**Exhibit Building secrets 2: What visitors do**

Written by Ian Simmons, Director of the Inspire science centre in Norwich from information supplied by Steve Pizzey, Roger Coleman, Ben Gammon, Andy Lloyd, Paul Orselli and Claire Pilsbury.

**People very rarely read the instructions**And only as a last resort, plus many cannot anyway, they may be too young, too old, speak a different language or may never have learnt. Do not make the appreciation of an exhibit entirely reliant on the label.  
  
**An exhibit must respond immediately**An exhibit must respond immediately to what the user does. If it doesn't they will do it again and again until they either give up, assuming it is broken, or actually break it themselves. If there is more than one thing they can do, in the absence of an immediate response they will try all sorts of combinations of activity. When the exhibit finally responds they will then be confused as to what they did that actually got results, as more often than not it was a couple of actions back and they will leave the exhibit baffled and frustrated.  
  
Any open slot in an exhibit (eg a small gap between 2 panels) becomes a postbox  
People will insert worksheets, ticket stubs, tissues and less savoury items.  
  
**People tend not to steal things**You can leave all sorts of seemingly alluring items such as prisms loose on an exhibit and, while they may wander around the gallery a little, do not usually get stolen often enough to make keeping a few spares and buying the occasional replacement non-viable.  
  
On the other hand, if you anchor loose parts to an exhibit by cables or cords, they will instantly get knotted into an impenetrable mass which renders the exhibit unusable and takes a large amount of staff time to unravel. It will usually be knotted again within minutes of unravelling. This is not malicious, just an inevitable consequence of the exhibit being used.  
  
Sometimes, anchoring items indicates they are of special value  
This may encourage the larcenous to make an effort to detach and steal them, whereas they would have left them alone if unattached because that gives out a subliminal message that the object is of no great value.  
  
**No matter how big or bright the arrows are, every crank will be enthusiastically turned in either direction**If only one direction produces an effect, give users a feedback clue, eg turning bike pedals backwards has a dramatically reduced sense of effort than turning them forward. If something has to be turned between several different set positions, make each position click into place. Otherwise users will just spin the thing at high speed. Make sure the clicking mechanism is tough, as users will still try and spin it to override the click and will break it if humanly possible.  
  
**Children (in particular) have no brakes**They will apply an awesome amount of force to something to make it move in the direction they think it ought to, and if it doesn't comply, they will force it to. They will also apply the maximum amount of force to any activity on gallery. Exhibits need to be able to take this, but some should reward the application of moderation rather than brute force.

Users treat delicate-looking exhibits with more respect than tough-looking ones  
But make sure the delicate exhibits only look delicate.

**Users often assume any button is a toggle switch**ie they should press it quickly and release it. Any button which is not should give an instant response to indicate it isn't.  
  
**Users don't look up**If an important part of an exhibit is above the user's sight line it needs to be visible from a long distance so they don't need to move their heads more than a few degrees to see it, or should do something to attract attention (move or make a noise). If an exhibit requires users to communicate at a distance they need to be able to see each other. If not they have no idea if there is someone there to communicate with.  
  
**People don't sequence**If an exhibit relies on the user doing a series of actions in a set sequence it is unlikely to be successful. People tend not to read the instructions, to do whatever looks most immediately exciting first and, if not getting an immediate response, they will leave the sequence uncompleted. This confuses the next user who encounters a half-completed exhibit without necessarily realising this is the case, or the exhibit needs a reset function included, which can be disconcerting to users.  
  
**People take things very literally**Metaphors are lost on most users, especially children. Most people under the age of 12 do not understand the principle of metaphor, many over that age may not grasp that the exhibit is being metaphorical, especially when others they've just encountered weren't. An exhibit about chromatography which is based on sorting different sized balls will, to most people, be a ball sorting exhibit, unless they already understand how chromatography works and have read the label.  
  
**People are copycats**People's favourite way of finding out how to use an exhibit is not to read the label, but to watch how other people are using it. If one person uses an exhibit incorrectly, a whole stream of them will often follow. Sometimes this is due to a problem with the makeup of the exhibit, occasionally it is just due to a quirk of the users - an exhibit which is usually used correctly by a majority of people may be consistently misused by a particular school party as a result of this effect. Explainers can be decisive in breaking cycles like these.  
  
**Exhibit names ought to be clear and unambiguous**The title of an exhibit is the piece of text most users are likely to read. Ideally it should provide a thumbnail sketch of what the exhibit is about and what they will do. Titles do not draw users to exhibits, it's sight and sound which do that. Giving an exciting title to an exhibit won't make it more popular, but may lead to disappointment when the exhibit doesn't live up to it. In addition, the exhibit name is the one part of it which has a life beyond the gallery, appearing in publications, conversations and worksheets. In such circumstances it is really useful if the name evokes the exhibit's action.  
  
**"Race against the clock"**Race against the clock is a good way of making something fairly dull more interesting. People find completing a task against the clock very exciting and will repeatedly carry out the task in order to better their time.  
 **"Trial of Strength" exhibits are a bad idea**People will always contrive to exceed the exhibit's tolerance and break it, an exhibit which produces an adequate response from a five-year-old hopping onto it from a standing start will not survive a 15-stone adult taking a running jump on to it from across the gallery. It also promotes the idea that maximum force should be applied to exhibits with a knock-on effect for the rest of the gallery.  
  
**People really like feely boxes**These are a great way of getting people to investigate and think about an object, but users shouldn't be able to see straight in or they won't feel. The object should be immediately feelable without having to grope around to find it, and it should not be easily confused with its mounting. Also, the cuff through which hands are put should be tough enough to withstand repeated use, but not so stiff that it drags off user's watches and jewellery.