

11-2014

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Recommended Citation

Chan, W.-h. P. (2014). Unveiling the violence in education: from a teacher's point of view. *Cultural Studies@Lingnan*, 44. Retrieved from <http://commons.ln.edu.hk/mcsln/vol43/iss1/6/>

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Unveiling the violence in education – from a teacher’s point of view

Chan Wan-hang Philip

It is quite a stunning discovery when I surf on the website of Nobel Prize Organization. As a winner of the education system, evidenced by the competition of a university degree and a taught master degree, and by being an educator (teacher in a secondary school), the fact that only a handful of Asian¹ Nobel Prize winners made me ponder a lot. I personally do not prefer environmental determinism that states there is a geographical distribution on human intelligence. However it is heart breaking, especially for a teacher, to realize that despite our devoted effort on teaching, with the tight schedule, long working hour, well-elaborated curriculum and examination rituals, we seem fail in cultivating our younger generation to be outstanding enough to be a leader and bring positive change in the world. This makes me reflect a lot in our education system. The violence that takes place in the education system, which deters students’ potentials, may be a reason.

Violence has been traditionally defined as visible, and especially physical. It often means the violence that related to bloodshed, such as domestic violence and wars. However, violence has wider meanings. Violence can occur invisibly, yet it does not mean that it has less impact than the visible one. Invisible violence, such as violence in form of suppression and detention, may exert greater impact than the visible or the physical one. The seemingly peaceful societies in our time do as much violent as in the barbarian past. Invisible violence may appear in social norms, education system, mass media, urban design, and even law and order. This essay aims at paying attention to the violence in education system, with the example of compulsory education in Hong Kong. The violence in compulsory education can be found in several ways, namely the aim of education, the ways of implementing teaching in normal school setting, and the suppression of emotions in education. In this essay, the

¹ The number of Nobel Prize won by continents since 1901: Europe – 468; the Americans – 293; Asian: 64.

teaching experience, with particular reference to Geography teaching of the author, is used as an example to illustrate the invisible violence in compulsory education.

This essay first discusses the theory of violence and peace, so as to provide a theoretical framework for the analysis. The essay proceeds to the discussion on why compulsory education can be violent. Based on the author's observation in Geography teaching in a local secondary school, the aim of curriculum of Geography, the settings of class and public examination are the different ways of imposing violence to students. The essay will also critic on the violence of knowledge itself with reference to the curriculum of New Senior Secondary Geography. At last, it will narrate and evaluate author's attempt in conducting a field trip in Tai O, which brings students out of the traditional setting of schooling and in the hope that such trip could culture students' humanistic solicitude in a local community.

The Theory of Violence (and Peace)

Violence and peace has been found complementary. Regardless the definition of violence, which is to be discussed further later, peace is often defined as the *absence of violence*. (Galtung, 2005, p. 22) In order to establish a theoretical framework on peace research, the complementary of peace, ie. violence, is needed. According to Galtung, violence:

“is present when human beings are being influenced so that their actual somatic and mental realizations are below their potential realizations.” (Galtung 2005, p.23)

In other words, Galtung (2005) suggested that violence happens when any institutions or persons restrict others from achieving their potential realization by use of any mean. In this sense, education is, unfortunately, an example. The violence in education is structural. It is useful to identify the various parties interplay in the education system in order to understand which and how several subjects and objects that violence acts

on. The key players (stakeholders) in education, whom which violence is demonstrated, are students, teachers, schools, the Education Bureau as well as the Hong Kong Examination and Assessment Authority (HKEAA). Violence is not only found between teachers (and schools) and students as most people may think, but also found between the Education Bureau and students (and teachers), as well as HKEAA and students (and teachers). Regardless the enactor or the sufferer of violence, violence in local education can be found in at least four ways, namely the aim of education, the settings of education, the examination, and, the violence of knowledge itself. The interplay of different parties and the violence in between will be discussed in detail. The discussion will be focused on the author's teaching experience in a secondary school, with particular reference to the curriculum of NSS Geography.

The aim of education

Traditional thoughts suggest education shall serve to cultivate children with knowledge, skills and visions, so as to prepare them to face challenges in the future. Education also aimed at cultivating the younger generation with etiquettes and virtues that our society needs. Education is required as every individual in the society is inseparable and interdependent. Good personalities, virtues and similar value system are vital for a harmonious society to minimize conflicts due to different value systems. Yet whether the homogeneous value can truly bring harmony in the society is questionable, it does imply avoidance or a public fear on diversity. For example, minorities such as gays, lesbians, bisexuals, trans-genders (GLBTs), ethnic minorities, etc, are suppressed; being quiet, proactive and critical are usually labelled as socially unpleasant and are being criticized as unsocial, aggressive and cynical. An education system, therefore somehow "normalizes" the generation so as to make them more socially compatible.

The society of Hong Kong is often being criticized as materialistic. Cost-and-benefit is often over-emphasized. The education system, and thus, the students in Hong Kong share the same trait. As per the author's observation in the school he served, the majority of students choose his/her electives at their Secondary 4 solely based on their

perceptions on the “usefulness” of the electives. It was also observed that the subject teachers promote their subject not in terms of the subject contents, but the prospects of the subject and related careers during the parents’ night for subject selection briefing. The Curriculum and Assessment Guides of subjects offered in New Senior Secondary (NSS) also stated explicitly the prospects and the function of the subjects in the Introduction section. Take NSS Geography as example:

*“The study of Geography in senior secondary schools provides students who will study Geography in the universities with a solid conceptual foundation. [...] It provides a spatial perspective on socio-economic and environmental issues, a focus on citizenship and on national and global identity, and opportunities for developing generic skills such as the ability to analyze and synthesize, to solve problems, to communicate and to use information technology. [...] Prepare(s) students for a range of career [..., such as] *urban and transport planning, resources and environmental management, tourism and recreation and, at a broader level, administration and business.*” (CDC, 2007, p.3, emphasizes are highlighted)*

The curriculum has emphasized the benefits of studying Geography. The same happens in the curriculum guides of all other HKDSE subjects. It focus on the usefulness of the subject in preparing students for further studies and mainstream careers, such as “*urban and transport planning, resources and environmental management, tourism and recreation and, at a broader level, administration and business*”. (CDC, 2007, p.3) The spirit of Geography, such as cultivating curiosity and appreciating the beauty of the nature and human endeavours, is omitted.

Such statement in the curriculum guide reflects thoroughly the mentality of the Education Bureau and the social expectation on education. Teenagers are obligated to attend schools to acquire knowledge and skills that are found useful in the future. From a social perspective, teenagers are obligated to attend schools so as to let them be ready and be useful in the society. No wonder the former name for Education

Bureau was the “Education and Manpower Bureau”. Education in Hong Kong is not for the education sake, but for the sake of manpower supply.

Education for the sake of manpower supply is itself violent. If children are regarded as manpower in the future, the Education Bureau is actually monopolized the manpower of Hong Kong, for that all students are required to attend school from Primary 1 to Secondary 6. With a set of standardized contents, students’ creativity, originality and potential are therefore limited in the standardized syllabus in their 12 years of study. Education system does not only monopolized manpower as it prepares students to mainstream careers, but also limits the potential development of these “future manpower”. Therefore the education system in Hong Kong is violent.

The settings of schooling

Compulsory education is found in every developed world. Since it is compulsory, education is usually free of charge and is subsidized by the government. It is recognized as the most essential part of a countries investment and it is generally believed that education can bring along with economic development and improvement of the livelihood of a country. Hong Kong followed suit to implement compulsory education in the 1970s. The duration of compulsory education has been extended to from 9 years to 12 years at 2009. Since 2009, students are required to undergo 6 years of primary education, and 6 years of secondary education (3 years of junior and 3 years of senior secondary). The 12-years of education lasts throughout the whole childhood and teenage. Therefore the design of the whole education regime is therefore play essential and critical role on children’s physical and mental development. However, not many compulsory educations in the world are successful. The education in Asian countries is often accused to be spoon-feeding, exam orientated and stressful.

According to the Education Bureau, students from new senior secondary education are required to take two to three elective subjects in an addition to the four core subjects, namely Chinese Language, English Language, Mathematics and Liberal

Studies. The electives are assumed to take up 250 teaching hours, which is equivalent to 10% of the total teaching hours in the senior secondary education. Therefore the duration for the whole senior secondary education is about 2500 hours. (CDC, 2007) The senior secondary education starts at Secondary 4 and ends with the Hong Kong Diploma of Secondary Education (HKDSE) at Secondary 6. Students usually have their study leave at February at Secondary 6, which means the senior secondary education lasts for two and a half years. By calculation, students in Hong Kong have roughly 1000 schooling hour per year. Compare with about 400 hours per year in undergraduate education, and about 300 hours per year in post-graduate education², the senior secondary (also in junior secondary, as both levels have the same teaching schedule in a school) education is far more intensive. In a school setting, students are usually have their first lesson at 8:30am, and finish their last lesson at about 3:30pm, with about one hour lunch time and on average a total of a half hour recesses. There are usually 40 to 50 minutes per lesson, and 6 to 9 lessons per day. Different school has different schedule but it is generally a norm that each students take 5 to 6 teaching hour per day. It should be aware that the teaching hour does not equal to the learning hour. Teaching hours only mean the time of direct contact with teachers during lecturing and other class activities. Students are required to do assignments, revision for dictations, quizzes, tests and exams as their self-learning hours, which the exact number varies from students to students, depending on their ability and ambition.

In a usual setting of teaching, most of the local schools have class size of about 28 to 35 students. Some subjects or schools may adopt small class teaching, which may reduce the class size to about 10 to 20 students. Seats of students are prearranged by teachers according to their height and their relationship with other classmates (close friends and enemies are usually avoided to be put together), occasionally according to their ability so as to encourage collaboration among classmates in class. Depending on teaching style, students usually sit accordingly and being lectured by teachers, while occasionally work on class works or quizzes. Some subjects may also require

² Assumes each course in an undergraduate programme lasts for 3 hours per week, 13 teaching weeks per course, and 10 courses per year, the total teaching hour is 390 hours. In a post-graduate programme (as in full time Master of Cultural Studies in Lingnan University), each course lasts for 3 hours per week, 13 teaching weeks per course, and 8 courses per year, the total teaching hour is 312 hours.

students to do experiments. Teaching in recent years also encourages conducting group discussion among peers and presentations to enhance intellectual exchange among students. Nevertheless, students study the standard contents as prescribed by the curriculum guide, instructed by teachers, in a confined environment. Deviant behaviours and activities that disturb the class such as talking, chatting with neighbours, using mobile phones and being inattentive are not allowed. Teachers are encouraged to stop students' "misbehaviour" in order to manage the discipline of the class, which the latter is often believed to be essential to enhance effectiveness teaching and learning. To discipline students, it is also common that teachers' permission is required if students have some physical needs even to stretch body, drink water and go washroom.

It is not difficult to identify different violent acts in education onto the students. Students are not only physically confined in a standard classroom for the lengthy teaching hours every school day, but also mentally confined by the limited space, textbooks and a list of classroom regulations in prohibiting "misbehaviours". The teaching and learning in Hong Kong is somewhat like a mass production, where students are intensely fed by teaching materials. It is "*violence that works on soul [...],include(s) lies, brainwashing, indoctrination of various kinds, threats, etc. that serve to decrease mental potentialities.*" (Galtung, 2005, p.24) Although Hong Kong passed regulations to ban corporal punishment and teachers are trained not to provoke any unnecessary threats to students, Galtung's description to violence is still valid in local education. It reduces students' potential to think differently and to create due to the lack of both time and space in their course of receiving education. It is a physical violence as students are confined in a particular space for a considerable period in during their lesson. Stretching body, drinking water, and going to washrooms requires teachers' permission and may considered as disturbing. It is also a psychological violence as students are fed by particular knowledge while creativity is limited through standardized assignments, tests and examinations. Most of the students in Hong Kong lost passion in learning, lack of creativity and is in general obedient to teachers without much critical thinking. The violence in the nature of education regime in Hong Kong may be the cause.

The examination

In order to have a fair and just assessment for a number of ten thousands of candidates in HKDSE every year, it is unavoidable that candidates' performances have to be assessed according to standardized marking scheme. Students are therefore discouraged to give answers which deviate from the marking scheme. Examination system is often being criticized for its standardized answers that limits students' creativities to solve real life problems and restricts students from giving alternative insights. It is a kind of psychological violence since students are hindered to express their own view with reference to the knowledge learnt from textbook and real life. The format of the public exam in Geography is illustrated as an example.

Currently there is no school-based assessment in Geography. Therefore the public exam accounts for 100% of in accessing students' performance. Geography exam consists of two exam papers. One covers the compulsory syllabus while another covers the elective syllabus. Only Paper 1 contains multiple-choice questions, while both papers set data-response questions and short essays. Definitive answers for multiple-choice questions and data-response questions are set, while the marking scheme for short essay gives a greater freedom on the contents. However, it does not mean that it is a total freedom for writing essay. Students are required to plan carefully according to the requirement of the essay, and give answers with articulation of geographical concepts and knowledge. In other words, although not explicitly shown in the marking scheme, the requirements such as the range of concepts and the writing style are implied. The effect of this has been changing tremendously on the pedagogy. Geography, as a subject that concerns on man-land relationship, has a unique interdisciplinary approach. It does not require a very in-depth knowledge on science but it combines every science disciplines like physics, chemistry and biology for the understanding our natural physical world. It does neither require deep understanding on economics, politics and history though they are essential to be examined so as to make sense of the complex human world. In such sense, the study of Geography is not only to give hard knowledge and explanation on every geographical phenomenon, but to cultivate problem solving skills in tackling

interdisciplinary problems. It requires observation, understanding and affection to the natural environment and to the humanity. Therefore, teaching requires the intensive use of real life examples, case studies, along with field visits and exchange of idea. However, the reality is due to the tight teaching schedule and the nature of examination, field visit is limited, textbook is the main source of information. Intensive work on exam drills and lecturing remain the main pedagogy in local geography teaching. Some teacher, especially for those teaching lower-achieving students, teaches not the appreciation to the natural beauty and awareness of being a global citizenship, but solely on exam skills. Field trip is often at low priority due to the time constraint, safety reason, and perhaps most importantly, the irrelevancy to examination.

Examination can change the way we teach our students. It unavoidably encourages standardization due to the large number of candidates in an exam. It provides a seemingly more objective and creditable assessment on students' performance, yet it smothers other possibilities of which teachers may teach, and students may understand the world otherwise. Examination system discourages creativity. Students have to take their own risk in giving answers that are not appeared in the textbooks or not discussed in class. As the results from public exam has a significant impact on students' future, students tend not to take risk; while teachers tend not to give marks to students who have reasonable yet deviated answers from the marking scheme.

The author attended a lesson observation of his colleague, with a representative from the Education Bureau in a Secondary 5 Geography lesson. The topic was about the preventive measures of preventing tectonic hazards (such as earthquake, tsunami and volcanic eruption) of the less developed countries. There was one group of students suggesting people living in less developed countries should pay more attention to animals such as unusual deaths and abnormal animal behaviours. They suggested that such behaviours were important signals of disaster. My colleague rejected their answer and said it was not a valid one. I then asked the representative and see if such answer should be accepted in the exam. Her reply was no, and explained that "they cannot give a detailed account on how it (animal observation) works, and may yield

low marks in the examination”. Yet it is common sense and is supported by lots of scientific literatures and local histories that animals behave abnormally prior the onset of disaster. Students who attempted to pounce the inquiry question and try to relate their knowledge and experience are discouraged. After all, students in the group discussion are only encouraged to answer with ideas that were provided in the textbook and present their answer clearly to their peers. The overall effect of such reject of idea is obvious: students no longer attempt to think or to debate, but to accept and remember every line from the textbook for the sake of examination.

Examination constitute what Galtung (2005) termed psychological violence as students are rewarded with high marks when he does what the influencer (the examiners and teachers) consider as right, and punished with low score otherwise. In this way, students, and even teachers, are prevented from realizing their potentialities. (Galtung, 2005) Students become reluctant to think critically about contemporary environmental and social issues. Teachers, who are supposed to be resourceful and knowledgeable in geographical knowledge, are also reserved to encourage students’ imaginations and to provide interesting additional knowledge to arouse students’ curiosity. In the above example, students with potentially brilliant idea are discouraged. What the group of students suggest may be a low cost solution of disaster monitoring in less developed countries. The research on animal behaviour to disaster may be a good research topic that may contribute to disaster prediction. However, teachers’ comment, also reflected by marking schemes, smothered students’ thoughts, and worst of all, smothered students’ curiosity in learning.

The violence of knowledge

Modern knowledge requires objectivity. Knowledge has to be factual, rational, observable and value-free. “Subjective knowledge” relates to feeling, experience, opinion and value, is seldom considered as knowledge. However, the making of objective knowledge is rather costly and is male-dominated environment. Intensive use of laboratory apparatus, large number of sample size and some tedious, technical experimental procedures and statistics discourage the layman and native contribution

to knowledge. Myths, tales, sensations and experience, which are used to be a significant part of knowledge construction especially in farming, community building and disaster prediction throughout human civilization, are now considered as irrelevant, non-scientific and superstitious. To differentiate knowledge is a kind of violence. The way of which a power sees a native (or a young) population as primitive, uncivilized and illiterate, and the process of which that power superimposes the knowledge to the native population through a standardized curriculum with routine schooling, and thus the population abandon their own knowledge system and wisdom, are fundamentally a suppression and is a structural violence to the population. The violence in knowledge has immense impacts. The history of colonization of the western power in the past few centuries has illustrated at best the impacts to the colonized. Local knowledge and wisdom has been abandoned, forgotten, and rejected by the new generations of citizens in the colonized countries. For instance, most of the people speak major languages like English, Spanish and Putonghua but abandoned their own dialects; learn sciences well but fail to farm their own land to produce their own food; communicate well with the modern world but not the neighbours, their elder generations and ancestors. The heritage of local traditions, dialects and histories are in crisis. Experiences, traditions and wisdom are replaced by science and technology.

The dominant of western knowledge and suppression of traditional wisdom is still a common phenomenon in the whole world nowadays. The syllabus of New Senior Secondary Geography is used to illustrate such dominance. Unit 6 of the compulsory part in NSS Geography discusses the issue of deforestation in tropical rainforest. It explained one of the causes of deforestation in Amazon Basin is due to shifting cultivation, which is a cultivation method that inherited from generations to generations in the local tribes. It illustrates the arrogance of modern science in ignoring traditional wisdom, and giving an impression that shifting cultivation, which was used to be sustainable, is primitive and is not sustainable. One should know that natives lived for long in their own piece of land and percept their space in their own way. The natives do achieve equilibrium with the nature until the disturbance, in this case, the arrival of international corporations that extracts natural resources from the forest. The inquiry question for the chapter, according to the curriculum and

assessment guide (CDC, 2007), is “how can we strive the balance between development and conservation”. It is a mean to exert conflict between the two aims: development and conservation has to be mutually exclusive. Alternative view points, such as stop developing the forest and finding substitutes for natural resources, practicing local small scale farming instead of massive agriculture in the rainforest, may risk for low marks, simply because students should elaborate and explain how the balance of “development” and “conservation” can be strived and answer according to the assumption embedded in the question.

Another topic about famine also mentioned about farming (Chapter 5). It adopts traditional textbook way in understanding agriculture, ie. the system approach. With the system approach means factors inside the system can be simplified into an input-process-output model. And towards the end of the chapter, it states that technology is a solution of food storage. However, it is important to understand whether problem of food shortage does exist is still debatable. Some even showed that food supply can feed the whole population yet conversion of farmland by the developed countries to non-food production and the daily waste of food create food shortage problem. Yet the assumed food shortage problem in the syllabus gave students no ground to challenge its validity; students were required to examine the solution and the limitation to alleviate food shortage with reference to modern technology, as the inquiry question of chapter 5 states: “*Combating Famine – is technology a panacea for food shortage?*”

From the above examples in the current Geography curriculum, violence on knowledge is found. The choice of knowledge in education is done by the Education Bureau, and the Education Bureau usually takes reference from examination boards from overseas. Regardless how the syllabus is formed, there is a standard set of values and stand points that superimposed on the students. Together with the examination authority that standardizes answers for assessment, it is no doubt that education is a form of brain washing. The hegemony of knowledge production restricts and disregards traditional wisdom, value system and assumptions, and thus hinders the

possibilities for the generations to appreciate and learn from their ancestors and traditional cultures.

Field trip as a (less) violent form of education, and its limitation.

The discussion so far explained evidences of violence in education, namely the aim of education, the settings of schooling, the examination, and the violence of knowledge. All these violence of education causes tremendous impacts on students' development and limited the next generation in realizing their potentials. The fact that the aim of education is to "normalize" students as well as capitalize students as manpower of the society, limited students' possibility to think out of the box, explore the alternative way of life and achieve their own goals. The setting of schooling and examination exert physical and psychological violence to students so that students become obedient to higher authorities, in this case, teachers and examination board. The violence of knowledge is the fundamental problem of knowledge. Knowledge is not at all objective and value free, but is usually narrated by some authorities. Some knowledge is also excluded from formal education that students learn less than they should have.

Geography as an elective subject in secondary school education provide an excellent chance for alternative learning as field trip and experience learning are encouraged. On 17 May 2014, the author leaded a group of secondary 4 Geography students in a field trip to Tai O. It was a programme in collaboration with Tourism and Hospitality Studies (THS) teacher and students. The aim of the trip was to design a sustainable hotel in various locations in Tai O. Students were expected to relate the natural and cultural environment they perceived in the trip and use their knowledge learnt from both subjects in their design. Guided tours were provided by teachers (on the local environment) and local guided tour from YWCA (on the culture and livelihood of Tai O). After the guided tours, students were encouraged to walk around and visit the site of their designated site of which their hotel should build upon.

In terms of subject contents from Geography and THS, the field trip was successful as students had a real life example that they can relate the textbook knowledge in the field. They looked at a real river mouth, some coastal environment, the scars formed after landslides as well as the interior of a hotel. However, students seemed to know nothing more than “have further understanding on the subject knowledge”. As per author’s observation, students were either feel boring with the lecturing by the tour guides, or kept on writing on notes that teachers assigned. The author had once thought not to provide any task sheets for the students in the hope that students to enjoy and experience the environment of Tai O. However, it came to the matter of another form of violence, ie. the violence experienced by teachers. Teachers have to report on the learning outcomes in every teaching activity. The learning outcomes have to be measurable, objective and can be supported by facts such as assignments and projects. From the school’s management point of view, such evidence is important as a proof of students’ learning and teachers’ effort. To teachers’ point of view, such learning experience has to be accessed and graded, so that students have to submit their portfolio after the trip. Students in turn have to focus on the task given, and have less time to experience on the field. In this way, students’ feeling and knowledge gained from the field trip are restricted. The instrumental rationality of schooling, such as writing of reports, well-defined learning objectives in learning activities, etc. limited the possibility of teachers in broadening students’ horizons, and of students in exploring their own interests and insights through on site observations.

Solution to violence in education: Life-long learning

The violence of education in compulsory education is difficult to be eliminated. Even when students are taken away from the classroom and attend a field trip, they are still subjected to the violence that found in the education system, or perhaps in this bureaucratic society. One reason is that knowledge itself is violent, as knowledge taught in school is highly selective, which limits students’ potential to pursuit knowledge. While another reason is that compulsory education is a large scale programme in a city. Learning outcome of students under compulsory education has to be assessed. Assessment, in order to be fair and objective, parameters and marking

schemes have to be set. Such process of standardization is unavoidable in compulsory education. Furthermore, as the case of field trip suggests, the requirement of providing proof of learning through well-planned proposals with learning objectives, and written evidences to prove students' progress, also play a role in limiting students' scope of learning.

Therefore, the only way to escape from the violence of education is to engage in life-long learning. Life-long learning is not only a temporal concept, but it is also a spatial concept. People should learn anytime and anywhere. This implies making learning is a daily practice. Learning should be a process to ask questions out of pure curiosity, and solve daily problems that one discovered. Therefore learning should not be only taken place in courses, institutions, with syllabus and curriculum of any form; neither should knowledge be transmitted in one way from teachers to learners. Education is itself violent, in that it defines the role of educators and the role of the educated and in that knowledge transmitted is highly selective. Therefore considering education as knowledge transmission, as most of the education systems in the world do, is likely a failure. Successful education systems, such as in German, Norway and Israel³, do not emphasis on teaching knowledge, but to ask questions⁴. Education should be reformed from aiming at knowledge transmission to enlightenment, so that students acquire curious and critical mind, question and communication skills, problem-solving skills and creativity. This facilities students with the capacity of self-learning for life, and allow a true freedom of learning with their forever curious mind. With the mind full of curiosity, well-equipped communication and problem-solving skills, the potential of a person can be limitless.

³ Although it is not a very scientific way to evaluate education systems in terms of the number of Nobel Prize won, this renowned prize serves as important indicator for a nation's creativity and achievements to the mankind. Within the relatively small territories of Germany, Norway and Israel, they produced 152, 13 and 12 Nobel Prize winners respectively since 1901.

⁴ c.f. 張德齡 (2014) 以色列，教育就是不一樣《遠見雜誌》第 336 期 2014 年 6 月號 Retrieved: http://www.gvm.com.tw/Boardcontent_25538_4.html

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