THE IDIAL PROJECT

A European Study of Inter-competency and Dialogue through Literature (IDIAL)
Investigating the development of transversal abilities in school children

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Teaching Transversal Abilities
Broughton Hall School, Liverpool

UK TEAM

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Abstract

The IDIAL study (2009-2011) involving ***Bulgaria, Finland, Latvia, Slovenia, Spain and the United Kingdom (UK)*** *focuses on developing senior pupils'* ***transversal abilities*** *required for lifelong learning. These* ***Key Competencies,*** *recommended by the European*

Parliament (2006/962/EC,) are: effective communication and cultural awareness, learning how to learn, mathematical, digital, scientific and technological abilities, social and civic engagement, initiative and entrepreneurship. In the UK, these are known as ***transferable abilities*** *and there is concern that education marginalises these because of the demands of an academic National Curriculum. Spoken and written communication, initiative and leadership are inadequate for workplace needs in over half the graduates in the latest survey (Association of Graduate Recruiters, 2009).*

Therefore, the IDIAL project aims to illuminate how these abilities can be facilitated in schools. Thirty pupils from Broughton Hall School, Liverpool, participated in a pilot project to investigate interactive, passive and self-directed teaching methods in a ten hour programme with three groups of year 8 students. The interactive method used the Communication Opportunity Group Strategy (COGS), proved in research to develop both transversal and academic competencies successfully by using the whole brain potential. The quantitative and qualitative results indicate the benefits of COGS experiences that raise awareness of both verbal and non-verbal communication systems in an interactive way, linking spoken and written modes. The pre and post tests show a statistical significant difference in performance in those receiving the COGS interactive method compared with other groups. Therefore, emphasis on the whole communication process, using full brain potential, is an effective way to teach transversal abilities, supported by other research and witnessed in the practice of high achieving countries. However, the present prescriptive educational philosophy and practice, which favours product outcomes, deflects interest away from the learning processes. A culture change is necessary to raise personal and academic standards but will require a shift in philosophy and practice to achieve this in the UK.

Background

In the UK, the Confederation of British Industry (CBI) has been influential in promoting the transferable skills agenda as employer reports consistently reveal that school, college and university leavers lack the formal spoken and written abilities to cope successfully in the workplace. They have monitored a rise in problems with

communication and relationships in over half of UK employees in Pertemps reports (CBI website).

Since our prescriptive UK National Curriculum was introduced in 1989, the mechanical processes of reading, writing, counting, measuring and calculating have been targeted. These are useful for acquiring and checking individual facts but are less so when addressing questions about the total understanding, application, quality or moral wisdom of education, depending on the transferable abilities that enable individuals to apply what they have learnt outside the classroom. There is a strong view that learning has recently suffered from a narrow, product based approach that has largely ignored the whole communicative process involved in shifting knowledge into understanding for dealing with life challenges. This has hindered personal and academic performance and is witnessed in the many criticisms of education by employers (Sage, 2009).

Understanding the *communicative, cognitive, linguistic and social* nature of learning and teaching is fundamental to its success for both personal and academic growth. In a study by Cwenar (2005), auditing the cognitive-linguistic abilities of students entering a senior school in a Midland city, 80 per cent were found to have communicative competences at a 5-6 year level. Therefore, it was unsurprising that the school was perpetually in special measures for failing to increase A-C grades at GCSE examinations with many students unemployable on leaving school. As a teacher explained: *'Many of these young people cannot understand instructions, let alone ask for them, so they never make their way to a job interview'.*

An Escalate study (Sage, 2005), found that 63 per cent of educators felt they did not have the knowledge or skill in spoken discourse to engage a *diverse* student audience. They had no idea about discourse differences and how to talk to pupils operating at many cognitive-linguistic levels. None of the group of 50 teachers in the study could elaborate the problems students faced in shifting from home to class talk. Talk is the way to share, mediate and extend learning but in groups (especially from different cultural and communicative backgrounds) this becomes a complex, risky process. In this technical learning model, students listen to information, presented for group rather than individual needs, developing knowledge in prescriptive tasks which can limit rather than expand thinking. The skill to *'read'* situations, make appropriate judgements and respond effectively only develops through active dialogue with others, exposing us to a range of ideas and solutions. An opportunity to interact, review, reflect, summarise views and refine action allows us to achieve a better understanding and mental balance which is reflected in spoken and written language and personal interactions.

Therefore, underpinning all development is *communicative competence,* which not only includes the processes of speaking, listening, reading, writing and number but ability to use initiative, manage oneself, make relationships, assert, persuade, negotiate, show empathy and employ new technologies. The framework to achieve this is the Communication Opportunity Group Strategy (COGS) which has been effective at all learning levels by linking thinking, language and social development in a holistic model that develops both left and right brain abilities (Sage, 2000a, 2000 2003, 2003a, 20004, 2006, 2009). Appendix 1 gives more details of this approach.

Why use a communicative approach to develop transversal abilities?

In the UK, written tasks are the most important measurement of performance and so these activities dominate the school curriculum. There is substantial world research linking *primary* language (speech) to the success of the *secondary* literacy and numeracy language levels as well as life skills. Studies stress the importance of establishing *formal* speaking, with its structuring of ideas, as the necessary prelude to all other learning which requires assembly of events for problem solving and understanding (Ashman and Conway, 1997). Words describe our abstract world of feelings and ideas whereas numbers define the physical one of time, space, size, weight, volume etc. The ability to organise these symbolic representations in formal speech, as in giving information or instructions, retelling events, comprehending a maths problem etc., is viewed as the essential step to acquiring problem solving ability for successful interaction. Experts suggest that communicative and social behaviours do not come naturally but once mastered can be applied to every situation and so are *transferable* (Hind, 1994).

However, we rarely check that students have achieved this formal, literate mode of *speaking*, with clinical experience indicating that learners fail to achieve socially and academically because they cannot assemble ideas for understanding and expression *(narrative thinking and structure:* Sage, 2000- chapters 1-2). High achieving countries are aware of this, regarding it as *fundamental* to learning, whereas the UK views it as merely *important,* so giving it a peripheral rather than a central curriculum place (Sage, Rogers & Cwenar, 2006). A communicative rationale for developing transversal abilities forms the basis of this study and the COGS is tried and tested to achieve improved personal and academic performances with all population groups. It facilitates seven narrative stages of development in a holistic approach with oracy and literacy tasks at the same thinking and linguistic level. Failures to perform well in literate and numerate tasks are because they are beyond an individual's ability to understand and express ideas. If you cannot think and speak thoughts you normally will be unable to write them or interact effectively in social situations.

The holistic approach to learning

'Holistic' meaning *'whole'* defines the development of both left and right brain hemispheres together when applied to learning. The human brain resembles the halves of a walnut connected at the centre by the *corpus callosum,* integrating left and right hemisphere activity. Roger Sperry (1973), the Nobel Laureate, found that by severing this connecting cable the two brain halves continued to function independently:

'*There appear to be two modes of thinking, verbal and non-verbal, represented rather separately in left and right hemispheres respectively and our educational system tends to neglect the non-verbal form of intellect. What it comes down to is that modern society discriminates against the right hemisphere'.*

Thus, we have two ways of thinking and understanding. The left-brain deals with words and parts of things, thinking linearly in step-by-step fashion (bottom-up processing). In contrast, the right brain deals with images and wholes, thinking laterally, intuitively and

inferentially, assembling components for overall comprehension (top-down processing). The right brain develops first and the left one does not kick in until children are seven plus (Sage, 2000). So, we might question our early concentration on analytic activities in the curriculum at a time when the brain is oriented to wholes and the outlines of things rather than details.

- **The right brain *synthesizes over space* whereas the left *analyses over time*.**

Therefore, the right hemisphere assembles the whole meaning with the left one examining the parts in greater detail. An example of how the two brains work in practice is completing a jigsaw. Unless you have an image of the whole picture it is difficult to assemble the parts to produce it. In order to put pieces together, experience, imagination, intuition, inference and organisation are necessary in order to create the meaningful whole. Sage (2003) shows how many students lack right brain abilities and in the book *'Lend us your ears'* presents clinical studies demonstrating how those with learning difficulties do not have this top down processing capacity. This book shows how this can be taught and developed through imaging activities.

In general, education is structured in the left-hemisphere mode. Teaching is sequenced with students progressing in a linear direction. Subject input and output is verbal and numerical. Focus is on facts rather than their overall meaning. Time schedules are followed with students seated in rows, converging on answers and receiving grades for work. There is little room for the dreamer, the artificer or the artist. You will not find courses in imagination, visualisation, intuition or inventiveness in curriculum programmes. Fortunately, such development occurs in spite of the education system but our culture is so strongly slanted towards rewarding left-brain abilities that inevitably we are losing brain potential. An educational strategy that facilitates the whole brain and develops both top-down and bottom-up processing is advocated. This is the thinking underpinning the COGS, which encourages *verbal,* left-brain and *non-verbal* right-brain activity for performances that can transfer to new situations.

The Transversal or transferable personal abilities.

What constitutes transversal or transferable abilities is difficult to grasp because many types can be identified. Traditionally, these have focused around communication, interpersonal or social competencies. Now, they include learning and study skills, numeracy and technology as well as initiative, self management, assertion and the cultural and community awareness that define a good, global citizen. Demand for individuals to master these competencies has come from different sources such as employers, educational validating bodies and government. As long ago as 1993 the Quality in Higher Education Project (QHE) pinpointed communication abilities as fundamental to any social interaction such as learning:

'Employers say that poor communication skills are evident at all stages of the recruitment process and beyond. Graduates often do not express themselves well....seen by employers as an indicator of potential success' .QHE project Newsletter, 1993

Sixteen years later the situation has not changed with the Association of Graduate Recruiters 2009 survey suggesting that approaching 60 per cent of graduates had difficulties with these competencies in the workplace. They reported problems in giving and receiving instructions, presenting information formally, using the telephone, discussing views, understanding others and relating to them effectively. At a time of dwindling resources and economic strictures, effective personal performances are vital. The next section defines the transversal abilities described by the European Parliament (2006/962/EC) as *effective communication and cultural awareness, learning how to learn, mathematical, digital, scientific and technological abilities, social and civic engagement, initiative and entrepreneurship.*

Communication and cultural awareness

Views, values, attitudes and knowledge are culturally linked so that it is impossible to consider communication and culture as separate entities. How and what we communicate is defined by our background. There are verbal and non-verbal dimensions. Verbally is included the message information and use of figurative, humorous and inferential speech. Non-verbal aspects are voice tone, pitch, pace, pause, power and pronunciation which convey the meaning. This is accompanied by *body language* which indicates mood and feelings through physical appearance, gaze, posture, gestures and facial expressions. There are also many spoken and written communicative genres with different conventions attached to them that have to be learnt and applied appropriately. For example, meeting protocols vary from public speaking ones, the former demanding dialogue and the latter monologue with very different discourse patterns. All communication has to be cognoscente of the cultural conventions of the parties involved for it to be effective, so an appreciation of *diversity* and what this involves is essential for successful exchanges.

Learning how to learn

This area defines communication strategy. Learning is the gaining of skills, knowledge, experience and attitudes over time so that one can achieve something previously impossible. There are inter-related stages that include the experience of new situations and behaviours, reflection by one self and others before the establishment of new knowledge, understanding and skills. Implementation involves determining the purpose, identifying the necessary procedures to achieve this and practising tasks. All this depends on *'internal language'* enabling one to 'story-up' the situation into a meaningful narrative. Without formal communication competence that develops narrative schema, independent learning is impossible. Students, at every level, are now requiring more adult support, indicating their inability to work out what is required and how to put this together.

Mathematical, digital, scientific and technological abilities

These modes are secondary language representational activities depending on primary speech and the symbolic processes and narrative structures already acquired. Again, coping with these activities depends on putting together information that depends on narrative thinking and language structures. Basic arithmetic operations, using methods such as ratios, percentages, fractionbs, indexes etc., presentation of numerical data in

tables, graphs and charts and understanding statistical analysis are all based on narrative schema and data assembly. Using computers, mobile phones etc. depend on following instruction sequences and thinking laterally to solve problems of gathering information.

Social and civic engagement
This aspect refers to the development of social responsibility, which demands awareness of community needs and appreciation of diversity and inclusion. Knowledge and experience of communicating, collaborating and cooperating with others is vital, engendering loyalty, reliability and commitment to a common purpose. There is a necessity to sublimate personal desires at times for the sake of the common good and consider others before oneself. Communicating views, feelings and attitudes is the foundation of social dynamics and specifically taught in high achieving countries such as Japan.

Initiative and entrepreneurship
This aspect refers to taking the lead and promoting and selling either yourself or the services or products with which you are involved. The skills are based on the communicative ability to assert oneself, persuade and negotiate, make good relationships with others and develop suitable administrative arrangements, time management, presentation of ideas to others and implementation of follow-up procedures. Again, well developed narrative abilities create the vision and understand the processes that will deliver it.

It is clear from all these descriptions of transversal competencies that the communicative process is the foundation on which they all depend and develop.

Methodology

Thirty year 8 students, aged 12-13 years, were assigned to the project which took place in the latter half of the summer term, 2009. They attended 5 two-hour sessions and were pre and post tested to provide qualitative and quantative information on progress. Students were divided into three groups and each received a different method of instruction around the topic of transversal abilities, using literature as the stimulus for this. Group 1 had a very interactive method using the COGS Level 1 Communication through Performance (see appendix 2). This was chosen to target personal performance using literature as the content to achieve this. Therefore, Group 1 was considered as the experimental one and the others as controls. The research question was: *'Do interactive, holistic methods of teaching develop transversal abilities more effectively than passive, component approaches?*

The COGS is explained fully in appendix 1 and has been practised for over twenty years with its research commended by leading academics (Cooper, 2001). The framework embraces an oracy to literacy approach to learning based on the view that literate language develops out of formal talk, organising ideas in a narrative structure (Brigman et al, 1999). The fourteen stages of the scheme reflect narrative development in the first seven goals and extended at further levels. This thinking and expressive development is divided into four spoken tasks that take *clarity, content, convention* and *conduct* as

perspectives, together with a written one at the same narrative level. This reflects the balance of the use of oral and literate activities in daily life (80 versus 20 per cent, Sage, 2000). The strategy encourages both verbal and non-verbal communication and views personal development as important as academic achievement.

The subjects

The subjects at Broughton Hall were from year 8 and in their second senior year. This school for girls was chosen because of the value that staff place on the development of personal abilities to access academic, practical achievements and social mobility. The 30 students represented a range of ability and were randomly assigned to three teaching groups as follows:

1. 10 students following an interactive learning approach using COGS.
2. 10 students taught formally using a didactic, passive, inactive mode.
3. 10 students learning through self-directed activities.

Short stories were prepared by the research team as initial stimuli and incorporated the transversal skill themes, so that students could discuss and develop the issues involved. Examples are available in appendix 4. Whereas group 1 used these as the basis for various types of practical activities to develop thinking and expression in speech and writing, group 2 read the stories and completed prescribed written tasks based on the issues. Group 3 were set a project, in which each student had to choose a theme from the stories and research this for a written report, using the internet and library facilities. The base-line testing process is explained below.

Session 1: Setting the dynamics and introducing transversal competencies

1. **Introduction:** In a circle format, the students were welcomed and the reasons for the group established. A beanbag was thrown at random to each person and everyone introduced themselves on receiving it with their name and a descriptive word beginning with the initial sound (e.g. I'm Rosie and I'm ridiculous).
2. **Pre-test:** Using a box containing small, interesting objects – each student chose an object and had three minutes to talk about it. The output was assessed on the following criteria, demonstrating ability to:

   - Describe the attributes of the object (narrative level 1) in an ordered way (level 2)
   - Show a comparison bringing out similarities and differences (level 3)
   - In the correct time sequence (level 4), explain how the object functions (level 5)
   - Reflect on the object with own views (level 6)
   - Put the object into a wider context within own experience (level 7)

   In this task, students put together information according to their cognitive-linguistic levels of narrative development and this method is supported in the literature but rarely used in practice because our culture does not value the assessment of communication in learning (Sage, 2000). Appendix 3 gives the core spoken and written competencies which were assessed alongside the narrative levels demonstrated in responses.

One student volunteer acted as time checker to make sure that everyone had the same opportunity in a standard format. The check list (appendix 5) was completed for each student by a researcher. The students completed a written account of this 'Show and Tell' activity, summarising their main points.

3. Finally, the first story was introduced telling of the experiences of a deaf lad and his friends. Group 1 was asked to prepare a passage from this to read and put into the context of the story or find another text reflecting one of the themes such as disability, one parent families, deaf non-verbal communication etc. Group 2 had a written task to develop an aspect of the story. Group 3 chose a transversal theme to investigate and write up in a written report.

The Results

Quantative data

The numerical data, from pre and post testing was analysed on the Statistical Package for Social Scientists (SPSS), using the latest version 17 and a two independent samples analysis for non-parametric data (NPar). The samples used are very small so data must be viewed with caution.The Mann-Whitney U and Wilcoxon Signed Rank test were suitable for this ordinal data of unrelated design. The three groups ranged in age from 12-13 years but there was no significant difference between them (G1 and G2, p = 0.63; G1 and G3, p = 0.61; G2 and G3, p= 0.71). The data of most interest is the pre and post test comparisons between group 1and groups 2 and 3. These results are presented below:

Code: Narr. = Narrative Test ; Spoken Comp T = Spoken Core Competences Test ;
Writing T = Writing Narrative Test ; Writing Comp. T = Writing Core Competences Test

Table 1
Comparison between Group 1 and 2 on Spoken & Written Tests 1 & 2

(post-test (test 2) levels of significance in brackets)

	Narr. Test 1 & 2	Spoken Comp Test 1 & 2	Writing Test 1 & 2	Writing Comp Test 1 & 2
Mann-Whitney U	45.500 **(.000)**	48.500 **(1.500)**	48.000 **(.000)**	31.500 **(.000)**
Wilcoxon W	100.500 **(55.000)**	103.500 **(56.500)**	103.000 **(55.000)**	86.500 **(55.000)**
Z	-.382 **(-4.077)**	-.126 **(-3.834)**	-.166 **(-3.900)**	-1.734 **(-3.954)**
Asymp.Sig.(2-tailed)	.702 **(.000)**	.900 **(.000)**	.868 **(.000)**	.083 **(.000)**
Exact Sig.(1-tailed Sig.) Not corrected for ties	.739 **(.000)**	.912 **(.000)**	.912 **(.000)**	.165 **(.000)**

In the pre-test there was no significant difference in any of tasks between the COGS interactive group 1 and the inactive group 2. There is, however, a large significant difference in test 2.

Table 2

Comparison between Group 1 and 3 on Spoken & Written Tests 1 & 2

(post-test (test 2) levels of significance in brackets)

	Narr. Test 1 & 2	Spoken Comp Test 1 & 2	Writing Test 1 & 2	Writing Comp Test 1 & 2
Mann-Whitney U	43.000 **(.000)**	45.500 **(1.000)**	44.500 **(.000)**	30.000 **(.000)**
Wilcoxon W	98.000 **(55.000)**	100.500 **(56.000)**	99.500 **(55.500)**	85.000 **(55.000)**
Z	-.597 **(-4.091)**	-.370 **(-3.810)**	-.439 **(-3.863)**	-1.673 **(-3.860)**
Asymp.Sig.(2-tailed)	.551 **(.000)**	.712 **(.000)**	.660 **(.000)**	.094 **(.000)**
Exact Sig.(1-tailed Sig.) Not corrected for ties	.631 **(.000)**	. 739 **(.000)**	.684 **(.000)**	.143 **(.000)**

In the pre-test there was no significant difference in any of tasks between the COGS interactive group 1 and the self directed group 3. There is, however, a large significant difference in test.2.

Table 3

Comparisons between Group 2 and 3 on Spoken & Written Tests 1 & 2

(post- test (test 2) levels of significance in brackets)

	Narr. Test 1 & 2	Spoken Comp Test 1 &2	Writing T 1 Test 1 & 2	Writing Comp T 1 Test 1 & 2
Mann-Whitney U	48.000 **(34.500)**	47.000 **(46.000)**	42.500 **(40.000)**	45.500 **(47.000)**
Wilcoxon W	103.000 **(89.500)**	102.000 **(101.000)**	97.500 **(95.000)**	100.500 **(102.000)**
Z	-.171 **(-1.273)**	-.241 **(-.320)**	-.602 **(-.801)**	-.402 **(-.269)**
Asymp.Sig.(2-tailed)	.865 **(.203)**	.809 **(.749))**	.547 **(.423)**	.688 **(.788)**
Exact Sig.(1-tailed Sig.) Not corrected for ties	.912 **(.247)**	. 853 **(.796)**	..579 **(.481)**	.739 **(.853t)**

In the inactive group 2 and the self directed group 3 there are no significant differences between test 1 and 2 with performance being very similar on both occasions.

Qualitative data

Pre-test data
In the first session, students were questioned in the whole group as to their knowledge of personal abilities and how they felt these were related to their successes inside and outside school. This was not a topic that they were familiar with discussing which is not surprising as the prescriptive UK National Curriculum does not attach fundamental importance to this area of knowledge. In the other countries in this European project we discovered that communication, rhetoric and philosophy figured in curriculum content and in Bulgaria and Finland (the only countries yet visited in this research phase) we found students aware of communication and its relation to all activities. We watched a drama project in a senior school in Sofia, Bulgaria, which students had put together and every individual we spoke to said that the most important outcome of this experience was their opportunity to develop their communication and cooperation with others.

This discussion regarding transversal abilities with the study cohort gave the researchers a grasp of the students' knowledge and skill needs. The pre-test activity, where students had to talk about an object of their choice, demonstrated that they had limited knowledge or experience of public speaking and how to deal with audiences. From this information, the programme was planned to provide activities in the interactive COGS group that would facilitate both knowledge and transversal abilities. It included how we processed information and how presentation and performance could assist this experience and build contact with others. Topics selected for the workshops for Group 1, using the transversal themes as content were:

- Verbal and non-verbal communication and their role in thinking, understanding and expressing thoughts, views and feelings.
- How to present knowledge to others and engage them for later collaboration and cooperation.

Students in group 2 and 3 were exposed to the same content but were not coached in how to communicate this orally before moving into written tasks. All students impressed the researchers with their interest and engagement in the workshops. They fully appreciated this opportunity and were happy to participate.

Post-test
The final workshop ended with a focus group in which each student was asked to share their experiences of the project and these were the unanimous themes recorded by researchers.

Group 1 – interactive COGS
- This opportunity was enjoyable and doing things together to experience what they were told was a good way to learn from others.
- The project had enhanced their own confidence and skills in other situations.
- Having constant opportunity to listen and watch others perform was helpful in understanding what was needed to understand and express information well.
- Pair and small group activities were fun and gave them chance to discuss, experiment and use imagination. They particularly liked the task when they had a

newspaper to create a fashion object and then sell their design to the audience and explain how they had created it.

- They appreciated a situation where they were never judged right or wrong but from observation of others and group discussion could work out how to improve themselves.
- The workshops had helped them think about how they talked to others more positively and they felt this made for better relationships with less falling out!
- Tasks in the workshops were relevant to their lives and provided useful practice in giving and receiving instructions, presenting ideas publicly in different ways, asserting oneself, negotiating, persuading, planning and producing something within a timescale, using initiative and giving feedback to others on their performance etc.
- The thinking, talking and then writing approach was one that everyone found successful because of the opportunity to share ideas and develop their own thinking.
- The stories that were the stimulus for activities were interesting and of the right length, promoting discussion on all sorts of topics related to communicating, collaborating, cooperating and supporting others.
- They enjoyed the chance to bring in their own contributions, such as poems and stories, and felt guilty when they had forgotten to do so but were interested in other's choices.

Groups 2 (inactive) and 3 Self-directed

These students gave similar feedback so this has been combined:

- Everyone enjoyed the experience and found the content, on transversal themes interesting and relevant to their lives.
- Discussing with group 1 COGS (interactive) they also would have liked a more interactive approach to learning as this seemed more fun.
- They enjoyed meeting new tutors from outside school and felt special being chosen for a European project. Some students had been to Spain but had not visited the other countries in the study.
- The stories that were used to introduce the transversal themes were ones they could relate to and made them think about issues such as disability, one parent families, ethnic differences etc.
- The idea of choosing a theme for a project from the stories (group 3) was a good idea as it gave some choices and allowed individuals to follow up an interest.
- Everyone thought they had benefitted from the project and what they learnt about in the stories and subsequent tasks was different from their other school subjects.
- Transversal abilities were something they had never heard about but they could understand how important these were to getting on at school and later gaining a job.
- They all would like more of this opportunity but next time asked if they could do COGS as everyone was talking about this group and they thought the fashion parade when students had to create, explain and sell their designs made from newspaper was fun and very funny!

Student spoken performance

In the pre-test, students were all uncomfortable about speaking in front of their peers and afraid of criticism. In general, performances, at this stage, were not of a adequate standard. Most students failed to make eye contact with the listening group and maintain it. They demonstrated few narrative levels in their presentations. Voices were poorly projected frequently dropping volume at the end of a sentence due to clavicular breathing habits (shallow breath intake). After eight hours of teaching the situation was very different on the post-testing in the interactive COGS group 1. Groups 2 and 3, however, did not show this extent of improvement because they did not have tasks where they constantly had to share information with others and were coached to do this well. Everyone, in COGS group 1, was performing at a competent level after the workshops, making eye contact, projecting voice with sustained volume and engaging the audience confidently, showing a fuller range of narrative levels in their performances. The researchers noted how much more confident this group were in discussion and presentation of tasks by the end of the project both inside and outside the class situation. These students were using voices with greater strength (some had real problems initially with vocal projection) and employing techniques such as eye contact, eye reference and gestures with more effect to engage listeners. Throughout the workshops, students in COGS group 1 were required to feed back on how the individual performances of others had impacted on them and give advice. This enhanced critical faculties, raised meta-cognition of the communicative process and increased the social dynamic in the group, as everyone felt the support and encouragement they received was a vital motivational force.

Writing performance

- In schools there is always particular focus on improving student literacy and the test of the workshops success was whether this aspect demonstrated this feature. Group 1 COGS (interactive) were exposed to the narrative framework which was used as criteria for spoken tasks which led to a written one at a later stage. As a result their writing showed great improvements with a more holistic approach to the task, considering more perspectives for discussion. These students demonstrated:
- Improved understanding of what was required in terms of response.
- Clearer structure to ideas, with balance between sections.
- Instead of being descriptive as in test 1, they were now discussing the important issues and presenting a range of view points.
- Greater grasp of ideas and evidence of deeper reflection.
- An appreciation of narrative levels such as comparison, explanation, review and reflection and the importance of these in formal speaking and writing tasks.

Initially, most students, in all groups, just listed the features of the chosen object, with no use of comparisons, reflections or relations to their own experiences in either their speech or writing. After the workshops group 1 demonstrated a fuller narrative range but this performance was not seen in group 2 or 3, as their teaching was focused on the product rather than the processes of learning.

Discussion

This project proved beneficial and enjoyable for all those concerned. The students were a delightful group of girls and it was clear they had very positive feelings about school. The teachers were very helpful and supportive and went out of their way, at a very busy exam time of the year, to accommodate the project. The outcome demonstrated significant differences in performance between group 1 COGS (interactive) on pre and post testing, not seen in the less active groups 2 (inactive) and 3 (self directed). The project suffered from the common problems when attempting research in the social and behavioural sciences. These were the many constraints and the difficulty of explaining, predicting and controlling phenomena. The major problem was because the research team had many other commitments, which required juggling of personnel in the workshops. However, the positive features were that the research team could observe across groups, which was important in feeding back on the qualitative aspects of the study. The team are used to working together and experienced in this type of project design which helps in managing problems when they occur. There must always be caution, however, in interpreting data collected by researchers who have emotional investment in the success of the project. Discussion will provide literature support to illuminate the results.

Evaluating the research and its application

Practitioners are often critical of academic literature and experimental research which seems to have little relevance to classroom or other context learning. Often criticism is based on the impracticality of research activities rather than of practitioners implementing the findings. Such views reflect the perceived chasm between what commonly occurs in tertiary institutions in the name of research and what takes place in the field regarding educational practice. The difficulty is exacerbated when researchers fail to use the existing learning environment and resources. Additional staff, used in research, are typically outside the regular teachers' or lecturers' grasp with little likelihood that they can reproduce the same augmented teaching environment. Common themes from the literature are now considered to evaluate the present project in the light of this situation.

1. Assessment of teaching and learning

There is a limited body of UK substantiated research in the field of cognitive-linguistic education and its impact on personal and academic development, largely because the training of teachers does not have this emphasis. There is substantial research from countries abroad who regard thinking and communication as the foundation for learning and existing. However, it is generally accepted that many factors influence a person's performance in any learning context. These are the:

- *Learner; Teacher; Curriculum; Context.*

Included are the learner's intellectual characteristics, personality, emotional state, learning background, culture and family influences. Also, the personal and professional characteristics of teachers influence the way instruction is provided and learning facilitated. The environment (class or small group) can have flexible or fixed formats and the curriculum topics are provided in either a broad or narrow sense. The formats in this project reflected this variety of approaches. The agenda in group 1 COGS (interactive)

reflects a *learner* rather than *teacher-centred* approach to education, whereas in groups 2 and 3 the latter mode was apparent with a narrow and less flexible instructional design. The project has a commitment to understand how and why the individual interacts with the learning environment and those in it to maximise the efficiency and effectiveness of the experience. The present emphasis on prescriptive education and its products deflects from the learning process based on students' individual needs. Therefore, the COGS process approach would be viewed as important but not essential within present philosophy and practice. However, the intention of the project was to show how transversal abilities can be acquired and personal and academic standards raised, indicating that attention to the whole communicative process in learning is a means to achieve this. Assessment, therefore, is an important element and must be multidimensional in nature to provide information about each of the above four agents and inform us about:

The learner's existing knowledge base

This means knowing about academic facts – the terms and information germane to subjects studies. Assessment starts with collecting base-line information so that instruction can build on that knowledge. This was achieved in the first project session when stories were produced on transversal themes. This was followed up with discussion, requiring the views of all participants. The knowledge and skills needed to improve performances according to the set COGS criteria were thus identified and pursued in group 1, COGS (interactive). Such an exercise was judged successful by everyone as it arose from a real need for students to consider this agenda in line with EU recommendations and was therefore relevant to their lives. Since the project criteria were clear and available to students in written form, they had the means to judge their own performance against these and to check what was expected of them by the end of the workshop programme. However, students who were told rather than coached (groups 2 and 3) did not automatically integrate these new behaviours into their repertoire as demonstrated in the post tests.

The learner's knowledge of how to learn

Most assessment methods fail to appraise how students attempt a task, deal with a problem and find a solution. Interactive assessment may provide this information but depends on the skill and experience of the tester and often proceeds without a clear idea of what processes to mediate. The use of the COGS strategy minimised this problem with the result that the time allotted for the teaching phase could be used to maximum effect. The show and tell activity on the pre and post-tests enabled judgement of the set COGS criteria and past research shows that this is simple to do with a day's training (Sage, 2007). Although the assessment process was carried out in a small group of ten students, the process is adaptable to large group teaching and is described in the second COGS manual (Sage, 2007).

The learner's processing abilities

It is difficult to know whether the learner's processing abilities are related to hardware (structural) or software (knowledge and experience). There has been recent interest in education regarding a learner's preferred processing style, together with strengths and weaknesses. These have led to methods of remediating the latter as priority (Kirby and

Williams, 1991); basing instruction only on learner strengths (Kaufman et al, 1983); teaching processing skills in isolation and then within academic tasks (Das et al, 1994) and embedding process within the curriculum context (Sage, 2000). The latter approach has been the only one to receive widespread support in the literature because of the importance of relating processing abilities to content and products. The COGS is based on this model and is described as a *strategy* rather than a *programme* because the content is chosen by the students in line with their personal needs and curriculum requirements. The assessment task and interactive approach in the workshops allowed the researchers regular opportunities to assess each individual's processing abilities and adjust input to suit. The researchers are experienced in this type of assessment with the lead (Dr Sage) qualified to the highest international level in cognitive-linguistic testing procedures as a member of the British Psychological Testing Corporation.

The learner's affective dimensions

This area is usually overlooked by teachers, clinicians and researchers despite many studies linking self-perception and self-efficacy with academic achievement (Lockhart and Hay, 1995). Affective dimensions are very difficult to assess with any reliability on standard tests such as PASS (The Perception of Ability Scale for Students, Boersma and Chapman, 1992) and discussed by Sage (1998). Our feelings and views are dynamic according to context so valid measurement is problematic. In the COGS this aspect is monitored in relation to student tasks. The group are encouraged to give feedback on each other's performances and this increases self-perception and self-efficacy in a formative assessment approach that has been found to be effective (Sage, 2006).

The learner's reactions to the learning environment

Cooperative, collaborative learning and peer tutoring is the model used in COGS and this emphasises the environment. Rarely, however, do we assess the nature of the context in which learning occurs and its effect on teaching. This difference in the context is difficult to assess in most situations and the comparison groups 2 and 3 were keen and engaged in their sessions but in feedback were aware that group 1 had been more interactive which they perceived as greater fun.

Connections in instruction

General principles have emerged from the literature that address what and how information is taught within the following domains that have a bearing on this project:

Knowledge of facts

Facts are the building blocks of acquisition and problem-solving and expand the learner's knowledge of the world. The prescriptive curricula now in place have led to didactic methods in classrooms, at every learning level, in order for the content to be covered as required and this approach was followed in groups 2 (inactive) and 3 (self directed). Such teaching is structured through systematic, prescribed syllabuses and teachers are obviously good at imparting knowledge effectively in this style as improving test and examination results year by year suggest. However, experience shows that students may not absorb information in long-term memory from passive learning and that interactive approaches lead to more effective understanding as found in the Maine

Laboratory experiments (Sage, 2004). The COGS uses an interactive approach with very little didactic input but it is the researchers' view that teachers need a greater depth of knowledge and skill to employ this style as students are under their own control rather than that of the educator.

Knowledge of process

A fundamental aim of cognitive-linguistic education is to teach students to be strategic. This means learning about the use and effectiveness of strategies that help organise information both for understanding and expression. The importance of mega-strategies that include monitoring, regulatory aspects of conscious thought, priority-setting, planning and decision making are very much the agenda of the COGS and were introduced in three minute direct teaching slots in the workshops followed by modelling tasks that students were required to do in order to understand the content. Examples included '*the places trick',* to comprehend how information is processed, organised and memorised and the introduction of brief narrative poems to show how meaning is inferred from a range of word clues and experiences of daily life. There is a general absence of a systematic approach to teach students meta-strategic behaviour, especially planning within a time frame. It is assumed that students will learn this naturally through trial and error or osmosis. Even gifted students lack knowledge about these strategies and in those with learning difficulties such competences are always absent (Ashman et al, 1994; Todman and McBeth, 1994). Teachers require more knowledge of these communicative processes and parents must become aware of the importance of supporting these outside school.

Knowledge of links between process and content

The issue is not so much whether process and content (facts) should be linked but how this can be done successfully. Researchers have been prodigious in studying areas such as reading and mathematics as these are considered basic abilities for learning any subject area. This has led, for example, to the deconstruction of some reading skills, with an obvious link between process and content, as in the strong relationship between fluent reading and phonic decoding. This component based approach has resulted in a selective focus in teaching seen in the recent literacy strategy and its emphasis on phonics. Although resulting in fluent readers, it has not necessarily improved understanding of the overall meaning from text (Sage, 2003).

However, it is difficult to know what role simultaneous and successive processing play in the development of social and interpersonal skills, syntax and grammar, recreation and leisure, essay or report writing, initiative and entrepreneurship etc. The cognitive-linguistic processes are essential but their role and relationship between process and performance is not always clear. Teaching can operate at the level of the teacher whatever the learning stage but will be far more effective if implemented at the level of the institution with increased opportunity for staff development and support. This has been the experience of the COGS which has taken off internationally because this approach is valued as fundamental to learning at all stages in contrast to the UK view that such teaching is important but not essential (Sage, 2009).

Future research

Class-based research is favoured but the traditions that have guided intervention studies over the past century may not be appropriate to a research context in which there are many uncontrollable influences. Observing the range of communicative interactions that occur in classrooms reinforces a view of an ever-changing and frequently volatile environment. How can research be conducted to validate the effectiveness of any teaching-learning process? The increasing acceptance of ethnographic and observational research methods recognises that experimental methods may not be appropriate. However, the use of a pre and post test design in this project is because the researchers believe that it is a useful way to build a data base that allows comparisons on set criteria over time and with different populations. Large experimental studies to prove efficacy, as in medical drug trials, are impossible to achieve in education with its *learner, teacher, curriculum and context* elements. The environment interacts with both assessment and instruction to provide either support or hindrance, suggesting that qualitative methods are important in answering the 'Why' of situations but the quantitative approach copes with the 'What' questions effectively.

The wider context

Over the last half century there have been important changes in the bases of power internationally that impact on the learning process. Traditionally, governments were the power-brokers with political and economic control. Now, multi-national companies and large corporations control international and intra-national finances, the media and many essential services. This has led to economic rationalist policies with public services required to provide with limited funds but improved productivity. The expansion of the World Wide Web, CD-Rom technology, Internet connections and open learning programmes allow students to study off campus with minimal recourse to the printed word on paper. Educationally there are needs for:

- Improved standards to cope with the communicative demands of a global society.
- Educators to be more accountable for students' educational outcomes.
- Educators to respond to communication innovations and neuro-scientific research.

As long ago as 1991, Skrtic argued for a power shift in educational institutions to empower teachers to contribute more to decision-making, necessary to deal with the complexity of the 21st century. He referred to the ideal organisation as an *adhocracy* rather than *bureaucracy,* in which teachers operated spontaneously to create innovative solutions to problems. This requires teachers to be *effective communicators* who:

- Understand the fundamental issues of thinking and communication in learning.
- Learn communicative abilities so that they can use and model them to others.
- Ensure that students develop abilities to become independent problem solvers.

One might speculate whether the abilities gained on a training course equip new teachers with a greater knowledge and expertise than they have received in the past in order to cope with global demands. For example, how well versed are they in communication and cultural issues? How much do they understand about transversal abilities? Comments from students, already referred to, suggest that this may not be the

case. Similarly, parents need to understand the importance of supporting communicative development for learning in an age where conversation has diminished at home with few opportunities for formal talk because families are always pressed for time (Sage, 2000).

Examples from research

One prestigious study demonstrated the principles considered important to integrate thinking and communication approaches in the classroom that develop transversal and academic abilities (Englert et al, 1994). These researchers incorporated communication training into the curriculum with an awareness of the social and cultural factors that affect classroom learning. The model accounts for an individual's experiences with talk and text and the need for collaboration and interaction between students in lessons. The methods drew upon the Vygotskian (1962) concept of supported learning. Thinking and its spoken expression were constantly encouraged, using spatial representations of ideas to record ideas before attempting narrative writing. Success was put down to the following features:

1. Emphasis on spoken to written communication in the classroom.
2. Development of a language for thinking, talking and learning from texts.
3. Focus on teaching the differences between informal and formal language.
4. Emphasis on student ownership of strategies rather than teacher direction.
5. Encouragement for students to speak out and share their thoughts constantly.

Englert et al emphasised that this approach required a major change in the way both teachers and students approached learning. The method, however, reflects practices that are basic to COGS and the result of the Englert research group's link with this strategy. Further support is seen in the Brigman studies (1999) which summarised 30 years of communication training in education across the world, emphasising that strategies that take a holistic approach to learning are effective in raising personal and academic performances. These valued both verbal and non-verbal systems of communicating thus developing both left and right brain hemispheres. Ashman and Conway (1997) reviewed work in cognition and communication across the world and reached the same conclusions, demonstrating that it is not until you verbalise thoughts in speech that you have conscious understanding to enable their effective recording in writing and number activities as well as successful exchanges with others.

Summary

This project shows a similar outcome to other research by Sage in 2000, 2003, 2004, 2006, 2009 and is reflected in the results of studies by other experts that have followed holistic principles embracing both left and right brain learning. These acknowledge the importance of both teacher and student communication inside and outside the classroom and value both academic and transversal ability in the learning process. COGS takes an oracy to literacy approach, suggesting the primary spoken language mode must have attained the formal, narrative levels to enable literacy, numeracy and interaction with others to develop successfully. Countries that figure highly on international league tables of educational achievement such as Japan, Cuba, Finland and Poland clearly demonstrate their emphasis on formal communication training for learning and in their universities have many professors of communication in education that can promote

these ideas in research and practice. For example, in the University in Havana there are two professors of communication in a small pedagogical institute who have first degrees in speech and language pathology, second degrees in psychology and PhDs in pedagogy. Thus, their academic backgrounds embrace both medical and educational domains for a better understanding of information processing and performance. In this country this level of expertise is almost non-existent and unless it is established there is little likelihood of significant changes in present practice. If we are serious in wanting to improve performance, studies such as this point the way. The recent 2009 report of the Association of Graduate Recruiters suggests that approaching 60 percent of employees have problems in oral and written communication that seriously interfere with workplace performance. We must not only talk the talk but strive to walk the talk if we wish to equip everyone with the abilities to survive successfully in today's society. The fact that the IDIAL project is high-lighting the transversal abilities as the springboard to improved academic achievement is a step in the right direction. The COGS holistic, interactive approach is an effective way to support such development and has proved suitable for whole or small group implementation for all ages and abilities.

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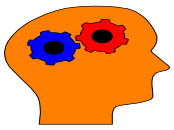
Appendix 1: COGS Information Sheet

THE COMMUNICATION OPPORTUNITY GROUP STRATEGY – COGS



Why COGS is needed

Much of our communication is misunderstood. Jill asked Jack to *'put the ball in the basket'*. Jack was stumped, as the ball wasn't visible. When given the missing bit: *'find the ball in the box - put it in the basket'*, he responded. Jack had to solve the problem like this: '*the ball's to be put in the basket - can't see it - may be in the kit box. Yes.I'll get it and put in the basket'*. Understanding and expressing a sequence of events (narrative) requires assembling facts and using imagination. We need help, however, as only 25% of communication is effective.

Communication is more than exchanging words!

Speaking embraces language, history, culture, customs & context. Voice tone, manner & gestures convey meaning - prescribing how relationships are handled according to personality, ability and attitude. Communicating styles vary across places, people and their positions. Mr Sugimine from Japan attends a London meeting where principles are agreed but details left to subgroups which he views as deception because Japanese debate until everyone decides. Similarly, UK performance targets are insane for Arabs as only God knows the future.

Actions speak louder than words and being unconscious are less distorted than speech. Take appointments with someone important. After waiting, you're kept an impersonal distance on the other side of a desk in the interview! The message is that you're of less position and value. Subtle forms of communication work independently merging within person-to-person exchanges through words and actions to make meaning. These are illustrated below:

Message systems within communication

TYPE	CHARACTERISTICS
Performance	**Speech, voice, gesture & manner** reflecting background, intelligence, personality and values
Interactions	Arrangements in society prescribing roles and status
Sexuality	Male and female behaviour leading to differences in the way we respond to one another
Lifestyle	Feeding, caring, clothing and housing arrangements conveying who and what we are
Exploitation	Use of context and materials supporting what we do
Space	Strategies used reflecting needs of a situation such as a louder voice in a large lecture hall
Defence	Techniques to fend off hostile forces and keep our positions
Time	Cycles and rhythms of living that influence patterns of activity
Learning	Adaptation to demands reflecting ability to cope effectively in situations
Maturity	Balanced approaches to situations showing ability to take on board other viewpoints

These components converge into a complex, communication culture bound by conventions. Therefore, Mr Bill, the lawyer, wears smart suits in court, drives a BMW and lives in a £500,000 house, communicating a high level of education, salary, status and lifestyle that will influence interactions with other people.

How we communicate and learn: informal and formal events

Informal communication is *unplanned, equal dialogue* between persons with clarified, controlled information.
Formal discourse is *planned, unequal monologue* with one taking charge and others in a more passive role.
A huge jump exists between *private dialogue* and *public monologue* - moving from the *shared, supportive, implicit communication of home* to the *unshared, independent*, *explicit talk of schools/workplaces*. Public talk selects and organises topics for wide audiences, projecting voice dynamically over distance with supportive gestures. Employing conventions required, acting appropriately and using audience feedback is essential for exchanges. Such aspects need expert teaching for effective performances. Life used to be less pressured with opportunities to narrate experiences. Today's frenetic existence allows no time for talk so we fail to develop formal listening and speaking. The COGS assists formal thinking and its expression to support learning/workplace needs.

Learning is communication: Informal, formal and technical

Informal learning uses unconscious imitation. We learn to talk by listening & observing how others make relationships & needs known. A system of communicative behaviour with thousands of details is passed on through generations without us articulating the rules. If imitation is interfered with informal learning is hindered.

Formal activities are taught by rules, rewards & punishment moulding behaviour such as *'Girls, don't do that'*. Voice tone indicates the particular behaviour is unthinkable. Formal patterns are learnt when mistakes are made and corrected. Details are of a binary *yes-no*, *right-wrong* character in a system we seldom question.

Technical learning results from teaching large numbers, depending less on student aptitude & suitable models but more on how material is analysed, selected and presented to audiences. The critical factor is learners' ability to follow narratives and grasp meaning. Learning experiences bring awareness of adaptation and change to accelerate progress and perfect performance. COGS helps effective communication by enhancing competences. It doesn't reduce a complex process into simple, trainable habits but focuses on the systems through which we communicate. Experiences of generations transmit through speech forming concepts central to mental growth. Speaking sorts and assembles reality, develops thinking and regulates behaviour. Perception, attention, memory, imagination, consciousness and action are products of social experiences and communication with others.

The COGS developed because pupils are often required to perform at a higher level in literacy & numeracy than they can achieve orally. 75% of children & adults have difficulties in comprehending & expressing narratives. The framework assists narrative thinking and communicative competence over 14 goals/levels for preschoolers to post-graduates. Goals are not applicable to specific ages, using zones of potential development. Narrative thinking is developed in the first 7 goals, extending from 8 to 14 within principles of *clarity, content, convention & conduct*, taking into account *intelligence, attitude, opportunity and personality*. Ideas progress as follows:

Goal	Idea development	Description
1	Record	Produce a range of ideas
2	Recite	Arrange simple ideas coherently
3	Refer	Compare ideas
4	Replay	Sequence ideas in time
5	Recount	Explain ideas – why? How?
6	Report	Introduce, discuss describe, evaluate ideas
7	Relate	Setting, events, actions, results, reactions

There are 5 tasks for each goal, 4 oral and 1 written, the ratio in life. S*pecific abilities* in particular communication acts and *core competences* are targeted. Games relax and support development in circle format that aids interaction. A tell, show, do and coach approach includes systematic sequencing of teaching with review, demonstration, guided practice and corrective, supportive feedback - proved as most effective in raising performance. To share meanings through talk there is a mixture of group and independent activity on the basis of what we can do in co-operation today we can do alone tomorrow. The setting is *collective*, with facilitator and students addressing learning together; *reciproca*l as both listen to each other and *cumulative*, with all building ideas into coherent lines of enquiry. The atmosphere is *supportive* helping free speaking, without fear or embarrassment. Narrative levels also provide a useful framework for differentiating subject tasks in large classes.

What does a trainer's course involve? In a practical course, trainers learn how thought & expression are structured, supported with study materials and 2 COGS manuals & videos. Training takes place over 1/2/3 days, depending on choice. On completion of training with Human Communication International, participants are accredited COGS trainers once they become members of Human Communication International (COGS registration £50; annual membership £30 but this may change over time). Email: HuComInt@aol.com.

Who can train? Anybody involved in supporting/teaching/ training children/adults benefits from the course. Applications are welcomed from speech & language therapists, teachers, trainers, lecturers, learning support staff, teaching assistants, learning mentors, education psychologists, youth workers, trainers, personal coaches etc.

What organisations are using COGS? COGS is delivered in schools in Essex, Gloucestershire, Hampshire, Kent, Leicestershire, Lincolnshire, Newcastle and Durham, Northern Ireland, Staffordshire and Warwickshire amongst others. In addition, it is used in Australia, Canada, Cuba, France and Italy. There have been projects with talented & able pupils and those with learning difficulties. Adults find the course + certificate beneficial to careers. Information from Prof R Sage: email: HuComInt@aol.com.

Appendix 2: COGS Performance Goal 1 record sheet

Appendix 3: Core Spoken and Written Competences

Appendix 4: Story 1 The Outsider

The remains of the burnt out cigarette coated in pink lipstick still glowed in an ashtray on the kitchen table; Misba Patel had already gone out to work on the nightshift at the local chicken factory. Baljit, her son (nicknamed Buzz) would clear up later and check on his younger sister Mina, who went to bed earlier and was already asleep. Dressed in green army camouflage pyjamas, he swiftly crept to the back door, to escape into his other world - granddad's rickety work shed at the bottom of the garden. The splintered, wooden door was unlocked. The light was fading as Buzz slipped in. Carefully grasping the precious

binoculars he tilted them through the peephole at the back of the shed, overlooking a rubbish dump. He traced the battered sign: **DANGER, TRESPASSERS WILL BE PROSECUTED!**

Smoke billowed from an old musty mattress. He zoomed in, peering through the worn glasses, covered in stick fingerprints from his bird watching days with granddad. Through the dying embers, he spotted 3 children, laughing and joking whilst spinning a rusty, old bicycle wheel. If only he could join in… *'Nearly there now. Pass us the last wheel',* Paddy shouted to Tracy. *'Come and get it yourself',* shrieked Tracy, covered from head to toe in mud. This was the last straw! She'd spent a hectic hour fetching and carrying for the two boys. She was about to give in. *'I'll do it',* Imran replied, *'It's getting late'.* The threesome had been working on *'Build a Buggy'* for the school's young entrepreneur award with a plan to give younger children 20p rides at the summer fete. They were just putting the finishing touches to the go-cart when the dark, menacing silhouette of Basher's *Smash and Grab* gang appeared in the distance. *'Quick, behind that tree, near the back of that shed! Grab the cart!'* They leapt into hiding, unable to drag the cart with them. *'What's this?'* said Basher with a sneer and a leer. *'Push me on it and let's see how it runs!'* He jumped on it with his full 15 stone weight. His mates, flushed with exertion, heaved him forward. Crash, bang, wallop! The front wheel shot into the air and the whole cart flew apart within seconds. The threesome shivered and shook with fear as the celebrity bully groaned and moaned, lying flat as a pancake and white as a sheet amid the debris. Through the binoculars, Buzz glimpsed a close up of Basher's finger, which he held up like a trophy, to maintain *'street cred'*. Blood spurted everywhere. Next moment, a vehicle with a blue siren shuddered to a halt and two coppers pounced on the lot of them. *Got yer! You're all nicked for putting your hands in Joe's till. Move it!'* They were ushered into the awaiting car like three meek, innocent lambs.

Saturday arrived. Buzz went to the shed and climbed up the step ladder to reach a can of scarlet paint and a tool kit. He then clambered down, smartly nipping over the fence at the back. The go-cart was badly damaged and needed reinforcing and reconstructing in the middle. He moved into a secluded space and got to work. In a couple of hours it was as good as new. He found a smooth, wooden plank for the middle. In the wink of an eye, he had mended the cart and repainted it. As he went back into his garden, little did he know that he'd left a trail of red paint behind him. There was a click in his ear, then silence. Bang slammed a car door and out fell 3 pairs of small feet and one size 11. It was Paddy, Imran and Tracey with her dad. They had come back to see if they could salvage the cart. *'Wow !'* enthused Dad. *'Have you been having me on, just to get me out of bed?'* The three friends stood in disbelief! Their mangled cart had turned into a magnificent, gleaming chariot! Were they in the land of Cinderella? It felt like it. Imran said *'Look, here's a trail of paint and a tiny hearing aid',* pointing to the garden shed and over the fence. Tracey joined in, *'It's got to belong to that house. I think it's the family who don't speak. Let's go round and find out.'* The group trooped to the front door and rang a brass bell. There was a scuffle and then the door opened. A small pale face appeared with a streak of red paint on his nose. Tracey smiled and looked at the boy's ears. He wore one hearing aid in the left ear. She gently held out the other as if it was a precious jewel. He took it from her hand. A beaming smile lit up his whole face. There was no need for words. The boy who had saved them was no longer an outsider.

Appendix 5: COGS check list for pre and post testing

Record: COGS pre and post intervention testing: Dates:
Name:_____D of B_____

Narrative Level	Pre-test	Comment		Post-test	Comment
Record – range of ideas (10 plus)					
Recite – grouping of ideas – look for					

organisation – and not random expression (e.g. all the ideas about colour in one go)					
Refer – compare with other ideas (e.g. key – if a *yale* do they cf with another sort such as a mortice key?)					
Replay – coherent sequence – look for logical expression of information					
Recount – explanation about object Use etc.					
Report – introduce, describe, discuss format – looking at this level for them to introduce their opinions/views					
Relate – include: setting, events, actions, results, reaction – full narrative level.					

Clarity/Conduct/Conventions

Pre-test Post-test

Use of face, hands and body language to get over the message -

Voice – lively and interesting

Concise information that does not ramble

Clear ideas

Posture upright, relaxed and appropriate distance from audience

Impression made on others

Eye contact – regularly with all the audience

Interesting vocabulary

Confidence and manner – relaxed, open and friendly

Checking if audience follows (use of questions etc.)

WRITING: follow scoring on COGS score sheet.

Appendix 6:

WRITING SAMPLES OF GROUPS 1, 2, 3 – TEST 1 & 2

(typed to be anonymous, but spelling and syntax mistakes and paragraph structure are as presented. Both test 1 and 2 are from the same person)

Group 1

Test 1: Object: A necklace
This necklace is made of blue beads. The glass is different sizes. It is like my Grandma wears. I would buy it for an old person.

Test 2: Object; A rubber finger mask
This is a scary mask. There is 4 holes on the back for you to put your fingers through to control it, where the mouth and eyes move.

It has blue eyes that pop out which makes it look scary. Half of the mask is covered in blood and it only has one ear and half a nose. It was made in Hong Kong. It is made out of rubber.

I like it because it stands out and looks dangerous which appeals to be. It has a mouth that opens. Every time I have to pick something out of Rosie's magic box, I pick this mask because it jumps out and catches my eye. I love this mask but I think I would not use it with very small children. When I was young I liked parties where you had to wear masks. At Christmas you might be lucky and find a mask in a cracker. They are fun and you can imagine you are a different person.

Group 2

Test 1: Robbie Williams toy car
Its green. It has 4 wheels. It has flowers. It's old. Can't think of anything else.

Test 2: A name card
It is a card. It has patterns. It has red bars. It has different colours. It has a number on it. It is something to do with craft.

Group 3

Test 1: A key
This is a key. Its made of metal. It is for doors. It's gold coler. That's all

Test 3: A miniature set of books
These are tiny, tiny books. There are four in a case. The stories are godiloks, Jak and the beenstalk and cinderela. You can read the print. That's all.