ABOUT INTELITEK

Intelitek transforms education across the globe with comprehensive technology learning solutions. Our innovative tools and technologies empower instructors and inspire students to improve the world around them. We understand the changing needs of career and technology classrooms and design flexible solutions that meet those needs.

With sustainable support and professional development to ensure the continued success of programs, Intelitek solutions deliver the competencies needed for in-demand careers.

At Intelitek we are producing results for students, teachers, nations and economies.
INTELITEK’S VISION FOR 21ST CENTURY SKILLS ACQUISITION

A WORD FROM OUR CEO

Intelitek’s educational technology solutions have been revolutionizing learning environments for over 30 years, in more than 50 countries across the globe.

While we are certainly proud of what we have accomplished, we have our eyes set firmly on the future. Looking ahead, it is our goal to prepare students for the careers of tomorrow by continuing to develop systems and solutions that optimize education today. This is especially difficult in the fast paced environment of the 21st century, where we cannot be sure what the jobs will look like in a few years.

Intelitek balances this by ensuring our programs and solutions, in addition to providing advanced skills and task based learning, also include life skills. Intelitek helps teach students to think independently, to work outside the box, to evaluate and assess, to work in a team and to take a leadership role when needed.

Our approach enables students and makes learning exciting while at the same time making it easier for teachers to teach.

In parallel to our educational programs we also provide:

- TNA – Training Need Analysis
- Professional Development
- Skills Mapping
- Program Establishment
- Installation, On Site Training, Operation and Run Up

Ido Yerushalmi
President and CEO
Intelitek Inc

MESSAGE FROM THE CEO

INTELITEK’S VISION FOR 21ST CENTURY SKILLS ACQUISITION

EXECUTIVE SUMMARY

Executive Summary

In today’s world, we are surrounded by technology that is changing at a rapid pace.

Tools, process, in fact almost everything in production and industry is computerizing, automating, and robotizing. Modern industry needs relevant skills to remain competitive and the modern employee needs the skills to integrate into this new job market. Carpenters once built tables, now CNC machines do, production workers assembled machines, now robots do, operators ran machinery, and now CAD/CAM software does.

The basic need for a workforce still exists, but the modern labor force needs to have the skillset to design, build, operate and maintain these systems.

Equipping the workforce with the skills required for the jobs of today and those of tomorrow is a strategic concern in the national growth and development outlooks of all economies nowadays. Many countries seek robust training strategies to meet the challenges of fostering strong, sustainable and balanced growth internally and globally. Each country’s prosperity depends on how many of its people are working and how productive they are, which in turn rests on the skills they have and how effectively those skills are used.

Skills are a foundation of a productive workforce. Yet, many of the educational institutes fail to produce students in the quantity and quality needed to keep up with the growing demand for a skillful workforce.

Countries must create an education path that will truly enable a modern industrial labor force that will operate and maintain modern factories. Jobs like plant maintenance, machine operator, production technician and other are increasing, but candidates are scarce due to a lack of pathways for vocational and industrial education.

To achieve the above, both educators and trainees have to go through an interdisciplinary educational program that will combine both theoretical and practical studies.

Modern industry that integrates science, technology, telecommunications and other state of the art technologies constitute the main “driving engines” for the development of a stable economy and competitiveness in today’s rapidly changing world. One can therefore identify the following factors as the “fuel” for developing economies worldwide:

- Education and knowledge are the foundation for cultivation of human resources, for economic development and for social-economic success. The backbone of national strength.
- Graduates of technology disciplines both in school, and post-secondary programs are being absorbed with great success into a industry. Technologists enable the development, production, maintenance and export of industries, both in the high technology sectors such as electronics, mechatronics, and computers, as well as in the mixed and traditional industries sectors, like the plastics, metals, textiles, medical and food sectors.
- Successful industrial countries around the world like Germany, United States, and England have recognized the importance of human capital, and have significantly increased their investment in manpower development and training in recent years. These countries are striving to develop engineering and technology literacy education from school and throughout the worker’s life (Life Long Learning) - according to the needs of the economy and industry in the country.
The Intelitek CTE Skills Map

Introduction to CTO 5
Advanced Hydraulics and PLC-Controlled Pneumatic Electro-pneumatics

CTE SKILLS MAP

All specifications, available courses and listed skills subject to change.

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For over 30 years, Intelitek has provided superior training solutions for programs in Engineering, Manufacturing, Industrial Maintenance, Robotics, Process Control, and Computer Integrated Manufacturing.

Leverages a powerful classroom management system, superior hardware, interactive content including simulations, 3-D animations and real-world projects, Intelitek’s programs engage students in learning!

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EXECUTIVE SUMMARY

Many countries are “stuck” in their inability to introduce and attract modern technology into their industries due to the lack of qualified manpower and the overabundance and reliance on manual labor. As a result, these countries are stagnating and rely more and more on foreign expertise. In these countries, surprisingly, the trend shows a significant decline in the number of professional-technology schools and vocational high schools over the years.

This trend conflicts with the trends in which industry has become more and more sophisticated, high-tech and computerized. In industry today, traditional production workers, are now operating and configuring computerized manufacturing systems that require a higher level of technology expertise and understanding.

The steady erosion of technical-professional education has led to, among other things, a shortage of thousands of skilled workers that would provide the boost needed to create economic growth.

Driven by the industry’s manpower needs on the one hand, and taking into account the investment required for technology training, Intelitek delivers training curriculum that individually and in programs deliver valuable educational solutions combined with practical experience.

JobMaster is a pathway to creating advanced workers with the industry skills required in the 21st century. By providing access to resources and access to knowledge you overcome the primary obstacle most schools face, to address the changes in the job market.

JobMaster programs address the pedagogic aspect of technology training as well as the practical aspects of on-the-job experience.

Pedagogy

Intelitek Pedagogical Concept

Intelitek offers programs for vocational training and STEM for students who want to develop a career track and be relevant in the labor market until retirement in about 40 years.

This is not a simple challenge because it is impossible to predict what the labor market will look like four decades from now. It is difficult to predict what new professions will be required, what existing professions will disappear from the job market, and what changes will occur that will affect our careers.

As educators, we want to educate graduates who are able to adapt themselves to changes in the job market over the course of their careers. We want to inspire individuals that will be able to successfully cope with change, lead processes to adapt to change and create increased value for society, employers and for themselves.

How Can We Achieve This Goal?

We believe that the way to achieve this goal is to impart thinking skills. The premise being that an employee who has acquired thinking skills can develop as changes in the labor market occur and remain relevant despite the unpredictability of what may happen in the future. The acquisition of thinking skills is integrated into the professional training process that Intelitek offers.

Intelitek strives to deliver learning environments that in addition to providing knowledge in the different fields such as machines, robotics, electronics, and more, are focused on exercising students thinking skills. The thinking skills that are core to our training programs are known as the 21st century skills - the 4C's:

1. Creativity
   Creation of intellectual flexibility. The ability to see reality from different points of view, to offer different solutions to a given problem.

2. Critical Thinking
   An active thinking process that examines knowledge, various feasibility possibilities and latent knowledge to reach an answer or conclusion.

3. Collaboration and Teamwork
   Decision making processes. Ability to perform a team role, lead a team and receive guidance from a team leader.

4. Communication
   The ability to interact with people, to absorb information, to create knowledge, and to share the acquired knowledge with team members.

What We Do For You?

Our programs consist of three major components that create a complete learning environment, described below in no particular order.

1. Pedagogic Equipment
   In each discipline, equipment is used that is specifically designed to teach the principles of a particular discipline. Our equipment meets our vision regarding the educational market and our world view.

2. Comprehensive Courseware
   Courseware that contains the relevant disciplinary knowledge. Our pedagogical packages include a set of courses with online lesson plans that enable personal self-paced or group learning. These courses can be run in a wide variety of ways according to the teacher’s or the school’s world view.

   The course also contains the principles of affirmative assessment that shapes the learning process during the course, and corrects it in real time. This enables the student to bridge any gaps created and to catch up with the progress of the class.

3. Applications
   Throughout the courses, students are required to apply the knowledge gathered individually and with peers to solve real open-ended problems. To this extent, students will need creativity, critical thinking, collaboration and communication to address problems.

The Implementation

Our solutions includes, in addition to the equipment and courses that together impart knowledge and improve thinking skills, support, training and guidance for teachers.

This training is delivered in multiple ways:

1. Professional Development / Teacher Training:
   Each of the teachers in a school system is a content expert for his/her field of knowledge.

   In our training, we introduce and present the new methodology, and we guide the teacher how to deliver his knowledge in
the new teaching concept. The rationale of the new teaching approach and how it can be implemented in the classroom will be presented. The training is based on many activities so that the teacher is an active learner who will experience the new paradigm both from a students and a teachers perspectives.

The outcome of this is a curriculum owned by the teacher that will be able to be used with his students in the school.

2. Teacher Tools:
Each of the courses in our portfolio is accompanied by teacher only components that guide the teacher not only on the mechanics of the program, but highlight the expectations from students, learning objectives and goals of each course and exercise.

3. Follow-up:
While we may not be able to track and support each teacher individually during the delivery of the courses, we can provide follow-up support and assistance. As noted, the change required of the teachers is not easy and will take time to implement. For this purpose, we offer the teachers webinars and Q&A sessions during the implementation of the programs so that they can apply the principles gradually and with pedagogic support.

Our Success Equals Your Success

Many educational systems that try to adapt themselves to the acquisition of 21st century skills and thinking skills fail in this endeavor. This is because changing the education paradigm from teaching knowledge to exercising thinking skills also requires teachers to change their professional world view.

Many teachers use teaching methods that have been practiced for decades, and naturally, changing your professional paradigm is difficult and not easy. It is difficult for a teacher who for many years has been accustomed to teaching from the perspective that he/she is the source of knowledge, to change his/her teaching methodology or to change his/her system for assessment from the assessment of knowledge to the evaluation of thinking skills.

But change is necessary. As educators, we want to educate graduates who are able to adapt themselves to changes in the job market over the course of their careers. We want to inspire individuals that will be able to successfully cope with change, lead processes to adapt to change and thereby create increased value for society, employers and for themselves.