

THE IMPACT OF UNIVERSITY TEACHERS COGNITIVE-EMOTIONAL POSTURE ON THE TEACHING/LEARNING PROCESS AND STUDENTS' USE OF ARTIFICIAL INTELLIGENCE. AN EXPLORATORY RESEARCH

L'IMPATTO DELLA POSTURA COGNITIVO-EMOTIVA DEL DOCENTE UNIVERSITARIO SUL PROCESSO DI INSEGNAMENTO/APPRENDIMENTO E IL RICORSO ALL'INTELLIGENZA ARTIFICIALE DA PARTE DEGLI STUDENTI. UNA RICERCA ESPLORATIVA

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ABSTRACT

In an increasingly digital world, what role do emotions play in the teaching/learning process? The paper aims to investigate the impact of the cognitive-emotional posture of the university teacher on the motivation to learn and on the use of *Artificial Intelligence* by students for study purposes. The exploratory research is carried out through the analysis of data from 187 students of the master's degree course in Primary Education Sciences at the European University of Rome.

In un mondo sempre più digitale quale ruolo assumono le emozioni nel processo di insegnamento/apprendimento? Il paper vuole investigare quale sia l'impatto della postura cognitivo-emotiva del docente universitario sulla motivazione all'apprendimento e sul ricorso all'*Intelligenza Artificiale* da parte degli studenti ai fini di studio. La ricerca esplorativa è svolta attraverso l'analisi dei dati di 187 studenti del corso di laurea Magistrale in Scienze della Formazione Primaria dell'Università Europea di Roma.

KEYWORDS

Emotional Intelligence, Artificial Intelligence, Faculty Development, Teaching/Learning Process, Educational Relationship.

Intelligenza Emotiva, Intelligenza Artificiale, Faculty Development, processo di insegnamento/apprendimento, Relazione Educativa

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Introduction

The *Fourth Industrial Revolution*, although born from the digital revolution, actually goes far beyond the simple change dictated by technology. In fact, just as happened in past industrial revolutions, the transformations affect all systems: norms, rules, institutions, objectives, expectations and the entire flow of things and people that play a fundamental role in economic, political and social contexts (Schwab, 2019).

The *Digital Education Action Plan* (2021- 2027), a European Union policy initiative aimed at supporting the sustainable and effective adaptation of member states' education and training systems to the digital age, has lately focused attention on the rise of *ChatGPT* (chatbots with AI) and its implications for the world of school and university research.

The use of *artificial intelligence* (AI) is also becoming increasingly popular in education as a useful support to teachers and students in facilitating the teaching-learning process but, in some ways, it is also a strategy adopted by students as a substitute tool for their personal skills to invest in learning.

In this article we will try to highlight, within the *educational relationship*, the impact of the cognitive-emotional posture of the university teacher on motivation and learning and on the use of Artificial Intelligence for the study purposes of students master's degree course in Primary Education Sciences at the European University of Rome who, in turn, find themselves in the role of teachers in training and future educational and training professional figures who need to acquire skills inherent to the *educational relationship*.

In an increasingly digital world, it is necessary to reconsider the role of the *educational relationship* by reaffirming the centrality and inseparability in education of bodily, emotional-cognitive and affective dimensions by taking into consideration all possible modes of action that support corporeity and intersubjectivity (Caruana, Borghi, 2016; Gallese, 2003), including the role that emotional intelligence plays in educational processes as it takes into account the fact that affectivity and emotionality condition learning and cognitive processes (Goleman 1996).

The key factor in the professional development of university teachers is didactics (Perla, 2022), and from a *Faculty Development* perspective, their training needs to be oriented toward teaching practices aimed at improving learning processes that are strictly student-centered.

This article presents an exploratory study on a sample of 187 students both for their role as future teachers and for their emotional involvement in the teaching/learning process, for their familiarity with pedagogical subjects, with teaching and with the evaluation.

The research involved the administration of a questionnaire, via Microsoft Forms, in order to highlight the nature of the factors related to the teacher's emotional involvement as possible elements that influence the students' learning process and to investigate whether the same factors are the reason to resort to the use of *AI* as a study support strategy or alternative to learning.

Although the sample is not representative, the intention is to explore the impact of the teaching process on motivation to learn and therefore on how teaching and evaluation in a university setting changes or can change with respect to the cognitive-emotional posture of the teacher.

Starting from the students' refunds, the intent is to initiate reflections on the orientations to be pursued in the training of university teachers from a *Faculty Development* perspective so that the teaching proposals are increasingly compliant in responding to the needs of the students and facilitate the *educational relationship* in order to better effects on motivation to learn, on the valorisation of the training process as a formative and formative evaluation aimed at achieving everyone's educational success of everyone.

1. Artificial intelligence and educational contexts

Artificial intelligence is a phenomenon that over the centuries has found ample space in literature and cinema, thus generating a vast popular culture. The attention towards machine learning, mechanical reasoning and robotics has led to the creation of modern intelligent models such as *Chat GPT*, capable of responding to the most complex needs (Telefono Azzurro, 2024).

The European Commission proposes the following definition: “*Artificial Intelligence (AI)* refers to systems that exhibit intelligent behavior by analyzing their environment and taking actions - with a certain degree of autonomy - to achieve specific objectives” (European Commission, 2018).

The topic of *AI* in educational contexts is an international field of research and application known as *Artificial Intelligence in Education (AIED)* which recognizes the need to redefine lines of educational research in relation to *AI* in order to promote

the development of learning environments adaptive and other flexible, inclusive, personalized, engaging and effective AIED tools, exploring their potential pedagogical opportunities (Zawacki-Richter, Marín, Bond, Gouverneur, 2019).

The priority for creating significant connections between *AI* and education is precisely to ensure that the expanded interdisciplinary fields of study (education, psychology, neuroscience, linguistics, sociology and anthropology) contaminate each other in a synchronous and mutual way, finding a space for comparison and project through a joint negotiation of models, intentions, actions, practices, as well as results that are both effective and ethical to assert more participatory and concrete methods (Panciroli, Rivoltella, Gabbrielli, Richter, 2020).

If it is true that technological tools can never replace human beings (or at least we hope so), it is also true that they offer opportunities to improve the way we teach and learn.

In particular, *AI* integrated into learning activities for continuous analysis of student results, can provide just-in-time feedback and assessments, as well as predict the probability of a student failing an assignment or dropping a course with high levels of accuracy (Bahadır, 2016).

The applications of *AI* and its use in teaching are very useful for adapting school programs to the specific needs of students, recognizing any weak points in programming or teaching, becoming an artificial tutor in carrying out homework and homework written tests.

The introduction of *ChatGPT* raises a lot of discussion about its role in schools and whether to use it as a technology to integrate or ban. The use of *chatbots* is widespread among young people, especially as a tool for help and support with schoolwork such as: doing research, studying topics, solving mathematical problems (Telefono Azzurro, 2024).

The latest frontier of *AI* on the mental state of emotion is *Emotional Artificial Intelligence* known as *Affective Computing* (Picard, 1997) defined as "computing that relates to, arises from, or deliberately influences emotions". *Affective Computing* represents a field of technologies capable of learning and interpreting human emotions which, through the analysis of textual, video and audio data, is able to detect emotional signals from different sources (Panciroli, Rivoltella, 2023) and which it allows us to cross the threshold of our emotions, making them intelligible and thus causing the fire wall that divided corporeality and the intimate sphere of the individual.

In the field of education, *Affective Computing* is used by teachers mainly to recognize the emotional state of students and provide corresponding feedback (Yadegaridehkordi, Noor, Ayub, Affal, Hussin, 2019) to adapt the teaching content and accuracy of assessments to improve their learning experience and the quality of teaching.

Affective Computing techniques also aid the research and development of educational games and robots (Wu, Huang, Hwang, 2016) by providing better human-computer interaction and achieving educational goals more effectively.

The complex intersection between pedagogy and AI has gone from a simple science fiction concept to an everyday reality that permeates every corner of our existence and highlights the importance for teachers to take a proactive approach by encouraging them to approach this emerging culture to prepare students to a world in which coexistence with algorithms will become, if it is not already, the norm (Pancioli, Rivoltella, 2023) and, opening the scenario of a *fourth educational revolution* (Seldon, Abidoye, 2018), offer them a personalized and universally accessible high-quality lifelong learning in formal and informal educational modalities.

In the educational field, the adoption of AI technologies is framed as a cultural phenomenon capable of redesigning the contours of teaching, educating and learning.

From this perspective, it becomes necessary to focus attention on "*Educating about AI*", not only regarding technical knowledge but the importance of students developing critical thinking about AI, understanding potential biases, limits and ethical issues; "*Educating with AI*", underlining that these technologies can be used as powerful tools to improve the effectiveness and efficiency of the educational process; "*Educating AI*" refers to the process of training and training the machines themselves. Ethics plays a fundamental role (Pancioli, Rivoltella, 2023).

It is undeniable that in the complexity of our society, algorithms represent a very useful and now almost indispensable support in both personal and professional life, but it is also important to open spaces for reflection regarding the potential risks to which humanity is exposing itself. In fact, there are many doubts and concerns that open up the potential risks that technologies could replace human beings in all sectors, including teaching (Holmes, Bialik, Fadel, 2019).

2. *Faculty development* and educational relationship: the cognitive-emotional posture of the teacher in student-centered teaching

In the Italian panorama, the university system responded somewhat late to the requests and innovations proposed by the *Faculty Development* processes compared to the international trend (Scarinci, Dipace, 2019).

In some countries, pedagogical training is preparatory to the teaching profession and in fact the achievement of a certification attesting to the teaching qualification is required. This reality, however, is not present everywhere and in fact, very often participation in any initiatives that go in this direction involves voluntary participation, which in the best of cases represents an internal reward requirement for career progression (Felisatti, Serbati, 2015). The university and all higher education agencies recognize the urgent need to trace paths for redesigning and redefining their role to address the cultural fractures that are emerging (Limone, 2012).

The key factor for the professional development of the university teacher is teaching which, being considered an "*institutional obligation*" and not requiring training obligations, is not evaluated and research is not encouraged. Classroom work is still considered the dark side of professional university teaching, an "*implicit*" considered as such in the eyes of the scientific communities because "*he who knows, also knows how to teach*". University teaching presents the same needs as any other teaching and therefore requires an effort at formalization and methodological innovation in order to generate a complex series of improvement effects in terms of quality (Perla, 2022). The individual disciplinary areas dictate its rhythms, methods, techniques and, as teaching for adults, it increasingly comes from a strong demand for the qualification of university teachers. "*Knowing how to teach*" is a theoretical value, not a technique that adds to the knowledge of a discipline (Perla 2020).

The pedagogical training of university teachers which aims to improve the quality of teaching in response to the continuous challenges for the development of an effective training offer is a central theme in the field of educational research. (Scarinci, Dipace, 2019).

Faculty Development is a planned program characterized by a wide range of activities that institutions undertake to renew or assist university teachers in their multiple roles (Lotti, 2011) and includes all activities (at institutional, but also individual level) that aim to promote teaching practices aimed at improving learning

processes and therefore the quality of the institutional teaching offer Scarinci, Dipace, 2019).

The recent Recommendations of the Ministers of the European Higher Education Area (BFUG 2020) have highlighted how the qualification processes of university teaching are closely related to student-centred teaching approaches (Perla, 2022).

The teaching profession is constitutively based on the *educational relationship*. Socio-emotional and affective skills represent the baggage of every teacher which influence the motivation, the learning processes of students but also their being necessary to successfully face the educational challenges that the educational context raises.

The body and its emotional-affective dimension are central in an *educational relationship* that is effective in the teaching-learning process. Emotions represent an essential element both in shaping the way students approach their relationship with their learning and therefore their way of assimilating, processing and retaining knowledge, and in creating productive and engaging learning environments.

The cognitive-emotional posture of the university teacher is a fundamental element for the creation of an effective *educational relationship* on the teaching-learning process. The body, understood as an existential posture, is given an affective character that constantly interacts with the environment (Damasio, 1994, Frauenfelder, 2018).

The human being is primarily relational. If we consider the possible modes of action that take place between corporeity and intersubjectivity, even the educational experience can be thought of as a shared space that is no longer "*egocentric*" but "*us-centric*" (Caruana, Borghi, 2016; Gallese, 2003).

Emotions, corporeality, affectivity and well-being are central elements in the intersubjective experience and strictly interconnected since in the educational relationship cognition and every possible interaction depend on the relational interactivity that occurs between the experience of the body with others and with the environment (Frauenfelder, 2018; Damasio, 1994; Gibson, 1979; Varela, Rosch, Thompson, 1991).

In the scenario of pedagogical research, many constituent elements of the educational experience have been recognized, namely space, presence and body, concepts inherited from the research paradigm of embodied cognition and philosophical literature (Caruana, Borghi, 2016).

Neuroscientific research has highlighted that relational experience is facilitated by the body, specifically by a system of mirroring functions that suggest shared participation in the same model of experience (Rizzolatti, Sinigaglia, 2006), and by emotional, affective and empathic aspects.

Daniel Goleman (1996) talks about the importance of the emotional mind influencing the rational one. Emotional intelligence makes emotions the main protagonists of learning processes (Salovey, Meyer, 1990), of socio-emotional well-being (Brearley, 2001), of cognitive processes also in directing specific functions, such as attentional focus and memory recovery (Rowe, Hirsh, Anderson, 2007).

Regardless of the source and mode of delivery (teacher, computer, peers, teaching resources, grade r/o the student himself) in the university context, students can receive feedback that can stimulate motivation and improve learning, if characterized by educational purpose (Pitt, Norton, 2016), and elicit different emotional responses (Bharuthram, van Heerden, 2022).

Emotions play a key role in the motivation, learning and results of university students even within different learning environments, especially in reference to the moments dedicated to the evaluation process (Lim, Dewson, Gasevic, Joksimovic, Pardo, Fudge, Gentili, 2020).

In implementing assessment practices also in the university context, digital technologies and the use of AI systems are taking on a role of support and help which is becoming increasingly relevant, in fact it is possible to make use of automatic evaluation processes which are becoming increasingly sophisticated and adaptable to specific training needs. From this perspective, the recurring production of *formative feedback* and *summative assessment* throughout the development of the course can make the traditional final exam superfluous, allowing us to overcome the attitude, often common among students, of focusing on "passing" the exam (Cecchiato, 2022).

The lack of experience of the body in action in the teaching-learning process (Caruana and Borghi, 2016) as a cognitive, affective and relational tool in constant dialogue with the environment determines resonances in our psychic, emotional and affective experiences (Sibilio, Galdieri, 2022), the concern is oriented towards understanding what repercussions can be found on emotional skills aimed both at the direct management of affective states and at their modulation as a support for cognitive processes (Goleman, 1996) also connected to the social and relational sphere.

The valorisation of the emotional skills of teachers, including university teachers, is an aspect to be paid attention to, encouraged and strengthened because if they are not aware of the potential, positive or negative, of the management or lack of management of emotional skills, they will not be able to accompany the their students in the demanding process of controlling them to achieve and maintain as much as possible a state of serene balance with themselves and with others (lanes, Demo, 2007).

In light of this, training on the management of emotional skills must become an integral part of the training path of university teachers oriented towards the initial academic training of future teachers, useful for developing basic skills in personal emotional management, as well as of individual students and of the group. classroom, improving motivation and learning.

3. Methods and Materials

The study was conducted on a non-probability sample of students enrolled in the Master's Degree Course in Primary Education Sciences at the European University of Rome for their role as future teachers, for their emotional involvement in the teaching/learning process and for their familiarity with pedagogical subjects, teaching and evaluation.

The aim of the exploratory research is to investigate, through the voices of the students, what impact the cognitive-emotional posture of the university teacher has on the educational relationship, on the motivation to learn and on the possible use of artificial intelligence for study purposes by responding to the research questions: what weight can the cognitive-emotional posture of the university teacher have in teaching and evaluating? What is the impact on students' learning motivation? For the purposes of studying, preparing for exams or thesis, could it become an expedient that leads students to resort to AI?

A semi-structured self-compiled questionnaire was administered to the students in a voluntary and anonymous form distributed by Microsoft Forms to investigate the different aspects of the topic under study: knowledge and use of AI, cognitive-emotional posture of university professors, students' approach in using the 'AI, meaning and importance of the teacher's cognitive-emotional posture in encouraging, motivating, interest and promoting the learning process.

The questionnaire consists of fortyfour items divided into ten open-ended questions (with the possibility of inserting a written comment encouraging student

reflection), twenty closed-ended questions, two closed-ended questions with multiple choice answers, and nine Likert scale questions. (of which seven with 4 values and two with five values).

Since the survey is still being studied, here it was deemed appropriate to analyze only those items that are considered congruent with the purpose of the research and relevant for reflection.

The sample of 187 respondents on which the survey is based (135 students not attending the courses and 52 attending) is made up of 97% female and 3% male: 51% are aged between 18 and 30 years old, 33% between 31 and 40 years old, 16% between 41 and 50 years old, 1% preferred not to answer and no one is over 50 years old.

A first relevant fact is the very high percentage of non-attending students, with the obligation to attend only for the laboratories, compared to attending students, with the obligation to attend also for the courses (Graph 1).



Graph. 1 (student responses)

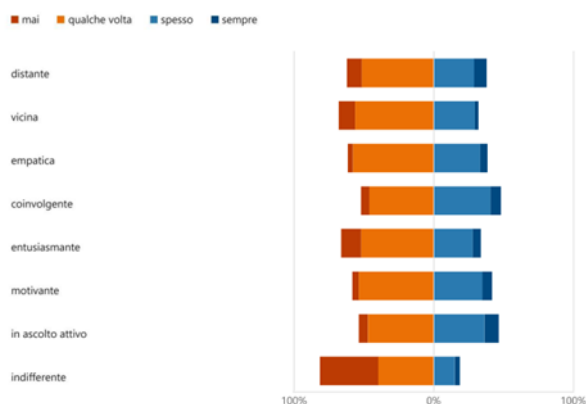
A second important data concerns the type of training previously received relating to the theme of the educational relationship and the teacher's emotional-affective skills. In fact, compared to the 35% of male and female students who have not obtained other academic qualifications, 65 %, however, appear to have another degree or specialization course mainly relating to education and training, psychological and sociological sciences.

The largest number of respondents are enrolled in the fourth and second year (47 and 46 respectively) followed by those in the third and first year (36 and 53), in the fifth year (19) and those who are currently out of course (4)

It is found that 60% of those returning believe that the cognitive-emotional posture of the teacher has a very significant impact on the learning process, 37% believe it is quite significant, 2% believe it is not very significant and 1% believe it does not have any impact. no significant impact motivating the answer with a written comment: *"feeling that the teacher is "closer" you are more motivated and*

interested"; "an open and empathetic teacher stimulates the student to learn and open discussions on the topics"; "the cognitive-emotional posture of the teacher is essential to encourage a sharing of passion for knowledge and knowledge"; "it makes you feel motivated and keeps the listener's attention high"; "a positive, confident and empathetic posture can create a welcoming and conducive environment for learning, encouraging students to feel more engaged and motivated".

Compared to the cognitive-emotional posture adopted by the university teacher in *"doing teaching"* and *"doing evaluation"*, although an equal percentage emerges between the perception of distance and closeness, it is nevertheless noted that on average the degree course teachers have the ability to involvement and active listening, a motivating, empathetic, sometimes exciting and in some cases perceived as indifferent approach. The empathetic, engaging and motivating posture quite used by the teachers of their degree course appears to be appreciated by the students (Graph 2).



Graph 2 (student responses)

Regarding the extent to which degree course teachers take into account, during teaching and evaluation, affective and emotional variables and student needs, 53% declare sometimes, 20% often, 19% never, 7% always.

The answer "sometimes" further enriched by the answers "often" and "always", offers an appreciable margin of *good practices* on which to reflect and the data becomes even more significant if also associated with that concerning the "graph 2" on the how students perceive the cognitive-emotional posture adopted by the university teacher in teaching and assessment.

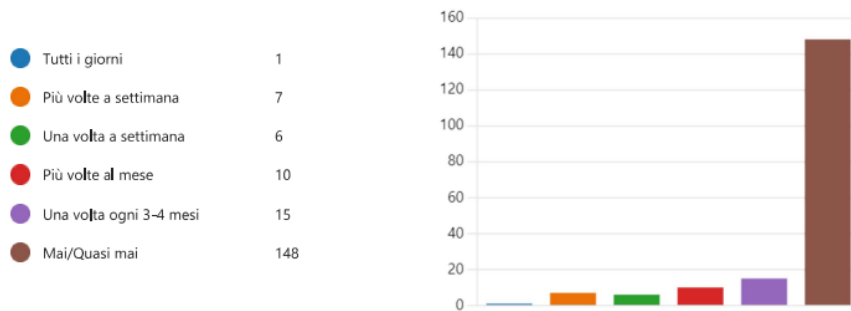
In light of the educational path experienced, when students are asked to respond with a personal comment to the question: "the teachers of your degree course who left you the most in terms of learning and emotions, what did they transmit to you?", from returns it is highlighted that, in terms of learning and emotions, teachers with an effective cognitive-emotional posture *"have instilled and transmitted the passion for teaching"*; *"they conveyed the awareness of learning as an experience not as an imposition to be followed"*; they expressed *"their authentic esteem and appreciation as a person and as a student, not only of my performance"*; *"they taught me to dare and encouraged me to do more and more"*; *"they taught me the awareness that learning comes through emotion"* (Graph 3).



Graph 3: student responses. Key words.

Regarding *Artificial Intelligence*, it is highlighted that 98% of respondents have heard of AI while 2% have never heard of it. Furthermore, it is recorded that 27% of students declare that they know ChatGPT and know well what it is but have never used it, 26% know and use the free version, 26% do not know ChatGPT, 21% only know it by name, while none of them use the paid version.

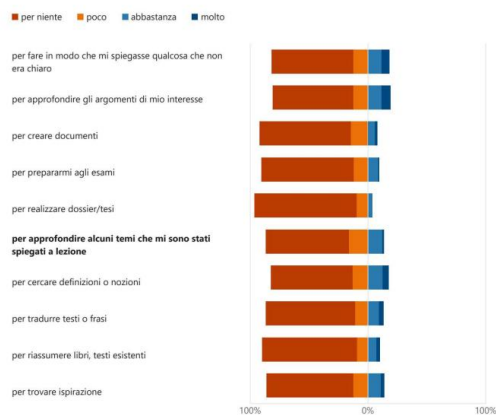
A third important piece of data records that among the respondents, there is a very high percentage of students who declare that they never or almost never use *ChatGPT* (148 out of 187 total) while 15 use it once every 3-4 months, 10 more times per month, 7 several times a week, 6 once a week, 1 every day (Graph 4).



Graph 4: student responses.

Also relevant is the data regarding the low percentage of students who use or consult *ChatGPT* for study purposes and the reasons that lead to its use are aimed above all at receiving a further explanation, to delve deeper into topics of interest or some themes that have been explained in class, to look for definitions or notions, to translate texts or sentences, to find inspiration, to create documents, to prepare for exams, to summarize books, existing texts and to a minimal extent to create dossiers/thesis (Graph 5).

The answer "not at all" further enriched by the answer "a little", allows us to note that the majority of students do not tend to make extensive use of *ChatGPT* for study purposes, confirming the data which shows that students almost never or never use *ChatGPT* (Graph 4).



Graph 5: student responses.

Although the students, for study purposes, evaluate ChatGPT as being quite easy to use and with decent performance, they still believe that it does not fully reflect the reliability and security requirements.

Regarding help in studying and facilitating the completion of a *ChatGPT* task, it is recorded that 51% of students declare that they do not know the answer while 29% responded that they have received help from the use of *ChatGPT* and 21 % responded instead that they had not been supported, justifying this with a comment on what was stated: *"sometimes I found it clear and coherent, other times absolutely misleading"*; *"it is simple to summarize and extrapolate the key concepts"*; *"it is certainly more help than books alone"*; *"it is useful for doing large searches quickly, but the contents require careful analysis"*; *"I don't use it for studying but only for image editing"*; *"It's also a way to be less alone and feel supported"*.

To the question "can Artificial Intelligence replace or compensate for the emotional aspect in the educational relationship" we found that 83% of students answered no, 14% I don't know and 3% yes (Graph 6), justifying the answer with a personal comment: *"the emotional climate and socialization that is created in discovery learning is missing. Often students don't need answers but indications to orient themselves and find the right way to the solution"*; *"it is the pedagogical component that drives the technology"*; *"it cannot replace the emotional aspect but it can help in moments of difficulty, discomfort, crisis to create logical and rational thoughts"*; *"while AI can be designed to recognize and emulate some human emotional expressions, they do not possess authentic feelings or emotions like humans: there needs to be a fair compromise and conscious and appropriate use"*.

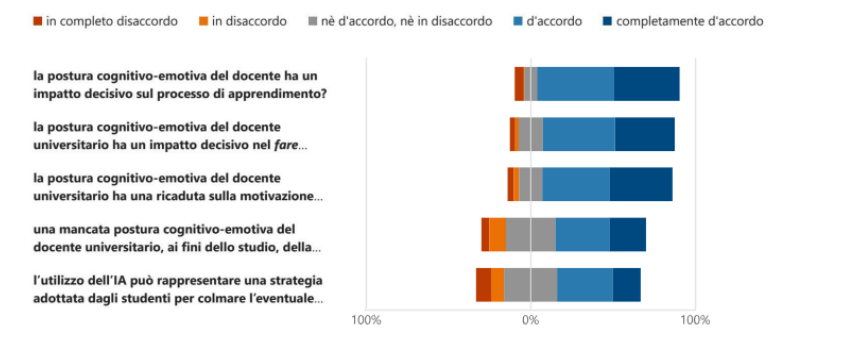


Graph 6: student responses.

A further relevant data shows that 46% of the respondents identify AI as a useful support for the university teacher in the planning of lessons, 21% in teaching, 14% in educational actions oriented towards inclusion, 11% in evaluation and 9% for other educational and teaching purposes.

As future teachers, it is noted that 38% of students do not show any concern, 36% do not know how to express themselves, while 26% appear to be worried while a very high number of respondents (on average 80%) report being aware of the risks regarding the reliability of the answers given by *ChatGPT*, the violation of privacy, a greater attitude towards laziness and a possible decrease in memory.

A final data of certain interest is the emerging picture which records the high number of respondents who declare that they agree with the statement that the teacher's cognitive-emotional posture has a decisive impact on the learning process, in "*doing teaching*", in "*doing assessment*" and on motivation to learn. While there is a redistribution of the percentages of agreement on the statements relating to the impact of a lack of cognitive-emotional posture of the university teacher, for the purposes of study, preparation of the exam or thesis, on becoming an expedient that leads university students to resort to AI (54%) and the use of AI as a strategy adopted by students to bridge any emotional distance between the teaching process and the learning process (50%) with an increase in the number of respondents (30% and 32 respectively %) who maintains a neutral position in responding (Graph 7).



Graph 7: student responses.

The final part in which comments, personal reflections or suggestions were recorded shows that the students welcomed the administration of the questionnaire, greatly appreciating being listened to, having had direct involvement in reporting their voice, the having felt part of a shared path of growth and collaboration, offering other food for thought on which to open further spaces for discussion.

4. Discussion

Although the sample is not representative, the exploratory research presented allows us to make some considerations and propose some lines of future work.

From the data collection, a particular sensitivity towards the issues under study emerges. This condition could be linked to the fact that we are addressing a population enrolled in a degree course in primary education sciences (with a very high percentage of students already graduated in education and training sciences or in psychology and sociology and in some cases already included in the world of school) for which the aspects inherent to the educational relationship and the teacher's relational and communicative approach appear to be topics already addressed or in any case a subject of study.

REgarding the answers to the items focused on the experience lived with teachers within an educational relationship expressed in all its parts (lessons, laboratories, exams, etc.), on a first reading, it could represent a critical element high number of non-attending students. Taking note that non-attending students are obliged to attend the laboratories, the data corresponding to the teacher/student experience can be considered reliable regarding "*doing teaching*", in relation to the laboratories, and "*doing assessment*", in reference to exams, and potentially reliable with regards to direct experience during participation in lessons. This consideration emerges from the return of the data as it is clear that the impact of the cognitive-emotional posture of the teacher is considered important and highly appreciated not only because it favors greater attention, concentration and fuels the sharing of enthusiasm and passion with respect to what is intended to be transmitted, but also because it has restored greater awareness of new learning in terms of knowledge, motivation for learning, approach to study, relational skills and consolidation of the professionalism of a future teacher or a teacher already in place.

Furthermore, from the findings it emerges that the teaching staff of the degree course in primary education sciences overall shows a certain attention towards the affective-emotional variables and the needs of the students even if they should be strengthened and valorised even more.

It is also interesting to have acquired the data that a low percentage of university students use *ChatGPT* sporadically and the motivations for using it appear to be in line with those of young people (Telefono azzurro, 2024), especially doing research on different topics, translating texts or sentences in a short time and, in a minimal way, also for the creation of images and to discuss with colleagues so as not to feel

alone. Furthermore, more than half of the students believe that *ChatGPT* is a more useful tool for the teacher, especially in educational planning.

Respect to the use of *ChatGPT* to support the study, it is clear that while a good part of the students declare that they are aware of the onset of some negative aspects such as, mainly, the increase in laziness and the decrease in memory, not all of them are be aware of how reliable it may be, failing to evaluate the reliability of the information and the security of privacy. A small part of them express concern as future teachers or teachers.

Almost all students believe that *AI* cannot replace or compensate for the emotional aspect experienced during lessons precisely because it is artificial, lacking the relational aspect at the basis of the educational relationship, and that the cognitive-emotional posture of the university teacher represents an element with very important consequences on the teaching/learning process, on motivation, learning, participation and relationships.

The nature and functions of emotions ensure that they are inseparable from human survival and development and the body and its posture have fundamental importance within the relational space.

Promoting the educational relationship based on the empathetic connection between all the subjects involved in the teaching/learning process means using a pedagogical orientation which, placing the educational success of the students at the centre, applies a teaching methodology which is able to give centrality to the body dimensions, cognitive-emotional and affective useful to promote the educational relationship based on the pleasure of learning which activates the interest and motivation to learn.

Human beings connect intelligence and corporeity and possess social intelligence, which makes them inclined to choose possibilities and realities sanctioned at a shared level (Santangelo, Leone, 2023).

Artificial intelligence is a form of non-biological intelligence capable of even learning and improving itself and which, in certain aspects, functions in a similar way to human intelligence although with important differences (Longo, Scorza, 2020).

AI can give answers, but it cannot ask questions. It is the human being who formulates the questions and provides all the algorithms to the *AI* to answer them.

It cannot replace the different forms of human intelligence, but at most it can support them and help them in the management of a large amount of data and

variables, while leaving the more complex and ethically motivated decisions to human beings. It is clear that some skills are still essentially human, just think of creativity, life and soft skills, holistic synthesis skills, emotional intelligence, and cannot be implemented by a machine, even if very sophisticated and technologically advanced (Cruciani, 2023).

The research work presented here is part of the projects accepted by the IRCIT (International Research Center for Inclusion and Teacher Training) of the UER.

Regarding to the size of the sample, the survey does not allow a generalization of the data collected. Even if the preliminary results presented here will require a re-reading in the framework, they still seem to constitute a good starting point for a work which, starting from the voice of the students, can offer a contribution to the debate relating to the importance of training and valorisation of university teaching and structuring increasingly empowering learning environments (Nussbaum, 2012).

For this interpretation to find new confirmations, other future experimental studies are hypothesized and if it is true that *AI* will be able to offer great opportunities, it is necessary not to underestimate the profound changes and concerns that derive from it. The need therefore emerges to develop debates and new research as a tool for further reflection.

5. Conclusion

Digital technologies are not just tools that simply change the way we interact with the world. Above all, they are systems that shape and increasingly influence the way we understand the world and relate to it, as well as the way we conceive of ourselves and interact with each other (Floridi, 2020).

By working on the training of aware people (university teachers and students) and insisting on ethics aimed at inspiring individual actions, it is possible to promote technological progress that enhances human perception, so that artificial intelligence and emotional intelligence cooperate as long as human intelligence remains master of the processes (Floridi, 2020) and can "govern" technologically advanced tools such as the latest generation *AI*.

This horizon summarizes the reason why education cannot "opt out" of the challenges regarding the organization of knowledge and the interpretation of reality that the affirmation of *AI* poses.

We therefore need continuous and responsible training through training courses capable of combining tradition and innovation, theories, techniques and creativity and training also focused on the personal and professional well-being of university teachers. We need to regain the awareness that a profession capable of responding to contextualized needs goes beyond capitalized skills; it has to do with dedication, with care, with relationships, with pedagogical reflection, with ethics, and even with utopia (Di Palma, 2023).

Investing in the improvement of teaching and learning practices through training activities promoted by universities to assist teachers in their roles therefore constitutes today a fundamental aspect of the development of the university institution, organization and people (Sorcinelli 2020). The National Recovery and Resilience Plan (PNRR) also moves in this direction: "From nurseries to universities" where, to strengthen the offer of education services in the university context, a specific investment has been envisaged with the creation of Teaching and Learning Center (TLC) for improving the quality of teaching in universities and schools" (Perla, 2022).

Starting a *Faculty Development program* is an important activity for a University and represents an opportunity to affirm the centrality of university teaching (Lotti, 2021).

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