focus group to collect students' reflections on

the experience, evaluating the pros and cons of proposing the methodology of collaborative distance learning.

2 DISTANCE COLLABORATIVE LEARNING: THE TALE OF AN EXPERIENCE

Here in Italy, phase 1 of Covid 19 has coincided with the beginning of second semester's courses: after one week, the whole University organized itself to start with distance learning using the Microsoft Teams platform as an institutional circuit for providing formation.

For many of us, including myself, it was a matter of using the online for the first time to run our courses. As far as I'm concerned, it seemed difficult to use this channel for a didactic that has always had a presential workshop mode, focusing on an experiential process to promote learning. Indeed, those features are peculiar of the subject which is the matter of the course and of my methodology of working. However, I have to say that within a couple of weeks I immediately found myself at ease.

Surprisingly, the students, who are mainly women, were very present and despite the 'distance', we experienced an excellent level of intimacy, thanks to the rather small group of participants, consisting of 25/30 students. In fact, everyone became emotional at the end of the course, especially while taking a picture of us together on Teams.

2.1 Methods

Because of these favorable conditions during the course, I came up with the idea of creating, even at a distance, an appropriate context allowing students to work in a collaborative learning mode. I created several private channels in my course team (see figure 1), that is, they were accessible only to a specific group of people enrolled in the team, randomly distributing 5/6 students for each group. First of all, the students were asked to identify a representative name, to be chosen together, of their own channel.

In the small group, students were free to choose to work either in writing or, as happened in the general channel for the duration of the course, in meeting mode, by activating the camera and microphone. I have never entered the subgroups, communicating in turn the structuring of the working times through the chat of the general channel.

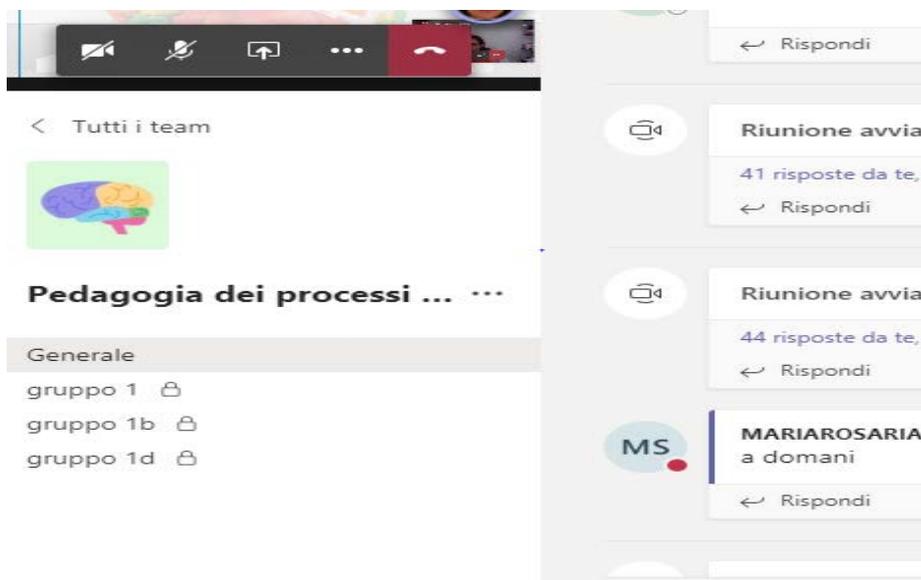


Figure 1: The channels for small group work on the Microsoft Teams platform

At that time, we were deepening the teaching/learning models, so the specific delivery for the described work has concerned the design of an educational path to be used at the time of Covid-19 both during the period of lockdown that we were experiencing, and eventually for the next phase, back to the real classroom which is hopefully scheduled for September. All this, by choosing a particular target of students for age groups.

The delivery was chosen together as a stimulus to start building an innovative kind of learning, since the pandemic forced us to manage the 'novelty'. Furthermore, it has to be considered that while we had the described experience (at the end of April 2020), some schools instead, in full lockdown, didn't almost propose 'alternative' teaching methods as it should have been done, and the students lived on their own skin and with their relatives the experience of having been almost abandoned by the educational institution. I lived it with my ten-year-old daughter enrolled in fifth grade of elementary schools, here in Italy, during phase 1 of Covid.

In a second moment, through a focus group carried out at the end of the meeting, again on the Teams, the evaluations by the students of the distance learning experience were collected.

2.2 Student work

Below I report the work carried out by a sub-group that was then presented in the 'large group' by the elected spokesperson. The work involved the design of an educational/didactic path for a hypothetical complex including both kindergarten (3-6 years) and primary school (6-10 years) upon return to the classroom in the post-lockdown phase.

«With regard to the distances and the path to walk in the intervals and to go to the bathroom, we thought we could use those stickers that are also used in the theatre, that are placed on the ground of the stage to make it clear where the children should be placed, stickers that can be of various colors. We might even think of those with a feet shape to show where to go, where to walk, where not to change direction, as it's usually done for the collection point in case of fire or earthquake.

Furthermore, in order not to frighten the children by using the masks, a small daily carnival could be established, with masks brought from home or the ones that children can make together during the art class at school, or hats with a plexiglass structure, as we have seen in recent days, but to make them playful and evoking fairy-tale characters. We can make masks in a way they depict characters that children like, be it the Batman, a lion, a dog, whatever they want, figures that they can put on the sides of the plexiglass, so that they might dress differently every day or not, in order not to be afraid of the mask or visor itself, because it is customized, instead of the classic masks that may be annoying, especially for many hours a day. As for taking the hands to the mouth, a typical gesture for children, we thought about creating funny videos to try to break this habit.

For instance, as for the hands washing there was a video of a child talking about the mask and he was very nice and cute because he was just like a peer educator, without 'pathologizing' with the videos, as it happened with doctors when they explain hands washing. For example, we had thought of the video of Snow White in which she taught the seven dwarfs to wash their hands.

For the structuring of time in the classroom we had thought of reduced hours, alternating children between the classrooms (in Italy, children of a class usually stay in the same classroom for the duration of the daily lessons), using the breaks between lessons to allow assistants to sanitize the environments. We had thought, instead of the desks, to have the children bring cushions from home, cushions to be placed in squares arranged in order to respect the safety distance, thanks to a grid drawn on the ground. Maybe the children could not bring notebooks or pens, working with a dynamic didactic, limiting the frontal explanations exclusively to what is enough to do their homework independently.

We could also work with, a didactic developed by means of multimedia videos that children can find at home using the educational platform when it is needed, perhaps even working with recordings produced by the teacher in classroom. In case one did not understand something, the video might constitute a support. This idea came up during our own process of adaptation with the Microsoft Teams platform. Many times, if we don't understand something, we can re-watch the video, or a recording that may have been there.

For example, it happened in our lessons, that I needed a content and I found it among the messages that had been written during the message exchange in the platform during the week, those concerned the didactic issues we were discussing about.

Then it may be useful for children, once they will be able watching these contents firstly at home, and then at classroom they will have the possibility to make their lessons in a much more dynamic way, in a less frontal methodological approach, to concentrate subjects in reduced hours, to alternate classrooms and teaching in a more flexible way. In this way, learning could also be structured in the light of neuroscientific research on attention, as we saw during the lesson concerning experimental teaching models. In this regard, we have addressed the problem of inclusion.

During this period of lockdown, for example, we happened to read about the experiences of how some children with difficulties, perhaps with an attention deficit, had benefited from distance learning, in which there is less noise than in classroom lessons, less distractions, maybe the teacher is more present, given the time limits, and concentrates the explanations more efficiently: these are all aspects that paradoxically, in the negative situation we are living in, can represent resources and potential to be promoted.

It came out a bunch of ideas from our work in a small group, which, perhaps are not easy to implement, for example the head count would be digitized, with an illuminated pub-like billboard and buttons to press from place, hats with large wings to allow social distancing between younger children, etc.

In class, we have talked about the difficulties due to disadvantaged situations, such as difficulties in finding materials, computers or electronic devices by schools in areas with lacking economic resources. We thought to implement an educating process that would permit the use of whatever is at hand or that gives the possibility of recycling different materials for different purposes. Let's say that we would think of an education to a happy degrowth, it is, in order to avoid the excessive consumerism, also given the economic difficulties that we will face with covid19. Children would be educated to a better critical judgment regarding consumption habits, a greater awareness of the environment, of self-care and of others, of the world, of time management, of slowing down, of the quality of presence.

We have thought about the establishment of a new material, we have named it 'hygiene' but we could also rename it for example 'personal care', 'care of us', that is, putting together all these 'care spaces' that can be necessary results to face this period, which are now new things that we have grasped thanks to the experience of Covid, but which we must not lose otherwise this period has been useless, and which have to do with self-care, with the enhancement, as we said the other time, of learning in its entirety: the experience of making pasta at home, the manual skills, appreciate the small things, those values we have acquired and rediscovered in this period».

Below I report the project prepared by another subgroup targeting middle school (11-13 years) and high school (13-18) kids, structured for the lockdown phase.

«Project title: 'Responsibly living with Covid'

The intervention is aimed at promoting 'virtual class groups' to encourage the active participation of the kids, stimulating their attention, motivation, thus directing them to assume responsible behaviour.

It is important to see how everything starts with the boys. They manage their time completely independently, without particular pressure, in a "free" way. The team of experts that we had hypothesized to involve, ie doctors, educators, pedagogues, teachers, psychologists, acts only as a "support", "guide", "monitoring" for the students themselves.

The working hypothesis would be structured as it follows:

- Organizing 2 times a week, for about 1 hour, subgroups whose participants make short films (or other based on their personal aptitudes/intelligence; e.g. music, drawing, writing, making comics, particular scenographies, etc.) in which concretely show how and why to behave in a certain way, in this emergency situation due to the Coronavirus.

Also, in this case by virtue of the promotion of their own and social responsibility, the kids are free to choose the days in which to meet in video/meeting on the platform to discuss it.

In this way, it is intended to emphasize that the children, thanks to this, improve their time management skills.

- Carry out meetings with the team of experts, for 1 hour, once a week (for example on Friday) to analyse the situation, to discuss together on progress, how to carry out the activity and, possibly, also on the difficulties that can arise in itinere (e.g. difficulties of cohesion, understanding among the participants, etc.)
- Finally, creating a "virtual psychological help desk" with an expert psychologist with whom kids can freely express themselves, without feeling judged, for example anonymously, via private chat or audio. Thus giving them the opportunity to talk to someone about their personal difficulties, for example, or thinking about how to manage the current situation, what to do in case of difficulty etc.

The idea of creating groups of adolescents through specific platforms, therefore in "telematic" mode, also promotes and increases the cohesion between them. Even if virtually, they can "meet", be together,

discuss, express different ideas and opinions, confront each other. This could represent a "tool" that would encourage young people to work in a group, thus also taking into account the collective dimension, sharing.

Finally, it could be an alternative tool to the classic frontal lesson that leads, in most cases, to boredom. The students, in this case, being active subjects in first person, are more involved and aware, therefore less prone to boredom, deconcentration and less unmotivated.

There is no doubt about the value of cooperative learning as an educational methodology that works on».

3 RESULTS AND CONCLUSION

The evaluations by the students of the experience of remote learning cooperatives, evaluations that emerged from a focus group carried out at the end of the meeting, again on Teams, were overall positive responses.

In particular, to the question "What function did the group play in the experience of remote cooperative learning (for example: did it facilitate, hinder, other ...)? And why?" Some interesting reflections emerged:

The comparison with others was very important, the group work played an important role: they first made it possible to create contact between us, a way to feel close despite distance learning and the difficulties connected to it, we were able to confirm our own points of view and integrate others that may not have been taken into consideration (L.C).

The group dimension has the great strength to be able to make these moments much richer in energy. Being physically together, with the body, has a totally different impact, but during this course I was also a little surprised that the group could still be perceived. We were all present in the moment and present at the activity we were carrying out, and this facilitated the whole process (F.T.).

The comparison with others was really constructive, the exchange of different ideas and opinions gave me the opportunity to reflect, "remodel", change some of my points of view. But, above all, the comparison with other people has allowed me to put myself on the other side, and therefore also take their point of view, as well as mine. It gave me the opportunity to have new perspectives. From this point of view it was very interesting (F.F.).

By dividing ourselves into small subgroups and being a small number of students, we had the opportunity to get to know each other better and to collaborate directly each from their own home. Usually in the classroom I don't appreciate group work, instead online, each of us had the opportunity to say what they thought. Especially in the project for the return to school following the coronavirus, I felt part of something really important, and I would have been with my colleagues for hours while listening to what they had to say. When the course was over, I had a moment of bewilderment, because it had become an important appointment for me, but I am happy to have had the opportunity to get to know my colleagues better, who I still often hear by phone (D.A.).

To conclude: a process that wants to be defined as educational has to compare people and facilitate dialogue, transform knowledge into skills, connect scientific knowledge with humanities, stimulate critical reflection and thoughtful action.

The emergency produced by the Covid-19 epidemic, initially experienced as an insurmountable obstacle to the implementation of any educational project, was re-read, in the light of the described experience, as a possible opportunity to start new reflections, to verify the effectiveness of collaborative paths, social consolidation and activation of participatory confrontation, and to experience the great utility of new forms and new communication tools, critically evaluating their pros and cons.

The current emergency has therefore determined the possibility of an evolution of educational paths based on new scenarios, which should see the cohesion of the protagonists involved as a basis for educating to the practice of social and individual behaviors consistent with what is happening. Today we are all exposed to different types of global risks, we live in the "world society of risk", but this traumatic vulnerability has to increase everyone's responsibility: we are an "existential community of destiny" (Beck, 2012, p.86).

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PUBLICATION CONFIRMATION LETTER

This is a confirmation that the contribution entitled:

COOPERATIVE LEARNING AT THE TIME OF COVID19: A UNIVERSITY EXPERIENCE

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has been included in the following publication:

Title: ICERI2020 Proceedings

ISBN: 978-84-09-24232-0

Publication year: 2020

ISSN: 2340-1095

Name of event: 13th annual International Conference of Education, Research and Innovation

Dates: 9-10 November 2020

Published by: IATED



ICERI2020 Local Organising Committee