

A.S. Neills' Summerhill

as seen from Gardner's multiple intelligences theory

Josep Pradas

Translated into English by Ester Astudillo

A. S. Neill set up Summerhill, the epitome of the traditional-alternative school, in the happy 1920s, when psychology was still in its infant years and neuroscience had not been even incepted yet. When he published his book about Summerhill, [1] in 1960, no model of the brain's functioning was still at hand either, though psychology had advanced a good deal and didactics had swayed to get on a critical tinge, favorable to the renewal of schooling practices (in spite of the ballast of traditional practices still aparent today). Even so, Neill's book remains today a courageous, path-breaking milestone no other book of the period dared defend.

If we go through this text, already a classic in critical pedagogy, we find some almost intuitive references to ideas later developed by researchers working in neuroscience, that in Neill's case were only the result of his luckily scant stock of common sense, in its best well-meaning sense. In this paper I will tackle some of these *Summerhillian* intuitions, while comparing them with later teaching proposals by Howard Gardner, derived from his theory of multiple intelligences, dating from the early 1980s. [2]

School failure is one of the first concerns for Gardner in his book about teaching applications of the multiple intelligences theory, *Multiple Intelligences. The Theory in Practice* (published in 1993). For example, he talks of students with high academic scores unable to apply their knowledge to situations not covered in their formal schooling. [3] And he believes that this is the result of teaching practices based on the absolute predominance of the academic curriculum, that is, that concerned basically with linguistic and mathenatical contents.

This explanatory assertion is the first evidence of common ground between Gardner and Neill: statistics about school failure in the 1950s and 1960s were indeed gloomy for the prospects of the United Kingdom and, unfortunately, triggered among the conservatives a series of claims that some reformation against the liberal and progressive schooling methods be enacted. Just when it was starting to win adepts in the British schooling system!, in direct opposition with traditional educational methodologies, which made use of physical punishment and which so displeased Neill.

The boomerang of school failure

School failure indeed triggers great social concern. As a matter of fact, it has become a statistical datum that regularly hits the forecasts of the government, the morale of teachers and, especially, the future of children. However, some prevention must be taken into account: although it is a statistic datum, perhaps it is also a means for political manipulation.

Academic failure is the evidence that academic skills of the schooling population are going awry, kids that in some years' time will become adults (and maybe more to the point still, although perversely screened off: they will become the labour force and the target market). In spite of the unanimous agreement in all social and political spheres that academic failure is a growing social concern, most of the bonds and overlappings between the economic and the education systems are indeed deliberately screened. And in the current process of transformation of economic and labour conditions, it is short of apparent that lesser academic skills among the work force coming into the job market will increase their disposition to adapt to the wavering demands in the job market: a growing population with mid or low professional skills will increase competence among job candidates and favour their disposition to assume lesser incomes and maimed labour rights.

On the other hand, the schooling focus on core competences (only the basic ones, and basically those focusing on media literacy) with an aim to ease students' entry into the job market, mostly as a result from the boost in the ITCs market, turns out adults eager to accommodate to the growing offer on tech gadgets. Thus, the ICTs market is the economic counterpart to the schooling focus on media skills. [4]

So it can be stated that academic failure is, paradoxically enough, *beneficial* (although of course nobody will be frank enough to own up to it) for the current dramatic political, social and work reformation processes that the neocons are enforcing in those European countries lucky enough to have escaped from under the footing of Ms. Thatcher and Reagan's Chicago Boys, following 1976 Nobel Prize Milton Friedman's auspices. And it results beneficial because, in the long term, academic failure is sure an antidote against all chances of a dramatic bottom-up social revolution. After all, massive school failure among middle and low classes ensures that only those among higher castes will possibly access higher education, and thus it guarantees social stability. This is called *neutralization*, and has been known to be at work since the times education first came into the concerns of politicians, back to the time of the first great empires (Babylonians, Egypt, China and ancient Greece). [5]

Leaving aside the obvious entanglement between economy and education, school failure is also the excuse that backwardly-inclined academics, professionals and parent-support lobbies have brandished to enforce their complaint against schooling methods that are generating, so they say, bigger populations of illiterate

youngsters. Hardly a surprise that this comes precisely when the neocons and some other world-wide political organizations, allegedly educationally concerned and with akin views, are setting up dramatic changes in the sphere of education. [6]

School failure is thus construed as the direct result of the enacting of new non-directive schooling methodologies, competing with old-time methodologies based on mnemonics and repetition, ignoring as of principle students' personal drives and preferences. This 'new' approach on schooling came into being along the 20th century, if in different stages and timings depending on the political background of countries. Now the approach is being scrutinised and contested on the grounds of its very limited results: it has failed to produce youngsters that will meet the needs of the society of our times.

Those who do not see eye to eye in the new 'modern' schooling approach claim that old directive schooling methodologies *at least* guaranteed a moderately high academic success rate, certainly higher than that of 'modern' methodologies. Gardner puts it this way: they prefer to abstain from experimenting with new methodologies and rather fall back on safe, if obsolete, ones. After all, students' academic evolution could of old at least be tested at the end of every term, whereas new methodologies demand a long-term scope, which brings with it its own hazards: it may be too late when you realise that the country is going to the dogs! [7]

The argument, however, is weak. Those critical with new teaching methodologies seem to have a revealing interest in the entrepreneurial management of schools and in enforcing an 'equal' schooling for everybody, skipping that 'bothersome' obligation of schools to attend to diversity. [8] They are also for academic assessment based strictly on academic performance, meaning that those students failing to perform well enough will be disregarded and, what's worse, deprived the possibility to be offered some alternative pathway while still under schooling age.

So my view is that these critical lobbies are grabbing the day, so to say: they are taking advantage of the current situation, critical in all possible ways and domains, to pose school failure as the crux and the trigger of it all. The situation can only be reversed, they say, by bringing *Darwinism* back on stage, which after all is the crux element governing the job market. Only thus will students be prepared to adjust to the real, cruel world that awaits them out there, out of the school premises: reality come true. [9]

Gardner & Neill against traditional schooling methodologies

Gardner, an active supporter of progressive, innovative teaching methods, wrote a book exploring the practical applications of his multiple intelligences theory, dating back from the eighties, and makes a point of dissectioning the battle held in the UE between traditionally-inclined lobbies and progressively-inclined ones. Those backward-looking enforced legal reformations on education with a view, they claimed, to

straighten up the appalling education situation in their country: statistics yielded an unprecedented high rate of school failure, hopefully still unknown in our own country —however fast we are moving up!

Gardner's book, then, binds together his own assumptions with new upcoming developments coming from neuroscience, and lists a series of complaints against traditional schooling methods, first and foremost because they automatically disregard all new moves and approaches coming from the science areas.

Gardner's main allegations are as follows: [10]

- Traditional teaching's only concern are language and mathematical skills.
- Teaching is all-dependent on writing tools and mnemonics.
- School assessment consists of assessing the ability to reproduce that which has been learned via writing tools and mnemonics.
- Academic success charts only academic performance. Thus it encourages cognitive profiles especially able with language and maths and disregards all others. Students with other non-academic profiles are thus doubly underprivileged: not only because of their cognitive 'shortcomings', but also because they are not offered alternative pathways. They are doomed to fall prey to the vagaries of the economic system.

Gardner posits a new ideal school that will be concerned with all academic and non-academic profiles. Traditionally, students failing to perform successfully in tasks that demanded the use of writing tools and mnemonics were expected to improve by insisting on... tasks that demanded they make use of writing tools and mnemonics! Nobody thought of the possibility to offer them an alternative pathway to reach the target and get away with it fine enough. Gardner's view is that teachers must cater for all cognitive profiles of students, and that no academic ability should be over-stressed over any others. Attending to diversity should not be a secondary path for students failing to perform well enough according to traditional standards. A history lesson, he says, can be delivered diversely, in a fashion parallel to that of students with different cognitive profiles, so that the content intended by the lesson will be easily accessed by differently patterned brains. Gardner lists at least five different pathways to deliver a history lesson :

[11]

- Narrative style: a theme may be presented by way of a narrative or story.
- Mathematical style: a theme may be presented by way of numerical or statistical information, triggering deduction or other logical operations.
- Abstraction: a topic may be presented as the result of comparison or analogy.

- Aesthetic style: a theme or topic may be presented so that it makes use of sensory descriptions, giving way to exploring various art forms.
- Experimental style: a theme or concept may be presented through handling materials, modelling them, etc., whether they be a rock or a historical document.

For Gardner, teachers should ideally be able to offer all these different approaches to all students. [12] Teachers will be welcome to cast the syllabus away and are encouraged to explore imagination and creativity in their teaching approach, with a view to engage students in the building up of their corpus of knowledge as springing from own personal drives (*poiesis*). [13]

This is precisely, again, common ground for both Neill and Gardner: the ideal teacher as described above, that encouraging of students to discover different materials, a person capable of triggering creative narratives and dramatic and artistic spontaneous productions from children. [14] A teacher who will tell stories without resorting to abstractions [15] and will succeed in guiding his teachings so that they will remain relevant for children's lives beyond classroom time. [16]

Gardner criticizes traditional schooling methods for focusing too insistently on such training that will favour only certain academic profiles to go through regular academic tests and thus access upper academic levels; [17] he wonders why assessment instruments may not be compatible with other non-academic profiles [18] and suggests that instructors compare different assessment instruments and give them equal relative weight when they come out with each student's final academic score. After all, all students go through the same syllabus, only via different pathways, as they will best suit each student's cognitive profile.

Still, here comes a difference between both authors: Neill pays no attention whatsoever to academic assessment. In Summerhill no exams were held; in fact, nobody was ever assessed. Every student was in charge of their own future, and the only relevant issue here was every child's personal drives. School failure statistics should not meddle at all: in his view there are not, nor should there be, alternative pathways for those students either unwilling or unable to adjust well enough to the curriculum. Neill admits that children with non-academic profiles will never achieve enough skills that will bring them into higher education. He would not discuss that the university curriculum demands academic skills all right. Simple and plain, he posits that teachers should discontinue their imposing fretting over children's academic performance. Rather, teachers should strive so see that less able students will one day be adults happy enough to have become socially and professionally competent thanks to other alternative non-

academic paths, that certainly did not impose on them tasks such as learning by rote all capitals in Catalan counties, for instance. Such knowledge is utterly irrelevant, Gardner further states, lest for those students with a particular interest in it. Let cleaners be contented with their lot rather than fret over all that they missed out on account of their cognitive profile. [19] He adds:

Little do parents realize how utterly irrelevant instruction at school is. Children, like adults, learn whatever they want to learn. Prizes, awards and exams only hinder the appropriate development of their personalities. Only high-brows will pose that education derives from books. Books are least important in school. All you need attain is a child who will be able to read, write and count. The rest should be modelling, sports, drama, drawing and freedom. Much of the school work for teenagers is a loss in time, energy and patience. It deprives them the right to play and only play. It replaces young minds with ageing ones. [...] It is high time we go over the cornerstone idea of work on which the notion of school is leaning. It's generally understood that all children should know some mathematics, history, geography, a little science, a little art, and certainly some literature. It is high time we realize that the standard child holds not interest at all in none of these. [20]

Some additional tips

The neocons' campaign against the new model of schooling is not a novelty. In his book on Summerhill, set up in 1925, Neill also recounts that lobbies in favour of a traditional educational approach, still prevailing in the 1960s, when he published his book, complaint that students coming out of Summerhill were not academically nor socially competent to join their adult lives as it was expected of them. So the boomerang of poor academic results was already being hurled at him back then.

Further arguments can be put forward in defence of Summerhill and countering the accusation above, that is blatantly on the search of support from concerned parents and politicians. Summerhill graduates were lacking because they grew up in an reserve of freedom, the neocons said, so very unlike the real world awaiting them out of the school premises.

Life is hard and we must prepare children to adjust. So we have to discipline them. If we let them do whatever they wish, how will they ever be able to use their reasoning? How will they be able to compete with those who know their discipline? How will they ever discipline themselves? [21]

True, in Summerhill children were not made to study. But the truth is that, according to Neill, those willing enough did achieve academic standards and also got an extra competence bonus in creativity and self-esteem. It is a stated fact that some Summerhill students got into college and later became university

professors. [22] Neill also produced a favourable report on Summerhill signed by agents from the British Ministry of Education. [23]

There remains the issue of adjustment to social life after leaving Summerhill. What a fit will these children make who have been carefree to do whatever they wished during their schooling years, when they eventually enter a world of obligations and duties? Neill's answer is as follows: if we educate children to become happy adults, whatever their profession, children attaining low academic achievement will do fine enough in life, because they will have had alternative non-academic options to grow into satisfied adults. In fact, it's the parents' misgivings about the odds that their academically non-able child fares that are most detrimental for the child's prospects. [24]

As Gardner, Neill also strives to find alternative paths to academy. Not everyone has an interest to unveil the secrets of nature, physics, math or syntax, Gardner argues. Such a far-fetched approach is simply ludicrous: no future gardener or dressmaker will ever naturally show any such drives, Neill points. [25]

Neill has his own criticisms to make against traditional schooling (some of which are anticipations of Gardner's), amongst others, the following:

- Imposition of academic teaching and learning rhythms for all students alike (uniformity). [26]
- Traditional schooling does not provide decent alternatives for students with non-academic profiles, so with time such strains usually lead to adult frustration. [27]
- Traditional schooling encourages students to adjust to the economic and social demands, however unfair these may be. [28]
- Traditional schooling pushes such adjustment by encouraging study habits and routines (repetition, mnemonics), dietary practices, etc., and usually seeks the connivence of families. [29]
- The traditional curriculum utterly ignores emotional education, capital for the healthy and integrated development of children. [30]

Attending to diversity

Gardner's practical implementation of his multiple intelligences theory starts on the idea that remedial attention to diversity in present-day schools is entirely misguided: it is designed to *redress* the learning difficulties of children, while it should rather serve the children's natural drives! Thus, students deserving most attention are those who find most difficulties in the curriculum rather than most able ones, and so they are *prized* a kind of *reinforcement* in different tasks depending on the nature of their *difficulties*: reading, writing, speaking, maths, etc. That is, children with poorer results must keep their minds busy in areas out of their range of interests—that is why they find them difficult for a start!—and are made to cover the same dreary path twice or thrice while once was enough for their more 'able' peers (most children have at least average academic ability).

A student with difficulties in solving addition and subtraction operations will certainly not improve in that area by being assigned unending loads of operations to solve. This blind approach once again goes to show that though present-day schooling does make a point to attend to diversity, it does so in an effort to restore uniformity and to return *deviant* students back to their classmates' *standards*.

Thus, if remedial treatment were focused on the various *natural drives* of students rather than on their performing *difficulties*, many children failing to achieve academically would probably see an end to their predicament. This would also allow for higher diversity *within* schools and *across* classrooms: among students now target of remedial treatment some hiding gifted child would surely shine now and then with some rare non-academic ability that would otherwise be passed unnoticed in a context enhancing uniformity. Such a promising possibility is, yet, only available if exploration of areas alien to the academic curriculum is boosted.

In this regard, Gardner's ideal school focuses on the drives shown by children from the beginning of their schooling years: he disapproves of the curriculum's design as associated only to academic abilities; rather it should allow for children to build up their own curriculum as deriving from their range of natural interests, thus allowing them to open doors in their path through schooling years and to keep other doors locked. Gardner's ideal school is a *division for diversity* by itself, welcoming the very diversity inhabiting inside every child's core.

Gardner's precursor, Summerhill, was far less mild, since it left all doors open so the child may retrace his steps should he ever breed second thoughts about his former options. Of course, he did not posit any such thing as multiple intelligences, nor that different children may demand different teaching methodologies: psychology had still a long way to go before such a bold hypothesis could be put forward. Neill took care of children's natural drives by simply letting them be. He was never demonstrative of any teaching preferences or intellectual sympathies. He never addressed the possibility that certain teaching methods may best suit specific skills inherent to academically-able brains. For him the crux was, simple enough,

the child's natural areas of interest: any child, if interest-driven, will learn whatever that appeals to him enough, irrespective of the teaching method, including the traditional *copy and repeat* one. In fact, given the primacy of interest as the crux factor in learning and acquisition, Neill never took it under his wing to develop any approach as to didactics. [31]

Neill does not pay attention to the different stages of child cognitive development, posited by Piaget and now partly challenged by neuroscience. [32] For him, cognitive maturation comes down to maturation of inherent interest drives, and that will not be easily gauged or measured. He recounts the case of a Summerhill student who would spend school time roaming into and out of classrooms, workshops and arts classes, or around the school yards and playground. Still, as soon as he settled down, quite accidentally, into his natural areas of interest, he covered in as little as two years all of the curriculum he had left undone in his prior idle years: a *standardized* curriculum that children in schools just repeat *standardly* for five or six years on a row, according to the rule that advance must be taken under the step by step fashion. For short, a procedure that breeds boredom, lack of motivation, disinterest and failure in far more students than one may advance, even amongst academically able ones. [33]

The primacy of interest drives

This idea, that no matter the teaching method, the student's genuine interests guides his learning process, is not Neill's original, it's much older. In fact, John Locke already drew attention to elements common in children's play *and* spontaneous learning: children learn on their own when engrossed at play if and only if they are genuinely driven by interest, and become experts in the field simply because they are having fun! [34] This is the source of those 'modern' teaching methods that make a point to liken formal learning with play, via the two basic ingredients of the latter: freedom and change [35] (vs. repetition and obligation, capital ingredients of traditional teaching methods). I'll tackle this issue a couple of paragraphs below.

As I say, this idea is already partly suggested in Locke, who did not, however, draw parallels between school learning and play. His proposal is, rather, far more Machiavellian: to force children into play until they grow so fed up with it that they'd rather be freed from it and take shelter in books! Locke's option is to infuse boringness into children *through* play so that books come out the absolute winners in the contest! His is the most perverse formulation ever of the principle of aversion as applied to teaching. [36]

The idea just sketched above, that of transferring the playful elements of play into the school learning context with a view to transfer as well the easiness of its efficiency, was taken up by the new 20th century

modern schooling methods concerned with didactics. The idea rests on two capital facts: a) that play naturally catches the child's interest and attention, and b) that the child is allowed to take an active role in it. So this new theorists thought that teachers may as well engage in the attempt to spark some interest drive in children by making classes enjoyable, and thus transfer the children's engagement onto the curriculum. To that end they deployed strategies to allow children an active role in the building-up of classroom contents, presumably reproducing the role that spontaneous play naturally offers them. However, it is short of apparent that certain curriculum contents, such as the division mechanics, are impossible to be made into fun. As a matter of fact, Neill says, only he who is really moved by a genuinely driven interest in the division mechanics will apply his outmost cognitive ability to the task, however far-fetched it may result to expect children between 10 to 15 years to grow excited about the task! [37]

Neill complaint against these teaching principles and teaching practices, however 'modern': he found them deceptive especially for children, a sort of gilded pill. [38] The trick is anything but misleading and ultimately ineffectual. For Neill, interest drives cannot be *sparked*, they must be *naturally surfaced*. The child must be allowed to discover for himself what it is that appeals to him, some sort of activity to which he sooner or later will devote himself utterly and in earnest, as well as quite passionately, that which he will put all his might and energy and devote his working days to (*poiesis*), that will eventually lead to competence and efficiency. And quite effortlessly for all that. [39] "There is more education in modelling a snowball than in attending a grammar class," he points. [40] Neill earnestly claimed that play and learning are not the same thing: what's more, they must necessarily be kept separate. [41]

Still, in my teaching experience you will meet indeed the odd child that will willingly accept being cheated by teachers, will swallow the gilded pill and continue to cope with assigned lessons, covering the same curriculum contents year after year, if in growing detail and elaboration. Most students, though, get bored despite teachers' cheating efforts and lose their drive and pull instead. So although some develop a moderate tolerance for boredom, large numbers simply fall into the habit of giving in to weariness as a sort of adaptive advantage, thus disguising how deadly bored they are of school work. What's worse, this general disheartening not only disguises children's dispiritedness, but also their possible assets and abilities, buried under the work loads the curriculum sets on them daily. [42]

Indeed, Neill parallels the school to a sort of kennel:

Schooling quite resembles dog training, the child being flogged and whipped like a dog, who will become an obedient adult. We train dogs to serve our purposes; so we teach our children. At this kennel which schools most resemble, humans must be polite, they must level their voices, they must obey the whistle when it's blown and learn to have their meals at the times we consider it appropriate. [43]

This, again, is common ground for both Neill and Gardner. Gardner's ideal school does not conceive of likening learning to play either: his purpose is to guise the teaching approach according to the cognitive profile of every student as they are naturally and freely surfaced (exception being made for target students of under four years, the determination of whose cognitive profile demands of course entertaining procedures). [44] A group of children chosen at random will necessarily include different cognitive profiles associated with the seven intelligences described by Gardner. As mentioned above, the same tale may be told differently, and this applies also to maths and to the division mechanics. Gardner proposes to adjust as best we can our teaching approach to the raw cognitive profile of every student, as this will boost an interest in them so they will acquire the content most accordingly with their natural disposition. It is a well-invested effort at attending to diversity, and it will eventually prevent lack of motivation, inability to keep prior knowledge functional and, hopefully, will prevent school and social failure. [45]

School should not be turned into an item-standardizing factory, Gardner writes. [46] Nor into a factory turning out bored-to-death office workers who just made it to secondary tight enough after their boring-to-death primary years, Neill would have added. Nor into a factory that will push bored-to-death students through an obstacle race and then hopefully into university, who will in time become, blood, sweat and tears abiding, middling doctors, unimaginative teachers and hopeless solicitors, he would have appended. [47]

However, Neill goes beyond and claims that students should not be made to learn anything outside their range of interests: they will learn their share when the right time comes. Neill disclaims that a certain specific teaching strategy be necessary, say, for a history lesson. Cognitive profiles were for him but seminal intuitions. Understandably, then, his arguments were rough and inaccurate. Still, he firmly believed that he who really wants to learn about history needs not being offered tricks or pills, nor a specific approach best suiting his cognitive profile. Children are quick and quite happy to learn on their own with a teacher who will have a limited guiding role, or even without a teacher! That was the case of a Summerhil student who for thirteen years did not attend classes and yet became an adept manufacturer of precision tools. [48]

Conclusions

One of Neill's capital claims is that no special guidance is needed to become a good teacher; another is his deliberate reluctance to develop the official curriculum: he had a fast, absolute faith in the power of children's natural drives, which will bring out their own natural abilities and help them focus attention on the areas which they will best and naturally command.

He was harshly criticised because he never got round to breed high rates of academic achievement among Summerhill students, yet still his approach does not differ much from Gardner's, brought to light three decades later. Both seek alternative pathways for students failing to perform well academically so they may attain a professional qualification that however skips standard exams on literature and algebra, for instance. Such exams will on breed dismay and disappointment that will haunt them during their training years and finally congeal into adult frustration and personal failure.

The breach between Neill and Gardner has to do, more than anything else, with the spirit of the times they lived in. Neill could tell apart, albeit intuitively, academic skills from other non-academic skills, which Gardner classified and elaborated on some years later (mechanical, artistic, etc.). All these were assigned a decent enough role in Summerhill. Still, there comes a time, at the end of the schooling period, when a no-turning point comes to pass: academically-able students may continue their journey and pass onto the immediate upper level; students non-academically gifted shall be dumped. Neill's only concern was that up to that point, other barriers and filters during the schooling years should be banned so that children will be offered the chances to bump into their own abilities and labour on it to make them surface. That's why in Summerhill no tests were ever held.

Three decades later Gardner claimed that the education system needed to see to it to avoid social exclusion, which in all probability will lead to school failure. He supported his claims with an elaborate theoretical apparatus that helped him put forward quite realistic, feasible and practical alternatives. He applied his multiple intelligences theory to posit different alternative pathways so the curriculum could be best accessed by different cognitive profiles, and claimed that school assessment should also be likely adjusted. He was positive this would, if not erase, at least diminish academic failure rates and ease the entry of certain profiles of students into the labour market.

However, Gardner never explained how the privileged non-academic profiles who luckily make it to university will cope with a highly academic curriculum, deprived as they are of academic abilities. Indeed, it was never a concern for Neill either, and he consistently skipped the point in his writings. Yet it was because he assumed that non-academically gifted students will *naturally shun* higher education. Or rather, since today universities are brimming to the top with non-academic profile students, he expected that they *will know better*. In this regard, there's no doubt that Neill's approach was far more realistic than

Gardner's. Today's state of affairs of the world, by and large, is irrefutable evidence that he hit the nail on the head all right.

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[1] A. S. Neill, *Summerhill*. México DF, Centro de Cultura Económica, 2010 (third reprint of the second edition, 2004; the first edition in Spanish dates from 1963, and the English original edition, from 1960). Foreword by Erich Fromm.

[2] H Howard Gardner, *Inteligencias múltiples. De la teoría a la práctica*. Barcelona, Paidós, 2011. A review of this book available here: <http://escuelaconcerebro.jimdo.com/rese%C3%B1as/inteligencias-m%C3%BAltiples-de-h-gardner/>. The theory of the multiple intelligences was set forth by Gardner in the book *Frames of Mind. The Theory of Multiple Intelligences*. New York, Basic Books, 1983.

[3] Gardner *Inteligencias múltiples, op. cit.*, p. 249-251.

[4] For an analysis of the economy-driven treatment of core competences at school, see the paper by Olmedo Beluche, "La educación por competencias y el neoliberalismo", published in [The haine.org](http://La.haine.org) (04-03-2013), presently erased but still available here: <http://lacabezaderousseau.blogspot.com.es/2013/03/una-critica-al-sistema-de-competencias.html>.

[5] See Abbagnano, N., & Visalberghi, A., *Historia de la pedagogía*. México, FCE, 1992, p. 12-15, and Jaeger, W. *Paideia*. México, FCE, 1957, I, 1, p. 19-20.

[6] According to Olmedo Beluche in *op. cit.*, "La Organización de Cooperación y Desarrollo Económico (OCDE), que reúne a las potencias capitalistas, publicó en 1995 "La flexibilidad del tiempo de trabajo" y, en 2001, "¿Qué futuro para la escuela?". Entre 2000 y 2006, la Unión Europea aprueba el marco de referencia para las "competencias-clave", necesarias para el aprendizaje a lo largo de la vida, para el desarrollo personal, la ciudadanía activa, la cohesión social y la empleabilidad."

- [7] Gardner *Inteligencias múltiples op. cit.*, p. 102.
- [8] Gardner *Inteligencias múltiples op. cit.*, p. 117.
- [9] Gardner *Inteligencias múltiples op. cit.*, p. 102.
- [10] Gardner, *Inteligencias múltiples op. cit.*, p. 56.
- [11] Gardner, *Inteligencias múltiples op. cit.*, p. 31.
- [12] Gardner, *Inteligencias múltiples op. cit.*, p. 268-269.
- [13] Gardner, *Inteligencias múltiples op. cit.*, p. 189.
- [14] Neill, *Summerhill, op. cit.*, p. 69, 72-74, Gardner *Inteligencias múltiples op. cit.*, p. 194.
- [15] Neill, *Summerhill, op. cit.*, p. 26.
- [16] Neill, *Summerhill, op. cit.*, p. 40, for a description of the daily life of Summerhill students.
- [17] Gardner, *Inteligencias múltiples op. cit.*, p. 238-241.
- [18] Gardner, *Inteligencias múltiples op. cit.*, p. 106.
- [19] Neill, *Summerhill, op. cit.*, p. 20-21.
- [20] Neill, *Summerhill, op. cit.*, p. 37-38, my translation from Spanish.
- [21] Neill, *Summerhill, op. cit.*, p. 101, my translation from Spanish.
- [22] Neill, *Summerhill, op. cit.*, p. 21-22.
- [23] Neill, *Summerhill, op. cit.*, p. 76-82, available here: <http://lacabezaderousseau.blogspot.com.es/2013/04/summerhill-bajo-inspeccion.html> .
- [24] Neill, *Summerhill, op. cit.*, p. 40.
- [25] Neill, *Summerhill, op. cit.*, p. 39.
- [26] Neill, *Summerhill, op. cit.*, p. 20 and 27.
- [27] Neill, *Summerhill, op. cit.*, p. 40.
- [28] Neill, *Summerhill, op. cit.*, p. 89.
- [29] Neill, *Summerhill, op. cit.*, p. 93.
- [30] Neill, *Summerhill, op. cit.*, p. 93.
- [31] Saffange, JF, "Alexander Sutherland Neill (1883-1973)," in *Perspectivas: revista trimestral de educación comparada* (París, UNESCO), vol. XXIV, 1-2, 1994, p. 228.
- [32] See Felix Pardo, "El error de Piaget. Cómo las evidencias empíricas obtenidas por las neurociencias informan una nueva didáctica de las matemáticas (Parte I)", published on *Escuela con cerebro*, posted on April 19 2013: <http://escuelaconcerebro.wordpress.com/2013/04/19/el-error-de-piaget-como-las-evidencias-empiricas-obtenidas-por-las-neurociencias-informan-una-nueva-didactica-de-las-matematicas-parte-i/>
- [33] Neill, *Summerhill, op. cit.*, p. 67-68 and 106.
- [34] Locke, *Pensaments sobre educació*. Vic Eumo 1991, sections 151-152.
- [35] Locke, *Pensament...s*, 74 and 128.
- [36] Locke, *Pensaments...* 124, 128 and 129.
- [37] Neill, *Summerhill, op. cit.*, p. 20-21.
- [38] Neill, *Summerhill, op. cit.*, p. 39.

[39] Neill, *Summerhill, op. cit.*, p. 106-107.

[40] Saffange, *op. cit.*, p. 226, quoting an excerpt from Neill's book *A dominie in Doubt*. London, Jenkins, 1920.

[41] Neill, *Summerhill, op. cit.*, p. 38.

[42] On the gap between student's real skills and self-perceived competences, see the paper by Jesús Guillén "Inteligencias múltiples en el aula", published May 8, 2013.

[43] Neill, *Summerhill, op. cit.*, p. 93, my translation from Spanish.

[44] So-called Spectrum classrooms, a display system that makes use of materials to find out the cognitive profile of students, and can be applied as of 4 years of age (Gardner, p. 10 and 30). This method allows to discover skills that will be passed unnoticed for parents and teachers in traditional schools because of the primacy of the academic profile imposed on all students in uniformity-oriented classrooms (Gardner, p. 139). PIFs projects also allow for certain artistic competences to surface from 11 or 12 years of age, and help establish academic-alternative pathways (Gardner, p. 170 ff).

[45] Gardner, *Inteligencias múltiples op. cit.*, p. 254.

[46] Gardner, *Inteligencias múltiples op. cit.*, p. 119.

[47] Neill, *Summerhill, op. cit.*, p. 39 and 89.

[48] Neill, *Summerhill, op. cit.*, p. 77.