

# **2003 TAIWAN INTERNATIONAL SCIENCE FAIR**

**CATEGORY : Engineering**

**PROJECT TITLE : Transiency**

**AWARD : Second Award, Engineering**

**SCHOOL : Diocesan Boys' School**

**FINALISTS : 何明剛**

張文傑

**COUNTRY : Hong Kong**

## Transiency

Transiency... something which only stays for a short time, and changes frequently. You're probably wondering now what this has to do with our sports and we must admit that at first sight it really doesn't seem to, but think of the world and how many changes sports have experienced. Is it not time we thought of how sports facilities could be improved? And what if you were told that there would be an "ever-changing" sports centre which you could use?

You really might get the chance to use such a sports centre one day, and that's what our idea is all about. A multipurpose sports center is what you could call it, but it's not in the least like any one you've seen before. In places like Hong Kong, where space is everything, multipurpose sports centers are common, but they always have so many colored lines that tend to confuse both players on the court and spectators off the court. Just how often have you seen referees and players arguing about whether the ball is out or not? And how often have you found that you are not enjoying the game as much as you should? Yup, we're sure it happens all the time, but you don't have to worry anymore, as our innovative design will solve all your problems. Yes, its time for us to change...

In our dream sports mat, we'll have lines which can change and also detectors to tell you where the balls land. You're probably thinking, "Lines which change?", and yes that's it! The perfect solution to all those confusing lines would be lines which could change their positions. And to do this, we've made use of some new technology called 'E-INK' which would make this possible. Of course it sounds like something which is really costly but in fact, this technology doesn't cost that much and its really durable, so it's really worth the money to start changing. Moreover, these mats can also be rolled up and stored somewhere else, so when you don't need to use the sports ground you can just pack it up and the venue can be used for other purposes.

## 評語

利用電場敏感的材料，配合電腦圖形容易改變的特性，發揮應用到運動場地格線的變化，以節省空間，創意的作品，也具未來的應用性。