



IMPORTANCE TO SUPPORT YOUNG INVENTORS (view of IFIA-Youth-Network-Manager)

For a long time a successful cooperation has existed with our new IFIA President, Alireza Rastegar. One of our shared visions is to care for young inventors as the future forerunners of inventive and innovative culture. On this focus my intentions are to offer my personal experiences for supporting IFIA's aims toward a prosperous future. In order to introduce my intentions I will give some personal remarks of my activities and engagements as IFIA-Youth-Network-Manager. As a graduate Physicist, Scientist and over 40 years passionate High-School-Teacher in Physics, Informatics and Mathematics – now retired – I encourage young students to use their skills for realizing new ideas. For more than 30 years I have been the Head and Manager of a Student-High-Tech-Invention-Education-Association (HAG) which was founded in 1982. Intentions of the HAG-Invention-Team are to research new ways to develop innovative inventions and medical devices especially for handicapped people.



partnership with shared visions for IFIA

As a visionary for successful future - with special focus at SaTE (Science and Technical Education) for youth – I believe in the gain of creative strategy to motivate young people for inventions. In my function as an official German Ambassador of MINT-Education (*Mathematics – Informatics – Nature – Technology*) in Science and Inventions, I try to bridge the gap between High-Tech and Social Compassion with the aim to gain Social Competence by young generation and to strengthen the creativity and motivation of youth for engineering and technology.



actual HAG-KIT-DEV-inventor-team

To be on an actual level I attended a lot of regional and international conferences and workshops for science and education and also participated at worldwide invention fairs. That's why education and scientific research papers were published for these topics to force the creativity by practical and theoretical education. The special focus is pointed at developing innovative ideas for realizing inventions. To support these goals workshop-presentations are reported as speaker at IFIA-events (i.e. IYLIY-2015/Taiwan, 1st IFIA-World-Conference-2105/Sweden).

Since the beginning of the KIT-Initiative (Creativity-Innovation-Technology) - in particular for supporting young inventors in German Invention Association (DEV) – I have also been engaged as a KIT-Ambassador and a passionate IFIA-promoter for youth inventors.

In the topic "The effect of creativity on youth" the focus is pointed at the importance of inborn creativity and their continuous strengthening. The aim is to encourage motivation among children and adolescents, to sharpen their communication skills and to raise awareness for the development of innovative ideas.



fun with Thailand kids

The future requires innovative-thinking visionary whose creativity must not be wasted. Since all nations need highly trained scientists and engineers, the required innovative ideas and impulses should be detected, amplified and fed into the creative minds of young tinkers and inventors as soon as possible.

Training, education and skills of young people belong to the most important resources of our society and are essentially linked with managing the complex problems of the future. To achieve this, the focus needs to be directed toward the recognition and promotion to their creativity among children, with the aim of a continuous strengthening and development among adolescents.

Creativity is an inborn talent. Everyone is creative and is eligible to promote his/her individual abilities. Creativity is available in the cradle, which must be recognized relying on human closeness, security, love, affection, understanding and appreciation. In the adolescent development, self-consciousness should be promoted, mistake making permitted, and thinking outside the box encouraged. Inexperience is a creative source that needs to be used as child-limitless potential.



inspiring Korean kids.jpg

"Still-unbent unit" can be used to make seemingly impossible happen. Adults are already narrowed by knowledge in the way of thinking. Seemingly logical relationships are no longer accessible. Children open up their "world" through ignorance, its own logic and experience: children demystify the magic spontaneously, have answers which amaze adults.

The more childlike ideas are still outside existing standards and not limit their creative idea horizon. The wonderful thing about children's creativity is inexhaustible source bubbling idea creation.

Parents are the main promoters of early childhood creativity, later school, education, environment, institutions. Children open up like the fascination with the unknown, have curiosity to explore and try new things. Their creativity will help them tackle common problems in teamwork and solve, inspire the joy of learning, let them live out their imagination with the Risk negative reactions.

Conclusion 1: Creativity is an essential source for innovative ideas that arise in the minds of passionate inventor. Idea generation and their realization require beside endurance,

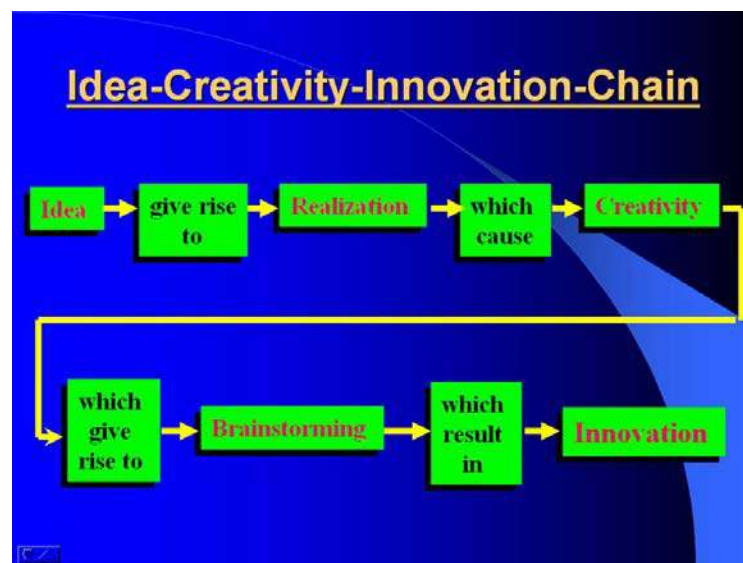
perseverance and innovative actions and unusual solutions. Therefore, the recognition, promotion and strengthening of creativity among children is of immense importance.

On this background all national invention associations have to realize the importance of the giant potential of youth. Without these huge potential of creativity, the motivation for innovative ideas of young generation will be destroyed. We have to campaign for the young kids, to attract them with special assistance and to support them as our prospective inventors.



awarding Malaysian girls with German Special Prize

In order to understand the important support of young kids to find a solution on the difficult path from the idea to the realization we must remember our own struggle to become an inventor. Also we depended on help by others to find the goal, we depended on help to get a hint for realization, we depended on help for being successful. But we are able to communicate because of our lifelong experiences, education and trained soft skills. But these external requirements are not developed enough and actual present by the youth. If we consider the example of the “Idea-Creativity-Innovation-Chain” then the complex matter will be understandable.



creativity-chain

The first step from the “**Idea**” to the goal of “**Realization**” requires a source of skills which is usually a filled pool by “**Creativity**” which need time, experiences and advanced personal development. In order to overcome these barriers we have to go in a communicative “**Brainstorming**” which is essential to find the right path. We see: “**Brainstorming**” is one of the most important help for youth on the difficult way to become successful.

Conclusion 2: In order to motivate youth to become a visionary creator we have to care for young kids in an early phase of school. Also parents should be able to communicate with their children, to animate them for opening the mind, jumping over barriers of the civilization and looking over the horizon. National inventor associations should open the doors for youth to support and accompany them in an optimal manner.

During the previous period of IFIA leadership under the presidency of Mr. Vedres my wished concept for integration of young inventors to open a successful future for IFIA was rejected with general remarks: “Young people (and women) couldn’t be innovative inventors!” With the actual IFIA-President Alireza Rastegar a new orientation started with successful integration of youth and women. The goals could be seen at a lot of invention fairs round the world.

My long experience as Leader of Student-High-Tech-Invention-Education-Association (HAG) and official German Ambassador of MINT-Education gave me the confirmation that grown up and young inventors are able to benefit from each other. Kids, scholar, collegian have an own thinking driven by fantasy, curiosity and imagination which causes unusual ideas, imagination, independency and social competency. We shouldn’t ignore these sources of originality and activity. In exchange adult inventors could give assistance, hand out advice, instructions and code of practice to guide the youth on their way to becoming a successful creator of innovative ideas.



HAG-DEV-KIT-Youth-Fair-Presentation

As the number of national invention associations focusing on the integration of youth rises, IFIA increasingly turns into a home for young inventors. So we have to care for an appropriate support in all areas of IFIA and international invention fairs. That’s why we have to make different sights between grown up and young inventors. This means not only the focus at qualification and perfection of inventions which are presented but also another perception of judgement and awarding.

On the strength of past experience as international jury-member (especially for young inventors) I offer my proposal to contribute for a successful integration of young inventors. Thereby the aim should be to convince the youth of their engaged input as accepted and successful young inventors.



fascinated Korean Youth

Some point of view:

→ It is very important to evaluate as jury in a different manner for grown up and young inventors. The point categories must match in a different aspect of the potential and possibilities.

→ It will be difficult to evaluate young inventors by giving points for follow questions: Is invention on market or not? Exist a chance to place it on market?

→ It is important to spend more time to speak with young inventors about their inventions. The youth-jury must be able to open the mind, heart and ears in order to give a personal feedback for the kids.

That's why I proposed 2013 at iENA (German invention fair/Nuremberg) as member of international jury-team to build 2 teams (for grown up and young inventors) with different evaluation aims. Since that time we earn a huge success to evaluate in a fair manner.

Conclusion 3: Our intention must be that we support the young inventors to engage them to stay on the hard and stony way to use their creativity for motivation as an inventor. That's why I believe that we have to think over about the number of awarding which will be very important as a sign of approval and compliment. We should be open in our mind to honour young inventors with enough Medals and Special Prizes as a sign of thanks for their efforts.

**The worth of a Medal in price is quite vanishing
for the merit of a Prize for compliment!**



awarded happy young inventors

Outlook: Please take my proposal and remarks as a help for a successful future for IFIA. We are now a very close IFIA-family and I think we have done what we have to do. Also we are a common community to form a successful future for IFIA. Let us provide confidence, friendship and reliance each other.

A handwritten signature in blue ink that reads 'Winfried Sturz'.

(IFIA-Youth-Network-Manager)
(IFIA-Exco-Member)