Maya Götz/Judith Schwarz

I Got It!: what children get out of an educational programme

Reception of a co-production from 9 Southeast Asian countries for 9 Southeast Asian countries

An IZI study among 1,564 children tested the increase of knowledge among viewers of the Southeast Asian programme *I Got It!*.

The TV programmes explicitly intended for children which are available to children in Southeast Asia are mainly provided by the global networks Disney, Nickelodeon, Cartoon Network etc. Non-fictional knowledge programmes only feature in the portfolio in very exceptional cases, and topics relating to particular regions, especially those produced locally, hardly appear at all. This was the reason why the Goethe Institutes in Southeast Asia started the project *I Got It!*, within the framework of the initiative "Culture and Development". Under the slogan "9 countries, 1 vision", the first regional knowledge programme for children was produced in 9 Asian countries (Brunei, Indonesia, Cambodia, Laos, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam).[1] The basic principle: the participating countries, as far as they are able, film items based around questions which are of interest to children in the fields of technology, nature, and the environment. These are the building blocks for the 10-minute magazine programme. In each country, they are voiced in the national language and introduced by a presenter from that country (in Cambodia and Laos by a female presenter). Intensive joint workshops on location in the relevant countries provide expert support and advice on writing and producing attractive children's programmes.[2] After the first 2 seasons, with 26 episodes each, the third is already in production.

Screenshot from *I Got It!* © Goethe-Institut

Ill. 1: **Particular value: children learn from the episode *Sugar* that an Indian king discovered sugar cane**

Method

The IZI carried out a study to accompany *I Got It!*, testing the increase of knowledge for individual elements of items. Using 3 selected programmes, standardised questions were asked to establish the change in viewers' level of knowledge in a before-after procedure. The Goethe-Institut in Thailand organised the surveys; in total, 1,564[3] children from Cambodia, Thailand, and the Philippines were surveyed.[4] The children, aged between 7 and 16, saw the episodes at screenings in the framework of the Science Film Festival, and filled in multiple-choice questionnaires before and after watching the programme. Out of the information offered in the programme – about energy generation and use *(Clean Energy)*, the production and effect of sugar *(Sugar)*, and air pollution *(Traffic)* – questions were asked about 11 knowledge items from the 3 episodes. The results give preliminary insights into the aspects which are particularly conducive to the acquisition of knowledge.

Results

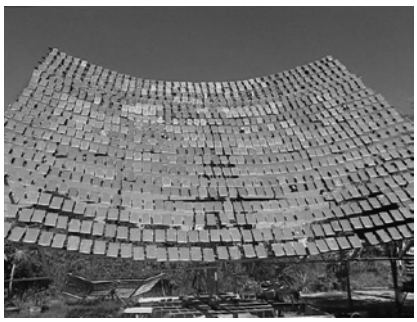
Overall, clear increase of knowledge is evident in a wide range of areas, with the proportion of correct answers increasing markedly for almost all the questions. This in itself makes it clear that *I Got It!* imparts knowledge in a way that is enriching for children. From the wealth of findings – which are mainly significant as feedback for the programme – a few salient insights, pointing beyond the specific context of the programme, will be presented in the following article.

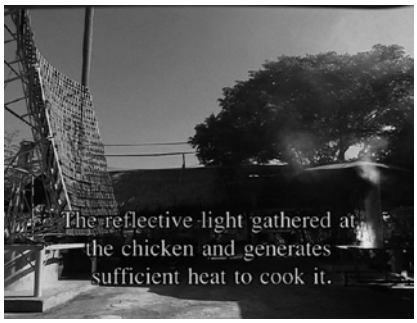
What is especially easy to remember

… knowledge with particular and novelty value

The greatest demonstrable increase of knowledge was related to the question of who discovered sugar. While

only about 25 % of the children knew before watching the programme that sugar was discovered by an Indian king, over 80 % knew this after the programme.
In the item, the content is illustrated with simple animation, aesthetically linked with regional traditions (ill. 1). The sharp increase in correct answers among the children is partly due to the novelty value of the information, which is also presented in an aesthetically appealing way. But the particular attraction which probably leads to the outstanding results also has to do with how the information is related to the region. This plant, highly prized all over the world, was not discovered and introduced to the world by one of the colonial powers, but by a king from nearby India. This regional connection means that the information has not only novelty value, but also identity value, making it especially easy to remember.





Screenshots from *I Got It!* © Goethe-Institut

Ill. 2 to 5: **Can sunlight burn a newspaper and grill chicken? The answer at the end of *Clean Energy*: yes, solar energy can do this if it is reflected and focused accordingly**

… with information which gives a more complex understanding of something which is well-known and taken for granted

The information about the discovery of sugar, with its positive emotional charge, is followed up by another unit producing clear increase of knowledge: the appearance of sugar cane, which is shown on screen. Children (and adults) all over the world generally know what white industrially produced sugar looks like. But the plant it was originally derived from tends to be unknown. Here the item establishes a link with something which children know and experience in everyday life, and adds an important element: where it comes from. The increase of knowledge is correspondingly high. After watching the episode, nearly 90 % of the children surveyed could recognise the plant that sugar comes from.

… showing a topic in several ways and in different dimensions

Part of the clearest increase of knowledge emerged in those places where a fundamental scientific matter is incorporated and given visual form in various ways. An example of this is the framing narrative in the episode *Clean Energy*. The topic of solar energy as a renewable resource has been dealt with repeatedly in the item, with experiments, graphic visualisations, and an explanatory off-camera text, ensuring that the content is firmly fixed in the audience's store of knowledge.

The presenter sits on a staircase with a boy called Pun. He gets the boy to show him how he sets fire to a piece of paper with a magnifying glass, by concentrating the sun's rays in the lens. An animated diagram clarifies how this works, showing how the sun strikes the paper through the magnifying glass.
The sequence portrays the child as an active, competent agent. The diagram offers a good way to mentally visualise how this works. A simple but effective expansion of knowledge in the field of optics. This is particularly easy to remember because this "small everyday experience with an optical phenomenon" fits perfectly into a larger, more spectacular framing plot: right at the beginning, the presenter demonstrates "magic tricks": he sets fire to a newspaper with sunlight, and then grills chicken in the sunbeam – without fire or electricity. How is this possible? After 7 minutes, he gives the solution to the mystery. We are shown a construction comprising around 1,000 mirrors, reflecting and focusing the sun. The energy generated is so strong that it sets a newspaper alight and even grills chicken (see ill. 2 to 5).

Allowing new dimensions of meaning

One reason why this was so memorable was the clever dramatic structure, involving the audience by means of a logical problem. What the children are seeing contradicts their prior knowledge, and cannot be integrated into their previous image of the world. The friendly presenter has no intention of embarrassing the children, however – this would hamper any increase of knowledge. He allows them to experience a sudden flash of insight by showing the huge construction behind the experiment, and explaining how something so apparently improbable is possible. This large-scale experiment for concentrating solar energy ties in with eve-

ryday experiences and knowledge already gained on a smaller scale. In this way the things children can do themselves are given a new dimension of meaning (singeing a piece of paper with a magnifying glass). The power and possibilities of knowledge about scientific connections become tangible – within the limits of television.

Screenshots from *I Got It!* © Goethe-Institut

Ill. 6 to 9: ***Traffic:*** **A girl actively asking, researching, understanding and drawing consequences. Elements children can relate to and an inspiration for them to follow**

… where children engage with a topic as agents

Further segments of the programme which are highly valuable for knowledge acquisition are those in which children are active and competent agents. This is most obvious in the example of the girl called Chi in the episode *Traffic*. Chi is the protagonist of the framing narrative and the thread connecting the various items. Starting from her own experience of how bad it smells when she is on the carrier of her mother's scooter, she consciously engages with the topic of air pollution. She carries out an experiment with her grandfather and visits a female scientist in a laboratory. At the end, she is convinced of the pollution caused by scooters, one of the most popular vehicles in Southeast Asia, and by cars. She decides to cycle more, and establishes a club at her school, "The Green Bicycle" (see ill. 6 to 9).

The young protagonist as an active, responsible agent gives viewers someone to relate to. She operates in the Southeast Asian world in which they live. This offers elements that viewers can recognise, starting with the living situation, and including the family setup and the typical characteristics of the traffic. Something perceived by children in everyday life is taken up, researched, and understood, and consequences are drawn from it. This not only expands knowledge of the topic, but also encourages viewers to take action themselves, and also weakens existing stereotypes, e.g. that research is a masculine activity.

Conclusion: it's worth it!

The study shows that children get something out of the programme. They get more out of some episodes than others, but the tendency is clear: knowledge programmes enrich children's lives, especially if they provide new facts and insights, give visual form to things which are not usually visible, and thereby foster a more complex understanding of familiar things. The combination of various approaches and the clever use of dramatic structure to involve the audience are particularly conducive to knowledge acquisition. But the moments most conducive to learning are those in which questions from children's everyday lives are evoked, researched, understood, and worked on, with children as active agents. Projects like this are particularly valuable in regions of the world where children have little access to representations of themselves on television, and where their regional realities hardly appear at all on children's television. ■

NOTES

[1] *The Goethe-Institut produced* I Got It! *jointly with television broadcasters from Brunei, Indonesia, Cambodia, Laos, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam.*

[2] *The pilot programme for the production began in July 2009 with the support of UNESCO in Thailand and Cambodia, the International Central Institute for Youth and Educational Television (IZI) at the Bavarian Broadcasting Corporation, the PRIX JEUNESSE Foundation, as well as tvision GmbH, gomie GmbH and the ZDF. The pilot series was first broadcast in summer 2010, initially in 7 countries, which were joined by a further 2 in 2011.*

[3] *54.3 % girls, 45.7 % boys*

[4] *n=1,564: 495 children watched* Clean Energy, *609 children watched* Sugar, *460 children watched* Traffic.

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