

OPTIMAL EDUCATION

The current model of education was developed to meet the transition from an agricultural society to an industrial society. Consequently this model is designed and built in the image and in the interests of the industrial age.

When we see that in nearly every country it is compulsory for children to attend school and that nearly all schools are structured identically and that our society spends large amounts of money to run these schools, we tend to assume there is a rational and logical reason for it.

If we want to solve the problems in our education system it is necessary to accept that this system is not a product of scientific insight or logical necessity. Instead, it is a product of history. This means that the majority of problems, that we are trying to solve, are caused by the system itself.

Optimal Education is a new model of education designed to replace the obsolete Prussian model. It is based on the research that has been done in the last 30-40 years. We have focused on the systemic mechanisms necessary to make essential changes to the education system. Optimal Education is based on a digital platform that will both facilitate the changes and take over some of the tasks done manually today.

SYSTEMIC MECHANICS



The practical mechanisms we use, in the current education system, are based on the industrial assembly line and designed at a time where all administration were done manually. Students are treated like products on an assembly line. At every workstation a teacher deliver a certain amount of knowledge and send them down the line.

Optimal Education follows an on-demand model of education. It is built in the interests of the information and technology age. In the production analogy it is the 3D-printing of education where customization and complexity is free. The mechanics of Optimal Education are designed to facilitate this shift from the current system and make the transition smooth.

STRUCTURE



The current education system is a rigid structure where we try to fit the student to the system. Students who can't or won't adjust to the system are seen as problematic. To account for this system failure we build new systems on top of the old ones. These students are often medicated or put into special courses or classes.

The system in Optimal Education adjusts to fit the student. This is done by replacing obsolete mechanism leading to a system where the interests and talents of each student are at the centre. By doing this we remove the root cause of the problem. This will cause a dramatic decline in psychopathological problems.





DIFFERENTIATED LEARNING AND MASTERY

The scheduled, standardized curriculum allocates a limited amount of time to review each concept. This means that we have a set amount of time to learn each concept and vary how well each student understands it. This leaves gaps in their knowledge, which eventually will inhibit or even stop their learning.

Optimal Education is based on mastering each concept, before moving on to the next. We keep the level of understanding set and vary the time to learn each concept. Optimal Education is designed so students can work on an individual level. This gives a practical system where students work at a pace and level that fits them which prevents gaps in their knowledge. This opens up for completely differentiated learning with little to no extra work for the teacher.



SELF-LEARNING AND PLAY

As a species humans are born with a natural instinct to learn the skills that are important to their culture. If there are no expectations or requirements for children they will spend their time playing because that is how we learn. It is an evolutionary mechanism that exists in all mammals. All mammals learn through play.

Optimal Education gives students unlimited time to play and experiment. Play allows students to develop their own interests and talents. It teaches them to make decisions and solve problems. During play children develop self control, learn to regulate their feelings and follow rules.

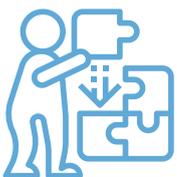


PERSONALIZED CURRICULUM

The standardized curriculum was designed for a world that was static and predictable. The accelerated pace that technology is developing with today, means that the world changes fast and can't be predicted. The standardized curriculum is the opposite of what we need today.

The amount of knowledge that we continually amass means that nobody can learn more than a tiny sliver. But we insist on teaching everyone the same tiny sliver. This leads to a reduction in the diversity of skills, knowledge, and ways of thinking.

The personalized curriculum gives the students control and autonomy over their education. This curriculum is based on the interests and talents of each student. Throughout their education student will move from play, to discovering their interest, to developing their talent. In opposition to the current system this will lead to a wealth in the diversity of skills, knowledge, and ways of thinking. This is the best way to prepare students for an unpredictable world in constant flux.



21ST CENTURY SKILLS

In the current system we have a focus on academic propositional information. In recent years we have become aware of the importance of skills like creativity, critical thinking, collaboration, innovation and others that we collectively call 21st century skills.



These skills have been tagged on the curriculum more as an afterthought rather than an integrated part of it. They are not skills that can be taught in the traditional way we think about education. The structure of the current system is specifically designed to unlearn these skills.

Optimal Education puts the emphasis on a type of project-based learning that nurtures these skills. These projects are chosen, developed and lead by the students. The delivery of propositional and fact based information occurs through the digital platform. This shifts the focus to 21st century skills with the current academic content as an integrated, supporting part of the project-based work.

EVALUATION AND ADMISSION



The evaluation systems we use today are highly inadequate. They are too imprecise to assess the factual knowledge of the students in any meaningful way, which is their main purpose. At the same time, the type of knowledge we evaluate is not as important as it used to be. It also causes severe problems for students in the form of stress, anxiety, depressions and pressure to achieve. All in all the systems are more harmful than beneficial, superfluous and relatively easy to replace.

Under Optimal Education every concept, in each subject, is organized and mapped according to difficulty, topics and subtopics. The evaluation simply registers when a concept has been mastered. Admission to a course is based on mastering the concepts that leads up to the concepts in the curriculum. The evaluation system is automatic, precise, and always up to date and can run concurrent with the traditional system. It also serves a dual purpose as a day to day tool for students and teachers for detecting their strengths and weaknesses. This completely eliminates the need for tests, exams and grades.

DEVELOPMENT AND IMPLEMENTATION



The digital platform fits into the current system of education. Our tools work alongside the existing mechanisms. They are designed to supersede the current mechanism instead of replacing them. The development of the platform is modular on several levels. This includes tools, subjects and levels. Designing and developing this way means that we can use input from early adopters to adjust components and correct mistakes during development. This leads to a smooth transition from the current system to Optimal Education.

The digital nature of the platform means that it is scalable. Traditionally we try to solve education in the developing world by replicating the western model. This model requires large investments in infrastructure. The model requires buildings, furnishings, educational materials, training of teachers, transportation to and from school and so on. Optimal Education only requires internet access. Stepping back and looking at what the fundamentals are in order for learning to happen, you only need groups of students and access to information. Optimal Education is a system designed to deliver free, modern education to everyone for the cost of a single school.

