



Review Article

Volume 9 Issue 2 - July 2021  
DOI: 10.19080/JPFMTS.2021.09.555759

J Phy Fit Treatment & Sports  
Copyright © All rights are reserved by Almada F

# Thinking Science and Education Implications and Dysfunctions



Almada F<sup>1\*</sup>, Fernando C<sup>2</sup> and Vicente A<sup>3</sup>

<sup>1</sup>Retired University Professor/Independent Researcher, Portugal

<sup>2</sup>University of Madeira - CITUR, Portugal

<sup>3</sup>University of Beira Interior - CIDESD, Portugal

**Submission:** July 09, 2021; **Published:** July 28, 2021

**\*Corresponding author:** Almada F, Retired University Professor / Independent Researcher, Portugal

## Abstract

As in many other fields, in science we have almost as much difficulty in understanding the past (what we seek to do), as in foreseeing the future (which we would like to guess). This does not authorize us, nor does it even mean, however, the acceptance of having a not very precise view of what science and knowledge acquisition is in the present (a present, now, this moment, that some say is merely a 'fold' between the past and the future). But let us leave the future and the present (and the running of time) to other moment. The past, which we can try to interpret from a point of view situated, inexorably, today (we cannot escape from this), with all the paradoxes to which this obliges, as we tried to leave open with what we said above.

From here, where we are located today, we have difficulty (we were almost saying impossibility) in realizing what happened twenty or thirty years ago. Even when we lived in these times. It will be even more difficult for those who have just heard reports, more or (above all) less reliable, which are always interpretations, which we receive in 2nd, 3rd, 4th, ... 'hand'. Even if in the times we live in we have difficulty referencing, with a minimum of precision, when the past is centuries away, the difficulties certainly increase. However, it is essential to understand what has happened, at least in the last two or three centuries, so that we can understand where we are today in education, the context in which we are integrated, the world in which we live, the science we have, etc. Despite the ruptures that Thomas Kuhn identified, giving us another look at the dynamics of evolutionary processes as well as the paradigm shifts that have happened, there are dynamics, habits, addictions ... that mark and survive.

[Note: When there is a rupture and a paradigm shift, there are constants that remain, even if viewed in another way in the new paradigm; the "tools, conceptual or material", available, as Ian Hacking tells us, are determinant in the definition of works that are achievable.]

The future, paradoxically, will be easier to conceive, to guess, because it is what we can build if we do not lack will and capacity. But so far, the effort (which many refuse) that requires us to build and gain coherence, leaves us empty and the temptation to believe in determinisms, or luck, always easier to accept (a priori, because then, usually, we complain), because immobilism is a dangerous temptation, which is not for the costs it has. Once this framing exercise is done, let us move on to science, the central object of this exposition, in its relationship with the phenomenon of education.

Let us not forget that everything changes, everything transforms- people, contexts, points of view, intentions, wills .... What means that we must constantly understand the processes to make the necessary adjustments so that consistencies and balances can be acceptable (possible to live).

**Keywords:** Framing exercise; Dysfunctional; Production; Dissemination; Distribution; Consumption; Criticism; Global

## Science & Education

A relationship that should be privileged but that is dysfunctional. Science and education are complementary contexts of treatment of knowledge (production, dissemination, distribution, consumption, criticism, and analysis, ...). But for this complementarity to be efficient, its articulation must be able to

be done in a 'natural' way. Which does not happen because the stages in which their evolutions take place are not only in contra-cycle (mutually) but are also often contradictory [1,2]. The return to a bucolic and simple past is nothing more than a naïve utopia of those who do not have a minimally consistent perception

of what was this past and/or (some accumulate) the costs and compromises that today would be necessary to recover some elements of these times. This is even for groups that apparently reject modernity and its technologies, habits, structures, gadgets, etc., and live with supposedly archaic aspects and facets (but using many of the means, good or bad, of 'today'). It is also that in the past the formulas found, to be minimally efficient and to have the necessary expression so that today we can still detect them, were marked by existing contexts. Others, many even, unable to survive, disappeared and lost without a sway, being frustrated experiences, without having had the time or ingenuity to assert themselves in the conditions and contexts they faced. Out of time, they did not survive. In this framework, drawing lessons from the past, capable of being difficult in the current framework, with coherences (endogenous and exogenous) and balances of their own, is not easy.

However, if we can (if we could) escape the slogans that underpin many of our perceptions today, building the visions we have and leaving the superficialities, going to the heart of the issues (of the issues that really matter and not the ones that are repeated to us insistently) to understand the features that are imposed, the surprises are a constant. A functionality really exists, has principles and laws to which they obey, coherences and balances to which they are subjected. It will not be for this or that discourse about gravity, for this or that way of understanding it, that we no longer run the risk of taking 'the apple' (if we are lucky only an apple) in the head. And the apple falls, in fact, we all agree (and if someone does not agree, we get an apple tree, which becomes a laboratory, and we will test it). The differences arise when you ask the question: Why? Looking back, we will see that the answers vary, for example:

- a) Because a spirit wanted to give a warning to the owner of the head...;
- b) Because it has tendency (a drive, a penchant, ...) to fall...;
- c) Because bodies attract in the direct reason of the masses and the square of the distance... Here we have already a reason, but not 'a why';
- d) Because the mass deforms space... - Why ... 'of the apple's fall' happens to have a reason, a feature...;

Each of these points is not just an outcome. The shift from one point to the next represents a rupture, a paradigm shift that, in addition to what we see at the local level, represents a change in globality by the implications it has, and by the (global) adjustments in the coherences and balances it causes. If we ask the same question by replacing apple with education, with science (specifying which, because the various sciences are located at different levels), with emotion, with feeling, with happiness..., the types of responses will remain similar, according to the coherences and balances in which it is included, marking times, evolutionary stages in the way knowledge are structured. Some of these 'views'

today are no longer even acceptable or are accepted by different people (thus showing their differences and contradictions). But are we aware of where we personally are? From what coherences and balances, we, personally, defend, what spaces/ times/ energies/ beliefs/ traditions... the whole and its dialectics and not the parts, in which each of us is situated? A conceptual leap, a disruption, that even not all sciences have done. What does not prevent, in any way, rather facilitates (borders define the territories), the endogenous and exogenous dialectics and discussions at different levels and dimensions..., the functionality (more or less efficient, more or less coherent and balanced), which is marked by the laws and principles to which it has to obey and within the parameters (many of which we ignore, the existence, the way of acting, et.) that constitute it and delimit it.

We thus have processes, coherent and balanced, as they have always existed in all times, although with greater or smaller depths. Or, rather, that they produced the times, that built them (a dialectic process), because they are their causes and not their effects. Coherences and balances that, because they are permanently in internal dialectics and with the outside, accompany and contribute to change. Or rather, they make the change. Structural and simultaneously structuring changes (not the episodes, incidents, which only fog visions and readings, although they are essential to 'see' the whole), from where we can draw the understanding of causalities, origins, transformations, ... Science, in its search for the universal, is (today) this search for causalities and the origins of transformations (and not, as some will still think, the analysis of punctual facts and the construction of data repositories, the incidents mentioned above, which in themselves say nothing - but which, however, can be useful, if worked with the intentionality that we have just described, we repeat). A search for the universal and a quest for causalities and the origins of the transformations, which help to seek to elucidate visions for the construction of conjecture or, on the contrary, help to refute it.

### **Education and science have here (i.e., from the perspective we advocate), incompatibilities that prevent**

- a) That education be a way to disseminate science, even paving the way for its acceptance, dissemination, application, reformulation, regeneration, etc.
- b) An education that is not (as many claim) an autonomous body with its internal logics, which lead to processes and criteria and forms of evaluation that favor the acquisition and reproduction of knowledge, within rigid and closed programs that take little into account the dynamics they impose (despite a discourse on creativity and innovation that sometimes seems to have concerns of this type of problems);
- c) That science, in the search for the universal and, therefore, in the search for causalities and the origins of transformations, is a space of freedom (and equivalent responsibility) of thought,

of vertigo to the unknown and the search for new solutions (conceptual and material), the possibility of experiencing and missing and rehearsing (which does not mean ignorance of the costs).

d) And not a laboratory of the exercise of technocracy, where bureaucrats use instruments preferably (fabulously) expensive (wealth has always been an indicator that helps distinguish the powerful from the rags) to gather data that, one day, eventually, will serve for something more than making communications that 'give points' to progress in a career ... merely bureaucratic.

**But for that to happen**

a) Education should predominantly be a space of construction and criticism, of the realization of 'work', mastery of tools (conceptual and/or material), of development of methodological capacity that makes efficient the search for solutions, debate and discussion, ...

b) Science would have, predominantly, a transformative vocation (at conceptual and material levels), of identifying problems and seeking its evaluation and selection.

**Utopia? perhaps**

Or utopia would be to think that we can continue this path of abandonment of challenges and desertion of the pleasure of accomplishing? Therefore, in search of immobilism, 'in a world' in which, literally, the continents move and the mountains travels, nothing is eternal, but of bureaucratization of life and the ways of being and behaviors, hoping, however, that everything can

continue to work?

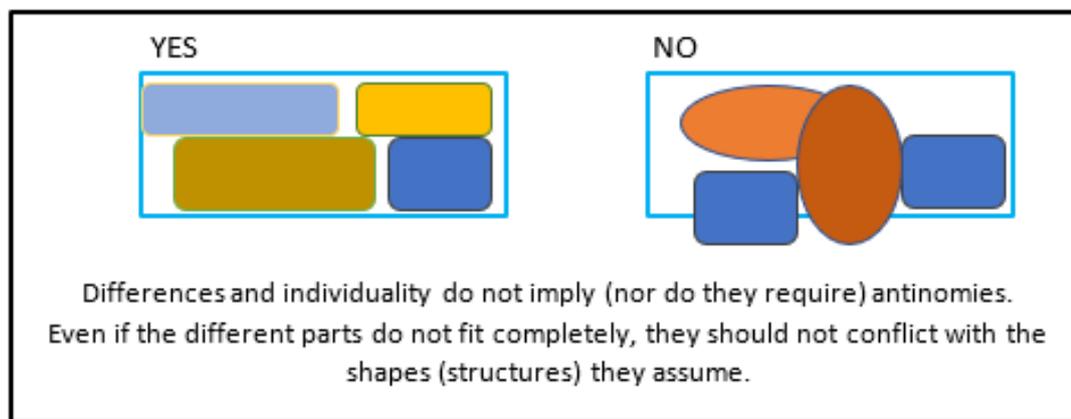
A paradox to consider – the apparent solidity of the part's view versus the difficulties of defining 'the whole'. A whole that some despair for not being able to immobilize and make eternal.

More than knowing some (we will never know them all) episodes (events), the fundamental is to understand the chain and articulation of these episodes, that is, the processes, and, if possible, to know too the rules of change and the principles to which it obeys [3,4].

**Education?**

To educate is to develop the capabilities and potentialities of the individual. When the discussion aimed to distinguish between education and the transformation of the individual, acting on their capabilities and potentialities, with a mixture of information / instruction, based on the transmission of knowledge produced, mostly, by science (as it was defended in times and today is still done by many) this definition was enough. It was essential not to complicate too much so that the key message could pass. But today it is essential to make change management. In a balance between what is possible and what is necessary. A balance that cannot ignore the coherence required, although sometimes it will force compromises at the level of the accessory so that the fundamental can be achieved. Science prepares knowledge, education prepares the man who will manage knowledge, use it, and enjoy it. They are complementary functions, but complementary if and only if (see, figure above), are in compatible stages of development, that is, in evolutionary processes in which the cycles of one respond to the needs and availabilities of the cycles of the other Table 1.

**Table 1:** A relationship that should be privileged but that is dysfunctional.



In a dialectic that has to consider that the cycles of science are random, the ruptures happen, see Kuhn, while in education the cycles have a more 'generational' duration (at least in the structure of current education, in which a generation 'prepares' the next according to the issues raised by the previous generation – a dynamic that has to be changed because it is no longer compatible with the speed at which the change takes place). With the shift

'of the fold' between yesterday and tomorrow that we call today/ present, a wave that sometimes breaks down (giving an image and symbolism to Kuhn's view of scientific revolutions), balances and coherences are not fixed, evolve, and transform, too. This dynamic is a good example (so we are going a little deeper and looked at it for a longer time here) of the sense that has the evolutionary process of education (and many other fields).

### Then we can

a) Look at the wave, describe it, measure its parameters (height, period, frequency, etc.), paint it, photograph it, etc. , without knowing what is going on, but enjoying the spectacle, we can build fantasies and even confuse correlations (simultaneity of phenomena, or the appearances of phenomena, or the analogies we can find, or...) with causalities that we can elaborate, without, however, resisting some well-elaborated rebuttals..., but why would we worry about these extravagances and whims of science?

or

b) Try to understand its functionality, realize how particles rotate in small circles (so seagulls poised on a wave do not leave the same place), not following the wave we see to travel, eventually, long distances (note - the wave runs, but the particles, after to rotate in small circles, return in the same place).

Accidentally (but not by chance, because it obeys laws and principles that we can formalize), either by a background effect in which the particles are caught by the support of the wave at the bottom, either by a consequence of strong winds, or because there is an effect of currents contrary to displacement, the bottom of the wave is locked (which can happen hundreds of meters deep) and the wave breaks (as the past when it finds the future and gives rise to the small fold that is today). One loses the magic, but it remains the understanding – some will prefer the ignorance that promotes magic (do not confuse magic, product of imagination with unknown, which can feed the dream and curiosity).

Others will choose to unravel the dynamics (what some will call the truth “naked and raw” – as opposed to the mystery that lets the imagination ‘gain wings’, with the inherent benefits and risks), the challenge of the unknown. Now the same wave (an allegorical representation of the world, let us not forget), seen from perspective A or from another point of view B, appears to us as a different thing, a different information. But also the observer (or the different observers) changes (knowledge modifies the observer... of course), according to what he seeks to see and even his experiences (Kuhn said, at a time when he had to defend himself fiercely, we are talking about the 60, 70 ... 80 and... of the last century, we quote – “What a man sees depends both upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see...” - in *The Structure of Scientific Revolutions*).

This means that the extrapolation we make from data sets collected in A or collected B are operations that, therefore, they deal with different information, although they may even come to the same conclusion, or to conclusions sufficiently similar to not be easy to distinguish which differences that contain [Note: again the whole and the parts - extrapolation- mathematical operation which means that from a set of data, from some data, which we can obtain, we infer a broader view that goes beyond the concrete of the data we have – both in their interstitials or beyond the limits

they cover]. Now when the differences of opinion are wide enough to ‘give discussion’, the confrontation with the ‘realities’ (always installments and, therefore, episodic - that is not confounded with the truth), laboratories (with more or less ‘white gowns’), help to take back doubts. We do not need to cling to our certainties and dogmas, ... or the conquest of a power that allows ‘the other to be eliminated’ (the term is not an exaggeration).

We, therefore, have options. Happy those who can do them. Of course, within the limits of the acceptable, because even folly and freedom (see, above, “the coherences and balances and the necessary commitments”) have limits, imposed by the survival of those who exercise them, in a logic of responsibility and prudence to which the cost/benefits ratio should not be unrelated. Not by the (many) powers exercised (?? - another discussion, another debate...), which should also be subject (in practice, not only in words), to a logic of responsibility and prudence to which the cost/benefit ratio should not be unrelated. But some go even beyond their borders and try to impose on others (education will not be one of the most exempt tools and the most innocuous pretexts), their coherences and balances. The divergences that often exist, when connected to and congruent, which they often are not, do not mean more than the place where each one situates his ‘fold of time’, his today. From where it turns out, as Kuhn (*ibidem*) tells us, “...what a man sees”, depending on “what he looks at”, “and upon what his previous visual- conceptual experience has taught him to see”. What does not authorize us, as Kuhn also said (complained!), to choose to the taste of our interests of the moment, the frame of reference that best could give us. There is a need for coherence and the necessary balances and, what is no less important, an intellectual honesty (some, optimists, admit that it exists) that regulates the process and guides the changes that must happen (coherence and balances are not rigid, can change, ... with coherence and... balance).

### Education, up in 1 and/or 2, opens different doors to us, for different worlds

Different options that today, in this ‘fold of time’, we have the necessary conditions to free people, individuals, to do, without questioning the survival of the group (at least in the short or medium term – which does not mean that the ‘bad’ options cannot lead to the subgroup that makes them, don’t be sanctioned to the limit of suppression, but rather that the global group can still survive – a debate to be held in other places – because we combine parts seeking coherence and global balances – but we always have sectoral views, far from ‘the truth of the whole’). It is in this problematic that education has to develop capacities to build and give answers and not only to know by heart and reproduce answers. The assessments that highlight and allow to predominate (indicators of an attitude) as a fundamental factor the ability to “repeat” ... replies made or informational content ‘from the past’, are ‘out of season’ (outdated). A simple examination with open consultation of the available information, repositories ‘at your fingertips’ (that old-fashioned!), denounces incoherence.

### Science?

Science is the search for the universals that allow us to understand the functionalities and their causalities. The 'global theoretical' is an extrapolation from the parts, while the 'whole praxis' (functional) is a coordination of the 'necessary parts'. Both are constructions of the observer from the knowledge that manages to withdraw ... of the observations he has made and what has been accumulated and transmitted over millions of years (with supports ranging from DNA, videos, books, cultural media, computer records, ...), to what was once called "culture versus nurture". The 'whole praxis', through experience (let's not forget that, for example, Einstein, nicknamed "the gentleman who had his laboratory inside the hat", was an expert in conceptual experiments), coherence and balances are put to the test and functionality is called into question, because the necessary parts are either there or are not there. In the case of the 'all theoretical' (in a Popperian conception), the "universal utterance" will always be waiting for "an utterance corresponding to certain facts" that puts it into question and refutes it. But let us not ignore that (at least in the phase in which we are, which is the result, especially of the education we have had) we are so sure that the utterances (what seeks 'the universal' and those that 'correspond to facts') the latter appears to us as more solid, more finished, more achieved, more consistent.

'The universal', with its obligatory flaws, always leaves us with the feeling (it should be noted that it is not even a perception) of discomfort, of unfinished, of lack of solidity, of inconsistency. What is but an illusion (a deformation of ours) because we seek certainties ... which sometimes (if we are not careful) leads us to nonsense like "... scientifically proven..." (which we no longer say, by shame, ..., but sometimes we still think). Nonsense that satisfies us more than "... not yet refuted...", which is almost a pleonasm, but which is more... 'true'. Uncertainty and the unknown appear to us as failures, like things we do not control, .... Do we wonder - a failure in education? An education where some (out of ignorance, certainly) think they know all the answers and be able to get the highest grade if... they dominate what is in the program (which gives us as a logical conclusion - 'why investigate, if I know all the answers?'). Now science is (today, in this fold of time), the ability to navigate through uncertainty and the unknown and that is where we should find "the highest grade of education". Science is always the exit from the safety of the comfort zones of the parts, to the universal (the inverse of gaining certainties of the old "is demonstrated that", valid in mathematics, forgetting the rest of the phrase "in this context", in the context of these facts; a situation from which even statistics suffers the consequences, with the loss of importance of the meaning (of 'meaning' note), of the inherent probabilities, of the value of the sample, .... Mistakes are paid for, ... and have collaterals that we often do not know (or do we not want to know?). We said - science is always to leave the security of the comfort zones of the party, to the universal in a search for to counter the entropy (the 'disorder') of the parties,

in a widening of borders towards the unknown and insecurity. The "only know that I know nothing", from centuries ago, has not yet been integrated into the thought and logic that guides it. It became (more) a slogan, empty, of the verbiage of some 'scholars'. Knowledge is the widening of the number of questions with which every scientist struggled at the end (?) of a research paper, the widening of the scope in which questions are asked, the treading (transcending) boundaries to deny the transcendent (not "towards the transcendent", as some argue), until it can honestly affirm, "the paradox is 'my beach'".

### Science / Education - a dysfunctional complementarity?

Without objective there is no strategy, only scattered decisions. Do science and education have the same goal? Can they have the same strategies? And be complementary [5,6]?

Confronting positions, from what we set out above, trying to present the arguments (the premises) that allow us to base the syllogism that we achieve.

a) Science and education, more than factors of change and transformation, have been, for centuries, a spectacle. The spectacle science has marked centuries. It was necessary to interest the 'patrons', unable to understand the contents, processes, and interests, so that the financing could continue to flow (has a... 'smell' of actuality, no?). Archimedes, da Vinci, Galileo, Jobs, among hundreds of others had to perform the ritual and do 'the liturgies of science' to continue to be subsidized and promoted (two essential functions for the development of science ... and other 'arts'). The crown court, the nobility and the bourgeois, as well as by imitation, universities, states, appreciated these demonstrations of power, which helped to promote an image, of... prestige. Already wizards, shamans, sorcerers and so many other names (but with identical functions), they brightened, gave brilliance to those who did not have it. Today sportsmen, artists, fans 'of the most diverse arts' ... help to acquire social exposure to those who do not have it for themselves. A social exhibition that is coveted product and, consequently, 'well paid'.

b) Education, with its ancestors', instruction, teaching, literacy, dressage, inclusion, incorporation, integration, ..., distributed and incremented by its institutions, schools (lato sensu), has always been, with some exceptions (and we will not run the risk of banality adding "which confirm the rule"), fostering social promotion more than skills (how to assess skills? is the question that blocks). The spectacle, liturgies, and rituals, has more value, for their symbolism, than by the skills and proficiency they develop. Although, of course, they have to justify the slogans with which it seeks to honor itself based on "his concern for the individual" ... even when it benefits massification objectives.

c) Science, faced with an industrial revolution was forced to a concern about production (the steam machine preceded thermodynamics, electricity was the object 'of fair' before discovering other utilities, ...). A production that developed by her

side and forced science to ... not 'miss the train', literally.

d) A transformation that is not a product of 'immediate consumption'. Supports and support itself in development, generating wealth, perhaps indirectly (that is, with the tools they bring from the field of science or education), and without so much splurge, but more sustained in time and with gains that do not sum up like a spinning of fireworks, which shine a moment.

e) Education has (still have) generational cycles, science has to allow to anticipate the competitor ... again so as not to 'miss the train' (now less literally).

f) Education and science are factors of transformation, they are spectacle, they are products (like all products) with multiple strands. The difference lies in the aspects they favor, the objectives they have and the strategies that result in the search for efficiency.

g) Other strategies (other objectives, therefore) could even be complementary.

But no. As we have seen above, they forget that, as will be generally accepted by almost everyone - "Science prepares knowledge, education prepares the man who will manage knowledge, use it and enjoy it [7,8]." See figure above - Differences and individuality do not imply (nor require) antinomies. Even if the different parts do not fit completely, they should not conflict with the shapes (structures) they assume. See also "A Brief Contribution to Understand the Structure of Knowledge and The Construction of Science". [3] To finish off, we leave an example - one of the greatest exponents that break the spectacle science/knowledge conflict is, without a doubt, Alfred Nobel. Vilified and much attacked for having used science for the production and stabilization of explosives (which conflicts with the discourse of education, in this fold of time) held a union between the ability of science to create new products, its industrialization, and marketing, knowledge, spectacle, ... combining the necessary aspects to achieve, in an efficient way, a product with projection and weight for the social development and quality of life of individuals. And, perhaps even with a hint of humor, left a structure to distribute a prize with his name to distinguish producers of knowledge in different areas. [NOTE: We confess that whenever we hear of Alfred Nobel, an image seeps into our vision (illusion or mirage?), we see him, on a day of laureates, at the entrance of the Swedish Academy, hidden behind the beard, winking at us. And we would almost swear that we hear, in the background, almost imperceptible, some chords of the song "Send in the clowns", with stanzas like "isn't it rich?" ...

"don't you love farce?" ... isn't it queer?" ... The senses preach us of these matches! There is no way of avoiding it.]

### Conclusion

The need for a small shake: A tiny little virus, with no brains (which should lead us to wonder if the references we use to interpret the world will not be far from what we need - instead of the insolent position of judging that the reasons are on our side, as "superior beings" ... we have the presumption to be), tried to teach us that our lives, our societal dynamic, our habits and ways of life ..., are dysfunctional. Too much dysfunctional for what we can have. We elect vision as the primary sense. Turned to the outside, therefore. But we forget that we are 'people' who need to be educated (to develop abilities and potentialities). "Look to yourself ... too" the tiny little virus, with no brains (but intelligent and wise), said. But we are such lousy apprentices! We don't understand that there is a problem, what the problem is and that we need solutions, good solutions. We just want to have the magics, or else, to save ... the sun (itself, a tiny little part of the huge cosmos). And the sun will be saved ... for some billion years. Unless ...! Who knows?

### References

1. Almada F, Fernando C, Vicente A (2021) Strategic, Tactical and Operational Errors in Science and Knowledge in General. *CPQ Orthopaedics* 5(3): 01-12.
2. Almada F, Fernando C, Vicente A (2021) Science and Knowledge: Investigation and Decision at 2, 3, 4, 5, n Dimensions. *Biomedical Journal of Scientific & Technical Research* 35(2).
3. Almada F, Fernando C, Vicente A (2021) A Brief Contribution to Understand the Structure of Knowledge and The Construction of Science. *Journal of Physical Fitness, Medicine & Treatment in Sports* 8(4): 60-63.
4. Almada F, Fernando C, Vicente A (2021) Science: Scarcity Versus Plenty. *Biomedical Journal of Scientific & Technical Research* 37(3).
5. Almada F, Fernando C, Vicente A (2020) Causes and Consequences - Key Concepts Ignored (or hidden) *Journal of Physical Fitness, Medicine & Treatment in Sports* 7(3): 1-2.
6. Almada F, Fernando C, Lopes H, Vicente A (2019) Precision, Rigor and the Visions of Man. *Journal of Physical Fitness, Medicine & Treatment in Sports* 7(3).
7. Almada F, Fernando C, Vicente A (in press) Conceptual Tools to Think Man. *Advances in Orthopedics and Sports Medicine*.
8. Almada F, Fernando C, Vicente A (2021) New Research in Science but not Only: Conceptual Research on Knowledge - Structures Blocking and their Causes. *Novel Research in Sciences* 5(5).



This work is licensed under Creative Commons Attribution 4.0 License  
DOI: [10.19080/JPFMTS.2021.09.555759](https://doi.org/10.19080/JPFMTS.2021.09.555759)

**Your next submission with Juniper Publishers  
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats  
**( Pdf, E-pub, Full Text, Audio)**
- Unceasing customer service

**Track the below URL for one-step submission**  
<https://juniperpublishers.com/online-submission.php>