

# CHALLENGES OF TEACHING EMBODIED PEDAGOGY DURING COVID EMERGENCY

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## INTRODUCTION

Embodied Pedagogy is a mandatory course in University of Milano “Bicocca” (Italy) for future teachers and educators. This discipline is to be intended as a whole of knowledge about the pedagogical value of body experiences and as a perspective on education that enhances the sense perception and holistic participation (body, mind, emotion) in educational contexts, while it is not intended just as a toolbox for physical education interventions. Besides, it represents a critical perspective on nowadays educational scenarios, where the body is often neglected or objectified simply as a matter of study, nurturing the separation between knowledge and life experiences<sup>1</sup>.

Predictably, our field has been highly impacted by the restriction due to Covid emergency, since we could say that, from February 2020, there has been a general and collective stop of movement and contact, which have traditionally been two focal points of our content proposal, in a theoretical and in a practical manner. Inevitably, in our research and teaching team, the following questions arose:

- what is going to happen to the embodied aspects of teaching and learning in virtual settings, especially (but not only) for lower grades, where sensory experiences, group belonging, and movement have a critical role in development and learning?
- How can we highlight the importance of these aspects to students, while we must ourselves teach in distance learning settings?
- How can we contribute to develop a critical vision towards the indiscriminate adoption of a setting that seems to primarily encourage a transmissive didactic?

The massive transition to online classes in schools and universities represented the opportunity to amplify our theoretical reflections and to create practical solutions that could allow to not forget the body even in these unknown circumstances. We dedicated great energy in our research activity investigating the details of these possibilities.

The academic course comprehends also practical workshops that are an essential part of the class. Even in traditional circumstances, this proposal has a double aim:

- make student teachers and educators aware of the hidden and submerged experiences of bodies in scholastic and educational contexts, giving the opportunity to live, verbalize and represent them.
- Witness, in our own teaching practices, an embodied approach.

We believed that this same posture, expressed by these aims, can be embraced when using digital technologies and can be critical for the current challenge of not losing unity between thought and action in learning and transformative environments. We summarized the challenges we met in order to

communicate our insights about how to preserve the sensorial and embodied aspects of teaching and learning in emergency and non-emergency digital learning contexts.

### **THE REMOVAL OF BODIES**

The first challenge we encountered was the one concerning the removal of bodily presence in digital learning environments. In a transmissive traditional classroom environment, bodies are not the main protagonists. Confined in a sitting position, still, bodies are just considered for their upper part, towards which the teacher addresses his/her speaking, which, besides, is usually the main part of the words pronounced in classroom.

Traditional teaching aims to address minds and consider minds separable from bodies, while now even neurosciences confirm that body and mind are profoundly interrelated, and sense perception have impacts even in constructing abstract thoughts<sup>2</sup>. What we can see in scholastic environments is a dispositive in action, reflecting values and ideas of education, learning and teaching. In a traditional setting, we can see that bodies are disciplined for docility, stillness and silence<sup>3</sup>. Distance learning settings easily call for a transmissive didactic: often students turn off cameras and lessons and workshops become a monologue by the teacher. These closed eyes on bodies are the natural opposite of an embodied perspective on education. Moreover, when bodies are visible, in these kinds of settings they're confined in little windows upon the screen, and they're forced in two dimensions, where lived experiences and differences are neutralized. Bodies can live and be lived only in relationship with others, with nature, experiencing real things, and this is how they contribute to learning constructing and building memories. Considering all of that, it seemed necessary to overturn the characteristics of the virtual pedagogical dispositive, which, like in some solutions proposed by some of the major video-conferencing platforms, gives an absolute power to the teacher. We needed to find ways to make students protagonists of their learning paths, calling them to act and to live experiences, in order to take care of the physical aspect of learning.

The removal of the body in learning settings is adding up to the critical condition of bodies due to the pandemic situation. Bodies were generally confined in homes, still in front of screens, in a situation that reduced the space for each one's life. Our teamwork reflected upon the symbolic and concrete centrality of breath in this global medical emergency: one of the main symptoms of Covid 19 syndrome is the lack of breath and the lung medical conditions.

For this reason, we proposed activities to enhance the awareness and the knowledge of each one's breath, like activities for breath awareness inspired by the Feldenkrais Method<sup>4</sup>, just with the audio, making possible to students to lay down and forget the webcams and the exposition we're all forced into with video-conferencing platforms. After that, we asked them to write a letter to themselves, like if the author was their own breath<sup>5</sup>. Then, we turned on cameras and we shared insights of this activity, coming back to a more traditional use of video-conferencing platform for discussion purposes.

### **THE REMOVAL OF SPACE**

The second challenge we met has been the non-physical nature of the learning environment. Recent research in the field of neuroscience<sup>6</sup> demonstrated that the activation of autobiographical memory does not happen in video-communication, since video-conferencing platforms are not perceived by our brain as actual places. Even though this doesn't happen in case of augmented and immersive virtual reality<sup>7</sup>, we can see that the digital transition of schools' didactics has moved to videoconferencing for the most part. These findings confirmed that the learning experience should integrate in one's own history, to become meaningful for the subject, and this prompted us to find solutions in this way.

For this reason, we interpreted the "Distance learning" device as a tool to help connection between participant and not as the main learning environment, as it is the case of transmissive approaches applied

to virtual environments. In our vision, the learning environment would comprehend the domestic one, and the experiences possible in it. So, we tried to seize the opportunity of being, students and professors, in daily and domestic spaces and grasping the possibility to move, to lay down, to walk, with the aim of enhancing the awareness towards perception of self and the environment around the person. This kind of overturn has been possible due to a revolution of space perception, with an active movement towards one's immediate environment, where learning activities take place. For example, we asked to take action in each one's space, change it in order to build a safe place in which working upon the self, before starting to give instruction for the workshop. We also looked at homes as autobiographical resources, and we built activities that embraced bodily practices and autobiographical writing and sharing<sup>5</sup>. Autobiography in Pedagogy shares common roots with embodied pedagogy approach, and they both have the aim to give back meaning to the person and his/her presence while living a learning experience<sup>8</sup>. For example, we proposed the sensorimotor exploration of daily objects that symbolized the current period for everyone like, for example, the chair. The object-chair has been sensory explored and then transformed in a scenic object, choreographic and symbolic partner, and this encouraged participants to narrate their "stay" - and related desire to move - in this pandemic period with short compositions of instant dance. Students during the sharing and reflecting moment highlighted the importance of domestic element as a pedagogical device. Some students-workers in Primary School classes expressed interesting considerations about the link between Distance Learning and Inclusion. A., for example, speaking about his teaching experience with a ten-year-old student suffering from behavioral disorders:

*A.: "During the first video calls, it was clear that the situation was really uncomfortable for him, you could see the frustration in the way he moved. Then his mom stopped the video-calls because he kept crying... he was really frustrated. Then slowly he began to understand how it worked, he started to manage it and he put the computer in his bedroom: something changed.*

*Teacher: "In your opinion, what was helpful for him in Distance Lessons?"*

*A.: "I think it was important for him to be in a familiar environment, to be in his bedroom. In my opinion it was significant for him to be in his own space. I saw the effects of doing lessons in a protected environment".*

## **THE REMOVAL OF GROUPS**

The third challenge was the risk of the removal of group experience. From the neurosciences we know that mirroring is significantly reduced by the impossibility of seeing the entire body of others and the lackness of haptic perception and proxemics<sup>9</sup>. Mirror neurons are, for this reason, less activated and so the intuition of another one's emotions and intentions decreases. However, these activations are very important in the pedagogical relationship, since they act as psychological motivators<sup>10</sup>. Moreover, the fact of being together physically in a physical classroom is also the reason of a synchronization of brain waves of students and teacher<sup>11, 12</sup>, which is a physiological marker of involvement in social dynamics and interest for the activity.

We had the aim of re-creating this kind of circularity in the online workshops, and for this reason we exploited the use of breakout rooms and the possibility to turn on and off the cameras. We proposed activities to speak with one another, sharing experiences and building representational products of the experience together, like the composition of short films of the choreographies. The com-position makes a synthesis of the work, canalizing energies into a relational flow. During the lessons we worked in small groups for short, cooperative, choreographic products, and this dimension of "making things together", starting from an embodied experience, generated in participants a nice sense of belonging. To promote this feeling, we worked also on body rhythmicity, creating ritual moments so that they could spark - this is true in distance learning, but even more in presence teaching - a deep sense of

belonging. So, we started and finished each class sharing a small, embodied practice, like a circular, open dance or a collective gesture built by the group and this have strongly contributed to generate in the group human warmth, sense of sincere interest each other. This group climate for a teacher is often an important indicator that teaching/learning process is moving forward and that something significant is happening in terms of education and knowing.

We also proposed mirroring theatrical activities, where students could imitate and conduct one another's body, in a growing feeling of connection<sup>13</sup>. Theatre and improv are a source of practices and theoretical reflections in our approach, and for this reason we used proposal from these disciplines to achieve that desired circularity. For example, the classical improv exercise of word-by-word sentence production, where two or more actors produce meaningful sentences one word each, without reaching agreement before. This practice is possible in virtual learning settings, in pairs or in group. Here's the notes of one of our instructors:

*We're connected in the videoconferencing platform, it's the first fifteen minutes. These 27 students don't know each other, it's April 2020, and we've been in lockdown from a month. After some warming up exercises, I ask them to produce a word-by-word storytelling, without reaching an agreement of who will speak. For this to happen, they'll need to listen carefully to the virtual environment, and try to take their turn to speak when there's silence. To foster the collective listening, I ask them to start again when two or more people speak together; instead, to enhance the acceptance of the mistake and the collective creation, I tell them that, if more than one people speak together, the person who'll speak next will decide what word pronounced was "right".*

## **CONCLUSION**

Our research group does not find the distance learning setting optimal for embodied experience, however this particular setting opened unexplored possibility in our didactics, as, for example, the domestic environment as a learning environment and as a chance to root learning, autobiographically. This gave us the possibility to have meaningful individual learning experiences while, in the virtual platform, we reached a group dimension that is nowadays still lacking in the academic lifetime. For this reasons, even if we still find preferable the in presence didactics for our contents, we think we developed a meaningful path to get students to experience directly the value of body in teaching/learning settings, and we think that the strategies we found could be implemented and developed further for blended and virtual learning courses not just in our field, but for every course that wants to highlight the value of body perception and experience. We hope that this work can contribute opening and expanding a discourse about the marginalized position covered by bodies in teaching/learning settings, generally and particularly in the digital ones.

## NOTES

- <sup>1</sup> Ivano Gamelli, *Pedagogia del corpo* (Milano: Cortina 2011)
- <sup>2</sup> Fausto Caruana and Anna Maria Borghi, *Il cervello in azione* (Bologna: Il Mulino, 2016)
- <sup>3</sup> Alessandro Ferrante, *Che cos'è un dispositivo pedagogico?* (Milano: Franco Angeli, 2017)
- <sup>4</sup> Moshe Feldenkrais, *Lezioni di movimento* (Roma: Edizioni Mediterranee, 2003)
- <sup>5</sup> Ivano Gamelli and Chiara Mirabelli, *Non solo a parole* (Milano: Cortina, 2019)
- <sup>6</sup> May-Britt Moser, David C. Rowland and Edvard I. Moser, "Place cells, grid cells, and memory". *Cold Spring Harbor perspectives in biology*, 7.2 (2015), doi: <https://doi.org/10.1101/cshperspect.a021808>. research (Moser, M.B., Rowland, D.C., & Moser, E.I., 2015). These researchers have highlighted how GPS neurons, "place" neurons, are not only specialized in mapping places and spatial orientation, as was believed by previous studies, but that they would have a central role in autobiographical memory.
- <sup>7</sup> Giuseppe Riva and Andrea Gaggioli, *Realtà virtuali: gli aspetti psicologici delle tecnologie simulate e il loro impatto sull'esperienza umana* (Firenze: Giunti 2019).
- <sup>8</sup> As the autobiographical movement in education has shown, knowledge is not knowledge if its processes are not incorporated by the person who learn and especially if the experience is not integrated into the history of the person.
- <sup>9</sup> Giuseppe Riva, *Relazioni didattiche online e in presenza, con il professor Giuseppe Riva*, online seminar, June 4, 2020 accessed May 27, 2021, <https://www.youtube.com/watch?v=wplGf8MoHNI>
- <sup>10</sup> Kevin Laland "The Foundations of Human Cooperation in Teaching and Imitation". *The Spanish Journal of Psychology*, 19, E100 (2016). doi: 10.1017/sjp.2016.101.
- <sup>11</sup> Suzanne Dikker, Lu Wan, Ido Davidesco, Lisa Kaggen, Matthias Oostrik, James McClintock, Jess Rowland, Georgios Michalareas, Jay J. Van Bavel, Mingzhou Ding, David Poeppel, "Brain-to-Brain Synchrony Tracks Real-World Dynamic Group Interactions in the Classroom". *Current biology: CB*, 27.9 (2017): 1375–1380. doi: <https://doi.org/10.1016/j.cub.2017.04.002>
- <sup>12</sup> Andrea Gaggioli, Carlo Galimberti, Antonio Bova, Pietro Cipresso, Giuseppe Riva, Alice Chirico, Eleonora Brivio, Elvis Mazzoni and Martina Benvenuti, "Networked Flow in Creative Collaboration: A Mixed Method Study", *Creativity Research Journal*, Vol. 32 (2020): 41-54
- <sup>13</sup> Lior Noy, Nava Levit-Binun and Yulia Golland, "Being in the zone: physiological markers of togetherness in joint improvisation". *Front. Hum. Neurosci.* 9.187 (2015): doi: 10.3389/fnhum.2015.00187

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