

Baseline Study report- Edu-kick Program, Slum Soccer, Nagpur supported by Sony Pictures Networks, India.

‘December’ 2017



Executive Summary

Edu-kick is a unique program that uses sports to not only teach some basic life-skills to children in schools, but also attempts to increase educational outcomes associated with subject-based performance. The program is currently in its third year of operation covering almost 2000 children in 40 Government and Zila Parishad schools in Nagpur. In its current phase the program is being supported by **Sony Pictures Networks, India.**

A baseline survey of a representative sample of schools (25 in number) was conducted for the current phase of the program in August-September 2017. The present report captures the findings of the baseline study, discusses and analyzes its relevance and puts forth recommendations for future implementation.

The report has been structured in two parts- Part I discusses the program genesis and the evolution of expected outcomes and program activities over the three year project period.

Part II specifically discusses the key findings of the baseline study and suggests recommendations for improving implementation for the remaining course of the project cycle.

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December 201



Edu-kick - The Program

Project Background

The importance of play and physical development while recognized as crucial for child development, has been lost in the educational institutions and even more so in underserved communities where there is often an unofficial attention to didactic education. This lack of focus on sport and play has been attributed as one of the singular most important cause of poor school performance and subsequently children dropping-out. Nagpur-based Slum Soccer has therefore conceptualized a unique program named 'EduKick' that uses sports to not only teach life skills to children in schools, but also to increase educational outcomes associated with subject-based performance.

EduKick (conceptualized to address the 3rd, 4th and 5th Sustainable Development Goal), focuses on the promotion of good health, primary education for children and gender equality from the underprivileged sections of the society who often do not get a chance to either attend school or even when they do, are forced to drop out due to various reasons, one of them being poor learning outcomes. Edukick aims to improve and build upon the existing educational outcomes and to improve its efficacy.

Evolution of the Program

Edu-kick is currently in its third year of operation. The program was conceived and designed organically as a response to the urgent need for better learning outcomes for children in primary schools in Nagpur. It all began when the organization's CEO Dr. Abhijit Barse noticed an article in TOI that discussed how primary level children in Government schools are unable to even apply simple concepts in Math. The article further pointed out that this phenomenon is a result of overcrowded schools, under-motivated teachers and children alongside various other factors. "My immediate response was to be able to do something to improve this situation in any way I can within my limited capacity" says, Dr. Barse. His organization Slum Soccer was already actively using football as a tool for change in girls' lives through their various other programs. Hence, as a next step, the team got together to brainstorm on how football can be similarly used in schools to directly improve subject-based learning.

A number of games were designed and then trialled in Kamptee, Nagpur where the organization had always been active. Kamptee is predominantly a Muslim-dominated area where girls are rarely seen outdoors. The subject-based games were trialled on primary school girls for almost 4 months. At the end of this period, it was felt that the games are too long and boring. However, despite that, some visible changes were noticed and recorded. The girls had become more vocal, expressive and talkative as against their earlier shy and hesitant selves. This was overall an encouragement for the team who then set to improve the games in making them short and interesting. They also realized that this kind of a program has space within schools and can go a long way in not just encouraging sports but also work towards improving learning outcomes.

It was around the same time that Slum Soccer received a sponsorship for a WASH project intervention in schools. "We adopted a lot of things from UNICEF's approach and moulded it to design games for children where life-skills education, specifically hygiene related issues can be given to children through football-based games." shares Dr. Barse. This was the beginning of version II of Edu-kick program. The overall approach was changed and made more nuanced and focussed. Games were designed based on specific learning requirements of children. A preliminary Math and English test was conducted in select schools among select children to understand their level of learning in these subjects. After that, games were designed to make children pick up basic mathematical concepts through football-based fun games.

At present, the program is in its third year of operation. The sponsorship support from Sony Pictures Networks, India specifically supporting 30 schools in Nagpur and 10 schools in Mumbai with direct engagement with almost 2000 children.

The program now uses a sports kit with relevant equipments that are required to run a session. The kit too has been improvised and redesigned over the years. So far, 40 sessions for the first phase of intervention has been



designed and 20 coaches have been specifically trained for conducting the sports sessions in overall 40 schools. The sessions are conducted during the physical education period in schools and is usually for a period of 40-45 mins.

Project Objectives and Expected Outcomes

Objective 1: Improving education outcomes and increased engagement in learning through football-based games, with special focus on girl children.

Expected Impact:

- increasing school attendance and decreasing absenteeism
- increase basic mathematical skills (Addition, subtraction, number line, shapes)

Indicators for monitoring:

- comparing attendance data of absenteeism to show improved attendance
- comparing school enrolment data from year one and year 2 of the program
- % improvement in basic mathematical concepts(based on questionnaire based testing at the beginning and end of the project cycle)

Objective 2: Improving overall physical fitness of all participating children

Expected Impact:

- improving physical fitness and instilling a habit of playing in 100 % of the participants

Indicators for monitoring:

- Measuring improvement with respect to agility, stamina, speed and heartbeat after sports-based activities in children, through baseline, mid-line and end-line data of all participants.

Objective 3: Improving life skills and facilitating personal development.

Expected Impact:

- Improve attitudes, knowledge and behaviour in all children regarding basic life skills pertaining to health and hygiene, communication and leadership skills.

Indicators for monitoring:

- Measuring improvement in terms of personal hygiene and sanitation through observation and field notes.
- Measuring improvement in terms of specific life skills such as communication, leadership, decision making, team-work, problem-solving through qualitative data analysis at the end of project phase.



Baseline Survey - An analysis

Rationale for the Baseline survey

As discussed in Part 1 of this report, Edu-kick has experienced a gradual evolution over a three-year period. The program team therefore felt that there was a need to firm up the program in terms of specific objectives that it desires to meet and the actual impact expected on ground.

While a lot of basic information about the type of schools, teachers and children, the program has been working with is known to the implementation team, there is a need to understand the overall attitudes and perceptions regarding sports related learning within these schools. Also, the program in its current year will be working with many new schools. Hence, it was felt that a baseline survey at the very beginning will not only help give details regarding infrastructure etc. within schools but also help understand teachers' and children's attitudes and perceptions regarding education in general and sports in particular. This will help in identifying possible roadblocks if any and help improvise the overall implementation approach.

The baseline data will also serve as a point of comparison for the end of project cycle when a similarly robust evaluation exercise will be conducted to understand actual impact on ground.



Children taking the Math and English tests during the baseline study

Methodology

A scientific and statistically robust methodology has been used to design the baseline survey. A total of 24 schools out of 40 participating schools was randomly selected for the purpose of running the survey. A total of 110 children (5 children per school) were individually interviewed for this purpose. Prior to that, specific questionnaires, one each to capture children, teacher and school data was designed through brainstorming sessions involving the entire team and a core facilitator. The data was collected, entered, coded and analyzed over a period of over four weeks in August-September 2017. The questionnaires contain a mix of open-ended as well as close-ended questions to allow the respondents to convey their experiences in greater detail.

A separate test-based learning analysis specifically for Math and English was also done with all the children (735 in number) from 25 sample schools out of 40. Some basic age and grade level appropriate questions were designed to test children's learning levels in these two subjects. The reason behind this testing was to see whether they are at par with their conceptual understanding in these two subject areas. The need for this was felt as one of the prime goals of edu-kick is to also improve subject-based learning outcomes for children especially in Math and English.

General School Profile

The survey was run amongst 24 schools, randomly selected out of the 40 schools where the edu-kick intervention has been planned. The general school questionnaire tried to gather information about the overall school infrastructure with regard to availability of playgrounds, toilets, place for washing hands and cleanliness. Some of the key baseline findings are as follows:

- 16 out of 24 schools have a playground while the rest (8 in number) don't
- Amongst the schools that have a playground, 9 are located within schools while 7 schools have it outside or in the vicinity
- Most of the playgrounds were grassy/muddy and was found to be safe as per safety standards for children to play on
- All the schools have toilets. However, 6 schools have common toilets for girls and boys while the rest have them separate for girls and boys
- Reportedly, in 14 schools the toilets are cleaned twice a week while 6 have it cleaned only once a week
- Notably, 13 schools had toilets where the door latch was missing or not working
- Only 9 schools had a place/tap to wash hands after using the toilet. Rest 15 schools did not have any provision for washing hands after use of toilet
- 19 schools did not have soap dispenser or bar on the basin for washing hands for any purpose

Most schools where the survey was conducted cater to children from underprivileged sections of society. However, according to government norms especially after the Right to Education Act (RTE), all schools must have a playground meeting safety norms for children to play. The above data shows that despite almost 7 years of the RTE Act, 8 schools within this limited dataset, has basic provisions like playgrounds, clean toilets with a latch, handwash facilities etc. missing in many schools. This is a revealing fact in the light of changes that were expected after the RTE Act.

From the program point of view, Edu-kick offers a possibility to enter such school spaces and offer to bring changes in the overall infrastructural facilities within a school. Since Edu-kick will require playgrounds to run their games sessions with children, it can in this case help schools to find safe spaces (open fields in the vicinity, local parks etc.) where sports can be pursued as an essential activity.

Edu-kick can especially bring changes with respect to improving the overall hygiene and sanitation situation through their games on improving life-skills pertaining to hygiene and sanitation.





Children in the midst of playing a Math-based game

Teachers' Profile

A total of 24 teachers were interviewed during the survey. Specific questionnaires were designed for the purpose to elicit information on their general attitude towards sports and the way it is dealt with within their schools. Some of the key findings are as follows:

- There are usually 2 sports period in a week in every school. However, reportedly PT or Physical education and sports are not separate according to 17 teachers. In addition to PT, kho-kho and kabaddi were the only two sports activities that was played by children
- Out of 24, 19 teachers felt that sports is an important activity and should be pursued regularly by children while the rest did not think so
- 15 out of 24 teachers said that they thought PT alone does not address the need for sports in their school. On further probing they named games such as football and cricket as additional sports activities that should be taken up during sports period
- With regard to availability of sports equipments in schools, teachers response was ambiguous, with only 6 conforming its availability in some form while the rest said they were not aware.
- With regard to receiving any sports training or the availability of any sports manual, the response once again was ambiguous with 8 confirming that they had not received any training while 15 did not answer saying they were not aware
- Out of 24 teachers, 22 confirmed the presence of an active School Management Committee (SMC) within schools. However, only 5 of the 22 SMCs have a student member in them while the rest do not
- 13 teachers confirmed that girls and boys play separately while only 9 said they sometimes play together. On further probing it was revealed that frequent fights and the boys tendency of getting physically violent were the reasons for keeping them separate.

The above findings though limited to the opinion of only 24 teachers, is quite revealing in nature. While overall, the need to have sports as an important developmental tool for children is expressed by teachers, the way of conducting the same within schools is limiting in approach. Unavailability of sports equipment, lack of knowledge due to a complete lack of training on sports and absence of sports manuals are all indicators that sports as an activity is neglected in schools. From the above findings, it can be clearly deduced that physical training or PT is the only major physical activity for children along with kho-kho and kabaddi that are sometimes played. In addition, teachers lack of knowledge regarding sports is also indicated in the fact that popular sports like football and cricket are the only two possibilities that they could think of on asking for alternatives.

In such a scenario, a program like Edu-kick sure stands as a ray of hope for teachers and students alike. Edu-kick through its unique games not only aims at making sure that children come out and play, it also aims at changing the overall school environment through generating an interest in sports among teachers. It is expected that the program will help build a pro-sports culture within these schools where teachers too will get involved and join hands with the facilitators.

Children's Profile

A total of 110 children from 24 schools (5 from each school) participated in the survey. Specific child-centric questionnaires were designed for the purpose to elicit information on children's motivations, likings and reasons for attending school. Few sports specific questions were also thrown in to understand their interest and inclination as well as the school's efforts in supporting that interest. Some of the key findings are as follows:

- Almost 100% children said that they like coming to school and miss it/stay absent only due to ill-health
- Almost all children 109 in number said that they like playing and out of these 105 children said that they enjoy outdoor games more than indoors
- 81 children reported that they do have a separate sports period while 25 said they did not. Notably, 62 children said that girls and boys play separately.
- For availability of sports equipment, children seemed to be little unsure as almost 65 children said they do not have any sports equipments while 46 said that even if they do, they do not get to use those equipments
- Almost 95 children said they do have a first-aid box and are taken care of in case of accidents of injuries
- 63 children said they did not know about child rights' while 45 did not answer this question



Breaking the gender barriers- girls and boys playing together!

From the above data, it can be clearly said that while children enjoy playing outdoor sports, there is still a complete lack of support and availability of facilities to help them pursue sports in schools. The fact that 46

children directly reported that they are not given any equipments to play with is a telling fact to support this finding. The other important finding is the fact that there continues to be a constant gender-divide within schools where girls and boys play separately. On further probing, it was revealed that they are mostly kept separate as boys tend to fight and get physically violent. Edu-kick as a program is also designed to foster team-spirit and togetherness during play. This is an important like-skill and can go a long way in a child's personal and emotional development.

As a program, Edu-kick has a huge opportunity to demonstrate that sports can transform lives in the long run through instilling certain behaviors that are healthy. The program sessions are conducted with the help of sports kits that have basic equipments such as footballs and basketballs, skipping ropes, stands etc. The program can aim at transforming the overall attitude towards playing sports/organizing a session with children through demonstrating the same to teachers.

Children's Math and English level Analysis

The subject based tests were done with 735 children (grade 4) in 24 schools. In Math, the questions covered basic foundational concepts such as knowledge of shapes, number line, odd and even, addition, subtraction and multiplication problems. In English, comprehension, spellings and knowledge of basic alphabets was tested. Some of the key findings are as follows:

- On an average, almost half of the children i.e., 50% tested were unable to answer either few or all questions in both Math and English
- The concepts that seem to be most difficult for them were identifying odd-even numbers (219 children got it wrong while 242 did not answer), number line (327 children got it wrong while 307 did not answer), subtraction (460 children got it wrong while 194 did not answer)
- In English, almost half the children fared badly in spellings and identifying objects and naming them correctly. In spellings, 210 children got at least 2 or more spellings wrong out of 4 given. In identifying things and writing them correctly, 203 children got it wrong while 342 did not attempt it at all.

The above findings are indicative of poor learning outcomes in both Math and English as children of grade 4 (aged 8-9 years) were unable to solve problems that are for lower graders. Their fear for both these subjects was also evident in their responses during individual interviews where many said that English and Math is disliked by them as they find it difficult.

Edu-kick has an opportunity here and an important role to fulfill if they can work towards improving children's interest in both Math and English. Their games-based approach can make these dull subjects interesting and less fearful. If certain basic concepts are clear, then it can be expected that children will start taking interest in studying Math and English and perhaps demonstrate better results in future.

Conclusions and Recommendations

In the light of the above findings from the questionnaire-based survey in the select participating schools, it can be concluded that a program like Edu-kick is a timely and much-needed intervention. The schools are of a mix category where some have the requisite interest and infrastructure to support the program while others do not. The team members will need to make extra efforts to motivate teachers and staff members wherever possible to have a more integrative approach that will make it sustainable in the long run.





Play in progress!

Children's overall interest in outdoor sports is a huge comforting factor and here edu-kick will play a positive and motivating role in encouraging children to try and play various types of games. Breaking gender barriers is yet another scope of intervention for the program. Most of edu-kick's games are integrative in nature and encourage group participation and building team-spirit. When girls and boys learn to play together a different kind of ethos is created and a sense of positive culture is fostered. The program should particularly try and highlight this approach when working with children and should try and do it in the presence of teachers.

The subject-based games should be revisited every two months and perhaps redesigned to introduce newer concepts so that children can broaden their knowledge in these areas. Regular monitoring and interaction with children post-sessions is a must to understand their needs and requirements which may change over a period of time.