



Childtuition First Experts Meeting, 11 - 13 April 2008, Brussels

1. Introduction

Prior to the Childtuition First Experts Meeting, 11 – 13 April 2008 in Brussels, board members, partners and programmers from Child Tuition participated in a preliminary brainstorm session with two external experts. The brainstorm session was a success, with valuable information shared between external experts and members of the Child Tuition team. Inevitably, a significant number of fundamental questions remained unanswered, while the different perspectives brought light onto new questions and uncertainties. The brainstorm session was a very worthwhile enterprise and gave shape to the first three-day Child Tuition Experts Meeting. Participants arrived at 12 questions that would need further elaboration and discussion throughout the meeting.

1. What is the main curriculum of the English language for internet literacy?
2.
 - a. What is the most intuitive way for children to navigate through the application?
 - b. How do they get back to the home page, or select the appropriate level?
3.
 - a. What rewards will be used?
 - b. What kind of relationship exists between rewards and games?
4. What level of responsibility will the child have in the learning process?
5. How to deal with the quality of the English language that is offered; is it necessary to make changes at later stages in the learning process?
6. What are the ideal features of the learning environment, if it is to be self-supporting and attractive to children?
7. How is feedback regarding results and achievements processed in the software?
8. What is the best way to display/demonstrate the child's learning progress?
9. What kind of pronunciation is the most appropriate for tribal children in India?
10. What level of English can the tribal children in India be expected to achieve?

11. Is it necessary to construct themes and contexts in the language learning software?
12. What does successful communication on the Internet consist of, and what kind of knowledge must children acquire to communicate successfully online?

This report is a written summary of Child Tuition first expert meeting. The discussions roughly followed three major themes, collectively addressing the 12 questions posed during the brainstorm session:

1. The curriculum (content, themes and contexts, knowledge to communicate successfully on the internet and learning progress).
2. Internet literacy and the English language (Oxbridge or King's English, pronunciation and achievement levels).
3. The learning environment (rewards and games, responsibility for the learning process and feedback regarding results and achievements).

2. Ideas and suggestions towards the curriculum

In the context of Child Tuition, the use of the concept 'curriculum' can be misleading. A curriculum facilitates and gives focus to teaching and learning. In the learning program for the Tribal children in India, however, there is no teaching involved. This would appear to simplify things as it removes a variable from the learning process. But it also makes life more complicated, since there is relatively little knowledge around creating successful self-directed learning programs, or the requirements for Internet literacy. Any recommendation regarding the choice of content, themes, contexts, the knowledge required for communicating successfully online or the most effective kind of learning, is at this point still highly speculative.

2.1 Content

The Child Tuition Foundation's target group consists of 2 to 8-year old children and, in general, disadvantaged children. There is no empirical data on the levels of literacy these children achieve in their native language. In general, the children seem to be eager to learn, which gives them more social status, although girls seem to be more eager than boys. Tribal children have a short educational career, and very few go on to higher education. The learning program should provide them with extra opportunities to learn, to explore the world remotely and to get in touch with other children in the world. Even providing basic materials as pen and paper would help, but this learning program looks to ensure that Tribal children can access the Internet in a meaningful

way. In terms of infrastructure, the expectation is that Internet access will be supplied in India via satellite in years to come.

The aim of the program is to learn English in order to create a gateway to the world. The program will encourage self-empowerment, which in itself spurs a motivation to learn. All experts pointed to possible risks the developers might be taking by preparing the Tribal children for the Internet.

At least five skills seem to be of importance for the first and second phase of the learning program:

1. Listening
2. Speaking (pronunciation and interaction)
3. Reading
4. Use of social and compensatory strategies
5. Intercultural learning

In the early stages, listening is the key skill for children learning English. In the first phase, then, the program should focus more on listening and compensating (i.e. guessing strategies). A possible approach is to insert a number of films that illustrate words and provide the learner with information that is just beyond their level of comprehension, thus encouraging compensation. At this stage, it is a matter of providing learning tasks that are a few steps ahead of the child's ability. This also supports the motivation of children. As section 5 will show, curiosity and success are decisive factors in sustaining motivation to learn a foreign language.

Input should be meaningful and comprehensible. Reading (short stories) is essential for the children. Telling stories is also important, because children learn to convey feelings and address more general ideas and concepts. Just showing flash cards is not enough. Kids love stories, which could be made to fit in with local traditions. Indians have a rich heritage in story telling. Stories should be especially important for the second phase of the program, for which an abundant amount of stories should be gathered.

The vocabulary taught should be aimed at everyday use. However it should also allow the child to engage with fantasy worlds and stories. In this way, the basic vocabulary should enable children to explore items or subjects they want to use or add to their daily life. A child with a passion for, say, tropical fish or slot car racing, should be able to obtain and use the corresponding vocabulary.

Moving to the second and the third phase of the program, writing should begin to play a more important role. There seem to be two essential motives:

1. Internet literacy can be achieved once the children are able to communicate in written English;

2. Internet literacy requires two-way communication, and Tribal children must find their own voice in the foreign language, in order to have their message come across.

2.2 Themes and Contexts

The discussions did not reveal a clear demand for the use of specific themes, in the sense of overarching structures. Tasks may be organized around, and words selected from, the following themes:

- | | |
|--------------------|-----------------------------------|
| 1. the ABC | 13. around the year |
| 2. the body | 14. contacts |
| 3. clothing | 15. at school |
| 4. food and drinks | 16. jobs-tools technologies |
| 5. at home | 17. environment |
| 6. the family | 18. numbers and colors |
| 7. my home village | 19. situations e.g. at the doctor |
| 8. the jungle | 20. shopping |
| 9. animals | 21. at the restaurant |
| 10. plants | 22. activities |
| 11. on the farm | 23. stories |
| 12. in the field | 24. the world around us |

It is noted that there is still a lack of knowledge about the local setting in which the program is to be used. Understanding of the culture, stories, and everyday experience of the people, as well as of the natural environment remains too vague. The developers must take more stock of what the children see, live through and experience. How the children's socio-cultural background relates to these themes is, of course, of the utmost importance. Participants with knowledge of the Tribals' living environment stressed that the actual prior knowledge of children coming to the villages varies a great deal. Their knowledge of the forest, jungle, and various surroundings of the villages, is extremely differentiated. Themes such as the jungle, animals, plants, and working on the farm or in the field are relevant, but typical Western European ideas about the appropriate words and settings must be adjusted substantially. More knowledge of the world of the Tribal children is needed. The choice of themes for the program may also draw on an established group of developmental fields for the education of very young children in Kindergarten (see below).

Developmental fields

Key areas

- | | |
|------------------|---|
| 1. The self | body, direct surroundings |
| 2. Tactile | experiences, food, smells |
| 3. Social | engagement in groups, organizations, patterns |
| 4. Mathematics | sequencing, operations |
| 5. Science | exploring, nature |
| 6. Communication | family, other children, teachers |

The question remains if it is necessary to make explicit choices about the selection of themes and contexts. The suggestion was made to use a set of possible themes and to

select freely from that. Much more important is the selection of words (appropriate in a specific setting and for the intended population) and using these words to acquire appropriate skills. The words should be well chosen and serve the possibilities to connect to specific words in the natural surroundings of the child.

2.3 Structure

The program should begin with an overview. Children should be oriented to the program through a visual, multimedia tour of its contents. This may be achieved by considering three affordances, or types of interaction, inherent in the program:

1. Instructional

Since there is no supervision, the content of the program must be organized in such a way that the child easily sees the benefits the program provides.

2. Output based

Clear indications of the goals, skills acquired and sequences will help learners become acquainted with the overall setup of the program. This will help the child to form expectations regarding the learning process.

3. Input based

Alternatively, the program may be structured according to peripheral technology / what the child is expected to contribute.

Functionalities could come from the device, while extra features could be on external memory, such as a USB stick.

2.4 Knowledge required for a successful access to the Internet

Early discussion during the experts meeting focused on aims, goals and limitations of the program. The planned program was set up to enable children to learn English independently of instructors. The project aims to remove one major obstacle facing disadvantaged youth, and access to the Internet has been a key theme since the initial stages of the project. All experts, however, pointed at the potential dangers involved. The *Childtuition* Foundation could be held legally responsible for any damage caused to children while surfing the Internet. This possibility should be taken seriously.

Data about the most recent developments on the Internet are important. As of 2007, 15.000 sites were created everyday, and 75% of those were dedicated to porn, poker and/or pills. In March 2008, this has jumped to 1,2 million Internet sites per day, where over 90% was related to the three P's. The possibilities for children to 'get lost', 'be damaged', or 'cause damage through provision of certain private data' are plentiful. Law suits could be filed against the *Childtuition* Foundation, because the foundation's program will have enabled Tribal children to access the Internet. All experts opted for

supplying a program that would provide a learning environment that eventually would enable a child to use the Internet. The program should provide language learning components and several elements that guide children toward responsible and intelligent use of the Internet, while teaching them appropriate skills such as searching for information. Within the program the child will only be browsing sites that provide information safe for children. *Ice* and *Nice* have shown their potential for usage within the planned learning program. Adequate learning environments for children are in strong demand. The use of *Google* has advantages when searching the internet for information. However, there are also disadvantages. A fine example might be the things children encounter when searching about 'Vikings' for their school work (projects, thesis or presentation). The first four pages hardly provide any relevant and appropriate information in an educational context for children. The first five websites would provide the children with information on:

1. Office furniture
2. History of Vikings in Wikipedia
3. The Supporters Club of the Basketball team Hanzevast Capitals, 'the Vikings'
4. An American football team
5. An uni-hockey club in Roosendaal Holland

Only after trying out several web sites a child would encounter the desired information. Then the question remains whether the information found is reliable (will I find the same through the same and different searches) and valid (have I found what I needed to find and is this true information). From this it can be deduced that children need to be educated to gain productive search habits. To use, for example, *Ice* or *Nice* the children are trained to:

1. Learn to think. They need to think at least 30 seconds about what they are looking for i.e. have they identified the concepts that are relevant and usable.
2. Identify why the site is there, i.e. what is the *raison d'être*? It could be that the site is there to make money and is not there to inform people.
3. Identify who the authors are.
4. Make cross-references in order to obtain reliable and accurate data.
5. Learn to verify the obtained data. Using at least three sources would be ideal.

The concept of 'triangulation' as it appears in journalism might be appropriate.

This might lead to the conclusion that the planned language learning program, striving also for internet literacy, should refrain from the full Internet and perhaps should train children for a passport to the Internet. A passport should help the child to:

- identify bias, where are the hidden agendas?
- prevent exploitation of the user.

- understand and apply e-safety (handle and cope with undesirable e-mails, fishing, use of social sites such as chat rooms, etc.).

For the planned learning program it might be appropriate to develop training programs that focus on:

- a. identification of the appropriate information
- b. use of several (at least three) different sources
- c. possibilities to verify the validity of the acquired information
- d. look and identify different levels of difficulty
- e. apply thinking strategies before entering search queries
- f. look for richness of information

This of course triggers the question of what the learning program is preparing children for: unlimited freedom on the Internet or selective freedom and training for future use of the Internet. The latter option was favored among those present.

2.5 Learning

To achieve Internet literacy it seems important to draw on natural learning processes. These emerge from the natural curiosity of children and their desire to explore. Their curiosity will decrease when tasks and exercises are too either easy or too difficult. Therefore tasks must be understandable and comprehensible, but stimulating at the same time. Each step in the program must achieve its goals as well as provide incentive to explore the program one step further. Several experts mentioned independently that the program should 'pitch' the child ahead of comprehension, i.e. delivering tasks that reach just beyond the child's ability. These observations hint at the social constructivist learning theory of Vygotsky (1962) in stressing the Zone of Proximal Development (ZPD).¹

For listening skills, techniques used in the Total Physical Response approach could be incorporated. Asher, founder of the Total Physical Response, advocates a silent period. His method stresses listening and physical responses from students. Typically, the teacher gives commands and students respond to the directions. In a listening module, students may spend all of their time improving listening comprehension. The program should provide comprehensible input in the form of clear, unhurried English, always accompanied by visual or contextual aids to comprehension. Video could be used extensively: the action and dialogue should be crystal clear, thus providing exceptionally well-illustrated and contextualized input. From this it can be deduced that the planned learning program should incorporate the use of a camera, comparable

¹ VYGOTSKY, L. S. (1962) *Thought and language* Cambridge [Mass] : M.I.T. Press.

See also ATHERTON JS (2005) *Learning and Teaching: Constructivism in learning*. On-line available: <http://www.learningandteaching.info/learning/constructivism.htm>

to *Skype*. It should use images extensively and identify different levels of difficulty, interest and possibilities for exploration.

3. The English language

For the planned language learning program, English has been chosen as the most useful foreign language when gaining access to the internet. With regard to the position of the English language for the Tribal children, the discussion left several topics unresolved. Two examples are provided here. When children are educated bilingually, they use the stronger language i.e. the first language when working on a problem. The dominance of the first language is an issue that eventually needs to be tackled when developing the planned learning program.

3.1 Oxbridge or King's English?

The program will allow for switching between three different voices for instructions. In this way children can get accustomed to the program with an Indian voice, and later familiarize themselves with other types of voices and accents. Previously a teacher had to be a near native speaker. Nowadays there are more speakers of English as a second language than (near-)native speakers – children will eventually get in touch with others from all over the world, and a familiarization with several types of voices and accents could therefore prove useful. There is no need for either Oxford English nor King's English. The momentary use of Bengal / Hindi English is nearer to the sounds children hear on a daily basis. Later on the program can present an array of different pronunciations of the English language.

3.2 Pronunciation

The desired sequence in second language learning begins with 'the picture', followed by 'the language' and 'the word image'. Pronunciation should be a separate category. It should be stressed that intonation is also of vital importance. The intonation of English words differs heavily from, for example, French words. Emotion plays a role, and additional meaning is added through emphasis. Children should tell stories to others. Story telling is an art in itself, and in this way children would learn to build a narrative, for example working toward a climax and suitable ending. The children would learn to

inject meaning through emphasis when necessary. Of course at this point, the stories should be extremely short.

3.3 Achievement levels

At various points in the discussion it was noted that there should be no fixed set of achievement levels for the children. They should, however, be informed about their progress over specific periods of time, i.e. progress made in the past day, week or month. A very useful source with regard to achievement levels could be the Common European Framework of Reference for Language Learning (CEF)². There is hardly any doubt about the usefulness of the CEF and the fact that it is used in a wide variety of settings. For convenience sake the relevant scales at –A, A1, A2 and B1 levels can be differentiated according to the demands of the planned learning program.

4. The perceived learning environment

The children should be given as much flexibility as possible. However, when a child becomes inactive, the program will begin to play automatically. Furthermore, games will be used to indicate a child's readiness for the next phase or an increase in the speed of their exercises.

4.1 Motivation, rewards and games

Three important types of motivation can be distinguished:

1. Instrumental motivation
2. Integrative motivation
3. Intrinsic motivation

An example of instrumental motivation is a person wants to learn something in order to gain access to a type of (higher) education. Integrative motivation for learning a language could be a desire to interact with persons from another culture: e.g. a Swiss learns Spanish because he is living with a Spanish partner. Neither of these types is applicable when teaching young children. The third type of motivation, intrinsic motivation, can be subdivided into:

- a. fun

² North, B. 1996/2000: *The development of a common framework scale of language proficiency*. PhD thesis, Thames Valley University. Reprinted 2000, New York, Peter Lang.
Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEF) (2001). Cambridge: Cambridge University Press.
Online to be obtained at www.ceftrain.net

- b. curiosity
- c. success

By increasing their autonomy, children gain more intrinsic motivation. After a few years children should have a sense of their own success and derive further motivation from that. A fourth component would be excitement. The program should therefore help the child to reflect on his or her progress (see 4.2), and sustain curiosity through stories and games. Furthermore, the child should be able to grasp the program's long-term goals, i.e. communicating with others throughout the world. Ultimately the child using the learning program should derive fun or curiosity from positive feedback. Variety, tension, exiting new types of games and stories seem to be the key requirements for sustaining motivation. In other words, the learning process itself could become a source of motivation. On a practical level this has at least two consequences. First of all, decisions on what to include will depend on gathering and assessing an enormous amount of material. For example, searching for and obtaining the necessary freeware. Second, initiatives such as *Ice* and *Nice* are growing at a very high rate and might be available for Child Tuition's purposes.

4.2 Responsibility for the learning process

Routine and repetition are necessary. Children tend to choose the shortest possible route toward achieving a particular goal. Therefore the program will offer repetition, but partially the tasks will be different, while other are repetitious. The outcome of the discussion on this topic was that children should be given maximum freedom to learn from the start, while gradually gaining responsibility for their learning process. The planned learning program should contain several options to sustain and encourage the learning process, such as:

- beginning learning processes at the child's current level (as determined through games and exercises)
- stimulating the learning process when the child is inactive or hesitating
- offering maximum freedom in navigation
- offering precise and accurate feedback

4.3 Feedback on results and achievements

Feedback is an essential part of the language learning experience. It provides the necessary link between student and instructor. However, in the case of this language learning program there is no instructor other than the program itself. Therefore it should be kept in mind that there are several characteristics of feedback in e-learning

environments that are important. When generating e-learning feedback it should be noted that:

- It provides the opportunity to directly affect the level of student learning
- It improves the program's ability to directly address individual learner needs.
- It allows the student to assess his or her performance through evaluation of strengths and weakness

Several suggestions were made as to what form feedback should take for the children. For example, a progress bar could be shown or a developmental chart - when a particular level is reached the child could get a reward (stars or an academic title). The progress should not be normative, but derived from comparison with the child's previous performance, whether in the past day, week or month. In addition to alerting children of their progress, the feedback should build up their confidence and pride. However, children are competitive and it might be very positive if children are able to compare themselves with one another. It is essential that experiences with the program can be shared, but also to be aware which children are on the verge of being excluded. The level of support for a competitive form of feedback was mixed among the participants.

5. Towards a beta version for phase 1

The report lacks the personal charm of those who attended the meeting, and does not do justice to the level of intellectual discussion had. In no way can this text can reproduce the many sharp observations made, or represent accurately enough the precise advice given. The text may serve as:

- a. A shorthand reminder of the conclusions reached.
- b. A starting point for further exploration of the issues raised.
- c. Support and a bit of guidance for the endless amount of decisions to be taken by the developers of *Childtuition*.

The developers of *Childtuition* have used the advice of the experts to develop a beta version for phase 1. It will be tested at Hemalkasa (India) for several months: September 2008 until January 2009. During this period the work on phase two of the language learning program will be started. At the end of the testing phase the learning results of the children will be explored extensively. Using all possible sources the developers of *Childtuition* aim to deliver a full report on their experiences, to be discussed with colleagues, teachers, evaluators and other experts at the second Experts Meeting, probably in March/April 2009. Based upon a very much complete

knowledge base the developmental process will be continued throughout 2009 and 2010.

The First Child Tuition Experts Meeting was attended by:

Mr. Reinhardt Borchers, Emden, Germany

Prof. Thijs Chanowski, Schellinkhout, The Netherlands

Mr. John Davies, Dudley, England

Mrs. Yorgin Dorka, India

Mr. Jeroen Van der Ent, Rotterdam, The Netherlands

Mrs. Hedwyg van Groenendaal, Tilburg, The Netherlands

Mr. Dr. Frans Hiddema, Rotterdam, The Netherlands

Prof. Richard Johnstone, Stirling, Scotland

Ir. Jasper Kappen, Rotterdam, The Netherlands

Dr. Nico Nobel, Noordwijk, The Netherlands/Tenerife, Spain

Mr. Peter Edelenbos, Groningen, The Netherlands

<http://www.childtuition.org>