

BRIEF LITERATURE REVIEW

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The Edward de Bono Programme for the Design and Development of Thinking
University of Malta
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The introduction of the de Bono programme in educational settings is sometimes criticised as, it is claimed, not much research has been carried out on its effects. One such criticism directed specifically at the de Bono CoRT programme states:

We find the lack of adequate evaluation studies on the CoRT program to be both surprising and disturbing. The program has been in existence for over 10 years and is claimed to be in wide use both in the British Isles and in Venezuela. Furthermore, de Bono makes strong claims concerning the effectiveness of the CoRT program. Yet after 10 years of widespread use, we have no adequate evidence concerning those claims and thus no support for the effectiveness of the program or the theoretical assumptions from which it was derived.¹

Although this criticism was published in 1985, it reflects statements that have continued to be directed towards de Bono's CoRT programme in recent years, that is, after more than 25 years of widespread use. Whether the statement was correct or not when it was published in 1985 is disputable. However, it can, today, be considered as a mistaken assumption as a great deal of serious academic research, some of which has been published, has been carried out in recent years.

The following is a list of some of the research that has been carried out, mainly in educational contexts (although some research in organisational settings is also included) together with a brief description of the nature of the research. This list is not exhaustive but, rather, representative of the research which has been carried out to date and, it is hoped, demonstrates the

¹ Polson, P.G., and Jeffries, R., 'Analysis-Instruction in General Problem Solving Skills: An Analysis of Four Approaches', p. 445, 1985, in J.W. Segal, S.F. Chipman and R. Glaser, (Eds.), *Thinking and Learning Skills. Volume 1*, Hillsdale, N.J.: Lawrence Erlbaum Associates, pp. 417-455.

increased, evolving and progressive research which has been carried out on the impact of the direct teaching of thinking using the de Bono methodology.

Edward de Bono, 1973, *CoRT Thinking Program, Workcards and Teachers' Notes*, Sydney: Direct Education Services. Reprinted in the U.S.A., 1987, Edward de Bono, *CoRT Thinking Program, Workcards and Teachers' Notes*, Chicago: S.R.A.

The CoRT programme was designed by Edward de Bono and was first published in 1973. The name CoRT comes from the Cognitive Research Trust which de Bono established at Cambridge, England. CoRT consists of sixty lessons divided into six sections of ten lessons each, CoRT 1 to CoRT VI. The programme offers instructions in a selection of specific thinking skills. It is recommended that CoRT lessons are taught with a mixture of direct instruction by the teacher, student group work, class discussion, individual work and homework projects.

De Bono² reports a number of experiments using CoRT. These are mostly pre/post designs involving idea counts, comparing CoRT treatment groups with control groups. Studies were usually conducted by the class teacher and involved samples of less than twenty pupils per group. Results in general suggest large increases in idea counts for the CoRT groups, but key details are lacking. De Bono admits to the problem when introducing the experiments as he states: "[they] do not succeed in proving anything, because in each case it is always possible that a special set of circumstances biased the results."³

² de Bono, Edward, 1976, *Teaching Thinking*, London: Maurice Temple Smith.

³ *Ibid.*, p. 217

J. Edwards and R.B. Baldauf Jr., 1983, 'Teaching Thinking in Secondary Science', in W. Maxwell, (Ed.), *Thinking: The Expanding Frontier*, Philadelphia, PA: Franklin Insitute Press, pp. 129-138.

Edwards and Baldauf report on the effects of a five week exposure to CoRT 1 on 72 fifteen year old male students as part of their Grade 10 science programme. Using pre- and post-essays on familiar and unfamiliar topics, they report educationally significant improvements on both essays. They further report significant correlations between achievement on CoRT and on the end of year science exam. Student reaction to the CoRT 1 programme was positive, as it was rated as being worth doing and as having a positive effect on their thinking. Anecdotal data from experienced teachers familiar with the students supported the view of an improvement in student thinking skills. This study is, however, of limited value as it had no control group.

M.A. de Sanchez and M. Astorga, 1983, 'Projecto Aprender a Pensar: Estudio de sus Efectos Sobre Una Muestra de Estudiantes Venezolanos', Caracas, Venezuela: Ministerio de Educacion

This study is cited in Nickerson *et al.* (1985). It reports on the impact of the Venezuelan implementation of an adaptation of CoRT. The researchers report increasing gains over three years for treatment students compared with control students on open-ended problems similar to those used in the treatment.

R.S. Nickerson, D.N. Perkins and E.E. Smith, 1985, *The Teaching of Thinking*, Hillsdale, N.J.: Lawrence Erlbaum Associates

Nickerson *et al.* discuss a wide range of programmes and categorises the de Bono CoRT Programme as a "heuristic oriented approach" which emphasises certain explicit methods that are available to a variety of cognitive tasks and that teach these methods outside conventional subjects. They review the limited available research on the effectiveness of CoRT including the studies

reported by de Bono in *Teaching Thinking*⁴ and in the CoRT Teachers Notes⁵ as well as the research of Edwards and Baldauf⁶ and of de Sanchez and Astorga.⁷ Although Nickerson *et al.* suggest that the findings of their research are favourable for the CoRT programme, they do not go as far as asserting the general effectiveness of CoRT. They state:

In general, the CoRT operations seem more suitable for contexts of decision making and informal reasoning in humanistic, social, and design contexts. They have a straightforward and immediate application to the sorts of problems that arise in everyday life. The CoRT operations can be seen as simple practical tactics that may help individuals to think sensibly about non-technical things, and, also, help them to come to perceive themselves as thinkers. Within its scope, it seems to us that CoRT is likely to have beneficial effects.⁸

John Edwards, 1988, 'The Direct Teaching of Thinking Skills, CoRT 1, An Evaluative Case Study', unpublished Ph.D. Thesis, James Cook University of North Queensland, Australia

Edwards' research makes use of de Bono's CoRT 1 programme to investigate whether students can be taught thinking skills directly through a heuristics-based programme which is independent of domain-specific knowledge. This study includes the investigation of seven claims which Edwards identified in the literature which de Bono has made concerning the CoRT programme. The basis for Edwards' work involved the teaching of CoRT 1 to Grade 7 children (in their last year at primary school) in Queensland. The study involves a delayed post-test (fifteen weeks after the pre-test and eleven

⁴ de Bono, Edward, 1976, *Teaching Thinking*, London: Maurice Temple Smith.

⁵ de Bono, Edward, *CoRT Thinking Program, Workcards and Teacher's Notes*, 1973a, Sydney: Direct Education Services.

⁶ Edwards, J., and Baldauf, R.B. Jr., 'Teaching Thinking in Secondary Science', in W. Maxwell, (Ed.), *Thinking: The Expanding Frontier*, 1983, Philadelphia, PA: Franklin Institute Press, pp. 129-138.

⁷ de Sanchez, M.A., and Astorga, M., 'Proyecto Aprender a Pensar: Estudio de sus Efectos Sobre Una Muestra de Estudiantes Venezolanos', 1983, Caracas, Venezuela: Ministerio de Educacion.

⁸ Nickerson, R.S., Perkins, D.N., and Smith, E.E., *The Teaching of Thinking*, 1985, Hillsdale,

weeks post-treatment) in order to assess the long-term (non-immediate) effects of the CoRT programme. The intervention involved 7.5 to 8 hours of classroom time and the positive results which emerged indicate great potential in the use of domain-independent heuristics-based programmes such as CoRT 1 for the direct teaching of thinking in education. Moreover, Edwards sets de Bono's ideas in historical and contemporary contexts and provides an extensive literature review on the subject of the direct teaching of thinking.

J. Edwards and J. Clayton, 1989, 'Observing a Thinking Skills Classroom', unpublished paper presented to the Fourth International Conference on Thinking, San Juan, Puerto Rico, August 1989

The paper discusses the effects of teaching a group of 12-year olds, in their last year of primary school, all 60 lessons of the CoRT programme (two lessons a week for thirty weeks). The teacher was helped to infuse the CoRT thinking skills, once learned by the students, through all disciplines of the school curriculum. The students showed improved scores on a range of quantitative measures while the teacher showed growth on a range of measures. Both the teacher and the headmaster, who regularly took the class, reported impressive benefits. The teacher noted that her teaching style had become more interactive. She now used group work more often and she knew her students and their thinking at a much deeper level than ever before in thirteen years of teaching. The students achieved outstanding and unexpected results on a set of standardised national tests and contributed many more ideas of a far higher quality than they had done before CoRT instruction. The headmaster confirmed the teacher's observations and noted that students exhibited more responsiveness and more confidence in their thinking than any group he had taught.

Anne Kite, 1991, 'Thinking Skills', Unpublished M.Ed. Dissertation, Dundee College of Education, Scotland

The dissertation provides a theoretical framework for the direct teaching of thinking and reviews a range of specially designed Thinking Skills Programmes including the de Bono CoRT Programme, Reuven Feuerstein's Instrumental Enrichment and Matthew Lipman's Philosophy for Children. The author describes the introduction of Philosophy for Children (*Kio and Gus*) into her school (Primary Year 6). This is followed by an evaluation of the implemented programme and a consideration of the implications of embodying such programmes into the school curriculum.

John Edwards, 1994, 'Thinking and Change', pp. 16 – 29, in Sandra Dingli (Ed.), *Creative Thinking: A Multifaceted Approach, Proceedings of the First International Conference on Creative Thinking*, Malta University Press

Edwards attacks the current educational system where, according to his early research, students "spend most of their time bobbing up and down in the sea of blah issuing from the mouth of the teacher." He categorically claims that learning is not simply the accumulation of knowledge. Edwards draws on his extensive experience to make the claim that change comes about as a result of thoughtful, lived experience and he states that a combination of understanding the change process and blending de Bono's processes offers one route to the type of thinking we all so badly need both in education and in business. An advocate of the de Bono CoRT programme, Edwards was instrumental in demonstrating that CoRT trained students perform better than other students in a number of academic spheres. Edwards would like to see increased research on the subject of teaching thinking in order to convince educational authorities that the teaching of thinking should be a major focus in the curriculum. He has been involved in both educational and staff training and management projects and observes that people often find it difficult to adapt to not being told what to do and how to think.

John O'Brien, Anne Stapledon, John Edwards and Phil Diamond 1994
'An Implementation of Cort-1, -IV and -VI in a large secondary school',
 pp. 93 – 110, in Sandra Dingli (Ed.), ***Creative Thinking: A Multifaceted Approach, Proceedings of the First International Conference on Creative Thinking, Malta University Press***

O'Brien *et al.* discuss the introduction of Edward de Bono's CoRT programme throughout the curriculum of a large secondary school. The paper describes their lived experience of implementing CoRT in an Australian Secondary School with approximately 1,600 students and 110 staff. An interesting question which the authors raise is how can students be interested in learning something which will not be tested. They give some interesting, optimistic and encouraging answers. The perceived benefits, some problems and the immediate and spontaneous reactions are described. Problems such as funding, teacher resistance to change, time constraints and pressure on students regarding work which is assessed, tested or graded is also discussed.

Barrie Hill, 1994, 'Growing People, Growing Crystals', pp. 215 – 223, in S. Dingli (Ed.), *Creative Thinking: A Multifaceted Approach*, Msida: Malta University Press.

Hill describes a major industrial application of Action Thinking which involved 150 staff at Queensland Magnesia, an Australian mining company. This involved 3-day live-in seminars for staff in cross-sectional groups of 30. Action Thinking Projects were developed which involved applying Action Thinking to their workplace. Eighteen staff were trained as Action Thinking coaches. These coaches, together with peer support groups established during the seminars, supported the individuals through learning from their actions in the workplace. The aims of this project involved the investment in a different workplace structure in order to draw on all workplace skills more effectively and to provide a higher level of personal satisfaction for the

workforce and a greater level of overall return for Queensland Magnesia project investors. An audit carried out after eighteen months of operation revealed that both objectives were being achieved. Increases in company profitability and effectiveness were matched by personal and professional gains for the workers. The culture of the company shifted to that of a learning organisation. Projects produced documentable financial benefits together with gains in professional independence and confidence. Workers became involved in their own continuing professional growth and the language of thinking and change was spoken at all levels.

John Edwards, 1996, 'The Direct Teaching of Thinking in Education and Business', pp. 82 – 95, in Sandra Dingli (Ed.), *Creative Thinking: New Perspectives, Proceedings of the Second International Conference on Creative Thinking*, Malta University Press.

The fact that thinking has been treated as a by-product of academic disciplines is strongly criticised by John Edwards. His paper gives an overview of the direct teaching of thinking in education and business as he draws on 28 years of experience. Edwards notes that insufficient attention has been paid to effective implementation strategies and suggests that "Maybe the teaching of thinking would be more effectively done in recultured workplace settings rather than in schools." (p.92) The fact is, he claims, that a number of workers "hang their brain on the gate" (p.82) before entering the workplace. The human brain is, however, a very precious resource which should be utilised and not neglected.

Kate Perkins and Terry Prime, 1996, 'They keep telling us we have to think differently, But no one shows us how to do it!', pp. 103 – 122, in Sandra Dingli (Ed.), *Creative Thinking: New Perspectives, Proceedings of the Second International Conference on Creative Thinking*, Malta University Press.

Perkins and Prime express a strong belief in the efficacy of de Bono's thinking tools as an effective strategy for change of attitude amongst workers. A real life case study is described where de Bono's thinking tools are combined with other activities. Perkins and Prime maintain that thinking tools develop and maintain mental flexibility and they stress the importance of learning to use tools and strategies which help us to escape from outdated paradigms. People need to be taught how to change their way of thinking and not merely told to think differently.

Sandra Dingli, 1996, 'Creative Thinking and Theories of Mind', Unpublished M.A. dissertation, University of Malta, April 1996

The dissertation investigates two topics, creative thinking and theories of mind, with a view to questioning and exposing the possibility of a correlation between them. The theories of mind presented by Edward de Bono and Margaret Boden are analysed in depth, together with the emergent implications for creative thinking of each theory of mind. The claims made by researchers in AI (Artificial Intelligence) regarding creativity are explored and the subsequent analysis demonstrates the necessity of a living human (biological) body for creative thinking to occur. The conclusion demonstrates that particular theories of mind suggest specific parameters within which a subsequent theory of creative thinking emerges.

Simon Batchelor, 1996, 'Six Hat Thinking – A tool for participation in development', unpublished paper presented at the Conference on the Teaching of Constructive Thinking Skills, Killiney, Co. Dublin, Ireland, December 1996

Batchelor presents his experience working with an NGO, Christian Outreach, in Cambodia, on a programme of community development. He makes use of de Bono's Six Thinking Hats and describes the adoption of this model for community development in Cambodia. Batchelor describes the basic model, its use for staff capacity building, and its use in rural village communities as a framework for open ended conversations. It concludes that the model is a useful tool for ensuring comprehensive analysis of problems, creating a framework for conversations and preventing conflicts.

Josette Leone Ganado, 1997, 'Teaching Children to Think', unpublished P.G.C.E. dissertation, University of Malta, July 1997

Leone Ganado describes her experience of teaching de Bono's CoRT 1 programme to Year 3 children (aged 7-8) in a state primary school in Malta in an attempt to assess the viability of the lessons. Six CoRT tools were taught to the children. Leone Ganado comments that "in spite of their young age the children benefited tremendously from the program and would give comments, ideas and considerations which would *not* normally be forthcoming from children of that age." (p.62) Some of her findings reflect those of O'Brien *et al* as she describes how children who were considered to be more able than others viewed less able children as a threat during the thinking lessons as they too were capable of thinking as well as their more able peers. (p.63) Leone Ganado found that teaching CoRT 1 lent itself readily to group work which was enhanced and that the thinking skills acquired in the CoRT lessons as well as the interpersonal skills which form an integral part of thinking lessons are readily transferable to other contexts.

Susan Mackie, 1998, 'Intellectual Liberation: UPTTRAIL's Contribution to the Thinking Revolution in South Africa', pp. 133 – 145, in Sandra Dingli (Ed.), *Creative Thinking: Towards Broader Horizons, Selected Proceedings of The Third International Conference on Creative Thinking*, Malta University Press

Susan Mackie addresses the important issue of skills training and human development in the light of practical experience gained in South Africa. The tools which are used are those developed by Edward de Bono and Mackie's paper describes the impact of training using de Bono's thinking skills and their practical implementation in real life work situations. She describes the conditions under which she operated with under-privileged people in extremely difficult (and unusual) conditions. The result is a paper which explores the potential of thinking skills and which is illustrated with examples of current intervention programmes in Platinum Mining and in the education of communities in an under-developed area of South Africa.

Lucienne Dingli and Louise Sciortino, 1998, 'Developing Democratic Values through a Summer School Curriculum', Unpublished B.Ed. (Hons.) dissertation, University of Malta, May 1998

The dissertation provides teachers and pupils with an eight-week summer school curriculum which aims to foster democratic values. The programme, which was successfully implemented at the University of Malta's summer school *Kids on Campus*, includes the de Bono methods and Philosophy for Children. In order to establish a child-centered environment, a thematic approach is adopted whereby a topic is introduced each week. The curriculum is designed to promote dialogue and participation, both of which are important skills in democratic societies. An evaluation is presented, together with recommendations, based on self-reflection and feedback from other summer school teachers.

Joseph M. Sammut, 1999, 'Teaching Thinking Skills to Primary School Children', Unpublished B.Ed.(Hons.) dissertation, University of Malta, May 1999

The dissertation is concerned with qualitative research which tackles the question: Can thinking skills be taught to primary school children? Sammut reviews the theoretical and practical aspects of teaching thinking in the primary school. He puts into practice Edward de Bono's CoRT 1 in a state primary school (Year 4) in order to evaluate his experience of teaching thinking to primary school children in an attempt to reveal the practical aspects of the teaching of thinking and to demonstrate how the thinking skills can be incorporated within the primary curriculum to help children become better thinkers. Sammut recognises the importance that schools equip pupils with the skills to access, collect, select and evaluate information. In this regard, he claims that one has to give special importance to the need to develop skills that enable pupils to assess and evaluate the available information. He further discusses a number of positive attributes which are linked to the direct teaching of thinking including collaboration, creativity and intelligence as part of the pedagogical transfer. He concludes that CoRT 1 thinking skills programme instils pupils with mental attitudes and principles towards lifelong education as well as the ability to adopt to circumstances that will be shifting and changing rapidly in the 21st century.

Davina Gray (Employment Service, for The Holst Group UK), June 1999, 'Thinking Smarter not Harder – Cognitive Thinking Workshops for New Deal 18-24 clients', Slough Unit of Delivery, First Evaluation, unpublished report (source: The Holst Group, U.K.)

This unpublished report describes a pilot project which involves collaboration between the Slough New Deal delivery unit and The Holst Group (Management and Training consultants) and Gateway partners, Buckingham Careers Services, to pilot Cognitive Thinking workshops for New Deal clients. The workshops were delivered over 3 x 2 hour sessions (Total: 6 hours) and

were based on the methods of Edward de Bono. Two workshops were held in different locations. Six clients attended the workshop in Aylesbury and eight clients attended High Wycombe (although some clients dropped out – went to prison – or found work). Out of the six Aylesbury clients who attended, five were in full time work when the report was completed, and the one who was still unemployed has a problem with lack of confidence but has recently started a training course and has had a job interview with a large employer. All the partners involved in the pilot agreed that it had been successful and it was decided to take this project a step further.

Davina Gray (Employment Service, for The Holst Group UK), January 2000, 'Thinking Smarter not Harder – Cognitive Thinking Workshops for New Deal 18-24 clients', Slough Unit of Delivery, Second Evaluation, unpublished report (source: The Holst Group, U.K.)

Two further workshops were held (see 'First Evaluation' above) in High Wycombe and Aylesbury, making use of the de Bono methods. Participants job success was monitored in order to evaluate the success of the workshops. In High Wycombe, it resulted that 62.5% of participants who attended the first workshop (April 1999) went into sustainable employment and did not resign within 13 weeks. The second workshop had a success rate of 33.3% of clients going into sustainable employment. The overall success rate for both workshops was 50%. In Aylesbury, there was a 100% success rate for the first workshop while the second workshop had a success rate of 29%. The overall success rate was 63.6%. The job placing of those who did not attend the workshops in Aylesbury was 12.5%. It is claimed that, following the workshops, all clients who attended were more focussed in their job search, well motivated and more confident. This helped in their approach to employers, resulting in better chances for sustainable employment.

Andrew Azzopardi, Lora Borg Savona, Elvira Busuttil, Josephine Mifsud, Margaret Pace, and Josianne Zammit, 2000, 'Teaching Thinking in a Secondary School in Malta', paper presented at The Fourth International Conference on Creative Thinking, University of Malta, July 2000, to be published in *Creative Thinking: An Indispensable Asset for a Successful Future, Selected Proceedings of the Fourth International Conference on Creative Thinking*, Sandra Dingli (Ed.), Malta University Press, 2001 (at press)

This paper discusses the introduction of the de Bono thinking skills in two state area secondary schools in Malta, Erin Serracino Inglott Girls' Secondary School and Lorenzo Gafa' Boys' Secondary School. The schools, which are both situated in relatively underprivileged areas, were pioneers in the introduction of these skills in Malta. The objectives of the programme within the school were:

- the introduction of divergent thinking skills by means of the de Bono programme for members of staff,
- the implementation of the skills within the classroom,
- the infiltration of the skills across the whole curriculum,
- the ability to use the skills in a variety of situations including within the school environment and within a wider context.

The paper describes the experiences of the teachers during the introductory year and puts forward a number of recommendations and suggestions.

Antoinette Caruana, 2000, 'Making a Difference at Playmobil', paper presented at The Fourth International Conference on Creative Thinking, University of Malta, July 2000, to be published in *Creative Thinking: An Indispensable Asset for a Successful Future, Selected Proceedings of the Fourth International Conference on Creative Thinking*, Sandra Dingli (Ed.), Malta University Press, 2001 (at press)

The paper describes some initiatives which have been strategically introduced over the years in Playmobil, a leading toy manufacturing organisation, to

facilitate a culture where people truly matter, and where the focus is not only on technical investment and competence but on developing the whole person who can truly contribute to the success of the company. Caruana describes how the company-wide undertaking of de Bono's DATT (Direct Attention Thinking Tools) – Playmobil's Think Kit Programme – has supported this vision and provided practical, unthreatening tools for improved decision making, teamwork, communication and target setting. She further describes how the experience of learning the de Bono thinking tools has proved to be invaluable to many individuals in their own private life, beyond the work environment.

Sandra Dingli, 2000, 'Teaching Thinking', paper presented at The Fourth International Conference on Creative Thinking, University of Malta, July 2000, to be published in *Creative Thinking: An Indispensable Asset for a Successful Future, Selected Proceedings of the Fourth International Conference on Creative Thinking*, Sandra Dingli (Ed.), Malta University Press, 2001 (at press)

Dingli describes a number of projects with which the Edward de Bono Programme for the Design and Development of Thinking has been involved over the past couple of years. These include the introduction of the de Bono thinking tools into a large area secondary school in Malta. Her paper demonstrates the broad application of the de Bono techniques which have been used by six-year old children and by mature professionals. She demonstrates a practical application of the de Bono thinking tools with responses elicited from mature professionals at an international conference on creativity.

Lina Cappello and Raymond Bonnici, 'The Use of Two Thinking Stories with Children in Year 5 using the CoRT Programme', Unpublished dissertation, Certificate in IT in Education, Faculty of Education, University of Malta, September 2000

The dissertation presents two thinking stories, 'The Ducks and the Ice-Cream' and 'Fluffy the Kitten', written and produced by the authors on CD and diskette, both of which are intended for use with Year 5 children. The stories are used together with five thinking tools from the de Bono CoRT 1 Programme, these being CAF, PMI, C&S, OPV and APC. Examples are given for the use of each tool in connection with the story.

Katia Mifsud, 2001, 'The Use of Dr. de Bono's Thinking Tools on Selected Aspects of Human Resources Management: A Case Study', Unpublished B.Commerce (Hons.) dissertation, University of Malta, May 2001

Mifsud presents the first study which attempts to describe the effects of using the de Bono methods in a workplace environment in Malta. She first establishes the importance of Human Resources Management in any organisation and then moves on to deal with the importance of integrating and instituting 'new' ways of doing things. In this regard, Mifsud makes a concerted effort not only to describe the innovative methodologies but also to show and to prove their effectiveness. The research includes four interviews, one focus group and observation of a Company meeting where the de Bono methods were used. Mifsud demonstrates that the de Bono DATT thinking tools help to reduce conflict, improve communication, improve decision making and strategically planning the future.

Shirley Atie, Neville Dimech, Joseph Vella, Sandra Dingli, Paul Bartolo, Lawrence Muscat, Daniela Bartoli, Forewords by Edward de Bono and Charles Mizzi, 'Report on the Direct Teaching of Thinking: Action Research Report on the implementation of a Thinking Skills Programme in Primary Schools in Malta', October 2000 – February 2001, Unpublished report, August 2001

This report describes and reports on an action research project which involved the introduction of the de Bono CoRT Programme as a pilot project in primary schools in Malta. Thinking Lessons were introduced into eight state primary schools in Malta in October 2000. Due to curriculum restrictions, the direct teaching of thinking was introduced through P.S.E. (Personal and Social Education) and the rationale for this choice is discussed in this report, together with the main aims of the project. The effects of the introduction of de Bono's thinking skills on pupils with particular reference to groupwork, classroom control, transfer and thinking abilities are discussed. Recommendations are proposed as this is an on-going project being carried out in collaboration with the Education Division, Malta.

Giuseppe Tidona, 2001, 'E' possibile migliorare la creatività e' la riflessivita' dei ragazzi' (Can we improve thinking and creativity in school children?) *DIALOGO – mensile regionale di cultura, politica e attualita'*, n. 7, anno XXVI, October 2001

Tidona carried out research in a school in Ragusa, Sicily making use of the de Bono CoRT Programme to assess the effects of teaching Thinking Skills to young people. The article describes the process which was used over one scholastic year with 14-year old children and the effects on the experimental group and the control group. Pre- and post-tests were used. The experimental group showed a significant increase in the skills which were assessed by the assigned tests, while the performance of the control group did not improve, even worsened in some respects. The data about the Italian

cultural scene add to the many studies on the CoRT lessons' effects, showing what was once considered impossible: improving thinking and creativity in students is obtainable.

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