

## **A new Global Basic Education System presented and A giant Global Education Deception exposed**

**UNESCO's Futures of Education Commission both missed and presented  
an opportunity to sustainably solve the global education problems.**

by

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### **1. The global basic education gloominess.**

Global basic education has for the past 25 years experienced continuing, critical, and increasing problems related to learning, enrolment, quality, equity, relevance, and financing. All official education research, all commissions, conferences, and investigations have dutifully reported and commented on this, but none of them has been able to present solutions to the problems or even reverse the continuously declining education trend.

Global education development is led, monitored, controlled, and managed by an unofficial network, which is called the **Traditional Education Establishment**, or **TEE** for short, throughout this document. It has its power base in the teachers' trade unions and the teacher trainings institutions.

**TEE** has a unique political position all over the world, as it is fully supported by all political parties from the far left to the far right and by humanists, idealists, socialists, and capitalists, but for varying reasons. This may be so, because most adult population of the world are parents, and the wellbeing of their offspring is more important than political and economic considerations.

Global education has, therefore, been allowed to develop as a "**human right for all and a social necessity**" without all the economic, financial, and political scrutiny, stops, and balances that all other sectors of the global economy are subjected to.

**TEE** has with its outstanding political power managed to keep the old traditional education delivery system practically unchanged for the past 60 years, causing all the education problems mentioned above. This was done with methods and for reasons that will be explained in this presentation, which was prompted by the final report of UNESCO's Futures of Education Commission.

## **2. The Futures of Education commission was coerced to invalidate UNESCO's previous outstanding work.**

When the third UNESCO-sponsored **International Commission on the Futures of Education: Learning to Become**, led by the President of Ethiopia, Her Excellency Sahle-Work Zewde, was launched in 2019, great expectations were expressed that the primary, crucial, and decisive education problems related to the basic education delivery system, education content, and organization, which two previous UNESCO international commissions, already in 1972 and 1996, had identified and presented, and which the TEE for the past 25 years had ignored, would finally be brought to the attention of the world and to a grand solution. The intentions, purposes, and goals for the Commission were from the beginning presented in no uncertain terms:

### **Part of a UNESCO tradition**

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The *Futures of Education: Learning to Become* is the latest in a series of global reports commissioned by UNESCO to grapple with the challenges that the future holds in store and to inspire change and issue policy recommendations for education.

The first of these reports, *Learning to Be: the world of education today and tomorrow* was developed in 1971-1972 and prepared by a commission chaired by Edgar Faure, a former Prime Minister and Minister of Education of France. The *Learning to Be* report warned of the risks of inequalities, privation and suffering and emphasized the universal features education. The Faure report called for the continued expansion of education and for lifelong education. It also stated that: "*Education today is facing critical challenge and we must think it out afresh in its entirety*" and "*The commission under-lined the fact that despite doubts and differing orientations, and whatever the progress or saving might be obtained from changes in the traditional educational system, the very heavy demand for education can only be met if instruments derived from modern technology are put to use.*"

From 1993-1996 a second international commission under the leadership of Jacques Delors, former President of the European Commission and former French Minister of Economy and Finance, prepared a report that was published as *Learning: The Treasure Within*. This report further emphasized the importance of a humanistic approach to education and established "the four pillars" of education, namely: learning to be, learning to know, learning to do, and learning to live together.

Among other important UNESCO publications on education in the intervening years is the 2015 report. *Rethinking Education: towards a global common good?* which proposed a rethinking of education and knowledge as global common goods.

All these initiatives, as well as UNESCO's work broadly across the Education Sector, inform the global report currently under preparation. The *Futures of Education: Learning to Become* report (forthcoming, late 2021) will build on this tradition and lay out an agenda for education policy dialogue and action at multiple levels.

On November 10, 2021, the commission delivered its final report ***REIMAGINING OUR FUTURES TOGETHER: A new social contract for education***, without any references to the original intentions or to any of UNESCO's previous, outstanding, and groundbreaking work for global education development.

In the Foreword, the UNESCO Director General makes an excuse for excluding them: *"these reports were insightful and influential; however, the world has fundamentally changed in recent years"*. This is a remarkable contradiction, because the world has during the past ten years, among many other things, changed in a way to make it possible to fully use the recommendations of the two previous UNESCO reports to finally solve the global education problems. The report particularly rejects the use of the new technology-based systems for knowledge-learning, which now have been developed and successfully used outside the official TEE-controlled environment. The report's underlined and emphasized statement: **"No technology is yet capable of replacing good human teachers"**, is, in fact, totally incorrect for more than 90% of the current average global basic education programs, which is knowledge-learning.

The TEE has once again managed to stop the development of education according to the proposals by UNESCO's two previous international commissions and to stop the use of technology-based teaching for knowledge-learning. They are now seeking *"a new social contract for education"* to get approval for continuing to manage global education in the same - for the global society unsuccessful and for the TEE very profitable - way as they have done for the past 25 years.

This will now be clarified for the world. By using the information from the two previous UNESCO commission reports and together with applying the new education delivery systems built on modern technology for all knowledge-based learning, I present a sustainable solution to the global education problems with a proposal for the layout and design of a new global basic education system that the Futures of Education commission could and should have done if they had not been sidetracked.

This can be found at the end of this document after a presentation of today's global basic education problems by comparing the situation 1960 and 2020 and an historic review of education development explaining how and why the traditional education system has been able to survive and obstruct the appropriate education development. It will be done with easily recognizable data and examples by using figures from the Swedish basic education system. It is a nine-year, "Grundskola", started in 1962, used by UNESCO and the World Bank as a model for basic education in the developing world and as a typical example of a modernized traditional education system, which also, like the rest, has deteriorated and now is rated on an average level in the world according to the PISA evaluations.

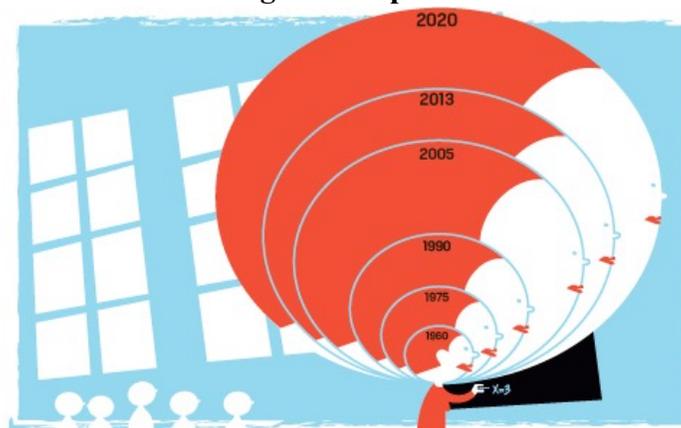
## 3. Global basic education 1960 and 2020.

**In 1960:** the car industry produced a Ford Edsel and a Chevy Impala; the tele industry produced rotary disc phones with landline connections; we navigated our travelling with maps and compasses; the computer industry produced room-size computers with insignificant capacity, costing \$ millions; and the global basic education delivery system was on average:

Classes of 30 students taught by teachers with a **teaching capacity** of about 20 hours/week for 35 weeks/year = **700 hours/year**.

This worked well at a time when schools still were a central point in the students' life, when teachers were able to completely master their subjects and the schools were the main source of knowledge for the students. The students had the same school and leisure time as now, but then, there were no computers or mobile phones; TV mainly in the evenings and there were plenty of extra job opportunities during their free time. The most important factor for basic education development was that there were no alternatives to the traditional education delivery system that even could be realistically imagined.

From 1960 until now the world population increased with 4.7 billion people and the **Knowledge Development 1960 -2020** was



*The amount of knowledge in the world has doubled every 7 to 8 years. The head volume of the teacher represents the amount of knowledge with 1960 as a base unit and the volume has in 2020 increased about 250 times and in 2030 it will be about 600 times bigger*

**In 2020:** with 250 times more knowledge than in 1960; the car industry produces self-driven electric cars; the tele industry produces mobile phones with global connection in milliseconds; we have all a global navigation system with meter accuracy; the computer industry produces laptops with 2TB storage for \$1000; and the global basic education delivery system is still:

Classes of 30 students taught by teachers with a **teaching capacity** of about 20 hours/week for 35 weeks/year = **700 hours/year**.

## **The learning problems caused by the failure of basic education.**

With about 250 times more knowledge to handle and the same delivery system capacity, schools and teachers are today no longer students' main source of knowledge; they can get more and up-to-date information instantly on their iPhones, and iPads. Teachers are left with a job, which is practically impossible to do to anybody's satisfaction. Their authority and competence can be easily questioned, and students often find schools and teachers lacking in both up-to-date knowledge and experience.

The content of education is limited by teachers' teaching capacity - about 700 hours/year - and that is only a fraction of today's needs according to both the UNESCO research - *Learning: The Treasure Within* - and the needed and wanted requirements of students, society, business, and industry. The course programs are to more than 90% knowledge learning, while non-knowledge-based learning is required to a much greater extent according to the same research. Because of the teachers' highly varying quality, both the teaching and grading of students have become arbitrary and un-equitable between schools, municipalities, and states.

The significant knowledge and learning deflation have been compensated by a corresponding grade inflation, thus sweeping the school and education problems under the carpet and blocked or silenced all proposals for change and development.

## **The problems the education failure has caused for the global community.**

Students' official learning support time in schools is limited by the teachers' teaching capacity, to about 700 hours/year. As the normal working hours on the labor market is about 40 hours x 45 weeks = 1800 hours/year, most students are left to spend about 1100 hours/year of extra - in addition to ordinary - free time in an environment, which today is packed with unproductive and misleading attractions and enticements. And that during nine years of their most critical development period. That is the main cause of today's extensive global youth-problems - alienation, mental health, gang-building, criminality, unemployment, etc. Providing basic education on a full-time basis is a necessary requirement in the future.

Providing official basic education with the traditional education system has become an economic and financial impossibility. Governments, states, or municipalities must finance basic education programs as a "human right for all" with little control of either costs or results. Basic education schools are "open for business" only during about 2/3 part the year but must be compensated with full year's pay. The traditional education system also requires expensive and special school facilities, which on average has use-factor below 50% when schools are in session and that is below 1/3 of the ordinary working time of the year. It is impossible for any enterprise to produce a satisfactory result under those conditions.

## **Why the traditional education system has not changed.**

For the TEE staff, teachers, teacher training institutions, education research, and other education related activities, the traditional education delivery system presents great advantages in money, worktime, employment conditions, job security, and prestige. Education can always show good results by manipulating student's grading and it is therefore no external demand for changes, which has allowed the TEE to continue as before.

The obvious failings of official basic education have made it possible for private business to make enormous profits, by providing paid-for education to students with well-to-do parents. There is overwhelming global evidence for this.

## **The only significant, positive education development during the past 25 years.**

Outside the official TEE environment new education delivery systems built on modern technology for knowledge learning have been developed, made available and successfully used during the past decade. With a teaching capacity of 24/7 all the year around it can provide each student with an individual, personalized, equitable, consistent, and first-class tuition and learning support in all knowledge-based subjects. The cost of production and delivery of digitalized knowledge learning - from the Khan Academy yearly report 2020 - is in the order of about US\$ 0.4/hour/student as compared to about US\$ 8.0/hour/student of today's education delivery system.

The Khan Academy, for example, is now “*providing free, world-class education for anyone, anywhere*” with a fully digitalized education delivery system. It has now an enrollment of about 130 million students in 190 countries.

The fundamental and significant difference with this type of knowledge learning is that all students learn until they fully master - or score 100% - of what is taught. In today's schools, students can proceed with knowing only a part of what is taught leaving gaps that accumulate until the whole system collapses.

Further information about digitalized knowledge learning at [www.khanacademy.org](http://www.khanacademy.org) and/or [www.youtube.com](http://www.youtube.com); search “Salman Khan education” and watch e.g.; “*Let's teach for mastery -- not test scores*” (in 10 minutes it presents a clear conception of the real global education problem) ; “*Education Reimagined* ” and “*Microsoft CEO Summit Innovation in Education*” (with Bill Gates) and more.

**That the TEE has totally ignored this outstanding new possibility for knowledge learning for the past 25 years is a scandalous neglect depriving billions of young people their human right to a good basic education.**

## **4. Education development history of the past 60 years.**

"Basic education for all" started to appear as a demand in the middle of the 19th Century and in my home country, Sweden, two basic principles for its establishment, which still appear in today's education system were adopted. Sweden was at that time mainly a farming society and one principle for basic education establishment was that schools would be open for operation during time when both teachers and students could be free from their ordinary farming work, therefore, the big break between sowing and harvesting time. Another principle was that for one hour of teaching, the teacher should have one hour of preparation time. Basic education developed, of course, differently and for different reason all over the world, but these, soon 200-year-old principles, are still alive in today's basic education systems on a global basis.<sup>1</sup>

After the Second World War a new organization, **UNESCO**, started to lead and coordinate global education development. With its Universal Declaration that "***education is a human right for all***" (1948) a rapid global education development started through reorganizing and reconstructing the century old, traditional education system, which was assessed, scrutinized, and updated for feasibility and efficiency.

In 1962, Sweden presented a new basic education system, a nine-year "Grundskola" which was used as a model for basic education development by UNESCO and later the World Bank to replace the colonial schools in the developing world. The "Grundskola" was also a typical example of a modernized traditional education system and is now rated on an average level in the world according to the PISA evaluations.

### **Learning to be.**

Global education development was initially successful from an enrolment point of view, but the quality of education soon became a serious problem. UNESCO established, therefore, the first "***International Commission on the Development of Education***" - ***the Faure Commission*** - to comprehensively study "***the world of education today and tomorrow***". It dealt in an objective and comprehensive way with all aspects of education as a vehicle for economic and social change. It made an in-depth analysis of the development potential of the traditional education system and found that it could never be expanded and extended to provide global, quality, and equivalent basic education for all.

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<sup>1</sup> When I became a full-time teacher in 1962, I took part in an official survey of teachers' working hours and was instructed to record one preparation hour for each teaching hour by the teachers' union representative.

In its final report, **“Learning to be”**(1972) the Commission made two specific and for TEE shocking statements; *“Education today is facing critical challenges and must be thought out afresh in its entirety”* and, *“The commission underlined the fact that despite doubts and differing orientations, and whatever the progress or saving might be obtained from changes in the traditional educational system, the very heavy demand for education can only be met if instruments derived from modern technology are put to use.”*

This defined the education delivery system; Classes of 30 students taught by teachers with a teaching capacity of about 20 hours/week for 35 weeks/year = 700 hours/year, as the primary basic education problem and it came down as a bombshell for the traditional education establishment. TEE realized a giant potential threat to its survival by technology taking over the education delivery system and heatedly rejected the Commission’s proposals as being utopian and totally unacceptable. **“Learning to be”** was, unfortunately, too far ahead of its time; the learning technology, which was required for improving education development, existed in 1972 only as a vague possibility. TEE used its politic power to brand UNESCO as being politicized and too liberal and influential, conservative countries like USA and UK left the institution. Because of this and lack of funds for financing development projects and research, during the 70s and 80s, UNESCO’s leadership and influence on global education started to slowly weaken.

### **A new actor on the global education stage; the World Bank (WB).**

With big money for education financing and research, the WB entered the education scene in mid-70s and started gradually, with prominently TEE-oriented staff to take over UNESCO’s role as a leader of global education development work. It strongly promoted the traditional education system, even though new learning technology had developed rapidly in the 80s and the UNESCO recommendations seemed to be increasingly viable for solving education problems.

One of the vital questions for the WB was what criteria for financing education projects should be applied. The Bank's loan officers and financial experts demanded that the standard “economic rate of return” for financing development projects should be applied even for education development projects. That turned out to be impossible to apply for education project, so the special education economists of the Bank managed to work out something that was called “social rate of return” for financing education development project. Using its political power, the TEE managed to get that approved, which meant that, in practical terms, education development projects never needed to be subjected to strict economic scrutiny or being financially accountable. This ruling is still in effect globally and is a major reason why education has not developed like other sectors of the global economy.

In 1990, The World Bank hosted and paid for the first **World Education Conference in Jomtien, Thailand**, where new goals and strategies for global education development were established for year 2000. The Conference declared that “the world had decided” that the traditional education delivery system should be continued. The World Bank promised billions of dollars in support for education development and - in partnership with **TEE** - it was now firmly established as the leader of global education development.

## **Learning: The Treasure Within.**

UNESCO was not satisfied (outraged) with the outcome of the Jomtien Conference, which had totally ignored the recommendations from “*Learning to be*”. To search for new and progressive solutions to the education development problems UNESCO established a second “**International Commission on Education for the Twenty-first Century**” - the **Delors Commission**. The Commission’s report in 1996: “**Learning: The treasure within**” could have greatly contributed to the efforts of modernizing and restructuring the education system. It further emphasized the importance of a humanistic approach to education and presented the design, content, and organization of a comprehensive basic education system:

*“If it is to succeed in its task, education must be organized around four fundamental types of learning, which, throughout a person’s life, will in a way be the pillars of knowledge; Learning to Know, Learning to Do, Learning to Live Together, and Learning to Be”. The module “Learning to Be” is designed to “enable each individual to discover, unearth and enrich his or her creative potential. This means going beyond an instrumental view of education, as a process to achieve specific aims in terms of skills, capacities, competence, etc., to one that emphasizes the development of a complete person.”*

This introduced the distinction between "knowledge-based"- and "non-knowledge-based"-learning, which official education research so far and even to-date has not at all considered. Global basic education was then - and still is - to more than 90% knowledge learning and all teachers are basically trained as knowledge teachers. *Learning to Know* is all knowledge-based learning, while *Learning to Do*, *Learning to Live together*, and *Learning to Be* are mainly non-knowledge-based learning. Non-knowledge-based subjects require both another type of teaching, teachers, and environment than the present classroom teaching, which in practice meant - as **Learning to be** had suggested - “*Education must be thought out afresh in its entirety*”. Nothing of this could be accommodated within in the traditional education system, and the **Learning: The Treasure Within** proposals were totally rejected, never acknowledged, considered, or used by the **TEE**.

## **The non-development period from 1996 to 2022.**

After having rejected even the second UNESCO commission's proposals and for the past 25 years, TEE has led global education ignoring all questions regarding the global education's primary problems related to the delivery system, content, and organization. Education development work has been done with the assumption that the traditional education delivery system shall not be changed and that very little of the important non-knowledge-based-learning could be included in the curricula.

Despite the facts that the Jomtien goals were not reached to any extent according to evaluations and that the education situation in the world had rather worsened, the TEE organized a second **World Education Conference in Dakar, Senegal**, in year 2000, which agreed upon new goals and the same strategies for education development up to 2015, still with no other alternative than continuing with the traditional education delivery system intact.

The World Bank tried independently to find new solutions to the education problem and made an extensive global education review in 2009 – 2010. The results and findings were presented in the **World Bank Education Sector Strategy 2020, "Learning for All."** To show a new initiative, it picked up an old UNESCO theme and suggested a major strategic shift from promoting "Education for All" to "Learning for All". This strategic shift was, in principle, well-motivated, but not accompanied by any proposals for changes or adjustments to the traditional education system and in 2020 at completion, nothing of what it proposed has been realized.

All concerned UN organizations and all world governments took part in a thorough global review of the state of education in 2012 - 2014 and UNESCO presented their findings in the **2015 EFA Global Monitoring Report (GMR)**. The Report states that the Dakar and UN Millennium goals for education development are "*far from reached*" and education is still in serious crises.

The GMR recommendations were forwarded to a third **World Education Forum in Incheon, Korea**, (May 2015), which set new goals and strategies for education development up to 2030. The "**Incheon Declaration**" presents and calls for "*a new vision for education, with bold and innovative actions*" but it does not present proposals or recommendations for changing the traditional education delivery system or significant changes in content and organization. On the contrary, all calculations of the "*increased financing need to reach the ambitious goals by 2030*" are based on a continued use of the traditional now outdated and inefficient education delivery system. The Declaration was used for formulating The Sustainable Development Goal 4 (SDG 4) of the 2030 Agenda, which aims to "*ensure inclusive and equitable quality education and promote lifelong learning*

*opportunities for all*", but it is already today evident that those goals will never be reached without solving education's primary problems and the education situation in the world is today, in 2022, worse than in 2015.

In 2015, UNESCO tried to draw new attention to the primary problems of basic education with the document "**Rethinking Education**" with the subtitle "**Towards a global common goal?**" In the preface the Director-General, Irina Bokova, clearly indicates what needs to be done:

*What education do we need for the 21st century? What is the purpose of education in the current context of societal transformation? How should learning be organized? These questions inspired the ideas presented in this publication. In the spirit of two landmark UNESCO publications, Learning to Be: The world of education today and tomorrow (1972), the 'Faure Report', and Learning: The treasure within (1996), the 'Delors Report,' I am convinced we need to think big again today about education.*

It was left without any consideration or acknowledgement by **TEE**

After the world conference, the **International Commission on Financing Global Education Opportunity** was set up to reinvigorate the case for investing in education and solving the global education problems. The Commission was co-convened in 2015 by the Prime Minister of Norway, the Presidents of Malawi, Indonesia, and Chile, and the Director-General of UNESCO. It was chaired by the United Nations Special Envoy for Global Education former UK Prime Minister Gordon Brown and supported by 26 high-level Commissioners, which included current and former heads of state and government, government ministers, five Nobel laureates, and leaders in the fields of education, business, economics, development, health, and security. This, the most prominent commission in education history ([www.educationcommission.org](http://www.educationcommission.org)) delivered its final report "The Learning Generation" to the UN Secretary-General on the 18<sup>th</sup> of September 2016. In it, the Commission completely misses the point that the lack of financing for education is that nobody in their right economic and financial mind wants to invest in a grossly ineffective and obsolete education delivery system. The Commission makes no reference to using learning systems built on modern technology like e.g., the Kahn Academy, which has no problems to attract private investors and financiers and therefore can deliver "*world-class education for anyone, anywhere*" free of charge.

The Commission has issued a great number of reports presenting the catastrophic situation of global education, but none of them addresses education's primary problems or suggests solutions of any significant value for solving them.

A sparkle in the education development darkness, presenting a new and extraordinary education development possibility was the “**International Conference on ICT AND POST-2015 EDUCATION**” (May 2015) organized by the People’s Republic of China in Qingdao. **The Qingdao Declaration**” presented a modern variation of what UNESCO's “*Learning to be*” outlined in 1972 and stated that “*Technology offers unprecedented opportunities to reduce the long-existing learning divide*”. Its proposals and recommendations were totally ignored by TEE.

## **World Development Report 2018**

In 2016, the World Bank started the preparation of the **World Development Report 2018** with the theme and subtitle **Learning to Realize Education’s Promise**. The initial intention was to investigate the global education problems from a fresh and creative point of view and to include the new education and learning technologies that e.g., the Khan Academy (above) had developed and successfully used outside the official education environment. That was presented to WB staff by the founder of the Khan Academy, Salman Khan in a seminar, “Education Reimagined”, June 22, 2016. At that time, the WB Chief Economist in charge of the **WDR 2018** stated that the upcoming report will include these new outstanding developments in education.

The final **WDR 2018** presents a wonder of education statistics from thousands of research reports produced by all the prominent education and financial experts of the world. There is, however, not even one reference to today's primary basic education problems; the delivery system, the content, and the organization, which the two prominent UNESO Commissions had identified more than 25 years ago. The report makes only one statement in relation to the use of modern learning technology: “*Technological interventions increase learning—but only if they enhance the teacher-learner relationship.*” There is overwhelming global evidence that this is totally incorrect regarding knowledge learning.

The **WDR 2018** could not present any useful, concrete proposals of value for the development of education, and it was practically forgotten the same day it was presented. One of the positive learnings from the report is that now we have names, faces and locations of the TEE; see four pages of acknowledgements in the beginning of the report.

Then we are back to where we started with the third UNESCO **International Commission on the Futures of Education: Learning to Become**, and I will now present what could and should have been realized and accomplished if the commission's original intentions, purposes, and goals had been followed.

## **5. A proposal for the layout and design of a new Global Basic Education and Learning System**

### **The content of comprehensive basic education and learning.**

UNESCO's *Delors Commission* report in 1996: "*Learning: The treasure within*" is used for the design of the total content and organization of the comprehensive basic education system:

*"If it is to succeed in its task, education must be organized around four fundamental types of learning, which, throughout a person's life, will in a way be the pillars of knowledge; Learning to Know, Learning to Do, Learning to Live Together, and Learning to Be"*.

*"Learning to Be" is designed to "enable each individual to discover, unearth and enrich his or her creative potential. This means going beyond an instrumental view of education, as a process to achieve specific aims in terms of skills, capacities, competence, etc., to one that emphasizes the development of a complete person."*

### **The system of knowledge learning.**

UNESCO's *Faure Commission* - comprehensively studied "*the world of education today and tomorrow*" and found that the teaching job required can only be done by using modern technology:

*"The commission accordingly underlined the fact that despite doubts and differing orientations, and whatever the progress or saving might be obtained from changes in the traditional educational system, the very heavy demand for education can only be met if instruments derived from modern technology are put to use."*

The technology required for knowledge learning is today readily available everywhere, fully developed and tested.

### **The four pillars - or modules - of comprehensive basic education.**

**Learning to Know:** Interactive and individual learning in Learning Centers. At the beginning, students will be psychologically tested and assessed to determine what type of learning program they best respond to and what type of assistance they need in their studies. The learning programs can be adjusted to fit the student's learning and intelligence type. Students will be responsible for their own learning and learn individually and interactively, with the assistance of specially outfitted and programmed computers – call them iKnow or iLearn. They can, with 24/7 capacities the year around, give every student an individual, equal, and comprehensive

knowledge-learning of highest quality, designed by the best teachers. Students' learning is continuously assessed and continues until the student master the subject.

Students will spend half the time on individual learning and half the time on group projects in direct relation to the learning program. Knowledge learning will take place in groups of 10 students for individual learning and 20 students in group-sessions. There will be one teacher per group in all sessions. During individual learning, each student will get learning support from a student that recently has completed the same course.

It must be stressed that it is only the knowledge-teaching part of a teacher's job that will be replaced by computers. The role of teachers will evolve from dispensers of information and knowledge to facilitators and enablers of learning. They will become professional learning specialists whose tasks will be to determine the students' learning type, select suitable programs, supervise the learning assistants, and generally supervise the students' development.

**Learning to Do: Facilitating and preparing the transition from school to employment.** Students will spend one quarter of the academic year doing practical work. They should practice – and be exposed to - as many different areas of the job market as possible to realize employment opportunities that can fit their personal interests and aptitudes. Students must learn to follow rules and regulations of workplaces as regards to time keeping, safety rules, teamwork, environmental and trade union issues, etc. The program will be adjusted to the student's age, grade, gender, and personal considerations. Private, state, and community employers in the area will organize the “Learning to Do” activities outside the Learning Center environment.

**Learning to Be: Introducing non-knowledge-based learning and free time activities.** This module aims at developing the personality of the students and contributing to their development into independent, well rounded, and physically/mentally healthy individuals. It includes all creative and non-knowledge-based learning. It incorporates all cultural (art, theater, music, song, etc.), social (clubs, hobbies, etc.), spiritual/religious and free-time (sports, athletics, etc.) activities that are available in the community where the student lives.

Students will be presented with, can try out, and learn about all these different areas of free-time activities and then select one or several that they want to be engaged in according to their interests and aptitudes. These activities will be organized by private and public organizations within the community and located outside the Learning Center.

**Learning to Live Together:** Introduction to social living and citizenship. The UNESCO formulation “Learning to Live Together” has been shortened to the verb SUPPORT. The students will learn and experience what it means to live in a community or society and what responsibilities they have in supporting common programs and maintain common properties. Students will learn to work together and give service and support to the common programs of the community, e.g., health, old age, retirement, and education programs.

The most important support work will be as a learning assistant. A student, who recently has taken the Learning to Know module and now follows the SUPPORT module, will support another student that takes the Learning to Know module for the first time. Students will thus attend the Learning to Know course twice; first as a student, and then as a learning assistant supporting a first-time student, which will greatly contribute to both students’ learning. In higher grades students will also work and support the community’s different welfare, maintenance, and development programs. The SUPPORT module will mainly be organized by the Learning Centers.

**A new organization and yearly plan.**

The education program will be restructured to fit all needs, at the same time as the effectiveness of education is greatly increased and the cost is reduced. The four modules, Learning to Know = KNOW, Learning to Do = DO, Learning to Be = BE, and Learning to Live Together = SUPPORT will be allocated one quarter per year in time and organized as a rolling scheme during the year. Students in the same grade are divided into four groups. Every student group takes one learning module in a rotating schedule from grade to grade. Each of the nine grades of basic education will look like this:

**LEARNING TO:**

<b>STUDENT GROUP</b>	<b>YEARLY QUARTERS</b>			
	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
<b>1</b>	<b>KNOW</b>	<b>DO</b>	<b>SUPPORT</b>	<b>BE</b>
<b>2</b>	<b>BE</b>	<b>KNOW</b>	<b>DO</b>	<b>SUPPORT</b>
<b>3</b>	<b>SUPPORT</b>	<b>BE</b>	<b>KNOW</b>	<b>DO</b>
<b>4</b>	<b>DO</b>	<b>SUPPORT</b>	<b>BE</b>	<b>KNOW</b>

## **Cost of a new Global Learning System vs. Traditional Education.**

A direct cost comparison between the costs of traditional schools and estimated costs of a new Global Learning System is presented in Attachment 1. This can be made in the same manner for any country or community, which has collected statistical enrollment and cost data. The basic education cost will approximately be cut in half.

## **The benefits of a new Global Basic Education and Learning System.**

### **The quality and equality of education:**

1. The students will be in charge and responsible for their learning. All learning will be individual and attuned to each student's personal background, knowledge, and experience. The students will be occupied and get learning support during 100% of a year's "Normal Working Time"-1800 hours/year.
2. All students learn until they fully master the subject or course they are studying. No grading is needed as achievements are continuously and automatically tested and recorded.
3. The throughput in the system will be 100% and dropouts will be 0%.
4. Every school can have the same top-quality comprehensive education program, irrespective of where they are located - in a city or in the countryside, from the North to the South Pole. A remote village can have the same top standard as an Ivory League facility. The "village school" will be reinstated.
5. Developing countries will get a shortcut in education development and an opportunity for a speedier catch up with the more developed and industrialized countries.

### **Teacher related issues:**

1. All the present teacher-related problems will disappear. It is the knowledge/teaching part of a teacher's job that will be replaced by computers. The role of teachers will evolve from dispensers of information and knowledge to facilitators and enablers of learning. The teachers will become professional learning specialists whose tasks will be to determine the students' learning type, select suitable programs, supervise the learning assistants, and in general, supervise the students' development.

### **Economy:**

1. Estimates show that the recurrent cost per student in the new system can be halved- -50% - as compared the traditional education system. Financing of basic education will therefore not any longer be a problem for local communities. See Attachment 1.
2. New investments in buildings will not be needed. The utilization factor for school facilities will increase from, at present ca 30% to ca 70 -80 %. See Attachment 1.

## **Financing and development aid transfer to needing countries.**

1. Viable, attractive, and well-designed projects of technical nature can be presented for financing from both the private market and the development aid donors. This new type of project will bring back old and bring in new investors into the education sector.

## **Private business involvement in basic education .**

1. As all schools everywhere will have the same top standard and quality; as the knowledge-learning will be all digitalized and need to occupy only 25% of the school time, and as the non-knowledge-based learning will be so integrated in the local community business and industry; local community authorities are the only ones that in an efficient way can manage the interactive relationship between the four learning modules. All private involvement in organizing, administrating, and/or running basic education establishments will not be needed, appropriate or allowed. There will be ample opportunities for private business to contribute in part of the development of the new global basic education system.

## **In addition**

1. With digitalized learning, preschool children from the age of five can learn to read and write to third grade standard in 3 - 4 months.
2. Under circumstances like the recent Corona pandemic, the knowledge learning programs could have continued uninterrupted to 100%.

## 6. Summary and conclusions

Using the proposals and recommendations from UNESCO's two international commissions - the FAURE, 1972 and the DELORS, 1996 - together with digitalizing all knowledge-learning, we can provide first class basic education and learning for all, everywhere for half the present cost.

Even in the remotest parts of the world; we need only; power supply by sun or wind; common electronic equipment; a good technician and learning programs.

This proposal represents the only possibility to reach education's Sustainable Development Goal 4 of the 2030 Agenda for global development.

It will also be a substantive part of the solution to one of the biggest remaining social problems in the world – the global youth problem.

This will be the greatest breakthrough in education development history and the biggest reconstruction project in global development history.

It can be supported by all political parties from the far left to the far right, by all societies, ethnicities, and religions.

It is a project that could and should unite the world.

Love and Peace

Lennart *Swahn*

### Personal Post Scriptum

I graduated with a MSc in Civil Engineering at Chalmers, Göteborg, Sweden, in 1958, got my Teaching Certificate in 1961 and started fulltime teacher in 1962. The very embryo of this paper was issued unauthorized at the World Bank in 1986 and was rejected and treated as contraband. An early version was presented to UNESCO's "Delors Commission" in 1994 with the four learning "pillars" for comprehensive basic education and may have contributed to their final report. All what I have presented here, I have personally experienced and/or taken part in. This may be my last contribution to education, and now I leave it to you to reconstruct global basic education for creating a much better world for the young generation. My motto throughout life and final advice to you is with Winston Churchill's words, "Never, never, never quit".

I wish you the best of  
Luck, Love, and Peace.  
Lennart

## Appendix 1

### Cost of a New Learning System vs. Traditional Education.

For this comparison, statistics from the Swedish Basic Education “Grundskolan” is chosen. The cost comparison can be made in the same manner for any country or community and the actual figures can easily be substituted and adjusted for appropriate estimates.

As a rough estimate, Sweden has a population of about 10 000 000 people and the Swedish Basic Education has 9 grades, with about 1 000 000 students and about 90 000 teachers. The number of students in basic education is 10% of the population and the number of students per teacher is then about 10:1. There is an average of 25 students per class.

### Comparison of education resources and capacities in a Swedish community with a population of 10,000 people

Total number of students in 9 grades of Traditional Education (10%) = 1000  
 Total number in the new Global Learning System (the same) = 1000  
 No. of students in the KNOW module at the Learning Centers = 1000/4 = 250

Traditional Education has 25 students per classroom and 1 teacher per 10 students. The Learning Centers have 10 students per media room and 20 students per group room with one teacher in each.

#### Facilities and teachers required:

	<u>Traditional Education</u>	<u>Learning Centers</u>
Classroom needs	1000/25 = 40	
Media room needs		250/10/2 = 13
Group room needs		250/20/2 = 7
Old type of teachers needed	1000/10 = 100	
New type of teacher needs (+20% for vacation, etc.)		(13+7)*1.20 = 24

The total cost for traditional education is about US\$ 10,000 per student and the cost distribution is approximately as follows:

Teacher salaries and expenditure	= 50%
Buildings, inventories	= 20%
Student learning, Library	= 5%
Administration, incl. student meals, welfare, transportation and misc.	= 25%

This distribution is made for the Swedish school system and figures may vary in other education systems. The cost for students' welfare and meals will be reduced as to about half as there are only in the Learning Centers about half of the time. The cost for learning materials is calculated under the assumption that each student will have access to a new learning computer and that interactive learning programs will be produced and distributed in all knowledge-based subjects. The computer equipment cost is estimated at a high total of \$1000 per unit, including standard software. Today the cost of an appropriate "super-computer" for schools is about \$300; ultimately expected to decrease to \$100 in global mass production.

**Cost comparison between a Traditional Education system and a new Global Learning System for a community with a population of 10,000 people.**

The basic cost per student and year at present is set to US\$ 10,000. The Global Learning System cost is US\$ 4,900 as shown in Figure 3.

<u>COST CATEGORY</u>	<u>Traditional Education System</u>	<u>New Learning System</u>
Teacher costs 50%	\$ 5,000	$\$5,000/100*24 = \$1,200$
Administration+ Misc. + Students' meals + School Transportation+ Welfare, etc., 25%	\$ 2,500	$50\% \text{ of } \$ 2,500 = \$1,250$
Buildings and Inventory, 20%	\$ 2,000	$20/40*2000 = \$1,250$
Library 5%	\$ 500	Estimated @ = \$1,000
Learning computers for Learning Centers replaced every year + extra media equipment and basic software		$20*10*\$1000/1000 = \$ 200$
<b>Cost per student and year</b>	<b>\$ 10,000</b>	<b>\$ 4,900</b>

These approximate cost estimates will vary very much from country to country and from continent to continent. In general, they indicate that a new media-based Global Learning System can reduce the recurrent cost of basic education considerably. The cost per student for computer equipment is negligible in comparison with other costs, even though we have made a high estimate of equipment cost. Teacher training will be dramatically shortened and cost reduced.