

ISSN: 0124-2121 E-ISSN: 2665-2420 http://revistas.unisimon.edu.co/index.php/educacion Educación y Humanismo 24(43): pp.171-185. Julio-Diciembre, 2022 https://doi.org/10.17081/eduhum.24.43.5682

# Toward a transdisciplinary educational method Draft-visualization: a didactic methodology

Hacia un método educativo transdisciplinario Draft-visualization, una metodología didáctica

Recibido: 14-02-2022

Aceptado: 30-04-2022

Publicado: 02-09-2022

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### Abstract

The predominance of an epistemological paradigm that remains linked to the linear, cumulative, and reductionist form of science highlights the delay with which transdisciplinarity spreads in the educational world.

The debate on the need for a global education reform fails to materialize, which, despite its longterm existence, views the same operators/teachers as only partially aware of the need for change; however, they are never sufficiently involved to give force to this change. The system remains paralyzed due to a dead end for which students are paying.

Therefore, this study proposes a teaching methodology (Draft-Visualization©®). If adopted as a collegiate tool, it is capable of allowing the students to independently work in a transdisciplinary sense regardless of the initial degree of involvement of teachers. Finally, the general operating scheme of a method is proposed (Vetas-Educando©®) as a result of direct experience, which is inspired by the theory of complexity and organized in the principles of transdisciplinarity. The study believes that each educational reality must be capable of conducting its work without renouncing the rigor of a method that enables it to verify and measure results. In this manner, a classic error of the school world is avoided, that is, its self-referentiality.

*Keywords:* complexity, education, educational method, Draft-visualization, transdisciplinary approach.

**Cómo citar este artículo (APA):** Finocchiaro, G. (2022). Toward a transdisciplinary educational method Draftvisualization: a didactic methodology. *Educación y Humanismo*, 24(43), 171-185. https://doi.org/10.17081/eduhum.24.43.5682



#### Resumen

El retraso con el que se propaga la transdisciplinariedad en el mundo educativo se destaca por el predominio de un paradigma epistemológico todavía ligado a la forma de ciencia lineal, acumulativa y reduccionista.

No se materializa el debate sobre la necesidad de una reforma educativa global, que, a pesar de estar vivo desde hace mucho tiempo, ve a los mismos operadores/docentes solo parcialmente conscientes de la necesidad de un cambio, pero nunca se involucran lo suficiente para dar fuerza a este cambio. El sistema permanece paralizado debido a un callejón sin salida por el que están pagando los estudiantes.

Por tanto, se propone una metodología de enseñanza (Draft-Visualization  $\mathbb{C}$  ®). Si se adopta como herramienta colegiada, es capaz de permitir que los propios alumnos trabajen en un sentido transdisciplinario, independientemente del grado inicial de implicación de los profesores. Finalmente, se propone el esquema operativo general de un método (Vetas-Educando  $\mathbb{C}$  ®), fruto de la experiencia directa, inspirado en la teoría de la complejidad y organizado en los principios de la transdisciplinariedad porque se cree que cada realidad educativa debe ser capaz realizar su trabajo sin renunciar al rigor de un método que le permita verificar y medir los resultados, evitando un mal clásico del mundo escolar: su autorreferencialidad.

*Palabras clave:* complejidad, educación, método educativo, Draft- visualization, abordaje transdisciplinario.

## Introduction

Approximately 50 years ago, the methodological perspective of transdisciplinarity in education was inaugurated. In 1970, Piaget hypothesized an evolution of interdisciplinary relationships toward a construct he called the *higher stage*, which suggested that it could be called transdisciplinary. This evolution consisted of the transition from knowledge of interrelationships and reciprocities through specific investigations to the ability to identify connections within a system that is viewed in its complexity, thus, overcoming disciplinary barriers. Therefore, he hypothesized an epistemological paradigm shift that could have led to the emergence of new concepts, help to formulate new questions, promote the renewal of operative paradigms in education and, ultimately, produce social change.

The resistance of the dominant paradigm, which has been historically affirmed to be anchored to the reductionist and linear vision of science, decreased and even rendered difficult the spread of this innovative perspective. For this reason, less remained known about transdisciplinarity and its application in the world of education, that is, from school to university. Always for the same reason, the interpretation that emerges underlined the multidisciplinary and interdisciplinary aspects, (a) even where instinctive forms of transdisciplinary attitude are registered (in this sense, schools constitute a curious panorama and, at the same time, a concept of anarchism and an interesting pedagogical homologation), (b) when trying to systematize an experience or when it is a case study, and (c) without capturing the elements that previously push independently toward a transdisciplinary approach. To contribute in this sense to a delay in the awareness of transdisciplinarity, a weight seemingly existed that the tradition of thought is assigned to certain ingrained concepts (e.g., pluri and interdisciplinarity), which appear to exhaust in themselves the possibilities of connection between various disciplines. Regardless, they reflected reluctance in entirely overlooking disciplinary specialization to move toward the typical mixture of the transdisciplinary perspective. In fact, if an absolute disciplinary individuality was observed in multidisciplinarity, although in a panorama of collective involvement centered on an object, then interdisciplinarity could create a relationship based on the exchange of methodological approaches that broaden the ability to expand one's knowledge about the object of study. In both cases, however, object-subject duality remains firmly anchored to a hierarchical and vertical model that frames the object and delimits its field of existence. In a complementary manner, the transdisciplinary perspective added to the panorama of the previous pluri and interdisciplinary visions, the withdrawal of the subject, and its location in a relational space whose interconnections span multiple levels of reality. According to Nicolescu (1996): "Disciplinarity, multidisciplinarity, interdisciplinarity and transdisciplinarity are the four arrows of a single bow: that of knowledge" (p. 37).

## Theoretical framework

Once a relational fabric has formed due to dynamics of conjunction/disjunction and inclusion/exclusion, among others, the same concepts acquire new light, lose their nature as attractive poles, and become parts of a whole as *nodes* connected by *interactions* according to a scheme that reveals its own strategy (for which not all conceptual nodes necessarily interact with one another). Hence, the need has emerged for an approach according to complexity theory by Morin and the need to employ a rigorous and replicable method, as Nicolescu pointed out.

In this sense, transdisciplinarity enables the avoidance of the internalized verticality of obsolete educational systems and helps to access a complex form of horizontality that recreates harmony between object and subject through the method. In this scheme, interdisciplinarity does not overcome the disconnection between object and subject. Herein lies its nature as a challenge instead of a new superdiscipline. In other words, their contribution is essential for developing an intelligence of the increasing complexity that characterizes hic et nunc. As Motta (2002) observes, the prefix trans indicates an "interactive dynamics that result in a reciprocal transformation of related disciplines in a particular field/subject/object/context." In this sense, the world of education should adopt its principles to include them in its range of methodological options and strive to adapt its offer to the context of a contemporaneity rich in this enormous heritage that historically produced the development of thought. The uncertainty that characterizes the modern times, in a certain manner, merely pertains to the emerging phenomenon of an awareness of this pre-existing complexity. Moreover, much remains to be learned to inhabit and put it using a formula by Ceruti and Bellusci (2020), although "the inability to recognize, dealing with and thinking about complexity is the result of our educational system" itself (Morin, 2011, p. 27).

Undoubtedly, the delay with which an attempt is made to concretely implement the contribution of transdisciplinarity is notable despite the long-term debate on the need for a global reform of education. Moreover, operators/teachers are aware, albeit insufficiently, of her to a certain extent. Delgado (2018) proposes that the importance of change "is not a need for improved education, rather a change that allows it to be able to fulfill the social function of preparing human beings to live in a world that is transforming globally at the edge of abyss of self-destruction" (pp. 39-40). This study proposes that adopting a working method that relates to (theory of) complexity and is organized on the principles of transdisciplinarity is more important than proposing methods that are marked by time (e.g.,

Montessori, Reggio children, Waldorf school) and alien to the contemporary context in which they survive in the form of elite products for bourgeois users. All forms of educational reality must conduct their work without renouncing the rigor of a method that enables the verification and measurement of its results, thus, avoiding an endemic evil in education called self-referentiality.

Within the wide range of educational issues examined using the transdisciplinary perspective, the need to overcome disciplinary fragmentation has become well known. For a long time, Morin (1999) has called for the promotion of radical reforms of educational systems. Its urgency does not only undergo a reform of university careers or, in other words, of the manner in which a specialized study leads to teaching in schools and universities. A change is required in the mentality itself. Therefore, it includes all forms of action in which educ-action underlines the inseparable relationship between theories and practices, between values and participation, between institutional instances and individual identities, and between social landscapes and personal destinies. While waiting for comprehensive reform interventions whose materialization remains vague, teachers, educators, and other actors in the educational process is called to this challenge that determines the future of every child who must receive compulsory education. In fact, it must be recognized that school systems are regulated by norms that tend to leave ambiguity to, overlook, or even prevent a concrete centrality of students in the game of category interests and the defense of the guarantees that correspond to the rights of workers (adults; Finocchiaro, 2016). The field is facing an important challenge against Batalloso Navas calls "pensamiento escolar único" (paraphrased from Chomsky & Romanet, 1995). This notion underlines that it is a form of cultural totalitarianism that prevents the generation of alternative forms of thought and education (Batalloso, 2008). For this reason, learning to act from a transdisciplinary perspective and organizing educational activities with a renewed spirit are very crucial aspects. Aware that we live, Augé (2009) states that, "mondo da consumare ma non da pensare; un mondo dove si possono attivare procedure di assistenza ma dove non è possibile elaborare strategie di cambiamento" (p. 28). To refrain from resigning to a discouraging and inactive bitterness, therefore, the transdisciplinary perspective helps in implementing a change in mentality regardless of the capacity of individual governments to initiate a reform that produces an institutional social change. In this sense, school and education are privileged places for an autonomous revolution in the thinking of the new generation and of those who care for them.

However, overcoming the paradigm opposite to that of complexity, which inspires the transdisciplinary perspective is difficult. This study refers to the paradigm of simplification that was historically founded by Descartes, whose method focused on decomposition into parts and was deeply internalized by teaching category. In fact, Descartes introduced the separation between subject and object (*res cogitans* and *res extensa*) as distinct and autonomous parts of the cognitive process. From this inheritance, a model of simplification was born, which is the real origin of the *ideology of specialization* given the weight of science on specialization over the centuries. Successful ventures obtained in terms of technological discoveries and applications, which are increasingly present in daily life and have increased the quality (and safety) of individual and collective life, may have reinforced the belief that the path of science was the one outlined by the French philosopher. As far as the study is concerned, notably, the image of teachers who were prepared through a university learning itinerary was formed due to this trust in the scientific method, which proceeds by simplification. In this manner, teaching was conceived as a form of

specialization and disciplinary fragmentation, whose limits observed today are a result of a prolonged process that is deeply rooted and aware of successes. In other words, changing this paradigm is difficult. A noteworthy notion, therefore, is that the tendency to prioritize teaching in many educational systems according to the level of specialization with respect to disciplinary content persists. In other words, the more specialized the teacher (from primary to the university level), the better the salary. Moreover, the difficult reconciliation of this custom with a generalized, prevalent law that recognizes the right to equal pay in the case of equal duties is less understood. The salary difference between teachers in kindergarten or elementary school and those in high school or universities is based on two principles without a real justification: the age of students and the *social* assessment of the different levels of disciplinary competence, which lacks support by norms. This scenario is a clear violation of the legislative principle that requires equal remuneration for equal work.

Another element of rigidity that must be faced is the depth that the concept of interdisciplinarity has acquired. In fact, for some time, the disciplinary division has generated perplexity and has pushed toward the search for a perspective that can capture the best of each of the areas of research and knowledge. The exchange of methodological approaches, which is typical of interdisciplinarity, has even created new disciplines that have been introduced into spaces that relatively bridge the gaps necessarily created between the different fields of knowledge precisely due to simplification and fragmentation. Interdisciplinarity has ushered the dimension of *nondisciplinarity*, which was previously external to a system that identified the object and limits of the knowledge process, according to the unifying perspective of each discipline. However, it has maintained the division of subject, which is a prerequisite for the achievement of a sense of learning that is the quid of teaching reform in school systems. In this sense, interdisciplinarity is an exercise of goodwill in the endeavor to participate in the solution of a problem. However, its epistemological foundation is seemingly fragile today. The daily practice of compulsory schools clearly demonstrates the persistence of an attitude of this type that continues to be characterized in disciplinary articulation. The organization of space and time in school in particular and in the educational world in general is the result of a vision resulting from disciplinary fragmentation. Another symptom is the observation that, schools will be unlikely to achieve the creation of real teams with the presence of temporary groups and/or prevailing projects, where the real level of participation is generally low despite the widespread concept of common work. Alternatively, the systems, which are institutional and governed by a regulatory framework, do not provide the tools necessary for the establishment and maintenance of educational teams, although they periodically lead to the emergence of guidelines that call for the formation of pedagogical teams.

This situation is corroborated by the legislation that separates, hierarchizes, distinguishes, hinders, and renders precarious the coexistence of disciplines in its articulation. Even the recurring exhortation toward a transversal operational commitment does not produce real results given the manner in which how teachers materially implement shared teachings on civic and ecological education, among others. Understandably, those that Illich defines as "funzioni latenti svolte dai sistemi scolastici moderni, cioè la custodia, la selezione, l'addottrinamento, l'istruzione" prevail even today (Illich, 2019, p. 47). Based on the initial reflections of Piaget, transdisciplinarity calls for a radical change in the world

of education that exceeds the mere willingness of teachers to collaborate and that requires a change in mentality to reach high levels of complexity.

To achieve a change of this magnitude, it is not enough to requesting the didactic level and/or the university degree, which should also be reformed, to provide adequate preparation for future teachers. Educational reforms are required to involve not only teaching but also the level of management and organization of concrete and daily activities with special attention to the school world, which befits a society that thinks critically about its future. This scenario explains why practical results are far from expectations for various reasons, such as despite great efforts countries exert toward inclusion. Changing the mentality of such numerous professional categories is difficult, because they compose the educational landscape of all countries. In addition, it is not economical. Governments are well aware of this situation and, despite good intentions (when and if they do; it is never obvious), they believe that they lack sufficient funds to finance a momentous reform such as the one needed. Such a radical form of education has not occurred even in France despite the commitment of great thinkers, such as Morin, and despite the dissemination of his theories and indications.

In this sense, the proposal suggested by the study is to overturn the state of affairs, which seems to be a transdisciplinary means of viewing educational reality and considering it for what it is not and does not know how to be, for what does not work and cannot work, and for what it should be and fails to be. The notion that school and education should be managed by adults who think the best (if it is the case) for young people is now nothing more than a wish that the daily practice of governments and the political class frequently denies. School systems, which interpret the educational ideology of each country, seem to be designed more for the needs of adults working in this field instead of for the sincere commitment to the future of young people (Finocchiaro, 2016).

From this perspective, the thought of Ivan Illich retains its relevance, who 50 years ago proposed *deschooling society* due to its ineffectiveness and, ultimately, because it is the root of the dark side of the social system, which is anchored to economic, instead of human, potential (Illich, 2019). In other words, education is linked to the economic perspective instead of the need to allow the people who compose society to build their true identity, as effectively demonstrated by the experience of visionary educators, such as Freire (1970).

Nearly all countries in the world criticize society due to its lack or inadequacy of investment in education. Alternatively, it is an intervention that would serve to profoundly renew the educational world. However, as previously stated, it is considered unfeasible in terms of the sufficiency of public funds if left with reasons used by the political level to justify its absence or inability to provide complete answers. Moreover, the suspicion does not fall that this inability is partially due to the competition of other social interests, which for various reasons are considered a priority over education. In other words, when an act is done to strengthen and renew the educational world, it is always done within the limits imposed by economic policy with its priorities and its constraints, among others. Therefore, the questions are: What kind of politics should be central to a society, the economic or the educational? Which of the two guarantees the free development of people? Which of the two is an identity process that guarantees balance on the path of life? On the contrary, what imposes its times, values, and needs that increasingly reduce the vital spaces of autonomy, independence, and personal identity?

# Methodology

Currently, the urgent problem is how to bring all discussions on transdisciplinarity to the level of the concrete or everyday life. In this sense, the experience of the author as a school director has provided the opportunity to challenge this practical dimension beyond theoretical commitment, in which the desires of those who stop locked in the theorizing level are lost. In addition, the attitude of those who know how to act but without adequate awareness and theoretical competence is no better. In fact, the search for the level of reality capable of constructing a concrete practice remains far-fetched in both cases. The Educandoit© method emerged from the experience of the author in Italy, which today takes the name Vetas-Educando®© after a happy encounter with a similar experience undertaken by the AlunCo Foundation in Argentina in the field of health. In both cases, active involvement in a direct experience enabled experimentation with concrete methods on the supposed centrality of students/patients.

Este Método constituido en base al pensamiento complejo y la transdisciplinariedad puede ser aplicable a otras áreas y organizaciones. Deberá evitarse cualquier intento de traslación como si se tratara de una receta operativa. Por el contrario, se requiere la construcción continua con base en el contexto, los actores, saberes y procesos que convergen en él. Solo en el respeto y la comprensión de cada identidad expresada y reconocida como una unidad compleja es que resulta pertinente la aplicación del todo<sup>1</sup> (Bustos et al., 2021, p. 86).

With this confidence, transdisciplinarity is given the opportunity to materialize if certain tasks -or at least partially – can be reversed, which characterizes the relationship between adults and young people, between teachers and students, and between professionals and patients. In other words, given the impossibility of reforming a system in which disciplinary fragmentation produces teachers with specialized disciplinary profiles, one can infer that young people represent the territory (space) where the disciplinary, multidisciplinary, and interdisciplinary actions (time) of teachers can evolve toward a transdisciplinary result. Therefore, specific tools should be considered in suggesting updated forms of transdisciplinary work that are available for daily use. The study posits that an evaluative attitude toward educational activities must be assumed at the same time, which can finally adopt *nuanced* forms without giving up the need to relatively measure the progress registered by students.

This study pertains to  $fuzzy^2$  systems, which are not superficial modalities or purely descriptive/quantitative/qualitative but evaluative of the *degree of belonging* to a level of

<sup>&</sup>lt;sup>1</sup> This method "is constituted on the basis of complex thinking and transdisciplinarity and can be applicable to other areas and organizations. Any attempt at translation should be avoided as if it were an operative recipe. On the contrary, continuous construction is required based on the context, the actors, knowledge and processes that converge in it. It is only in the respect and understanding of each identity expressed and recognized as a complex unit that the application of the whole becomes pertinent". My transl.

<sup>&</sup>lt;sup>2</sup> The reference is to the concept of a *nuanced whole* introduced by Lotfi A. Zadeh in 1964 which subsequently developed (especially in Japan and Europe by introducing new forms of logic in various fields of knowledge) gave rise to a nuanced logic based on one of the pillars of transdisciplinarity: the principle of the included third.

learning that must be considered in the context of life (e.g., outside of school) of the individual and concrete subject who learns (Rubin, 2018). Now more than ever in education, a necessary form is one that knows how to combine the needs of the Cartesian *certum* with that of the Vichian *verum* and that does not coincide with the forms of *buonismo*<sup>3</sup> in which a teacher maintains a role based on the concept of power.

Draft-Visualization is a methodology that intends to place students in a transdisciplinary learning situation. Its educational purpose is the development of critical thinking. Toward this end, it enables students to express their personal way of thinking regardless of the level of knowledge or competence. It is a transversal work that involves all forms of disciplines. Its basis does not consist of the proposal of a professor of a subject. On the contrary, the disciplines contribute to students by enabling them to work in a transdisciplinary manner.

## Results

One starts by selecting a phrase, which can be a quote from a philosopher or a verse from a song that may reflect the tastes and uses of students; it can be a writer's text or an idiom. It is about selecting words thought, because, as Carlo Levi stated, "*Le parole sono pietre*." The teacher can suggest a phrase or guide the students in their choice. In any case, the student must be involved in the entire process. Once the methodology has been learned, the teaching team can jointly plan activities by periodically resorting to Draft-Visualization.

Students initially try to provide a graphic form to the sentence by drawing as they like and individually. Meanwhile, they reflect on the content of the sentence in a manner similar to brainstorming with the help of the teacher. It is a starting point to develop the lessons planned by the teacher/teachers in relation to the contents of a subject area and following the *flow of consciousness* that will occur within the group as the activity progresses. The objective is to critically reflect on the meaning of words and sentences and to consider the relationships highlighted and set in motion by such a reflection without limits to the directions that students take. The task of teachers is to make everyone aware of the interconnections that emerge from the suggestions of each student.

To conduct this kind of activity, possessing a common language that is as lightened as possible from ideological superstructures is necessary. In this sense, competence in reading and writing is the most committed, because it represents the level of formal education that distinguishes the *educated* from those who, by opposition, play the role of *ignorant*. From this perspective, art or artistic language lends itself to the objective, although significant differences may be observed in graphic skills. However, this form is more suitable due to the absence of pervasive cultural models that blame inferior artistic abilities.

Therefore, the rationale for the design is clear. The simple act of drawing letters and words helps defuse any feelings of inadequacy in all students involved. As a prerequisite, the level required is not the skill of formal design. When an educational activity is conducted

<sup>&</sup>lt;sup>3</sup> This neologism indicates an attitude of benevolence and forgiveness that puts the teacher in a position of power insofar as it allows them to decide whether or not to save a fragile student due to his learning, the effect of which is only to empower the teaching role compared to the student who has to thank him for his kindness.

in a classroom, the first rule that conditions the work of students is an invisible one: the memory of the individual value that each student assigned to their commitment and previous work. Therefore, a memory exists-within the personal dimension of identity -that is received through the school evaluation and that strongly influences each student in the positive and negative senses. Students who generally receive positive assessments are instinctively ready to take on the assignment they receive. Others or those who feel insufficiently prepared approach the task with a sense of prudence and lack of conviction that reduces or even nullifies its potential. In this sense, cognitive control and memory at the brain level come into play, which are functions closely related to each other. The artistic medium, which is required at the simple basic level, maintains low expectation from all actors, eliminates the rigidity of individual cognitive attitudes, and helps in the creation of the same initial conditions among all without interfering in the relationship between cognitive control (necessary for fulfilling homework) and memory (influences cognitive flexibility). The language of art makes students forget any hierarchy internalized from quantitative evaluations within a verticalized didactic system and enables them to add a condition of cognitive flexibility that allows them to use individual resources. In turn, they are relieved of social shame that overlaps with the process. A system of school rules based on quantitative assessment.

Neuroscientific research demonstrated that the brain supports adherence to rules of behavior. A widespread knowledge is that the middorsal thalamus interrupts control over compliance using rules considered necessary when assigning or receiving a target (Richter & Yeung, 2012).

Other investigations conducted in the previous 10 years consider the prefrontal and right lateral cortices as brain region responsible for behavior that leads to adaptation to social norms in the cases of forced and restricted choices due to fear of a penalty (Ruff, 2013).

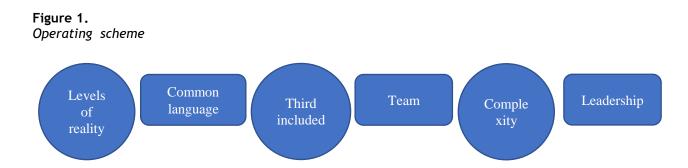
Given a process of commutation (switch), which enables the jump from rules to rules according to the requirement of different contexts, the study suggests that the use of artistic language offers the possibility of jumping across rules in the same manner. This study refers to the internalized rule that was previously mentioned, which inhibits the commitment and motivation of students who are penalized by the quantitative assessment system. In this case, the change allows each student to defer from the awareness of that memory of individual *value* with which they were labeled within the educational institution. In other words, the neuronal concentration found in specific areas of the brain plays a preliminary role every time students are invited to embark on a learning path, and this role is related to fundamental prerequisites. Examples are acceptance of the rules of the game/task to be performed and the presence of internalized judgments that inhibit conscious action in the form of fear (sanction), shame (inadequate performance), and inhibition (social etiquette).

### Discussion

The use of methodologies, such as Draft-Visualization, and the observation of group dynamics developed in practice have empirically demonstrated that students are normally labeled as bad students or those who frequently find a way not to perform or complete a task in activities. Instead, they have participated in the activities with an unusual serenity. If the proposed reasoning is valid, then the students would have been able to exercise a conscious function that enabled them to interact on equal terms with all classmates and achieve a certain level of success and leadership within the activity. Moreover, emphasizing the stimulus effects of a climate of harmony previously registered in notoriously difficult and critical classrooms precisely on the internal relational plane has not been necessary. The use of the elemental design has enabled everyone to gain self-confidence up to the point of exposing their personal thoughts on the meaning of the original sentence and its interpretation. This pedagogical procedure has proven to offer support to the identity of students, which is in constant play throughout the years of education, and shows respect for the principle that Freire defines as "atteggiamento dialogico come fondamento dell'educazione" (Freire, 1970, p. 97). This method has not only been about providing a level playing field but also about creating learning situations in which success does not equate content or skill but an opportunity for self-disclosure. In this sense, the enthusiasm that currently accompanies the debate on competency teaching has been seemingly worrying, because it runs the risk of being misleading with respect to the real objectives of education at least from the point of view of the author.

In this sense and on a strictly methodological level, art is the common language that represents the first stage in the construction of a transdisciplinary work model based on three basic principles, namely, (1) different levels of reality (and perception), (2) principle of the third included, and (3) complexity of reality. At the same time, this basic language facilitates the dimension of teamwork that is also representative of the transdisciplinary perspective. The Educandoit<sup>®</sup> method developed during the experience undertaken in a school in a disadvantaged urban periphery of Palermo has built its structure by virtue of an activity of constant reflection according to the recursive model of Morin (Finocchiaro, 2014).

Nietzsche said that the method always reaches the end. In this case, this is what happened from a stimulation of a *transdisciplinary attitude*. The evolution of the Vetas-Educando®© method proposes the following operating scheme.



The Draft-Visualization methodology was developed within this operational scheme, and initiatives, such as "Orto in condotta," were conducted. Its objective was to require critical thinking through the return of the conditions of equality in learning for subjects whose sociofamiliar origin imposes differences that were impossible to derive in a rigid, hierarchical, and formalized educational system (Finocchiaro, 2020).

## Timing

Sessions do not follow a fixed duration; thus, adapting to each learning context is convenient.

## Conclusions

This methodology is conducted in three stages. *Initially*, each student draws the selected phrase in their own way. When reflections on the meaning and sense of the phrase, connections, and relationships they forged have revealed groups that share a theme, an opinion or a related construct, the teacher will lead them to meet and form small groups. This step ushers in the *second stage*. Each group selects one of the drafts of its members, such that it remains a common work. Around the sentence, the group members will draw and/or write the aspects that helped them to specify the topic or a common opinion that emerged from the sentence to share the sense in which they agreed. At the *third stage*, every time a change in teacher and discipline occurs (regardless of timing; the organization of times, hours, and days is the responsibility of each class group), the group draft continues to be a space where they have to find a method for adapting the requests of each discipline to the drawing itself out of respect for the common sense that united them and that they are developing together. In this manner, students will have to think in a transdisciplinary manner with the help of all teachers.

In the space of a certain number of hours of school study, the drawing that was initially formed only through a series of colored letters and words will have been enriched with other elements contributed by the students due to the requests of other teachers and disciplines and which they will have opted to add to the draft. The result will be a common product of a group and will represent the work that all teachers must evaluate for educational purposes. The initial individual drawing remains. The students will have to decide whether to draw their drawing at the same time as a group work or to use it as a personal diary or another.

### The teaching rule

The advantage of this process is that the formation of the group -and, not the least, its dynamics -is solely dependent on the manner of thinking of its components and leaving aside the personal dynamics that typically operate in school. The teacher is the one tasked with omitting obstacles for all students to express themselves to reveal their thoughts. This method considers no errors, contradictions, rules, and votes. The teachers write down their observation of the behaviors of students and relate emerging themes with their requests in terms of the content of their programming.

# The inclusion

Another stage involves the entire school community. The class group that worked together on a topic can select one of the drawings, such that the stimulus phrase is displayed in a place in a building. In fact, painting the words on a wall helps them remember their previous thoughts, actions, and methods of developing the activity. Importantly, it is a method of including the entire school community in a process of reflection, which stimulates recursive actions. This process facilitates a recursive process of the activity and its content, meaning, and value with the entire network of relationships, actions, and interactions that were developed. In addition, it contributes to the maintenance of a general level of esthetics of the entire school building enriched by artistic works made by students in the form of graffiti.

## Notes

The value of this methodology affects students and teachers.

# Students

- Feel free to do using their capability without shame and sense of guilt;
- Participate without fear of lacking an adequate level of specific preparation;
- Exercise critical thinking as a personal function and not as a study test;
- Discover their talent and express their identity;
- Learn to trust themselves;
- Improve relationships with others;
- Reduce the distance between them and teachers;
- Learn to identify meaningful connections between disciplines and a central idea; and
- Practice a sense of beauty as a language and a way of community life.

# **Teachers:**

- Concretely experience the role of a learning facilitator and leaves a position of power chained to the teaching-evaluation process;
- Investigate the sociocultural context of students to propose phrases that fit their world, lifestyle, needs, and dreams, among others;
- Learn to handle completed group dynamics, such that the identity of each student finds its space of concrete manifestation;
- Specifically commit to removing invisible obstacles to learning; and
- Defer from its protagonism and leave space for the centrality of students.

If we consider the notion that the Draft-Visualization methodology sets in motion in terms of complexity, we understand how a conscious action on *dispositif* can influence change. The role that teachers assume in the implementation of the methodology and, importantly, the use of basic artistic language that enables students to limit the internalized presence of the inhibitory models of their abilities, acts on that network. As explained by Foucalt, this network in schools relates to institutional (classical figure of the teacher; categorization of students) and informal (e.g., spontaneity and dialogical exchange) elements, physical environment (reterritorialized with respect to the structure of the frontal lesson), rules of use (not imposed vertically but discussed horizontally), statements (selected phrases), and reflections (network of symbolic references). Moreover, it defines the content of the school *dispositif* within which an idea of education circulates. In this configuration and always following Foucalt (1971), the *dispositif* reveals its nature as a network of knowledge and

power. This study poses the questions asked by Habermas to Foucalt, that is, what is the relationship between discourse and practice and does one support the other or vice versa? The answer is that this methodology combines discourse and practice, eliminates authority mechanisms that render academic discourse a source of hierarchy, and creates conditions for new connections and modes of knowledge/power that recursively influence the previous structure of the school community. It reveals a new face, individually and collectively, and enhances the talent present in each individual.

Since the education system resorted to the concept of *dispositif*, one realizes that the reference to the *interaction of forces* that considers concretion and leads to the emergence of the subjectivity of each person if Deleuze's (2007) reflection is recalled, the study proposes that the change in the framework of forces that precisely act outside pre-established schemes within a class group becomes susceptible to adjustment, modification and even extension by contagion. Thus, the learning experience leads to shuffles, that is, the cards on the table of normal school practice, and generates requests that suggest changes in direction with respect to typical dynamics.

To the extent that students gradually realize that they are proceeding in a transdisciplinary sense and, therefore, questioning the framework of institutional relationships that they previously overlooked, their capacity to face not only personal challenges but also institutional discourse increases. Thus, the construction of one's identity undergoes this critical reflection not only on the contents of the activity mounted through Draft-Visualization but also through critical reflections on the *dispositif* in which they learn. The study believes that this method enables the understanding of the nuance offered by Giorgio Agamben about the concept of *dispositif*. Agamben (2006) argues that it is a mechanism that allows the subject to assume different positions and that, thanks to the network in which it is inserted, it can develop different processes of subjectivation and identity construction. In this sense, the complete course of Draft-Visualization in the classroom as well as its external output, that is, painting as a final product and the phrase on the walls of the school poses a symbolic value of reterritorialization, of resignification of the self, and of institutional spaces, which are now converted into a place of group expression and memory of complex relational dynamics.

Therefore, we can expect that a contamination effect may emerge that extends to the entire school and pushes toward a transdisciplinary perspective of the entire institution and always with adapted forms. This notion is expected from an activity of this type, that is, initially conducted only by an individual (teacher) or a group (class). In this field experience, this method certainly worked and overcame resistance and skepticism from those least willing to face a new challenge. However, maintaining a high level of involvement calls other factors in the complex intertwining of activities of an educational institution into question such as the weight and action of a leader and the creation of a team capable of multiplying the effects of actions taken.

However, this scenario is another topic that the study hopes to revisit in the future.

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