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COMPLUTENSE

To engage students with the World, in the field of the environment

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Abstract. Globalization is shaping new societies, new kinds of communication, intensification of travels, pervasion of media, acceleration of information, at the same time as the news become outdated in few seconds. The rapidity of media exchanges is relentlessly dragging technology, like technology circularly increases the frequency and speed of news. The waves of information will change our attitude of thinking, even the brain mechanisms, forging a new social order. All this imposes new practices of teaching, in general, and in environmental, in particular, correlated to new procedures of teachers' training. The new teachers should be instructed in technology, like they must instruct apprentices, to know the influence of the Web on identifying different appearances of society. There is a need of specialists, suitable for organizing the students, navigation into the ocean of information, at the same time, instructors must protect the youngest from the ultra-infiltration and dominance or pervasion of the Web. The educators' job is progressively complicated, since education occurs yet more outside the school's room in an amazing number of ways. The global world has open windows and open doors: everything (or almost) enters and everything goes out, creating opportunities, but also risks.

Keywords: Education; Web-Net; Environment; Mixed-disciplinarity; Globalization; Geography.

[es] Para involucrar a los estudiantes con el Mundo, en el campo del medio ambiente

Resumen. La globalización está configurando nuevas sociedades, nuevas formas de comunicación, intensificación de los viajes, penetración de los medios, aceleración de la información, al mismo tiempo que las noticias se vuelven obsoletas en pocos segundos. La rapidez de los intercambios de medios arrastra implacablemente a la tecnología, de la misma manera que la tecnología aumenta circularmente la frecuencia y la velocidad de las noticias. Las oleadas de información cambiarán nuestra actitud de pensamiento, incluso los mecanismos cerebrales, forjando un nuevo orden social. Todo ello impone nuevas prácticas de enseñanza, en general, y del medio ambiente, en particular, correlacionadas con nuevos procedimientos de formación docente. Los nuevos docentes deben ser instruidos en tecnología,

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como deben instruirse los aprendices, para conocer la influencia de la Web en la identificación de los diferentes aspectos de la sociedad. Hay una necesidad de especialistas, adecuados para organizar a los estudiantes, la navegación en el océano de la información, al mismo tiempo, los instructores deben proteger a los más jóvenes de la ultra-infiltración y el dominio o la penetración de la Web. El trabajo de los educadores se complica cada vez más, ya que la educación se da cada vez más fuera del salón de clases en un número sorprendente de formas. El mundo global tiene ventanas abiertas y puertas abiertas: todo (o casi) entra y todo sale, creando oportunidades, pero también riesgos.

Palabras clave: Educación; red web; medio ambiente; mixto-disciplinariedad; globalización; Geografía.

[fr] Engager les étudiants avec le Monde, dans le domaine de l'environnement

Résumé. La mondialisation façonne de nouvelles sociétés, de nouvelles formes de communication, l'intensification des déplacements, la pénétration des médias, l'accélération de l'information, en même temps que l'actualité devient obsolète en quelques secondes. La vitesse des échanges médiatiques entraîne sans relâche la technologie vers le bas, tout comme la technologie augmente de manière circulaire la fréquence et la vitesse des informations. Les vagues d'informations vont changer notre attitude de pensée, même les mécanismes cérébraux, forgeant un nouvel ordre social. Tout cela impose de nouvelles pratiques pédagogiques, en général, et d'environnement, en particulier, corrélées à de nouvelles modalités de formation des enseignants. Les nouveaux enseignants doivent être formés à la technologie, comme les apprentis doivent être formés, pour connaître l'influence du Web dans l'identification des différents aspects de la société. Il y a un besoin de spécialistes, adéquats pour organiser les étudiants, la navigation dans l'océan de l'information, en même temps, les instructeurs doivent protéger les plus jeunes de l'ultra-infiltration et de la domination ou de la pénétration du Web. Le travail des éducateurs devient de plus en plus compliqué, car l'éducation se déroule de plus en plus en dehors de la salle de classe d'un nombre surprenant de façons. Le monde global a des fenêtres ouvertes et des portes ouvertes : tout (ou presque) entre et tout sort, créant des opportunités, mais aussi des risques.

Mots-clés: Éducation ; réseau Internet ; environnement; mixte-disciplinarité; mondialisation; Géographie.

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1. Foreword

Teaching will be always more complex, tied by inter- and trans-disciplinarity, because students, willy-nilly, are introduced into the global world; tutors must guide them along an infinite horizon, especially today, when politicians are looking for strategies on how to emerge stronger in a post pandemic emergence.

For this reasons, education needs innovation, the school must change, it should be not more a segregated unit, an ivory tower, where a scientist stays, where students are

taught the same things they found in the books, but a living place where they speak, argument among them, discuss with outside people, and study with the teachers.

It follows that the teachers must have new and updated expertise, not only relative to their main field, but information on all the main topics of society. They have to find innovative methods, other than to be gifted with human sensitivity, capable to form students as complete persons and responsible citizens.

2. Introduction

The last incumbent threat of epidemic has imposed a major attention to the external entire world, from what we recognise that we must have a greater understanding of the planet. To have a good image of the external world, it would be necessary to better study new disciplines, both human disciplines and scientific disciplines, even if today any distinction must be avoided, since all the contents are connected to the real experience and the daily life of everyone.

Globalization imposes the knowledge of the world, the physical, the economic, the historical, the ethnic, the political aspects of nations and populations. All the disciplines must be taught, even at the first level, gradually little by little, because the life creation is constantly fluctuating and further articulated. Even young people have to understand that all the episodes are interrelated by causes and consequences, to discover that events are tied by invisible ties, mysterious for someone, but not for others, to realise that people are the perpetrators of many outcomes which can change the earth.

The knowledge of the world could increase the sociality of people; school should prepare to life.

Nowadays it would be impossible to act without knowing what is outside us, or the entire universe; our lives are all linked together in one world, we all, we are united against risks and perils, affording every time new and common challenges; what is beneficial for one, must be favourable for all the others, and also the opposite.

3. Going with the world: an environmental reality

The Earth is incessantly rotating, that means always changing. Our world is in a perpetual state of transformation; changing are also people, nature, and animals, as well as human relations, like the values which are continually modified. The modern changes are amplified by technology. All the modifications will change our vision of the physical setting and the human society. Every change in the physical ecosystem will produce a change in the economic and social environment, like every change in the socio-economic milieu will produce modifications in the physical domain. Human activity and mental processing are combined together and infinitely reproduced.

Education must evolve with our societies, anticipating changes rather than simply reacting to problems. "The first decades of the 21st century are at the

intersection of a turn of the millennium and touched by a rapid technological change.” (Burns, Gottschalk (eds.) 2019). As best as we can, we must prepare our children and young people for the future, we must cultivate skills that can empower them to handle a changing society (Naess, 1979).

The exchanges between populations are ever wider and in-depth. They require an increased education in all the sciences, or both a knowledge of territories and people all around the world itself and in its different shapes, not neglecting the social sciences that connect peoples and history and associate all the human destinies. A most required sort of innovation should be a major connectivity between human and mathematical sciences.

3.1. Global awareness in the study of the environment

The human contacts are surely intensified by travels and movements, which imply the knowledge of diverse identities in the general enlargement of the human rights, global awareness and necessity of the roles of teachers as leaders in social justice and equity issues (Wenner, Campbell, 2016).

The discussion on education is firstly based on the fact that every individual in the world must have a sufficient instruction to become a complete person and a respectable citizen. The general rules of governments are based on the fundamental duty of forming trustworthy citizens. The result of these two statements should be that every regime has the obligation of producing all the means for a global literacy, useful for a complete governance. The efforts of governments are always paid by the resourceful results, offering more productive citizens.

The investment in education becomes money (OECD, 2020). Generally, there is a connection between culture and the private and public revenues. Culture is also connected to a safe migration, since some administrators require a certain level of education for the immigrants, confirmed by the statistics which demonstrate that with low levels of schooling, low salaries prevail which don't permit, not only a sufficient sustenance for migrants in a foreign country, but also nor the necessary for the families in their original countries.

The means of knowledge are today multifaced and distributed everywhere, thanks to new technologies, but the role of basic schools is fundamental in every nation for the global equity.

The goal is to afford all the faces of society and technologies with, at least a baggage of elevated languages skills, basic maths, and well-being knowledge for personal protection and nutritional safety.

Certainly, creating an equal cultural basis for all in a country or in the entire globe, will be proactive for a continuing amelioration of the cultural conditions of humanity.

Sadly, we are far away, from equal conditions, both in economics terms, and educational terms. Surely, education must be the first goal, even before the economic parity, but we recognise that without healthy bodies, or the necessary nourishment, education cannot advance. In facts, many international funds for poor children preview basic aids for them and their families.

New perceptions are seeing the person as a complex, as a holistic total. Like the person is a complex, the world is a unicum, so persons and world are always strictly interconnected.

It follows that the new directions of evolution require an always interconnected system of education which intends the person as an interlacement of elements, a holistic complexion, letting everyone with its worth.

3.2. The new society: towards environmental awareness

Like Earth, like persons, like nature, and entities, societies are always mutable. A new social form of the individual is born in the third millennium, bonded by the social environment and personal interactions, and augmented by the accelerated travels and communication exchanges, both, in person and virtual manner (OECD, 2010). Even more we are in contact with unknown people with whom we must find agreements, or with whom we become friends; fortunately, all humans do partage the same sentiments and general experiences, connected by the “collective unconscious” (Jung, 1963).

The relation individual-society is a sliding door, an open window, where meanings and modifications are reflected, like in a mirror which creates new images, both of the individuals and societies, and, consequently, of their connections.

Societies are submitted to the same evolution of the well-known Darwinism. Education is a product of civilization, every evolution in society will form a new pattern of education. The problem is that education is usually running slower than business and technological novelties. In any case, we are noticing that the rapidity of technology will train new viewpoints in education.

We are now led from an increasing invisible wave, directed by the movement of *global-globalization*. Surely, every one of us has afforded, rationalized, and interiorized the topic of “globalization”, but Covid 19 has changed the perspective, making the issues of human interconnections more tied to the life of every one of us, letting us to understand that we do have the same fears, the same hopes, the same expectations.

Our environment is jeopardized, our lifestyle is sometime overturned. Our engagements are constantly increasing, our security is at stake; every day we must manage and pay for new risks, perils, and challenges.

People have found the necessary force in virtual unity, in long distance communications, in comparing the different systems of reaction to external harmful common dangers.

“The transition to different types of social relations and structures is based on anticipated and reflected choices of individuals that are accompanied by a coherent response from the society.

Education, it will be suggested, plays a pivotal role in linking individuals and society together - like in the philosophy of Hermann Hesse, suggesting that the Self and Society are dynamically intertwined (1971).

Personal or behavioural modifications in societies are creating social transitions; the mutual exchanges between individuals and societies are producing social shifts, named *social transactions*. In the history of human civilization, “social transaction” will result in a new direction of the history of human refinement, in the advancement and distribution of new knowledge and technologies, and in the formation, merging, splitting, decline, and re-emergence of particular types of societies (Igamberdiev, Brenner, 2020).

Scientists affirm that “social transaction” can be modelled by the logic of the transactional interpretation of quantum mechanics. Quantum physics works on a counterintuitive logic, not be reconciled with classical physics, being the scientific expressions arrived at the end of determinism. In the quantum world, a complete knowledge of the state of a system is no longer sufficient to determine how it will look in the future. We will have to be satisfied with determining the probabilities of future events (Pellegrini 2021), like stated by Albert Einstein, “Logic will get you from A to B, Imagination will take you everywhere.”

A new dialog on the evolution and dynamics of societies, from a combination of perspectives will involve all the major sciences. “For instance, how many thousand disciplines might be counted in today’s scientific and technological realms? Perhaps close to 10,000? (OECD, 2021, b).

“Evolutionary dynamics of social systems, are apportioning views from areas such as evolutionary biology, paleo-anthropology, evolutionary psychology, network-science, non-linear economics, social physics, social psychology, social and political sciences, artificial intelligence, computer science, and the new approaches to history and social evolution” (Mariju’an, Igamberdiev, 2020, p.120).

We argue that one discipline is the queen of interdisciplinarity: geography, the discipline of the interrelationships for excellence (Galvani, 2001, p.104). Geography furnishes the tools that connect the natural, physical, and political phenomena to their territorial basis. Other sciences offer in good ways the mirror of all that occurs in the world, like natural sciences, but geography adds the human component to the events. It is also the most modern discipline which disentangles the bond man- environment-nature - society, allowing itself to be the science for excellence of the sustainability goals. The discipline that collects all the information about the global biodiversity is geography; a discipline not very loved at school, and not good taught by teachers, as considered only descriptive. Geography, instead, is one complete context of themes, places, people, environment, animals, plants, situations, events, wonderfulness, indispensable for the overall accepted concept of globalization. Geography offers both the possibilities of human and scientific disciplines, all the arguments can be represented by graphs and images, and more, all the events of the world can be amplified and enriched by data literacy. Nowadays it would be impossible to act without a geographical knowledge.

3.3.The role of society in environmental education

There is a growing interest in looking beyond the traditional outcomes of education – such as income, employment and GDP – towards non-economic aspects of well-being and societal progress – such as health, civic engagement, political interests, crime and happiness (OECD, 2017), since we observe that all the forms of societies are determined by the educational system, which evolves according to moral advancements and economic progress.

Wellbeing of individuals and societies is connected to schools' outcomes. Adults with tertiary attainment not only expect to live longer, or having higher life expectancy; they also report being in better health than adults with secondary education. "Continuing learning can also contribute to non-economic goals, such as personal fulfilment, improved health, civic participation and social inclusion" (Ruhose, Thomsen and Weilage, 2019, p.175).

The means of knowledge are today multifaced and distributed everywhere, thanks to new technologies, but the role of basic schools is fundamental. The goal is to afford all the faces of society and technologies with a baggage of elevated, adapted skills.

Modern societies require complete persons, polyhedric personalities, but especially, good citizens, "involved in every kind of socio-political fields, to understand the waves of change and to forge the hardest solutions in the social conflicts" (O'Reilly, 2019).

3.4. Environmental education in deprived countries

We think that schools must be free of charges, especially primary schools, for creating the first step of equality. The process becomes circular; later the personal engagement, the time, the resources for advancing will depend on the single individual, and the resources of the States. Certainly, creating an equal basis for all in a country or in the entire world, will be proactive for a continuing amelioration of the cultural conditions of humanity, driving towards equity. Meanwhile the acceleration of technology increases the distance between the "have" and "have not", expression which is part of the UN project "No one left behind" (<https://sdgs.un.org/goals>). The problem is that technology and scientific research are advancing too fast, and millions of people are left, inevitable, behind, not only in technological terms, but also in economic sustenance.

Living conditions and cultural refinement are strictly interconnected. Nourishment is fundamental for living; culture is fundamental for the brain, like food is the nourishment for the body, culture is for the mind. The mind is the vortex of all human activities and ideas. The body also is directed from the brain (Naess, 1990).

International aids are also programming family planning, since, without closing the gap, between increasing population and decreasing resources and wellness, any development program can advance. It is up to the single governments to decide how to proceed, but people must not wait for their rights. Education is the fundamental right; it permits to enter the real life. School should prepare for life, for this it must

assure a friendly environment, a culturally responsive learning environment for all the children.

The U.S. Secretary of Education Miguel Cardona told to Press (NYT, on July 16, 2022) that education should be comprehensive: “Every child should have access to a high-quality education, provided in a safe, supportive, and predictable learning environment, free from discrimination, filled with healthy, trusting relationships, and one that ensures their social, emotional, and academic growth and development” - He was speaking to all the world, not only regard to the inequity that exists even in the richest countries – “Children with disabilities have historically faced systemic barriers to accessing their education and, in light of the COVID-19 pandemic, have faced greater challenges to their social, emotional, and academic development and success.”

Reciprocal education must guarantee that everyone could have the possibility to express his own ideas, and to exchange them in a cooperative and productive manner for the reciprocal personal maturation. As stated by the US Dept on Education: “Restorative practices focus on developing caring connections, listening to, and valuing others’ opinions, promoting accountability, repairing harm, and supporting reintegration back into the educational environment.

Implementing restorative practices, as a targeted support, could include revitalizing groups conferencing, recuperative circles, and conversations among students to facilitate healing” (United State Government, Education Department³).

That means to heal the school environment, especially erasing what in old times, was very mentally unsafe and armful for the linear development of the youngest, or a too strict discipline.

3.5. No one behind: All forward

The OECD webinar on August 8. 2022: *Power of Youth: Building an inclusive society should start in the classroom*, has arrived at the conclusion that to decrease the sociological and economic breaches in the world, all young people must have equal opportunities in education, not eluding all attempts of modernisation (Organisation for Economic Co-operation and Development, OECD)⁴.

Breaches are not only in economy, also in social achievements, the first of all to be considered is equity, followed by the gender gap. Gender gap is a moral construct deriving from general human rights, not the same of sexual orientation, which should be a strictly personal interpretation of lifestyle. Human right is the right of everyone to be accepted as a unique person with his values.

Innovation consists not only in technological changes, but also in shaping new environments, in producing new atmospheres, in establishing new types of

³ United State Government, Education Department: www.edu.gov.us

⁴ Organisation for Economic Co-operation and Development, OECD: <http://www.oecd-forum.org>

interactions, in forging new visuals, in looking towards new horizons. The steps to arrive at these goals require an open mentality from teachers who should be open to the world; they have to know different people and situations, foreign countries and places; they should be the first to enter the world, if they have to put students into the same globe. Innovative education will also be training tutoring; if traveling is a form of knowledge, students must travel, but, before them, teachers must travel.

A way to consider is how to introduce into schools the research methods of laboratories and high-level studies, to open the mind, and to consider the last phenomena of environments and societies. OECD (2022) considers research, that is more relevant and more readily used, being far from becoming a mainstream instrument in education (*Centre for Educational Research and Innovation*).

Research and experience are accumulated in numbers of sectors, including health, environment, agriculture and branches of social science. Learning more from these sectors could benefit education. Platforms for mutual learning will contribute to developing a more robust knowledge base in every ground.

Research could strengthen the knowledge through “evidence-informed” conception and about what really works. “What works” movement (Smil, 2009) had opened up a strong debate between methodological schools and has provoked reflections about its implications for practitioners’ professionalism.

Early childhood programs and schools projects can consider ongoing and effective professional development in these areas to ensure educators are equipped with the skills to create a culturally responsive learning environment for all children (OECD, 2013).

4. Teaching is a social and behavioural relationship, in the environmental field

Man is increasingly linked to the environment and will be increasingly so, in a continuous feed back; he is an integral part of the evolutionary process. However, in recent years the weight of the environment is preponderant, because it has been modified in an unusual way by demographic and industrial growth.

The educational system is a dynamic process that must be updated to the evolution of the society. It is of fundamental importance to include within the schools new applications that reflect the evolution of the social, economic, and cultural factors of the human community. The duty of school is not only to educate, but to create, to shape the individual, to form the human being.

Teaching will be more inter- and trans-disciplinary, because students must be introduced into the real world, modified by a new visual or the sovereignty of *iper-globalization*.

The new millennium teaching could start from real events, which could be connected to the long chain of history, as a resume of the most important episodes which would explain the recent past and the present. In history it is also possible to find experiences of education even valuable for today.

In September 2021, the US Department of Education released the study “Supporting Child and Student Social, Emotional, Behavioural and Mental Health” (United State Government, Education Department⁵), to provide information and resources to enhance the promotion of mental health and the social and emotional well-being among children and students.

Innovative and global education must guarantee that everyone could have the possibility to express his own ideas, and to exchange them in a cooperative and productive manner for the reciprocal personal maturation.

To connect the classroom with the media we must introduce into schools the world. This is not simple, the world becomes increasingly deeper and consequently more complicated, but we must know it, living with it; it cannot be avoided, only we do have the duty to protect the youngest from the ultra-invasion and super influence of the Web.

4.1 New visions in environmental teaching

Stated that teaching will be more inter - and transdisciplinary and stated that students must be the inhabitants of a new world, becoming the nomads of uninterrupted movements, along which they will find open doors and windows, teachers should open new windows for new perspectives.

We propose three forms for affording the outside world from the windows of the classroom, and for entering into the rooms of the world (Galvani, 2001 (a) y (b, p.103).

- First, learning from other contexts;
- Second, learning from other countries;
- Third, learning from other sectors.

These forms must conduct to three tracks of praxis which will open the mind from a new education, towards a new mentality and new habits:

- Comparison with the world;
- Interpretation of the world;
- Creation of the world.

All this is certainly not easy, but it is like to learn to swim, very difficult at the beginning, very easy with exercise. We must navigate the world, and if the world become more ample, we will need bigger arms to gain a more bountiful vision of the things.

Practically, we intend to suggest some innovation in a new vision of teaching (Galvani, 2000 (a);

first: to connect the classroom with the media we must introduce into schools the world. This is not simple, the world becomes increasingly deeper and consequently more problematic, but it cannot be avoided.

⁵ United State Government, Education Department: www.ed.gov/news

The real process of practical education has been discussed in a conference in Helsinki in 2001 (Galvani, 2000 (b) Galvani 2001 (b): From the debate it had resulted a connected process of education, which implies four phases of linked contents:

- Pluri- disciplinarity;
- Multi-disciplinarity;
- Inter-disciplinarity;
- Trans-disciplinarity;

If the world is changing, we must adapt to it, knowledge also must change, and, as a consequence, education too. To these above mentioned phases, we should affix other modern procedures, like aspects of new disciplinarity:

- ✓Techno-disciplinarity;
- ✓Co-disciplinarity;
- ✓Mixed-disciplinarity;
- ✓Linked- disciplinarity;
- ✓Mutual-disciplinarity;
- ✓Virtual-disciplinarity;
- ✓Hidden-disciplinarity;

We will explain these technicisms:

Pluri- disciplinarity; it intends that the complexity of life makes every event a tool of learning.

Multi-disciplinarity; it relates to all the interests of an individual which become personal elements of learning.

Inter-disciplinarity; like the former one, it is related to personal interests, but considered as fields of interest, and not as elements.

Trans-disciplinarity; it is the most complex aspect because it brings every form of education towards a superior structure, a metaphor, or even a *METAVERSO*.

Techno-disciplinarity certainly implies the use of Internet, but also the use of all the electronic devices. Today, we must conduct students even towards domestic robots, since they are utilized in industries since years. We must even open the way towards Artificial Intelligence (*AI*). It seems a complicated issue, but it can be explained in simple terms, it involves manipulation of data and a repetition of several operations. It is not a monster, only a mixing of data, words, and commands. Countless repetitions is the key of *AI*, that means operations that would require too much time from individuals, but that are created by themselves (Galvani, 2001).

AI technology contains an educational example which includes a moral suggestion. *AI* proceeds in a mechanical way, but repeating the human procedures; its findings are deducted from an ordered process of repetitions. The students could learn from these procedures, while exercising is a way for mental development and for obtaining success in school and in life.

Co-disciplinarity derives from the specialization of sciences; one branch helps the other, some discoveries in one field can be utilized in other fields. Knowledge of one discipline is useful for the others. Co-disciplinarity implies the intervention of school's external elements, like the street-disciplinarity.

Mixed-disciplinarity intends that the borders of scientific fields are fading away, one into another; it is inclusive of various human expressions, especially the several forms of art or art-disciplinarity and also movie-disciplinarity.

Linked-disciplinarity is typical of the new media, connected to the linked use of several devices, several hardware and software, like several social media.

Mutual-disciplinarity implies that one theme can sustain the others (it is like co-disciplinarity, but with more force of cooperation, or co-co-disciplinarity).

Virtual-disciplinarity is intended in holistic terms, it would mean, that all the Net is a form of education, even outside the official institutions. Nevertheless, or because of that, and because it includes the social-disciplinarity, it requires a strong attention and a protection from educators, from parents, friends, teachers, public officers, for its pervasive influence.

Hidden-disciplinarity requires much attention from all of us. It suggests that all the everyday experience has influence on our mind, even if we don't pay attention to it. It could also be dangerous, since it shapes our behaviour without our conscience. It is largely used by advertisements for merchandises.

4.2 New ways of environmental teaching

The evidence-informed practice movement gave rise to a rich field of study looking into the dynamics of knowledge (Levin, Wadmany, 2008, p.236). Terms such as knowledge management, knowledge-to-action, knowledge translation, transfer, mobilisation, brokerage and mediation consider the changing aspects of the understanding from different angles.

The dynamic has evolved along the last times, according to 3 different models: Linear, Relational, Systemic.

In both the linear and relational models, a strong emphasis is placed on mediation, i.e. by intermediary actors and processes that bridge the gap between communities of research producers and users. Intermediary actors include organizations (e.g. brokerage agencies) and individuals (e.g. translators, brokers, gatekeepers, boundary spanners and champions). While each actor is important in a systems view, this view implies that all actors together shape the research ecosystem through their interactions, feedback loops and co-creation (Wenner, Campbell, cit).

Here we will propose the original interpretation of the 3 models, to which we will affix a graphic depiction.

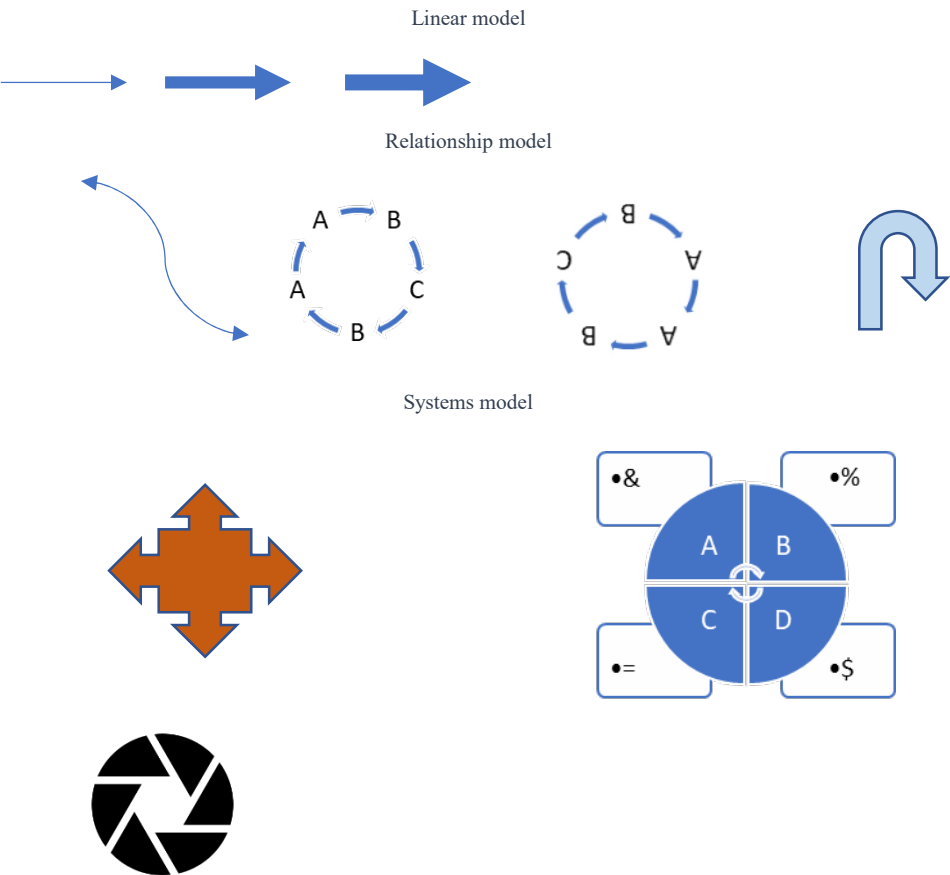
The Linear model suggests a one-way process. The Relational models incorporate the linear model's principles for dissemination and diffusion, and then focus on the interactions among people using the knowledge.

In the relational model, knowledge comes from multiple sources (research, theory, policy, practice), not just from the researcher. Its use and effectiveness depends on effective relationships and processes (Best, Holmes, 2010).

The systems model builds on linear and relationship thinking, where relationships themselves are shaped, embedded and organized through structures whose various parts are tied and linked together.

Working with complex systems, offers new ways of understanding the behaviours of these systems, and the iterative, evolving requirements of transformation. (Best, Holmes, cit).

Figure 1. Graphic Representation of dynamic models



Source: Own elaboration.

Social skills instruction supports on developing social relationships, self-management strategies, improve school performance, and restorative practices, to finally receive support for, and reinforcement by skilled adults, trained in evidence-based practices.

As for the adult population, learning should be focused on improving employability, through a combination of education and practical job training. Barriers to participation in learning need to be removed, and delivery methods need to be more innovative and flexible. (OECD, 2017).

5. Conclusions

The travels are intensified after the several innovations in the motorcars, railways, and flights, like the amelioration of economic conditions. Communications are strengthened, according to the virtualization of communications, thanks to the global net and the updated devices for utilising it, all linked together and associated with our personal data, our movements and interests. That means that globalization is multifaced in tangible terms and invisible terms, touching all the aspects of our life. The globalization and the Web are modifying our habits and subtly influencing our minds and our thoughts. All the aspects of communication are becoming not only information, but also forms of education (if not dis-education). The global net of information will need an enlightening literacy, and an increasing arrangement in practical skills for employment, like moral skills for responsible governance towards a world of global equity.

Responsible, teachers and parents must face the new tendencies, follow them and guide the youngest for the better, at the same time protecting themselves and the pupils from the dictatorship of the Web.

6. References

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