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# Italian University Students facing Distance Learning: the Results of a Panel Web Survey

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# Italian University Students facing Distance Learning: the Results of a Panel Web Survey

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Abstact: The proposed paper centers on a segment of data taken from a broader study on the social effects of the pandemic (Lombardo & Mauceri, eds., 2020), focusing on the sub-sample of university students. Said study involved widespread sharing of the questionnaire link on the Net, reaching 13.473 cases over 4 weeks of data collection (including 3,013 students in Distance Learning programs, of which 1,741 are university students placed in three-year, master's or post-graduate degree courses). This survey was envisaged as a panel web survey, with the intent of recording budding phenomena and capturing, in a diachronic perspective, the evolution of those phenomena under analysis with the same interviewees. One year later, the research team tried to piece together the "balance" of interviewees with respect to numerous areas, among which school stands out. The intent herein is that of presenting the emerging Distance Learning adaptation profiles of the interviewed university students, with particular regard to factors connected to declining performance, digital inequalities, cognitive-emotional distress, forms of marginalization-exclusion, while also, however, trying to highlight the strengths and opportunities inherent to the social transformations underway.

*Keywords: Distance Learning, University, Panel Web Survey, Pandemic*

## 1. Life at the time of the Coronavirus: a focus on Universities and Distance Learning within a panel web survey

The wide and rapid diffusion of Distance Learning in Italian schools at all levels is one of the most striking phenomena emerging in connection with the outbreak of the Covid-19 pandemic. As is well known, the university sector has also been affected by the adoption of Distance Learning, showing, overall, a remarkable ability to adapt to the unexpected emergency situation, both in the supply and the demand when it comes to training.

All the studies on online education conducted within the past decades, underline how the ideation of an effective *use of digital technology for educational purposes* must stem from a meticulous process of *design and planning*, aimed at engaging students and capturing their attention, in addition to engineering quality didactics, capable of exceeding the learning objectives garnered with traditional academics (for an account of the issue, see Hodges et al., 2020). If appropriately utilized, in fact, technology allows students and teachers to strive to the fullest, and collaborate for maximum reciprocity (Bower, 2019; GarcíaBotero et al., 2018; Gonzalez et al., 2020). Experimenting with innovative, digital-based didactic methods can build, in the *student centered learning* formula, incentives for particularly participatory teaching models, capable of fostering and strenthening critical thinking, the desire for further study, and the development of the students' basic and transversal skills (one may consider, for instance, renowned formulas like the *flipped classroom*, exercises and workshops based on *cooperative learning*, or *public speaking, peer instruction*).

Although the students of today are digital natives, for all intents and purposes – as opposed to their teachers, characterized as digital immigrants (Prensky, 2001) –, it is important to note, as regards our objectives, that the pandemic has resulted in millions of students transitioning in an *abrupt, forced* and *unexpected* manner from face to face learning to an online educational environment, with the risk of their digital competencies being applied passively, and instrumentally. Distance Learning, in particular, was launched without giving teachers the opportunity to familiarize, in a gradual and thought-out fashion, with effective transformation and adaptation strategies for their teaching styles, without adjusting their teaching objectives, or the expected results. The hasty change, therefore, happened in a way which prevented educators from adequately designing an online curriculum capable of mitigating the adverse effects of the digital transition on the students' *cognitive engagement* and *cognitive absorption.*

With regard to the latter, in Kemp et al. (2019) cognitive engagement is defined as the cerebral activities that consent the internalization of acquired information. Stimulating focus and inquisitiveness, as well as flow and con-

centration, are all aspects of the above. Cognitive absorption, instead, indicates being engrossed in a given task, whereas flow is the attention directed to a single undertaking without interference (Kemp et al., 2019; Saade & Bahli, 2005).

Furthermore, the state of emergency did not give students and teachers time to find alternative relational models, that could render the digital environment a space within which truly effective cooperative models could be implemented. It was difficult, if not impossible, for educators to communicate with their pupils online in keeping with the interaction guaranteed by in-person exchanges (Weick and Sutcliffe, 2011). The lack of the specified requisites could, hypothetically, result in a generalized negative impact on the students' academic results (Bower, 2019), as well as on their psycho-emotional states, thus seriously jeopardizing the attainment of the learning and developmental objectives set out by the teachers.

Although most students were familiar with the technology, the precipitous character of the transition to Distance Learning – with all the challenges it posed to teachers and students – did not necessarily foster the development and propagation of effectively innovative didactics capable of activating cognitive, emotional and participatory resources which, surely, digital tuition could potentially guarantee [1].

On the other hand, and in a broader sense, technology, at the center of digital natives' lives even before the time in question, took on a substantially pervasive character throughout the pandemic; in view of the incontrovertible fact that youngsters spent much of their *everyday lives before a screen*, and not just for schoolwork, and their existence increasingly denoted by prolonged use of electronic devices, this chapter aims to investigate how university life, in this instance, took shape "remotely".

The above considerations allow one to surmise that, despite the massive (but not incremental, directed or homogeneous) investments towards the *dematerialization of training processes*[2], Distance Learning has potentially represented a significant source of discomfort, the risk of social exclusion even, for a significant number of students (the primary focus of the analysis proposed herein), but constituted an opportunity and an efficient solution for others. If, on the one hand, Distance Learning has contributed to increasing *participation numbers* in training activities (many questions remain about the *quality of* such *participation*), to saving time (one need only think of the

[1] For the innovative potential the digital offers academics in periods of "normalcy", and with proper planning and forethought, please refer to the volume Veletsianos ed. (2016).

[2] Admittedly already somewhat in place, in multiple academic contexts, before the pandemic - one need only think of the diversified and tested expressions of *innovative teaching* widely in use, in combination with *traditional strategies of teaching* / verification of learning / communication between actors / study support.

time resources invested, for study purposes, in traveling within large metropolitan contexts and the phenomenon of commuting) and to safeguarding formal deadlines and objectives (exams, thesis discussions, etc.), on the other hand, there was no lack of critical issues: from the perceived lower effectiveness of training activities for learning purposes[3], to the inevitable impact, cognitive-emotional in nature, in terms of socialization[4] and interactional-relational dynamics (between peers and with teachers); from a decreased attractiveness of study activities, to the innovative solutions implemented, not always complete and satisfactory, to digital inequalities.

As mentioned, the literature on online learning is vast, but the same cannot be said for that on students' perception of remote teaching and learning in an emergency situation (Anguilera-Hermida, 2020). This is especially relevant because, on account of the pandemic, students were forcibly immersed in a new educational scenario rather than independently choosing to engage in online tuition (Hodges et al., 2020).

Therefore, herein the empirical evidence finds space, in connection to the differences perceived by univesity students between in-person and remote teaching, within the hypothesis that their reactions to the transition would be extremely varied - due in part to pre-established and diversified cognitive, emotional and social backgrounds and that, for the majority of students, Distance Learning has meant a sudden depletion of their resources vis-a-vis commitment and cognitive engagement, as well as in terms of relational opportunities on several levels.

In particular, within the time frame of the first nationwide lockdown, a group of scholars from the Department of Communication and Social Research (CoRiS) of the Sapienza University of Rome launched a web survey with the aim of studying the effects of the pandemic, and of government restrictions aimed at containing the spread of infection, on the daily life and social relations of the Italians (Lombardo & Mauceri, eds., 2020). The link to the questionnaire was widely shared on the Internet, on numerous websites and social channels (including those of public institutions active in the field of national security and health, such as the Department of Civil Protection and the Ministry of Health): the cases reached by the survey, in 4 weeks of collection, were 13,473[5]; among these were 3,013 students in Distance Learn-

[3] Suffice it to say that the physical context in which the students benefited from Distance Learning was their own home, a non-neutral space, often a source of interference, in itself full of occupants and activities, sometimes problematic.

[4] Our thoughts go, in particular, but obviously not only, to the newly-enrolled students, forced to experience the delicate start-up phase of their university endeavor remotely.

[5] The imbalance of the large sample with respect to certain essential socio-demographic variables warranted it be weighed: the data obtained were aligned, in the direction of proportionality, with the characteristics of gender, age and educational qualification of the Internet user population (source Istat, 2019).

ing programs, of which 1,741 were university students, placed in three-year, master's or post-graduate degree courses.

The online questionnaire was designed to reflect, in the analysis phase, on numerous levels, hypothesized to be interconnected: Apprehension, Perception of risk and states of mind; Lifestyles and Family Relationships; Employment status, professional status and Smart Working; Distance learning; Channels of communication, styles of information acquisition and use of technologies; Trust in institutions and Evaluation of measures aimed at contrasting the spread of the virus; Representation of the future. Since its inception, this survey has been configured as a panel web survey (Callegaro et al., 2015; Mauceri, Faggiano & Di Censi, 2022; Patrick et al., 2021), aimed at accounting, with respect to each round of research, for specific emerging phenomena and distinctive features, and, at the same time, to record, in a diachronic perspective, the processuality of the phenomena under analysis with the same interviewees. One year later, the research team, extending its interest to other thematic dimensions (including the area of collective practices and cognitive-emotional processes connected with the vaccination campaign), returned to investigate issues such as apprehension, everyday life, the relational system, and attempted to restore the balance of the interviewees with respect to numerous aspects and contexts, among which the academic world stands out. The subjects available to be recontacted for research purposes provided their e-mail address in the first survey. The intent here is to present the emerging adaptation profiles of the university students reached with regard to Distance Learning, paying particular attention to the factors connected with declining performance, digital inequalities, cognitive-emotional distress, forms of marginalization-exclusion, while also trying to highlight the strengths and opportunities inherent in the ongoing social transformations.

It is here advisable to emphasize that within the survey questionnaire, designed, in both the first and second research rounds, with the aim of recording - including their evolution over time - the social effects of the pandemic and the restrictions to prevent the spread of Covid-19, the questions on Distance Learning experiences were few and specific (along with queries on other spheres of action: use of spare time, prevention practices, trust in institutions, expectations for the future etc).

The foregoing entail a cluster of indicators specially aimed at grasping personal perceptions and assessments (on differing plains among which: time management, relationships, learning outcomes, academic achievements, interests etc.) of what they incurred at university, as well as in non-academic contexts. In this regard, the questionnaire contained a small number of specific queries investigating the availability, at home and on campus, of adequate equipment (internet connection, e-learning platforms in use, available

digital devices), understood as the basis for tackling the emergency from an educational standpoint.

For obvious reasons of instrument economy, the survey did not aim to retrace antecedent itineraries of digital introduction into Italian universities (as regards the tools implemented prior to and throughout the pandemic; the investment towards digital innovation and the acquisition of a veritable culture of the digital as applied to education - technological endowment, acquired competencies, common use practices, completed hybridizations etc.), nor the specific methodological solutions, or the innovative didactic formulas, adopted in their studies by the individual respondents. This has not provided, therefore, for specific enquiries into: equipment in use (hardware and software), digital competencies predating the pandemic or acquired during, studying styles and acquisition of competencies/knowledge, methodology vis-a-vis teaching and appraising learning outcomes.

The questionnaire's shortcomings in this regard were mitigated by attributing the utmost relevance to the participating students' evaluations of their experience as per the different plains it affects, embracing a diachronic logic, and providing for numerous questions aimed at retracing the interviewees' social profiles. This, with particular attention to social-cultural capital; material conditions; cognitive, affective, relational resources of the partcipants engaged; in short, with particular regard for variable backgrounds, that are simultaneously essential to bearing the weight of an emergency which, as known, did not only hit the dimension of education, but the very existence of all the respondents.

Before getting into the merits of the presentation of the results obtained and the reflections carried out, some clarifications must be made on the sample strictly referable to the panel web survey, represented by the subjects, involved in the Distance Learning experience, who participated in the survey with a questionnaire both in the first and second round of the survey. More specifically, of the 1,741 cases classified as university students in spring 2020 (of which 1,401 provided assessments on Distance Learning with the pandemic in full swing), 733 entered their email address after giving their responses, for the purpose of renewing contact. The second questionnaire was sent to the latter respondents, as per an accurate plan of recall and reminders, one year later. In the second round of research, 287 students completed the questionnaire again (of which 229 had experienced Distance Learning during the lockdown), but not all of them are still engaged in university courses in 2021; in conclusion, 182 students, who in addition to having experienced Distance Learning at time 2, expressed a new evaluation on it and thus constituted the empirical cases on which to perform a longitudinal analysis of the data.

In the first round of research, a large sample of secondary school students (1,272 units) was also reached, on whom, however, it was not possible to graft any data analysis work that could account for the passing of time. A few dozen questionnaires in the second round of research were linked to the already reduced number of e-mail addresses available in the matrix in 2020 (352). However, one may recall that, when comparing profiles of university students and high school students at time 1, the negative effects of Distance Learning - including an exacerbation of social inequalities and a widening of pre-existing gaps (Ciurnelli & Izzo, 2020; Nuzzaci et al., 2020; Ghigi & Piras, 2021; Saraceno, 2021) -, concerned especially the latter (Fasanella et al., 2020). Furthermore, while the second round of the research herein was taking place in the spring of 2021, a parallel team from the CoRiS Department carried out an impressive survey in Italian secondary schools, operating, with reference to the Distance Learning section, with the same survey questions[6]. On that occasion, 209 schools of the 1,599 present in the regional and provincial capitals of Italy were involved in the survey (following a request for participation sent to all the registered school managers); the cases reached amounted to 6,689, while the classes selected for the purposes of the survey, two in all per institution, were the second and fourth year classes. The research concerned various aspects of young people's daily life (schooling, family life, free time, uses of digital platforms…), including, precisely, the experience of Distance Learning. In a nutshell, one year after the outbreak of the pandemic, it emerged that, on the one hand, subjects who were "already" fragile and with uncertain academic paths before the pandemic - foreign students, from low social backgrounds, with poor technological skills, etc. - more than others, were at higher risk of abandoning their studies and experiencing multiple forms of social exclusion. On the other hand, in the eyes of the scholastically weaker and less motivated subjects (who have adopted the *approach to distance learning* "*with cameras and audio off*", passive and inattentive) Distance Learning has taken on the traits of a *way out*, of a pass to the world of work, perhaps without any real and essential skills. In the face of this, finally, the students characterized by a strong attachment to school (with respect to the values, content, experiences and actors involved) were particularly penalized, being, in fact, forced to "endure" the form teaching had taken on in the pandemic. With particular attention to round 2 of the research, it will be interesting here to compare different generations of stu-

[6] See the article written by Fasanella & Faggiano in this special issue. The research, entitled *Critical Thinking and Cognitive Populism in the Digital Platform Society*, is part of the activities of the Electoral Sociology Observatory of the Department of Communication and Social Research of the Sapienza University of Rome - Scientific coordinator of the Observatory / Research coordinator: prof. Carmelo Lombardo.

dents to whom the same questions have been directed within the same time unit, with the aim of highlighting common traits and specificities.

## 2. The comparison between the Distance Learning experience and traditional teaching in the context of university

As mentioned, the introduction of the Distance Learning experience in the academic field, introduced as a generalized government measure to academics in schools and universities, starting March 5, 2020, required a progressive adaptation by teachers and students to the unprecedented conditions that the evolution of the pandemic, from time to time, required be adopted in order to contain contagion. The panel study conducted, with all the limits already exposed in terms of the scarcity of the sample reached during the two rounds, allows us to take stock of this experience in the university context, where Distance Learning was adopted as a sole method during the nationwide lockdown, due to the suspension of in-person teaching, eventually becoming an option that the students had the opportunity to choose, when the training offer gradually started to be provided in mixed mode.

The survey offered university students, during the two stages of the survey, the opportunity to reflect, by way of the answers to the questionnaire submitted in the two research rounds, on the advantages and limits of Distance Learning, introducing a series of comparative dimensions with respect to the canonical methods of teaching adopted in the academic field before the health emergency broke out.

An initial comparative dimension has to do with the *degree of effort required of students to follow the lessons remotely*. As reported in table 1, just under half the students highlight the first critical element, due to the greater investment in terms of effort that Distance Learning requires compared to following lessons in person. This is a fact that had already emerged from the analyses on the entire sample of university students in the course of the first survey, and which is reproduced in the two smaller subgroups identified in the panel study. It should be noted that one year after the end of the lockdown, there was an 11% increase in the share of students (almost a third of the sample) who, at least in terms of this one aspect, seem to have adapted to the changed conditions and reported greater ease in following lessons online. This may be due to the progressive effort that teachers have made to improve the performance of remote lessons, but it is in large part believed to be attributable to the students' activation of the resources needed to digest, in the course of the year separating the two surveys, the change in teaching style.

An undisputed advantage of following distance learning is constituted by the elimination of the traveling time needed to attend lessons in person.

In fact, *simplification of time management* is an aspect that emerges from the responses of university students, both during the course the lockdown and in the subsequent evolution of the emergency. In particular, this benefit of Distance Learning, reported by half of the sample in Round 1, is further enhanced in the subsequent period, as can be seen from the growing percentage of those who reported it in the second round (see table 2). The same growing trend - this time in terms of a negative evaluation - can be seen by analyzing the rating on the *degree of engagement offered by Distance Learning*, if compared with in-person lessons (see table 3).

*Table 1 - Comparative assessment of the effort required by the attendance of online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| More challenging to follow | 47,4 | 48,5 | 43,4 |
| No difference | 34,0 | 33,2 | 27,5 |
| Less challenging to follow | 18,6 | 18,3 | 29,1 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

*Table 2. – Comparative assessment of time management involved in attending online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| Time management simpler | 52,2 | 50,2 | 67,0 |
| No difference | 22,9 | 22,3 | 13,2 |
| Time management more exacting | 24,9 | 27,5 | 19,8 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

*Table 3. – Comparative assessment of the degree of engagement offered by online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| More boring | 53,0 | 55,9 | 67,0 |
| No difference | 39,0 | 36,7 | 26,4 |
| More engaging | 8,0 | 7,4 | 6,6 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

In fact, only a very residual share of the three samples indicated that Distance Learning allows for a more stimulating display of educational contents, while, with an incremental trend, the percentage of those who follow lessons online, feeling bored and lacking engagement, prevails in both periods.

On the other hand, as has been critically noted, "the loss of eye contact, the electric coldness of the voice and the dryness of the screen significantly influence the capacity for involvement of the subjects and greatly lower attention span" (Sarsini, 2020, p. 10). To interpret these assessments, it is probably necessary to refer to the teachers' lack of aptitude in measuring up against an innovative teaching style, which is effectively capable of enhancing digital skills, using the new tools that Distance Learning management requires with dexterity and creativity. Mixed teaching probably encourages this form of discomfort, due to the complex management by the teacher of an interactive mode capable of engaging the students in the classroom as well as those following the lesson remotely. Another great criticality connected to Distance Learning emerges with regard to the limited socialization that remote lessons allow. Both relations with teachers (see table 4), or, to an even greater extent, interactions with colleagues (see table 5) appear impoverished, in the absence of co-presence in the classrooms. The weakening of the relational fabric does not tend to diminish after the initial impact with Distance Learning, but it persists, with specular evaluations, even one year from the end of the lockdown, encompassing substantial shares in all three of the survey samples.

The substantially negative balance of opportunities to follow lessons attentively, interactively and in an engaging manner negatively affects learning skills, which, with the advent of Distance Learning, appear to be more contained for a substantial share of respondents (see table 6). The percentage grows, exceeding half of the sample, in the subgroup of students in Round 2, probably also in the wake of a decreased performance recorded in exams taken after the introduction of Distance Learning, which we will have the opportunity to highlight shortly.

Finally, in the comparison between the two stages of data collection, it emerges that the academic workload has only increased for roughly one third of the sample during the entire evolution of the pandemic, while the prevailing share does not notice a substantial change at this level, probably thanks to the care taken by most teachers to conform the exam programs to the changes in the educational scenario (see table 7).

*Table 4 – Comparative assessment of the possibilities of interaction with teachers in online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| More possibilities for interaction with the teacher | 19,2 | 17,0 | 20,3 |
| No difference | 29,9 | 28,8 | 24,2 |
| Fewer possibilities of interaction with the teacher | 50,9 | 54,2 | 55,5 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

*Table 5 - Comparative assessment of the possibilities of interaction with classmates in online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| More possibilities for interaction with classmates | 6,6 | 6,6 | 6,0 |
| No difference | 14,7 | 12,7 | 17,6 |
| Fewer possibilities of interaction with classmates | 78,7 | 80,7 | 76,4 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

*Table 6 - Comparative assessment of the effectiveness for learning purposes related to online didactic activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| More effective for learning | 11,8 | 15,3 | 12,6 |
| No difference | 43,2 | 38,0 | 30,8 |
| Less effective for learning | 45,0 | 46,7 | 56,6 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

The impact of Distance Learning, as emerges from the responses to the second questionnaire, integrated with three supplementary items, has negative repercussions for about one third of the sample on two fundamental dimensions, both referable to the university career. In particular, for this sub-

group of students, the long-term effects of exposure to Distance Learning are characterized by a joint decrease both in their confidence in their abilities (see table 8) and their performance at university (see table 9).

*Table 7 - Comparative assessment of the work load required by online teaching activities compared to traditional in-person didactics (%)*

| | Sample of university students in Distance Learning during the lockdown | Round 1 | Round 2 |
|---|---|---|---|
| Increased | 30,0 | 33,4 | 32,4 |
| No difference | 59,6 | 56,8 | 63,2 |
| Decreased | 10,4 | 9,8 | 4,4 |
| Total<br>r.v. | 100,0<br>(1.401) | 100,0<br>(229) | 100,0<br>(182) |

*Table 8 - Assessment of the impact of Distance Learning on confidence in one's abilities one year after the end of the lockdown (%)*

| | |
|---|---|
| Decreased confidence in one's abilities | 33,5 |
| No difference | 54,4 |
| Increased confidence in one's abilities | 12,1 |
| Total<br>r.v. | 100,0<br>(182) |

*Table 9 - Assessment of the impact of Distance Learning on university performance one year after the end of the lockdown (%)*

| | |
|---|---|
| Declined performance | 29,1 |
| No difference | 57,2 |
| Improved performance | 13,7 |
| Total<br>r.v. | 100,0<br>(182) |

These are two problematic elements that further confirm the need to critically reflect on the effectiveness of Distance Learning when compared to canonical strategies, if not accompanied by specific training of the teaching staff in truly innovative forms of teaching, able to fully grasp the potential that the use of digital technologies may have in terms of achievement of the educational objectives of the teachings imparted. In addition, such a radical change would evidently have required an equally significant change in communication style and in the strategies aimed at favoring the engegement of students and the learning of the content as conveyed from time to time.

Directly connected to the learning opportunities offered by Distance Learning, another aspect, integrated into the second Round, once again brings to light the difficulties associated with the opportunity to preserve adequate levels of concentration during online lessons. In fact, more than three quarters of the sample (80.2%) complained of the increased risk of distraction and interruption present in their home environment. This further critical element - obviously not imputable to the teachers' skills - confirms the greater complexity involved in an adequate control of the progression of the lesson. Holding lessons in a classroom makes it possible to immediately interpret signs of lack of comprehension and inattention. As Rivoltella states, it is on this that "the ability of an instructor to "hold" the classroom is also built: from the point of view of a real semiotics of space; knowing how to read the symptoms on the faces, in the looks, in the dynamics, it means imagining what could happen and acting accordingly" (2014, pp. 5-6).

*Table 10 - Percentage of university students who have not changed their assessment of Distance Learning one year after the lockdown with regard to the aspects that emerged as distinctive in the comparison with traditional didactics (% calculated with respect to Round 2)*

| Distinctive features (modal class) | % stable responses | Sign. |
|---|---|---|
| More challenging to follow | 63,9 | 0,000 |
| Time management simpler | 60,9 | 0,014 |
| More boring | 65,2 | 0,000 |
| Fewer opportunities to interact with the teacher | 67,0 | 0,000 |
| Fewer opportunities to interact with classmates | 84,6 | 0,000 |
| Less effective for learning | 57,6 | 0,000 |
| No difference in work load | 54,8 | 0,049 |

The reference to table 10 highlights how all the evaluations deriving from the comparison between Distance Learning and traditional teaching remained relatively stable throughout the evolution of the pandemic. The longitudinal data presented, obtained starting from the contingency tables that compared the answers of the two research stages[7], allow us to understand how the percentages of university students who, in Round 2, reproduce the distinctive features already mentioned in Round 1, all largely exceed half of the respondents.

In addition to these peculiar traits, which represent the modal classes in the previously presented tables, other types of evaluation also remain fun-

[7] Reporting the contingency tables in their entirety was avoided due to the small number of the sub-sample of university students in Distance Learning involved in the panel (182).

damentally stable, as can be derived from the significance coefficients of Chi squared, all below 0.05, despite the small size of the panel sample.

Before this scenario, which would seem to denote the utter failure of Distance Learning, one must clarify that the use of digital technology to support innovative didactics, and in a condition of non-emergency, presents indubitable advantages and holds great potential in terms of the future development of university courses.

For the promotion of alternative didactics, in the spirit of innovation and amelioration of the quality of training-academic programs, some experts have suggested the following parameters and objectives (Kryukov & Gorin, 2017), all including the constant and targeted use of the Web and suitable digital devices, as well as the combination of study methods, traditional and non:

- *Selecting, retracing, elaborating and using the vast range of information available online* on themes and topics of interest, acting on *the students' motivational apparatus* and on *teacher creativity;*
  - Fostering the *efficency of the apprehension process* by way of *customized curricula*, tailored to the individual student and, where possible, aimed at *instensifying study practices*;
- Adopting *new teaching methodologies*, capable of facilitating the transition from a generally passive type of learning (based on unidirectional and hierarchical transferrance of knowledge) to a more active one, more horizontal and bidirectional (consider practices like project-based learning, business games, simulation modelling, flipped classrooms).
  - *Field training* aimed at the *acquisition and merging of versatile competencies* and at the continual and optimal *integration of different activities (theory*, *research* and *practice*);
  - Actions leading to a *change in the learning culture*, aimed at incentivizing *student autonomy* with respect to the figure of the tutor
  - Introducing a *culture of assessment and self-assessment/self-reflection* by establishing a vast range – easily applicable throughout the entire course of studies – of *computer-based tests*.

Morevover, the use of ICTs for educational purposes can foster in students specific skills, of great added value in terms of *entering* a *job market* which appears *increasingly digitalized* (Ratten, 2020). Finally, one must not underestimate the appeal Distance Learning can hold for *working students*, for *off-campus Italian students* and *foreigners*. As evidenced in many quarters, remote learning can, rightfully, be inscribed within the channel of didactic solutions, capable of contributing to the democratization of higher education (Andrade, 2015).

This can also be confirmed by recalling that, during the pandemic, a general increase in remote students was recorded. Likewise, several scholars

have concluded that digitalization in the field of education is not immune to potential failure and grave challenges (Hauge, 2014; Håkansson Lindqvist, 2015; Pettersson, 2020), especially when considering the following aspects: issues of didactic sustainability in schools and universities on account of subpar and/or diversified access to digital technologies by the different actors involved in the education process (Hauge, 2014; Aesaert et al., 2015);

- the tendency to support preexisting practices, through the use of technology, rather than aiming for actual steps towards change and development (Glover et al., 2016; Håkansson Lindqvist, 2015; Jenkins et al., 2011);
- the digitalization process is oftentimes limited to economic investment in the implementation of technology (not homegeneous, moreover, on different campuses and in different territorial areas), without producing a deep and radical change in teaching practices, or the development of organizational infrastructure to support digitalization (Cuban, 2013; Islam & Grönlund, 2016).

For our purposes, it must be highlighted that the adoption of digital technology for Distance Learning needs a strong connection with alternative pedagogic strategies that can promote student cooperation, engagement and effort (Jahnke et al., 2017; Glover et al., 2016; Pettersson, 2020). In particular, as evidenced, digitalization not accompanied by a change in teaching strategies usually results in failure, if one observes the achievement of the learning objectives by the teachers, and learning outcomes with respect to students (Agélii Genlott & Grönlund, 2016; Pettersson, 2020). In all likelihood, the abrupt transition to online teaching and learning, brought on by the health emergency, exacerbated these risks, reinforcing a Distance Learning model in which education strategies seemed to mostly model prior pedagogic patterns, with a view to the mere implementation of digital technologies. In other words, what did not concretely take place was the opportunity of producing a substantial evolvement of the teaching practices in use in pre-pandemic times, whereas, conversely, the negative by-products of the digital transformation were the most intensified.. The state of emergency, therefore, having promoted a "run for shelter" logic, was ultimately not in line with the acknowledged theoretical preconditions which connect digital education to innovation practices aimed at transforming educational-academic processes to improve the quality thereof.

These observation are in line with the implications put forth by the RAT theoretical model, advanced by Hughes, Thomas and Scharber (2006), which identify three expressive-applicative modalities for technology in education: *Replacement*, *Amplification* and *Trasformation*. Unlike Replacement, which only adopts technology as a substitute, without providing for substantial mutations in preexisting didactic models, the categories of Amplification and Transformation, respectively amplify and transform established institu-

tional practices, student learning processes and content goals, guaranteeing an increase in educational efficiency, in productivity and/or in the familiar ways of doing things into novel solutions to persistent problems. Most likely, many university professors, thrust into an emergency phase, did little more than replace an analog environment with a virtual space, to a usage of digital technologies which, concretely, amounted to the mere, albeit important, feasibility of proceeding with didactic activities throughout the pandemic, without too many disruptions.

## 3. One year later: assessments, budgets and expectations of university students in synthetic terms

The objective of this section, systematically connected with the 182 students who expressed their assessments on Distance Learning both in Round 1 and Round 2 of the web survey panel, is to move from an analytical reporting of the data to a presentation of the results centered on operations of synthesis, comparison and control; the preparation of some empirical indices[8] stemming from the series of questions in the previous paragraph analyzed "item by item" represents the jumping-off point for the reflections reported herein.

The prepared indices respectively account for the following dimensions:

- *Sociality* (items connected with the impact of Distance Learning on interactions with teachers and colleagues);
- *Energy spent* (items related to time management, required effort and study load);
- *Effectiveness* (items referring to the repercussions in terms of appeal and learning / acquisition of skills).

As in the study on high school students, for university students too, the aim was to identify factors of a different nature (contextual, relational, in-

[8] When constructing the indices, the individual items referring to the battery under analysis (see tables 1-7) have been previously dichotomized, in order to isolate, with respect to the other possible answers (aggregated in a single block), the modality referring to a positive evaluation of Distance Learning, or to the perception of improvement of the single aspect considered, thanks to the entry of Distance Learning into university life. The indices arise from subsequent counting operations, combined with forms of reduction / simplification, within the semantic dimensions considered in the design phase of the surveying instrument. The "positive impact" mode of each index has to do with response profiles that do not show any form of criticality with respect to the aspects considered. The "negative impact" mode obviously summarizes situations and assessments that are partially or decidedly critical. It should be pointed out that these assessments, collected here in summary form, have been expressed with specific reference to one's own experience and therefore do not represent general assessments of Distance Learning and its impact on the student and on the institution of university. As shall be seen, however, student opinions about the fate of university were deliberately collected, leading individuals to disengage, so to speak, from what they personally experienced and express a global forecast.

dividual) significantly and characteristically associated with the impact of Distance Learning, both with reference to specific levels on which its repercussions can be recorded, and in a global sense. More specifically, among the agents of influence considered in order to evaluate the effects of Distance Learning on university courses and the main methods of reaction / adaptation to it, are classic *socio-demographic variables* (gender, age, size of the municipality of residence, geographical area of residence, composition of the family unit) and variables connected with the *environment, both physical and social, in which Distance Learning is inserted* (screening of the available technological equipment, screening of the characteristics of the living space - size, comfort, privacy; sharing of living space with other subjects in Distance Learning and / or Smart Working programs during the pandemic; field of study)[9].

Consistently with what was seen in the previous paragraph, negative evaluations on Distance Learning and critical opinions of its effects far exceed the expressions of satisfaction and positive adaptation (tabs 11-13). The element that most of all is evidently missing is *closeness*, both in the asymmetrical dimension of the teacher-student relationship, and in the symmetrical expression of the student-student dyad: the dematerialization and decontextualization generated by *distance* have suddenly stolen the scene, causing discomfort to most, to the pillars of the teaching activity, which took shape, before the arrival of Covid-19, through contact, interaction, contamination, emotional exchange, relationship, reciprocity. Over 80% of the interviewees felt the blow, and the picture does not seem to move at all in the transfer from one research round to the other (table 11).

Furthermore, although still dominated by the share of those who, even at time 2, viewed Distance Learning negatively in terms of impact on the *Energy spent*, the modality connected with a positive assessment earns almost 10 percentage points. Over time, evidently, an appreciable share of interviewed students developed adaptive skills in terms of a more efficient use of time and a more profitable organization of academic engagements (table 12). On the contrary, at time 2 the negative perception of Distance Learning on the dimension of *Effectiveness* increased by 10 percentage points. In this case, from one year to the next, the intolerance towards this method of teaching

[9] For reasons related to the economics of research (the questionnaire within which the cut-out presented here was made is very complex and extensive), a series of further variables have not been included in the matrix, however, which proved to be particularly useful in the illustration phase and interpretation of Distance Learning adaptation profiles emerged from the survey conducted on students in Italian secondary schools in the spring of 2021. For informative purposes, these are items that have to do with: *family environment*; *system of social and cultural relationships / opportunities cultivated in the family*; *university performance prior to the outbreak of the pandemic*; *quality of the relationships established in the university context before the emergency*; *Nationality.*

continued to grow and Distance Learning appeared to be less and less stimulating and incentivizing for the purpose of acquiring profound and lasting skills. Interest and enthusiasm unequivocally represent essential driving forces for learning, while boredom puts the achievement of this goal at great risk.

*Table 11- Impact of Distance Learning on the dimension of Sociality: interactions with teachers and classmates - Comparative assessment as compared to traditional in-person didactics (% - Round 1 and Round 2)*

| | Round 1 | Round 2 |
|---|---|---|
| Positive | 17,7 | 17,6 |
| Negative | 82,3 | 82,4 |
| Total | 100,0 | 100,0 |

*Table 12- Impact of Distance Learning on the dimension of Energy spent: time, commitment, workload- Comparative assessment as compared to traditional in-person didactics (% - Round 1 and Round 2)*

| | Round 1 | Round 2 |
|---|---|---|
| Positive | 32,6 | 41,8 |
| Negative | 67,4 | 58,2 |
| Total | 100,0 | 100,0 |

The shift to an overall index of *Intensity of the negative effects of Distance Learning* on the perceptual level, symmetrically to what has been seen so far, highlights, once more, how in the student perspective the medium-high criticality effects exceed, both in Round 1 and in Round 2, those of the opposite sign (table 14).

*Table 13- Impact of Distance Learning on the dimension of Effectiveness: appeal and learning- Comparative assessment as compared to traditional in-person didactics (% - Round 1 and Round 2)*

| | Round 1 | Round 2 |
|---|---|---|
| Positive | 37,6 | 27,5 |
| Negative | 62,4 | 72,5 |
| Total | 100,0 | 100,0 |

*Table 14 - Intensity of the negative effects of Distance Learning (Sociality, Energy spent, Effectiveness) - Comparative assessment as compared to traditional in-person didactics (% - Round 1 and Round 2)*

| | Round 1 | Round 2 |
|---|---|---|
| None | 7,2 | 7,7 |
| Low | 19,3 | 18,7 |
| Medium | 27,6 | 26,4 |
| High | 45,9 | 47,2 |
| Total | 100,0 | 100,0 |

On the other hand, as seen in the previous paragraph, both by dwelling on the individual dimensions investigated, and by considering the overall index, the assessments expressed during the first nationwide lockdown tended not to change one year later, the interviewees being equal (Alomyan, 2021; Aristeidou & Cross, 2021; Armstrong-Mensah et al. 2020; Baltà-Salvador et al. 2021; Ismaili, 2021; Mathew & Chung, 2021; Perez-Lopez et al. 2021). The table below clearly highlights the convergence framework that emerged from the available data (table 15).

*Table 15 - Percentage of university students who did not change their assessment of Distance Learning one year after the lockdown with respect to the aspects that emerged as distinctive in the comparison with traditional didactics (% calculated with respect to the second survey)*

| Distinctive features (modal class) | % stable responses | Sign. |
|---|---|---|
| Negative impact of Distance Learning on the dimension of Sociality | 88,0 | 0,000 |
| Negative impact of Distance Learning on the dimension of Energy Spent | 76,5 | 0,001 |
| Negative impact of Distance Learning on the dimension of Appeal/ Learning | 69,4 | 0,000 |
| High intensity of the overall negative effects of Distance Learning | 64,6 | 0,000 |

In the analysis phase, interesting associations emerged, capable of distinguishing these *two response areas* highlighted in table 14, which tend to refer to, observing the two stages of research, the same student profiles. In stage 1 the factors which, significantly ($p \leq .005$), favor an overall positive perception of Distance Learning are: a large, comfortable home environment that guarantees privacy (25% vs percentages ranging between 13 and 17 looking at the other methods of evaluating the available space in the house for the purposes of Distance Learning) and being over 25 years of age (29% vs 5%). The most visibly critical responses concern respondents who define their homes as unsuitable for Distance Learning (57% vs 36-44%), under the age

of 25 (51% vs 36%), who share their home space with other people in Distance Learning or Smart Working programs (49% vs 36%), placed in families characterized by the presence of siblings in addition to that of their parents (55% vs 37-44%). In stage 2, the spectrum of associations that were found to be significant remained almost identical and with similar percentage differences: again, the subjects who perceive Distance Learning favorably are the most mature from a personal point of view, and those who can experience remote studies in a comfortable living environment in terms of available space, structural / ergonomic characteristics, shielded from interference and noise. Beyond the expected comparison between the optimal characteristics of domestic space and the acceptance of / adaptation to Distance Learning, the dual social force pushing some university students to express themselves positively towards this method of content delivery and, moreover, to keep one's favorable attitude steady, is represented by one's inclusion in professional paths and / or by the status of one's parents: in other words, the presence of work and / or family commitments (as well as study) is, in some ways, more easily reconciled with Distance Learning than in-person teaching. On the opposite front, intolerance towards Distance Learning, in addition to its association to the aforementioned profiles (with similar values and percentage differences), concerns, in particular, the subjects who have a below average technological endowment (57% vs 43%)[10], and subjects studying in the humanities area (62% vs 40% for the human sciences area and 50% for the natural sciences area).

It should be added that, in a completely symmetrical way, in rounds 1 and 2 of the research, the most critical attitude towards Distance Learning ($p \leq .005$) particularly concerns those who experienced a lowering of the degree of cohesion at home during the pandemic and, in the emergency phase, feel anxiety and stress more than others (traits, moreover, very common in the sample and affecting, more generally, about half of the subjects reached), not surprisingly characterized, at the same time, by bleaker forecasts (hypothesis of progressive worsening of the economic conditions of one's family, and the idea according to which the Covid emergency will require a long time for its full resolution) compared to their more serene peers, placed in family contexts with a more relaxed and collaborative atmosphere, immersed in

[10] However, it should be noted that the students reached are, already in round 1 of research, rather advantaged, and in a transversal and widespread way, on this front, probably also on account of a path started by universities well before the pandemic, in the direction of the technological drive and of innovative teaching. In the survey conducted on students in Italian secondary schools, the *digital divide* turned out to be broader and deeper, concerning both the level of students' technical-computer skills (catapulted, effectively, into the world of Distance Learning together with their teachers), and personal technological equipment (first of all the quality of the internet connection), which is essential for dealing with the emergency method of didactic delivery.

solid university networks, which were probably formed before the pandemic and are resistant to it. The cross-checks carried out include those referring to the items added to the Distance Learning rating scale in round 2, aimed at accounting for aspects that can only be detected after a certain period of time from the outbreak of the pandemic, including the assessment of the impact of Distance Learning on university performance (grades, number of exams completed, timely completion of studies / smooth entry into a new academic path - for example, passing from a three-year degree course to a master's). A very clear picture emerged: 48% of the subjects who expressed a very negative overall assessment of Distance Learning recorded, one year later, a worsening of their performances (% in the sample: 29% - p =. 000), 44% of them experience lower self-confidence over time, in their ability to study and acquire skills (sample %: 33% - p =. 000), 92% define Distance Learning as a teaching method susceptible to continuous interruptions and interference (% in the sample: 80% - p =.000). Conversely, these effects are instead indicated by a narrow minority of subjects who have assessed the impact of Distance Learning positively overall. Consistently with these findings, both at stage 1 and stage 2, an overall positive opinion of Distance Learning is significantly associated with a preference given to it with respect to in-person teaching (round 1: 32% vs 14-22%; round 2: 26% vs 0-5%); on the contrary, anyone who makes negative judgments on the effects of Distance Learning has no doubts about the irreplaceable nature of in-person teaching (round 1: 56% vs 21-38%; round 2: 67% vs 25-39%). In other words, Distance Learning, when adopted as a transitory and emergency solution, was less of a burden on some of the interviewees, to the point of generating in them a preference for this teaching method (which, in essence, still endures one year later), the nature of which warrants reflection in the conclusions. Those who suffer most from the effects of Distance Learning, on the contrary, hope for an end, as soon as possible, to this "parenthesis". Dwelling on the results reported in table 16, which reports, at time 2, a version of the intensity index of the negative effects of Distance Learning capable of taking into account, at the same time, the repercussions in terms of performance, one can observe one particularly interesting aspect: besides the profiles characterized by a consistently positive or negative evaluation of Distance Learning, it emerges that a large number of interviewees (almost half) judge this expression of teaching negatively, while also recording an improvement in their own performances. Evidently, *progressing and taking exams is not enough*, everything else (the possibility of frequenting university spaces, interfacing with peers and teachers, establishing connections, living the university experience in its entirety) is missing, regardless of the results achieved.

*Table 16 - Typological index: Intensity of the negative effects of Distance Learning (Sociality, Energy spent, Effectiveness) and Impact on performance - Comparative assessment as against traditional in-person didactics (% - Round 2)*

| | Round 2 |
|---|---|
| Positive effects/Improved performance | 26,4 |
| Negative effects/Improved performance | 45,6 |
| Negative effects/Decline in performance | 28,0 |
| Total | 100,0 |

While the previously reported trends (such as, for example, the preference for Distance Learning by subjects over the age of 25[11]) are maintained in profiles classified as *consistent*, the group of *subjects that rejects Distance Learning, even in the absence of criticality in terms of career, performance, and the progress of their university career*, appears to be very heterogeneous and transversal (no particular differences emerge by calling into question the contextual and individual variables available in the matrix; for example, students who attend a three-year course, compared to a master's or post-graduate course). Beyond the assessments recorded on the impact of Distance Learning and the preferences expressed, for all (or almost all) of the interviewees, the university of the future, or rather, the post-Covid university will be in-person. More specifically, after the pandemic, enrollments in online universities will not increase in the students' perspective (94%), university enrollments will not decrease (98%), and university dropouts will not increase (93%). In short, there is an almost unanimous opinion that the university will resist and maintain its traditional form (Adnan & Anwar, 2020; Aucejo et al. 2020; Fatoni Arifiati et al. 2020; Kedraka & Kaltsidis, 2020)..

## 4. Closing Notes

Faced with the forcible closure of schools, whether total or partial depending on the stage of the pandemic, a veritable proliferation of *educational platforms* was observed; simultaneously, for a large chunk of the population, including students. the systematic use of electronic devices and access to the internet became indispensable, not only for use in educational activities, but for recreational-expressive consumption as well and, not subserviently, to weave the fabric of a new, collective existence online.

[11] In round 2, the subjects classified as particularly suffering when it comes to Distance Learning also express themselves, significantly and more than the others, in terms of a lower ability to collaborate and have exchanges with their colleagues, as well as a loss of trust in teachers. A *remote teacher* is evidently perceived as a subject with whom it is almost impossible to weave *personalized relationships centered on specific problems.*

To address the demands that have arisen in step with new digital technologies, the countries of the region have developed national framework strategies for digital development. These planning instruments allow policymakers to set priorities for intervention with a medium- and long-term vision in order to, among other things, coordinate the different areas of public policy and allocate resources for the digital transformation of society in general. Distance Learning is not a complete novelty in the university realm: the technological push, the adoption of innovative teaching solutions for the purpose of transmitting skills / evaluating performances, the use of platforms and the combination of integrated didactic expressions already constituted, prior to the pandemic, a proven reality in the considered environment (van Dijck *et al.*, 2018; tr. it, 2019). A reality combined with traditional in-person teaching, *integrated*, not prevalent, nor, let alone, exclusive (Giancola, Grimaldi & Romito, 2019; Gui, 2019; Head, 2014; Pitzalis et al. 2016).

The Distance Learning experience has left an indelible mark on the national schooling system, paving the way for numerous queries and prompts for scientific research in the field of academics (Toniolo Institute, 2021), besides showcasing instances of innovation within the school system, which are increasingly urgent and no longer deferrable.

The collective shock we have experienced starting March 2020 could, and perhaps ought to, be a chance to complete an evolutionary leap - with a strong *digital* imprint - within the education system, as widely believed by the generation of *digital natives* first of all, who were certainly hoping, even before the advent of Covid-19, to detect greater responsiveness, within the Italian education sector, to new technologies, as well as less standardized, innovative, creative, *hybrid* didactic formulas (Giancola, Grimaldi, Romito, 2019; Pitzalis, Porcu, De Feo, Giambona, 2016).

It is not, however, that simple to evaluate the impact of Distance Learning unequivocally, where the objective - starting with an accurate appraisal of pitfalls and perks - with a view to futurity and new-found *normalcy*, is that of laying the foundation for a project to renovate the future of the schooling system. The exacerbation of social inequalities during the pandemic (which did not spare the student realm, which, in part, was found to be more vulnerable to learning deficits, and at risk of dispersion), and, more specifically, the issue of the *digital divide* (Nuzzaci et al., 2020; Ghigi, Piras, 2021; Saraceno, 2021); the uneven distribution of the methodological and technological competencies of educators for the purposes of managing DL;; the loss, for the young, of direct and empathic relations with their tutors; the depletion of peer interaction dynamics; a widespread reduced efficiency perceived in learning activities; the inevitable decline in the comprehensive level of attention, as well as the time set aside for studying being laden with interference and distractions; the overlapping - more than the past - of action spheres;

prolonging exposure to technological devices; these are some of the issues to which the scientific community, and the broader public debate, have given the most reflection, and upon which to design, by way of a close collaboration between the scientific realm and the public sphere, the future of the school sector, and universities in particular.

Without, naturally, wishing to be misunderstood - a return to the analog is not possible, nor advisable in our society of platforms; moreover, the online and offline dimensions do not present clear-cut breaks or boundaries, but they have been meshing and hybridizing for decades - beyond a new and imposing drive towards innovation, to be profitably safeguarded and fed in future, we cannot fail to recognize, at the time of Covid-19, the contradictions and distress stemming from *innovation without human contact*. The investment and resources from the time of the pandemic, while consisting, in fact, in an efficient and, simultaneously, obligatory solution, generated widespread intolerance among students and produced a broadly repulsive attitude: in the eyes of most people, Distance Learning breaks important routines, takes away the attractiveness of the undertaken course of study, negatively affects relational life and the *possibility of forming groups*, downgrades the emotional component of university life. The most interesting fact is that, in the face of evaluations that persist over time, as the panel web survey highlights and allows us to record, the rejecting attitude towards Distance Learning is often found even in cases in which it, although negatively reflected on dimensions such as that of sociality and / or energy spent, does not affect performance. In other words, many of the students interviewed (about half) are not only interested in results (finishing their studies, taking exams, *being in good standing*); their sensation is that of loss of contact, exclusion from a process and experiences to which they are strongly attached and towards which they are equally projected.

As seen in the previous pages, although representing the minority profile, there is no shortage of subjects who perceive Distance Learning favorably, to the point of preferring it to in-person teaching: these are those who are older in age, of those who, besides studying, work and / or have a family to think about. Given the widespread discontent, therefore, distinct and peculiar forms of adaptation and reaction to Distance Learning emerge: 1. there are those subjects gravely struggling in the academic and relational areas, for whom past and present disadvantages seem to be combining and cumulating in particularly challenging ways, who are characterized by a completely hostile attitude towards Distance Learning and sincerely hope for a full return to in-person teaching; 2. There are, moreover, the academically and, probably, socially and emotionally stronger students, who feel especially penalized by the deprivation suffered at a human level, albeit with good and on-track performance; 3. Finally, there are those who, more opportunistically, have

found an effective solution in Distance Learning, on account of a demanding and *multitasking life* on the family and work fronts. With due differences, the pattern that emerged in the study conducted on Italian students of secondary schools is once again found: Distance Learning is associated with different responses, ranging from utilitarian acceptance to repulsion, from open conflict to attitudes that are only partially critical. The reasons and the student target of reference change, but the reading keys remain the same, in looking at the referenced individual, relational, contextual result. In particular, reflecting on the profile best suited to Distance Learning in the university context and making a parallelism with the similar group of very young people that emerged in the referenced study (and, as will be recalled, conducted within the same time unit) - for which this training solution represents a *loophole*, a means to reach the world of work, quickly and without a particular waste of energy - there is a doubt that, for different reasons, the worker and / or parent enrolled in university, in a pandemic, could have given in, more than students, to the temptation of *distance learning with cameras and audio off*; it would be worth investigating this aspect and understanding whether the lack of decline in performance is due, at least in part, to the greater leniency of teachers during the emergency phase and / or to a less effective and profound acquisition of skills, in terms of the achievement of results, on a formal level. If this were to be the case, this scenario would only yield losers: in terms of profound experiences and interactions, of social support (given the risk of dispersion and exclusion), of the acquisition of solid and lasting skills. This reading of the data, which enhances student assessments, perceptions and experiences, certainly does not want to diminish the scope of Distance Learning: it has undoubtedly constituted a *solution* in the emergency phase, *temporary* and *not definitive*, a means of transition that has allowed universities to react and not stop, drawing strength, for that matter, from the area of technological innovation which, in a future key, can only benefit *universities* once *in-person* attendance has been restored. However, there does not seem to be a basis for its permanence in the long term, looking at the volition explored, as well as the demand for higher education. The university of the future is in its historical-cultural-social premises, and also in the representations that emerged, in person; it is increasingly innovative, but remains strongly centered on human capital, on trust between the actors involved and on social networks, resources that are difficult to acquire and feed *remotely*, resources that, if already scarce to begin with, in the emergency phase can only be further eroded. It will, therefore, be essential to work towards a return to normalcy, and thus to attending university in-person once again, universities orientated to technological innovation, where the advantages of the digitization of the education sector can be optimized with respect to those stemming from live interactions and exchanges,

among peers and between different generations. In subsequent years, with the full-fledged return of in-person tuition, it will thus be necessary to work tirelessly on the integration of traditional and innovative didactics, seeking out multiplayer discussions that favor dialogue between the younger and older educators, between teachers and learners, so that ongoing experiences of didactic experimentation may be systemized, and with the endorsement and promulgation, to avoid any and all gaps, of methodologies that still need capillary and homogeneous radicalization in academic practices. Didactic innovation, after all, needs to incentivize and motivate students and teachers alike, both being essential groups within a vaster community of continually evolving and ever-growing practices. In these terms, it becomes possible to look at the years marked by the pandemic as an important testing table, for students, to whom a lot of the considerations herein are addressed, as much as teachers, induced to hastily alter - and perhaps not always adequately enough - their teaching style, reinforcing their technological competencies, while simultaneously attempting to have human interactions with in-person students (a minority in this latest pandemic juncture), as well as remote learners (a vast majority during Covid).

Moving on to the methodological level, the present study and the structure of the empirical basis lend themselves to further reflection. The introduction stated that the web survey can be associated with the use of complex and articulated questionnaires and generate profitable forms of participation / collaboration on the part of the subjects observed, especially where it touches themes and issues of interest and social impact, close to their life experiences. Also said and shown, data in hand, was how it can constitute suitable instrumentation in the context of research designs aimed at studying some topics of investigation in their temporal evolution. However, this study, as well as other similar experiences, are not without limits. First among which, the lack of statistical representativeness of the reference samples and their mortality over time. With specific reference to the size of the sample under analysis (compared with the sample of the first round of investigation), it can be said that, although small, it reflects typical proportions and forms of fall described in the literature. Moreover, the small sample acquired, in our view, represented a vehicle for the acquisition of high quality and very interesting data, made up of particularly motivated subjects "faithful over time", and "reliable collaborators", veritable lifeblood for social research. The willingness to answer a demanding questionnaire one year later is certainly not a foregone conclusion. The subjects included in the sample have in fact put their experience and their point of view at the service of an urgent social issue, on which public opinion moves, and knowledge and political wills intersect. At this point, comes the need to check and further explore the evidence that has emerged, again, if possible, *with the same subjects*, interfac-

ing with a sub-sample of interviewees reached in the second round who, in our point of view are *privileged witnesses to the university Distance Learning experience*. The students interviewed with answers useful for combining in both the first and second round are not many, but, as seen in the previous pages, they are sufficiently varied to be able to observe, on the one hand, that discomfort and discontent are widespread, pervasive phenomena, resistant to time, and on the other hand, that discomfort and ease, lost opportunities and possibilities are not distributed in a completely uniform way. In other words, there are different reasons and paths that can constitute a basis for reflection to plan a more conscious and targeted return to attendance, to rethink education and methodologies for transferring skills, calibrating them on a multiform and complex subject, the student. The opportunity and the desire to better understand the results of the survey, as well as to check their solidity, suggest the grafting of a non-standard instrumentation on the adopted standard one. The natural development of the study presented herein involves a third round of research conducted with the aid of an in-depth interview, according to a tailored plan of targeted subjects that takes into account the results obtained thus far, the prevalent profiles that have emerged, and the interpretations that have worked, of additional influencing agents not available in the data matrix, but denoted by the theoretical and empirical literature on the topics of social exclusion, digital use, university education and study tracks.

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