

KNIHV - teaching the habit of giving and receiving

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Once good friends, Alice and Bob started to drift apart. They started speaking less at school and meeting less after class. Bob was turning inward and was afraid to speak, Alice did not know how to ask. There was a will to solve the problem, but for some reason the path to the act seemed mountain-high.

Introduction

The members of our study group in Design Studio 1 (a practical design course in Design&Technology Futures, TalTech&EKA) looked back on our years in school and could very directly relate to what the fictional Alice and Bob felt. We had either experienced bullying ourselves or had seen fellow students being bullied. It turns out that we were not alone.



According to the Estonian Human Rights center, every 5th child encounters bullying, boys and girls alike. Every 10th child admits to taking part in bullying. Victims of bullying and bullies in Estonia are two to three times unhappier than their non-bullying peers (Inimõiguste keskus 2015).

Being unhappy in the school carries serious long term effects in a child's well being and outlook in life. Both the bully and the victim can have lower grades, less interest in school or they drop out of it entirely. This can lead to more serious mental issues and a lesser engagement in the labour market later on (OECD 2015). A 2016. Swedish study found that the cost of bullying in Swedish society is 1.4 billion euros annually. This is the annual pay of about 30000 full time teachers (Lundmark, Nilsson, and Wadeskog 2016).

Our study group decided to look at the Estonian school system, mapping the problem of bullying, reframing it, identifying key stakeholders and suggesting a new fun way of building a better school experience for the students. If not without bullying entirely, then at least with less of it.

The school system

While going to school is a seemingly simple act, the school ecosystem is complex. It incorporates infrastructure, the school teachers, social pedagogues, parents, children, other educational facilities plus the state in terms of funding and policy etc. It is a big system that receives large state investment and has larger yet expectations for the outcomes - educated citizens that can operate and develop a country.

A child in Estonia goes to school on average for 12 years. This covers the mandatory primary school (grades 1-4), secondary school (grades 5-9) and the voluntary highschool (grades 10-12). We chose to work with grades 5-9, as in these grades students deal with bullying the most (Inimõiguste keskus 2015).

Existing solutions

There are a number of anti-bullying programs for schools. Since 2013, two major international anti-bullying programs have been in use in Estonian schools: KiVa from Finland and Free of Bullying from Denmark (Eesti Vabariigi Õiguskantsler).

KiVa is a research- and evidence based anti-bullying program which is used around the world. It has been developed in the University of Turku, Finland (KiVa 2020).

KiVa program is based on three main elements: prevention, intervention and monitoring. When a school takes on the KiVa program, preventive actions of bullying are directed at all students. Parents are also educated on preventing bullying and given tools to tackle bullying.

Free of Bullying program focuses on the prevention of bullying amongst children up to 8 years old. The underlying philosophy behind Free of Bullying is that all children need to feel part of a community (Free of Bullying 2020).

The Free of Bullying programme is implemented by developing a series of good social practices which have been designed to strengthen the children's sense of community. The four core values that the program revolves around are tolerance, respect, care and courage. These values are said to develop children's social skills and enable them to develop positive relationships in childhood as well as later in life (Free of Bullying 2020).

As of the 2020/2021 academic year, the KiVa program is implemented by more than 100 schools and study places in Estonia. This is approximately 20% of all Estonian general education schools (Kiusamisvaba Kool 2020). At the same time, as of Fall 2018, 145 schools and as of Fall 2019, 481 kindergartens throughout Estonia have acquired the right to use the Free of Bullying program (Free of Bullying 2020).

Overloaded system

Our interviews revealed that schools can view these programs as needing a lot of work and time to implement. They increase the teachers' workload and require the whole school administration as well as all teachers to be on board with taking on a new program. Not all teachers see the

problem of bullying and many are not even aware that bullying is happening. Some schools rely on their own internal systems of dealing with problematic kids and can feel that an external program undermines their staff experience and authority.

A school founder brought out in an interview that there is an intrinsic problem in the modern Estonian school system - namely schools are expected to do increasingly more things in a context of limited resources. A school must educate the child in broad respects (physical exercise, financial knowledge, IT, math, science, history etc), work with parents, meet state standards, pay wages etc.

A similar sense of performance is common among adults - a mute peer pressure towards career performance, raising good children (Meeussen and Laar 2018, 2), being healthy and efficient. The child too is pressured to perform well in school, take part in one or several after-school activities, and decide upon career choices.

Design problem

Our design process led to the conclusion that a principal method of unlocking a troubled relation in the student-teacher-parent triad is communication. "Talking about it" has been suggested as a solution by the teachers, bullies and victims alike (Inimõiguste keskus 2015).

However talking about emotions is not as straightforward as describing a house, for example. Emotions have no corners, no walls, no obvious color. In a 1983 video interview, Nobel-laureate winner, physicist Richard Feynman declines to answer the reporter's question about why two magnets attract or repel. He then goes on explaining in a very friendly manner for 7 minutes why he declined to answer - in conclusion, because the reporter would not understand it in terms Feynman does (Feynman and BBC2 1983).



How can one tell about something that one does not know how to describe? How can one listen if one does not know the words that are being said?

Without a basic skill set for expressing emotions and listening to others express theirs, a student can easily feel alone with his or her problem. A fear to express and inability to listen can lead to a deep sense of insecurity.

We hypothesize that the bully, the victim and the bystanders all share a common trait - they are insecure. Be it the popular kid or loner, each individual is insecure about something and when uncontrolled, this emotion can result in acting out, shutting out or both.

However we see insecurity as a deeply human trait. It is one of the undercurrents in the story of Narcissus and Echo. While we need a positive self image to thrive, we also need to see others next to us. A developed personality needs balance between those of Narcissus and Echo.

Therefore we found it important to work with insecurity in a way that does not attempt to remove it, but rather directs the feeling in a constructive way.

Acts of kindness

Everyday acts of kindness helps us notice and appreciate what is good and what we like in those around us. Being in the habit of making compliments and doing good helps us create an optimistic, happier outlook on life (DiGiulio 2019).

Everyday acts of kindness can increase an individual's sense of well-being and life satisfaction (Weaver et al. 2018, 1). Social rewards, such as praise, directly enhance skill consolidation in humans. A person performs better when they receive a social reward after completing an exercise.

Receiving a social reward has a significant impact on memory, learning and motivation. Being paid a compliment triggers the same parts of our brain that get activated when we get paid a monetary award (Izuma, Saito, and Sadato 2008, 1). Whether we are the giver or the receiver of a compliment, compliments may be considered an act of kindness that has the potential to make us feel good about ourselves (Sugawara et al. 2012, 1).

Our research led us to learn that regularly performing acts of kindness plays an important role in accepting individuality.

Applying the concept

Our idea was to design a mental hygiene practice for kids which teaches the art of giving and receiving by encouraging positive habits at school. As well as strengthen the individual and group, build a positive culture where everyone is appreciated and considered to be important and valuable.

We wanted the concept to apply personally and collectively. It should make students interact, but in a subtle and supportive manner not to invoke unnecessary competition and rivalry. The concept of gamification entered our design process early on, as playing is second nature to children.

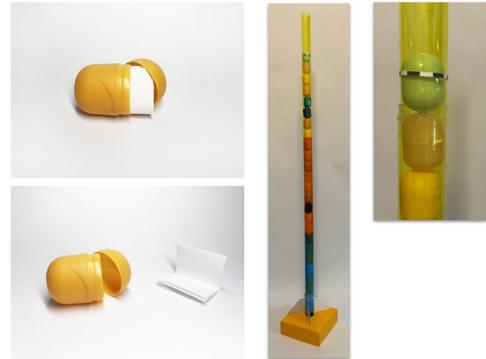
After testing several prototypes, playing around with seating, using audiovisual nudging etc, we ended up developing a group game of doing and receiving good.

KNIHV - the game of doing and receiving good

The KNIHV game rules are simple: the class gets a decorated vertical hollow tube and a bowl with little surprise egg capsules. There are as many capsules as there are students, however participation is voluntary.

The capsules all contain a printed task on paper. These are tasks such as giving someone a compliment, helping the teacher wipe the chalkboard, sharing your snack with a friend etc. Students then have either the full day or a number of breaks to complete the task. The teacher has the role of being the moderator of the game upon request by students.

Completion of the task is confirmed by writing “done” on the paper, enclosing the paper into the surprise egg shell and inserting the egg into the hollow tube. The surprise egg is a known format already designed and engineered to be playful (e.g. cracking sound when opened). Lowering the egg into the tube makes an exciting whistle sound that lowers in pitch as the egg drops.



Once the tube is filled to a predefined level (indicated by a color scheme on the semi-transparent tube), the game is finished and the whole class wins a prize. The prize can be an excursion to the zoo, a special guest visit etc. We considered immaterial prizes to be more valuable, as they leave a more profound effect, but the final decision is up to the class teacher and can be creatively combined with the curriculum.

Testing the game

Mustamäe Secondary School in Tallinn was kind enough to let us test our concept on their 5th graders. We handed out three sets of tubes, surprise eggs and tasks to three parallels: 5A, 5B and 5C, to a total 58 students. While two classes received an equal number of eggs (~30 pieces), then one class received only 6 eggs (all eggs contained task slips). We wanted to test how a limited game recourse affects the gameplay.

Furthermore, one class received blank task slips. They were instructed to come up with simple acts of good. This was to test whether the game would be more engaging without predefined tasks. All classes received the game on the same day and results too were collected on the same day. All participants received a simple prize: TalTech pens, postcards and reflectors.

Results of testing

The feedback from all three games was overwhelmingly positive. Not only were all students eager to participate in the game, but the gameplay also inspired the instructing teacher. Rules were simple enough to understand and the teacher did not feel overloaded. The game was taken seriously and no foul play was seen. Predefined tasks slips were all marked “done” and there were no empty slips returned into the non-predefined task tube.



While predefined tasks were easily understood, coming up with tasks required students to reflect on which deeds are good and which are not. For example, one student asked the instructing teacher: "Is sharing my carrot with someone a good act?"

It was significant that both extroverted and introverted children eagerly took part in the game. We believe this is possible due to the tasks being simple and flexible. A student could choose to help a friend or clean the chalkboard. Both are acts of good in the sense of the classroom community. The pupils are not forced to do something, but they can decide what and when to do.

Our instructing teacher liked the game and made several suggestions to how it could be developed further. She was especially interested in assigning tasks to groups of students to see social dynamics at play.

The key takeaway was that Mustamäe Secondary School expressed interest in carrying on with the game development, testing the game and perhaps adopting it into the curriculum in the long term.

Conclusion

In light of positive feedback for the initial testing of the game, there is an opportunity to further develop it in cooperation with Tallinn Mustamäe Secondary School. The game as a tool to expand pupils' positive cognitive and social interaction is efficient for the teachers to manage and add an entertaining aspect for kids' schooldays.

Developing the project further will require collaboration with the school to complete a more extensive testing period and work directly with the pupils to identify the areas the game can benefit the most. The game can be developed with situation-based, goal-based, or skill-based tasks, to grow a specific social or cognitive skill, for example, teamwork.

A positive and supportive environment in schools can greatly benefit the future generation. A simple step towards this future is learning to give and receive good at school. The long term implication of these simple acts is learning to talk about one's issues and listening to others express theirs, recognizing that people are different and bullying or shutting out does not solve anything.

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