

The ACTS Project in Finland has concentrated on three basic aims: to make use of Bloom's taxonomy, on which the Finnish national curriculum (2014) is based, a useful and integral part of teaching and learning; to make thinking visible; to develop tools which aid assessment of thinking and learning by both teachers and learners and which are suitable for everyday use in the classroom. In line with the Finnish curriculum there has been much focus on learning to learn.

Theoretical background: The Yes/No game is a task which has long been used in classrooms to practice basic memory skills, and the game itself has relied on guesswork. Learners must guess what the teacher is thinking of, and the teacher can only answer *Yes* or *No*. In order to make the game more thinking, and to challenge the learners, the rules of the basic *Yes/No* game have been developed and altered, as can be seen in *Yes-No Game: How it should be used*. (see p.2)).

When the game is used consistently and systematically it can lead to improvement in various types of thinking. Although it involves asking closed questions, the challenge is to be able to elicit the maximum information from such questions. It has been used effectively as an introductory task to practise some of the first skills necessary for effective and inventive problem-solving. In demanding that learners ask as few questions as possible, the game forces them to look for relevancy, to try to find patterns and understand them, and thereby to start thinking up their own strategies. The 'Yes/No technology' has been used extensively for pre-schoolers for example by Sidorchuk and Khomenko (see below) and also for language teaching and other subjects to all age groups by Sokol in the Thinking Approach (see below). Here it is used at primary level for EFL, but it could be used for any subject, integrating thinking skills with curriculum content.

The skills the game practises relate directly to the demands of the Finnish curriculum for thinking and learning skills – finding out what is relevant and important in a particular context, reflecting and self-assessing, improving procedures and strategies. It involves questioning, reflection and reasoning, drawing conclusions and inventing. At its simplest level it practises narrowing the search space in a problem, and it gradually becomes more demanding, going on to practise classification skills and finding the most relevant features of a problem or situation (see 'Moving on..', p.3)).

In common with many thinking tasks, the game provides challenge, it doesn't say how the challenge should be tackled as the learners should work out the strategy themselves. It depends on making the thinking visible in order to reflect on it, assess and develop it. The game also demands the skills and atmosphere necessary for class discussion and good group work, thus bringing together the strands of the ACTS project in Finland.

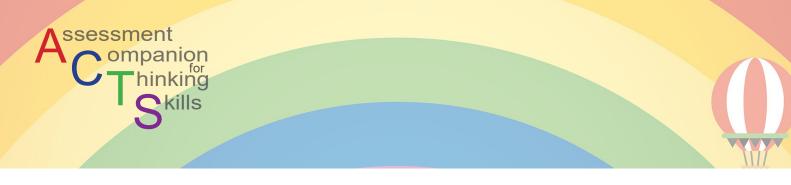








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In the context of the ACTS project in Finland a Challenge Sheet (see, p.9) has been developed to help to make the reflection and discussion after the game more effective, concrete and visible. This means that as well as reflecting on the game, learners also reflect on their own thinking (Bloom verbs) and metacognitive and working skills (see, p.7,8). The game provides a task where the different levels of thinking on the Bloom poster can be expressed, seen and reflected on, particularly when looking at what the pupils actually do when playing the game, what and how they learn from it afterwards and how they can improve their performance in the future.

References: Opetushallitus (2014:96): *The Finnish National Curriculum*. Next Print Oy, Helsinki 2016.
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Sidorchuk, T. and Khomenko N. (2006). *Thoughtivity for Kids*. Salem: GOAL/QPC, pp 59-73.
www.thinking-approach.org/yes-no-technology

<u>https://otsm-triz.org/en/category/отсм-термины/отсм-триз-педагогика/нелинейная-</u>технологияобучения/технология-да-нет







