

Teaching HCI Through Magic: Answers to Questions

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What I tried successfully

We tried using magic tricks to illustrate a range of HCI concepts to both school and MSc students. Magic works well as a metaphor for HCI. Tricks combine mechanics and psychology-informed presentation just as programs combine algorithms with psychology-informed interaction design.

Changes that I made

We started using magic to teach computer science with links around algorithms but then realised the deeper links to HCI. We have dropped old tricks and introduced new ones as we discover which ones work best to tell interesting stories.

Readings I found interesting

[We believed that this question could be interpreted in two different ways and have supplied answers for both possibilities]

1. Fulves, Karl. 1983. Self-Working Number Magic: 101 Foolproof Tricks. New York: Dover Magic Books.
Fulves, Karl. 2001. My Best Self-Working Card Tricks. New York: Dover Magic Books.
2. The fact that we get extremely positive feedback across a wide range of groups is very interesting. This applies to age groups from secondary school students of all ages, whether gifted or mixed ability groups, with family audiences, researchers and MSc students. Similarly feedback is good in various formats: shows or walk-by stalls, or performing a trick in a lecture to illustrate a point.

Tips and strategies I found useful

Teach with a sense of fun and infect the audience with your enthusiasm. Providing memorable hooks based on strong and fun analogies is a powerful learning mechanism. Science festival or open day stalls where the audience walk by is a good way for a new presenter to get started, rather than going straight into doing it in a lecture. If it goes wrong then there are few consequences and there is a new audience along immediately to try again. You do them so many times that at the end of a day you are very confident!

What I found challenging

Having the courage to do tricks the first time in front of a live audience can be very nerve-racking.

What did not work for me

It is important to have tricks and presentation you are comfortable with. When we've tried to just take the patter of someone else rather than adapting it, tricks have fallen flat.

What would have helped me

It would have helped to realise sooner that trying to force the links from magic to science does not work. It is best to take a trick you like and just see what link comes to mind than start with a HCI concept and try to create a trick to teach it. You do that with lots of tricks. Once you start doing the tricks new ideas occur to you that you can then use in the future.