WHAT WE KNOW ABOUT RESEARCH IN PHILOSOPHY FOR CHILDREN

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SUMMARY

Philosophy for Children is a program aimed to develop and foster high order thinking skills. It was implemented for the first time in the States in 1970. The creator of the program, Matthew Lipman was teaching at Columbia University (N.Y.) and he realized that many of his students just lacked the basic critical thinking skills needed to cope with social and political problems, even with academic assignments. He started developing his curriculum based on two strong assumptions: according to Piaget's stages theory, children 12 years old showed a growing ability to formal and abstract thinking; western philosophical tradition had attached to much importance to the art of good reasoning. The backbone of the new educational program was putting together those two simple and basic findings: he developed a curriculum where philosophical discussions about philosophical topics were the academic stuff that helped children to foster their thinking skills.

At the very beginning, the curriculum was intended for children 11 to 12 years old; later on, after Lipman rejecting Piaget's approach to cognitive development, new materials were designed to foster basic thinking skills in elementary school and kindergarten. So, the curriculum grew and spanned from age 4 to 18; from 4 to 12, just to offer children the possibility of mastering the basic thinking skills, and from 12 on to apply those skills to ethical, esthetical and social topics. It also broadened its goals and stressed the necessity of fostering affective and social skills. The curriculum also spread all over the world, with translations into other languages and implementation in thousands of schools in many countries.

As in any other program aimed to develop and foster high order thinking skills, there has been from the beginning of the implementation a deep interest in the consequences of the implementation of the program mainly on students, but also on teachers. Mathew Lipman, himself and his staff in the Institute for the Advancement of Philosophy for Children, established a close cooperation with the New Jersey Department of Education and its Educational Testing Service. The first step was to design a test to evaluate thinking skills (New Jersey Test of Reasoning Skills), focusing on the reasoning skills such as they appeared in the curriculum for children 11 years old, *Harry Sttotlemeir's Discovery*. Then, they conducted a first field experiment in two schools at Montclair district and two years later a wider study involving thousands of children in different schools in New Jersey. They used, of course, their own test and other evaluation tools, including children's academic scores in reading and mathematics.

Since then, many researches on the effectiveness of the program have been conducted in many countries. In order to get an overview as complete as possible, we have looked carefully through the main journals related with the program. We have also consulted two data base and we have asked, through two mailing lists, for information about evaluations conducted all over the world.

Most of the researches we have collected focus on thinking skills, but there are also quite a few examples of researches focusing on affective and cooperative skills. A great part of those researches uses classic quantitative methodology, with the New Jersey Test of Reasoning Skills as the main evaluation tool, but resorting also to other classical tests from the psychological domain. In the last years, influenced by the new trends in psychological and educational evaluation, other people moved to more qualitative methods. Although the program claims that other affective skills and personality traits are an important part of the educational aims of its implementation, there are not many examples of researches evaluating

skills other than cognitive. Our team itself has done four researches, three of them focusing in thinking skills and a last one on personality characteristics.

At present, most of those researches support the evidence of a positive impact on children's reasoning skills. However, the discussions about the evaluation of the implementation of the program have always been one of the most controversial topics in the international and national conferences hold by scholars involved in the implementation of the program. These are the main topics under discussion: a) the possibility of an evaluation of the philosophical skills fostered by the program; b) the skills (cognitive, affective, others) fostered by the program that should be evaluated; c) the adequacy of quantitative or qualitative methods to a valid evaluation of those skills; d) the full implications of the findings of the evaluations of the program.

Interesting as those discussions are, they arouse a certain feeling of disorientation and provoke some doubts. To begin with, most of the researches use New Jersey Test of Reasoning Skills; it is, of course, a test of deductive reasoning, well designed, but too close to the content of the curriculum as to assume that the kind of reasoning skills it evaluates would be transferred by children to other domains of knowledge and personal life. In some cases other tests are used and that allow us to get a better understanding of the effect of implementing the program. There are other cases where is established a correlation between data from NJTRS and academic grades in mathematics and language.

A second problem we have discovered is that, unfortunately, a significant amount of the reports that have been published lack the necessary information to support the claims they present as a conclusion of their research. We really do not know whether it is just a problem of presenting the results without taking into account the academic standards in educational research or it is a consequence of an incomplete or faulty design of the research. A simpler explanation might be that the majority of the researches have been done by people whose scholar area is not educational or psychological research; so, they are not very familiar with the procedures. In any case, many times, after reading a paper or report, it is almost impossible to come to any conclusion relating to actual effects of the implementation of the program.

A third problem, in part a consequence of the other two, is that we got the impression that there is not any real community of researchers working together, in such a way that they make possible an accumulative knowledge about the effect of the program, its achievements and failures as a program of cognitive enrichment. There are very few examples of replication of a research to support the validity of the findings. In the first years of the implementation of the program, there was a coherent and far-reaching project of research at the IAPC, the institution directed by Matthew Lipman, but once they got a positive result, they left their work on research (Shipman, V. C., 1983). There is also an important research team in Canada, Quebec, which has been evaluating the implementation of the program since the very beginning and they have focused on different dimensions of children development. At present they are involved in a very interesting project of qualitative research (Daniel, M.F. & Cols. 2002). This project has several outstanding characteristics that deserve a closer attention. First, they have involved in the research scholars from different countries and different cultural backgrounds; on the second hand, they are putting a lot of hard work into the precise and soundness definition of the main cognitive skills they want to observe; finally, they are developing several different tools to observe children's behavior and find out their mastering of thinking and affective skills. Our team, here in Spain, has a great commitment to a long term evaluation of the program. However, out of those few examples, the international research scene is far from satisfactory. It looks like if people started working with the program, then decided to do their own research, just to confirm the educational goodness of its implementation, and then they disregard any further research into the area to get a better understanding of its contribution to children personal growth or to have some feed-back that allows them to introduce some modification into the design of the curriculum.

The IAPC, the head office of the Philosophy for Children project, has played a very important role as the leading institution of the program in order to offer and to get as much information as possible about the implementation of the curriculum. As editor of the most important journal of the community of people involved in doing philosophy with children, it has published a large number of articles about researches done in different countries all over the world. Even more, it has published two reports on achievements of

the program, the first one in 1982 and the second in 1991, with a significant sample of the most interesting researches and its results. Notwithstanding, those reports, valuable as they are, do not offer any analysis of the researches. They just put together a short abstract of the original paper or article, with some basic (and some times incomplete) information, and that is all. That is, there is not at present any rigorous study or analysis of the evaluation of the program.

So, the present situation is as follows. There is a great amount of researches done about the implementation of the program, and the list of reports presented below in this paper produces evidence in support of this claim, much more if we realize that probably we did not find all the existing reports. On the second hand, the results tend to offer some support for the positive effect of doing philosophy with children. However, this positive impact has been proved mainly in cognitive skills, and there is much less evidence of the positive effect on affective dimensions of students' personality. In order to throw some light on these problems, our team, here in Spain, decided to apply the methodological procedures of meta-analysis to clarify how much we really know. We have selected just those reports with the data or information that was required to do the meta-analysis. Then, we centered our attention on the researches that fulfilled all the requisites needed for a meta-analysis and that approached the same children's skills or abilities. At present only in the case of reasoning or cognitive skills it is possible to get enough evidence or information so as to do a meta-analysis. Taking into account that we do not have much information, the variables we have selected are just reduced to: a) effect size of the implementation; b) test used to evaluate the growth of children's reasoning skills; c) year of the evaluation. It is not too much, but we think that this meta-analysis is a very important step for the evaluation of the program. The results of the reported meta-analysis reveal that P4C has a positive effect. The positive effect is higher when researchers use New Jersey Test of Reasoning Skills, and it appears, but with lower impact, using others tests (García Moriyón et al., 2003). Most of the findings of this meta-analysis are exposed above in this short overview.

Taking into account all we could get from that large amount of evidence, some think that there is still a hard work to be done in the years ahead. We might suggest some directions to avoid some of the problems we have find out and to go deeper in the evaluation of the personal and educational effects of the program on students. >From our point of view, we should focus our attention in the following three domains:

Theoretical foundations

For the last years, and almost from the very beginning of the evaluation, the discussion about the theoretical and methodological foundations of the evaluation of the program has attracted a big attention from the people involved. There are several very interesting papers we include in the list below that approach the most important topics and more questionable aspects of doing a research. As many people in the philosophy for children community comes from the faculties of Philosophy and have a strong philosophical background in philosophy, there is a certain bias in the reflection on these problems. As Sygurdadottir suggests (Sigurdadottir, 2002), we need to establish a clear distinction between philosophical research and psychological and educational research, because both have different aims and methodologies. Some of the problems and the shortcomings we found in many reports might come from this confusion: people do a research from a philosophical point of view, and although they use some standard psychological tools, they do not use them adequately and their conclusions are bad based or just lack the basic methodological requirements. Philosophical research, interesting as it is, is not very useful as long as we want to analyze the consequences of doing philosophy with children in the school system, or in other stages. Quite the opposite, philosophical reflection is essential to get a clear understanding of the theoretical and methodological suppositions the program rests on, and also to clarify the philosophical foundations of the program, even to offer the criteria that allow us to tell the genuine philosophical discussion in the classroom apart from the non philosophical ones, a very important topic that would need much more evaluation that it got till now.

So, people from the philosophical background should ask for help from the people with a better training in the requirements of educational and psychological research. A strong cooperation between both "cultures", setting up interdisciplinary research teams, such as in Canada or here in Spain, would be very constructive.

On the other hand, we think that the proposals and suggestions about the goals, procedures and consequences of the researches in this domain are abundant enough and full of suggesting and clarifying ideas concerning the main problems related to the evaluation of the program. A close and careful reading of some of the papers we include in the theoretical section of our list would be very helpful and enlightening for all scholars involved in projects of evaluation (Garcia et al. 2002; Henderson, A. 1988; Morehouse, 1995). Of course, this kind of discussion is always open to new considerations and a complete change of the theoretical paradigm is a possibility we need to bear in mind, even the radical criticism that considers very difficult or even impossible to do any precise research on the practice of philosophy (Heynes, 2001). However, this tendency to go back to the foundations every time is a typical philosophical bias we have to be very careful with. From our point of view, theoretical and methodological reflection and discussion is not a serious priority at present; it should be limited to the specifics demands of a specific research, as an analysis of the suppositions and results of that research, no more no less.

Methodological Problems

Most of the researches mentioned in this list have been conducted using the classical quantitative approach to the evaluation of programs, as it was usual in psychology and education research field. Of course, we have find out more deficiencies than expected, and we have mentioned above a possible explanation of these shortages. Since the late of the 80s, psychologists began to use qualitative methods in their research as it related to educational issues and the understanding of learning and cognition. Qualitative research fit very well in the philosophical mood of that time, moving also far away from any Cartesian understanding of truth and method, and the qualitative approach attracted the attention of many people working in P4C (Maykut & Morehouse, 1994). Interesting as it is, qualitative research is an approach mucho more demanding: time and money consuming, and needed of a greater work from researchers. The proposals of Daniel, Morehouse or Santi offer good directions to conduct an evaluation of the program according to this new methodology (Daniel, M.F. & Cols. 2002; Maykut & Morehouse, 1994; Santi, 1993), although they should go ahead to overcome some of the difficulties that this kind of work creates, mainly a precise definition of the observational variables and a sound and reliable interpretation of the data collected.

Having said that, and accepting the refreshing approach to research we can found in qualitative methodology, we think that it is not very useful to make a clear-cut distinction between both methods, qualitative and quantitative, such as some of the scholars we have just mentioned hint at. The kind of method we use, depends upon the aims of our evaluation and the specific characteristic of the mian subject matter we want to explore. Some times, the only appropriate methodology is the qualitative one, for example, if you want to evaluate the consequences of doing philosophy with a small number of students (McDermott, M., s.d.) or you are conducting a case study following an ethnographic approach (Echeverría, E., 1992). In other occasions, the quantitative methodology is the most appropriated, such as in the case you want to know the impact of doing philosophy in the academic achievement of students or in the mastering of some specific cognitive or affective skill (Shipman, V. 1983). Most of the times, a mixed methodology is the most suitable for the evaluation; the we can use some classical psychological tests and also other more qualitative tools, such as a teacher's diary or check lists of thinking skills. It is also possible that the method you use be conditional on human and economical resources. Qualitative research is much more demanding and not always is possible to get the funding to putt into practice a complex and sophisticated qualitative methodology.

Goals of the research

After a detailed check of the reports we have included in this paper, we think that it is needed to widen the field of our researches. To begin with, according to the theoretical books of Matthew Lipman, Philosophy for Children is a program for the encouragement of thinking skills in children; their first evaluation of the implementation of P4C was focused on those thinking, or reasoning skills, with a specific attention to deductive reasoning, such as it is evaluated with the NJTRS, and to academic achievement, scored by mathematic and language grades. However the meaning of "reasoning" was wider than just deductive and inductive cognitive skills. From the very beginning, the concept incorporated a critical and creative dimension and was related with an important amount of affective skills, such as tolerance, open-mindedness, self-esteem and self-strength, cooperation… In later years, in tune with the most important trends in psychological and philosophical thinking, they turned their attention to caring thinking and emotional intelligence, even though those characteristic were present in the original approach of the program.

Although there are various researches that have concentrated on those affective attitudes or dispositions, we need to get much more evidence to support the claim that P4C also foster and encourage those dimensions of children's minds, or personalities. Of course, this field is much more complex, and to demonstrate the positive effectiveness of the program on that domain is not an easy task. In any case, the first steps have been taken, and we just should continue on that direction (Camhy, 1998; Gardner, 1999). We can also find very good contributions focusing on a wider and deeper meaning of thinking, which includes the critical and creative dimensions, and also the informal reasoning, much more related with the kind of argumentation we try to cultivate in the community of inquiry.

On the second hand, the first goal of the program is to help children to develop and master the reasoning skills that are needed to build and sustain a democratic society. Academic achievement, important as it is, was not the matter Lipman was first worried about; social and political consequences of education, in the path opened by Dewey, were his most important interests. So, we should move our mind on fields far away from the school setting; first, far away from the more restricted sense of education, academic achievement. A good example is the research project of McDermott, working with children at risk (McDermott, 2002). Another interesting example is that from Echevarría, conducting his research in the playground (peers interaction) and at home (family interaction), in order to evaluate the consequences of doing philosophy in the daily life of children (Echeverría, 1992). As far as I know, some people did, or are doing, philosophy in other scenarios or environments, such as people in jail, street children or elderly people. It would be nice to go ahead with those activities and to evaluate their impact on people.

Last but not least, most of the reports on the effect of thinking skills programs in children's minds and behaviour are very sceptical about the influence of those programs in the long term. That is, when we apply a program to a group of children for a short period of time or for one or two years, it is normal to discover a positive impact on students. However, some years later, the impact tends to vanish and fade away; then, there are doubts regarding the lost-lasting effect on children of doing philosophy in the childhood or adolescence. At the same time, the majority of the researches we include in our list evaluate the impact of philosophizing after a short period of application: from some months to an academic year, with very few examples of a two year application. On the contrary, one of the main assumptions of the program is that children would need a long exposition to the practice of philosophy, as long as we do want to help them to become reasonable people, with a mastering of critical, creative and caring thinking. So, we are really in need of longitudinal researches that evaluate the real consequences of the program. Our team in Spain has just beginning a longitudinal research project: we agreed with a private school to conduct a research with its students. They are doing philosophy for children every year from grade 1 to grade 10, once a week, and we want to collect data about personality, thinking skills and academic and personal achievements every four years, beginning when children are 8 years old and ending when they are 25 years old. We also agreed with another private school that is the control group. We should wait a long time before getting any evidence about the long-term effectiveness of the program.

PAPERS AND REPORTS ON P4C IMPLEMENTATION

1. COGNITIVE SKILLS

1. ALLEN, TERRY (1988): "Doing Philosophy with Children". *Thinking*, vol. 7, no. 3. He finds a significant gain in logical reasoning (NJTRS) in the experimental group of 23 students.
2. ALLEN, TERRY (1988): "I Think, Therefore I Can: Attribution and Philosophy for Children". *Thinking*, vol. 8, no. 1. The results of this study offer indication that the P4C program may be more beneficial in raising reading comprehension scores for children who are poorer readers than for those identified as more skilled.
3. BANKS, JOYCE (1989): "Philosophy for Children and California achievement test: an analytic study in a Midwestern suburb". *Analytic Teaching*, Vol. 9, 2. Using California Achievement Test, students in the experimental group have a significant gain in total reading and Language Scores.
4. BROWNING, BECKY (1988): "Harry in three classes". *Analytic Teaching*, Vol. 8, 1. pp. 70-72. It is a descriptive report of teacher's positive experience using Harry program with three different student populations. He underlines the special gains of special education students
5. BURNES (1981): 5th and 8th grade students in Minnesota. Harry implemented for two years. Second year, all classes show significant gains on reasoning. Third year, gains on reasoning reading comprehension. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)
6. CAMHY, DANIELA and GUNTHER IBERER (1988): "Philosophy for Children. A Research Project for further mental and personality development of primary and secondary school pupils" *Thinking*, vol. 7, no 4. The results show a positive effect on reasoning skills and flexibility (creative thinking); experimental group scores in the post test are higher than those from control group.
7. CINCUINO, DOLLY (1982): "An Evaluation of a Philosophy Program with 5th and 6th Grade Academically Talented Students". *Thinking*, vol. 2, no. 3-4. 50 students made significant gains on all five measures (California Test of Mental Maturity; Questioning Task and other three tests). No control group was tested. Teachers, students and parents offer positive reports on the implementation of the program.
8. CUMMINGS, NANCY PERRY (1979): "Improving the Logical Skills of Fifth Graders", in *Thinking* 1(3-4), 90-92. Discussion of the author's duplication of Lipman's field experiment in 1970 (Lipman & Biermann, 1970). Finds support for Lipman's claim regarding teaching children thinking skills with philosophy but feels further research needs to be done regarding the methodology. Data are included.
9. CUMMINGS, NANCY PERRY (1981): "Analytical Thinking for Children: Review of the Research" in *Analytic Teaching* 2(1), 26-28. Experiment with 32 fifth-grade students, using pre-test and post-test, experimental group and control group (two groups of 16 each). The study provides reliable data and their conclusion gives support to Lipman¨s claim that a philosophical approach can be utilized to improve children logical skills, but the possibility of generalize the study is limited.
10. DANIEL, M.F. (1998): "P4C in Preservice Teacher Education" *Analytic Teaching*, 19, no. 1, 13-20. She reports on two researches involving 4 a 13 teachers-to-be. She used P4C methodology, but not their material. A two-hour discussion period each week, for 9 and 15 weeks. Analysis of the verbatim transcripts of the meetings, a personal interview and short questionnaire shows that philosophical discussions is pertinent to practical training and foster the development of critical thinking.
11. DANIEL, M.F; L. LAFORTUNE; R. PALLASCIO; M. SCHLEIFER; P. MONGEAU (1999): "Philosophical Dialogue among Pupils: A Potent Tool for Learning Mathematics" en PALSSON, H.,

B. SIGURDARDOTTIR, Y B. NELSON: *Philosophy for Children on Top of the World*. Akureyri: Univ. Akureyri. Interesting, but without control group. In this article the data and its analysis are not presented. They announce a future presentation. They find that introducing philosophical reflection among peers concerning mathematical concepts and problems help pupils form primary and middle school to 'tame' mathematics: to like it better and to transfer it more easily into daily experience.

12. DANIEL, M.F. & COLS. (2002) "The development of dialogical critical thinking" This qualitative analysis study the manifestation of "dialogical critical thinking": four modes of thinking (logical, creative, responsible and meta-cognitive) according to the epistemological perspectives (egocentricity, relativism and intersubjectivity oriented toward meaning). Research was conducted with pupils of three cultural contexts.
13. ECHEVERRÍA, EUGENIO (1992): "El aprendizaje y la utilización del pensamiento crítico. Una investigación etnográfica." En *Aprender a pensar*. N. 5, Pp. 60-69. It is an ethnographic research, with qualitative data from observing students in the classroom, the schoolyard and at home. Although there are some improvements in children thinking skills, some contradictions and incoherencies are observed. More qualitative researches are needed trying to figure out why children use thinking skills in some contexts but not in another ones
14. EDUCATIONAL TESTING SERVICE (New Jersey) (1978): Pomtom Lakes and Newark 1976-78. A complete abstract in Lipman, M: *Philosophy goes to school*. p. 219-224. Significant improvement in Mathematics and reading
15. GARCÍA MORIYÓN, F.; MORENO, A.; PASCUAL DIEZ, F.; TRAVER, V. (1988): "Evaluación de la aplicación del programa de FpN". It evaluates the impact of P4C in three high schools of Madrid. The results suggest an improvement of the experimental group in general cognitive ability (RAVEN and NJTRS) and reading comprehension, but neither in specific cognitive abilities nor in personality.
16. GARCÍA MORIYÓN, F.; COLOM, R.; LORA, S.; RIVAS, M.; Y TRAVER V. (2000): "Valoración de 'Filosofía para Niños': un programa de enseñar a pensar." *Psicothema.* Vol. 12, no. 2, pp. 207-211. It evaluates the impact of P4C in three high schools of Madrid. The results suggest an improvement of the experimental group in general cognitive ability, but neither in specific cognitive abilities nor in personality.
17. GARCÍA MORIYÓN, F.; COLOM, R.; LORA, S.; RIVAS, M.; Y TRAVER V. (2002): *La evaluación de la inteligencia cognitiva y la inteligencia emocional.* Madrid: De la Torre. The book explores all the questions related with the research on the implementation of the program and offers a guide to do future evaluations. They include the results of their first research (2000) and of a replication done two years later. In the replication, EG does not improve better than CG
18. GARCÍA MORIYÓN, F.; COLOM, R., REBOLLO, I. (2003): "Evaluating Philosophy for Children: A Meta-Analysis"
19. HOLDER, J. (1991): Final report on Phase II. 600 5th grade students in the EC, and other 600 in the CG. They implemented Harry 2-3 hours a week during 1991-92. Positive effect on students. The used NJTRS. No specific data are given. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)
20. HOLDER, J. "Philosophy for Children in the Philippines Proyect" Final report on phase III Unistar mission. The results of those studies indicated a high potential of successful implementation of P4C programs in Philippines classrooms. The research was done in two 5th grade classes, experimental and control group and pre-test and post-test. They used modified versions of Harry and Test Reasoning Skills.
21. HYMER; B. (September 2002) "If you think of the world as a piece of custard... Gifted Children's use of metaphor as a tool for conceptual reasoning" (September 2002) A small-scale qualitative study

that examines the transcript of a group enquiry conduced according to the practice of philosophical enquiry with children.

22. HUERTA, FRANCISCO (1991): 438 students, 5th and 6th grade, in private school from Mexico City. There was not Control group. Students improved in NJTRS. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)

23. IMBROSCIANO, ANTHONY (1997): "Philosophy and Student Academic Performance" en *Critical and Creative Thinking,* 5 (1), 35-41. Students who did P4C get higher tertiary entrance scores, but it was a poorly controlled study, so the findings are indicative only. (Quoted by T. Sprod)

24. IORIO, JOHN & WEINSTEIN, MARK & MARTIN, JOHN. (1984): "A Review of District 24's Philosophy for Children Program", in *Thinking* 5 (2), 28-35. It is an experiment conducted in Queens during 1981-1989. 369 grades three through sixth students (experimental group) were tested using a developmental version of NJTRS and a Child Description Checklist. P4C has a significant effect on raising pupils' level of critical thinking. It increases children's ability to reason critically, and does so buy affecting both the pupil and the teachers' awareness of the effect of the program on the pupil. All data are included.

25. JACKSON T. & DEUTSCH (1987): Short abstract in "Philosophy for Children. Where we are now" *Thinking*. Supplement Two. 1000 students, K thru 12th grade in 15 of Hawaii's public schools. Experimental group showed significant gains in NJTRS. Students and teachers favored the continuation of the program.

26. JENKINS, JOSEPH (1986). "Philosophy for Children Programme at a Gloucestershire Comprehensive School in Great Britain", in *Thinking* 6 (3): 33-37. Describes the author's experience in implementing the Philosophy for Children program, the difficulties he encountered, such as weaning children away from desks, and the American language, and what benefits both he and the children received from the program. EG improved significantly better on NJTRS. Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)

27. KARRAS, RAY W. (1979): "Final Evaluation of the Pilot Program in Philosophical Reasoning in Lexington Elementary Schools 1978-79", in *Thinking* 1(3-4), 26-32. The P4C seems to have significantly improved students' abilities in the use of formal and informal logic, and it has been favorably received by most students tested. The experimental group was made up of 150 sixth and fith grade students. They discussed Harry during a full academic year, twice a week.

28. LIPMAN, M. & BIERMAN (1970): "Field experiment in Montclair". 20 children in experimental group showed significant gains over the control group in the area of logic and logical reasoning using CTMN. . Two years and a half afterwards, the differences between the two groups on reading was significantly different. Abstract in LIPMAN, M: *Philosophy goes to school*.

29. MADRID MONTES, MARÍA ELENA (2001): *Juchitán de los niños. Habilidades cognitivas en el aula* México, Universidad Pedagógica Nacional. It is a long report of a research about the implementation of the program in two primary school in Mexico, D.F. Most of the books deals with theoretical and philosophical problems, and some qualitative information about the implementation of the program. They used NJTRS to analyze the effect of the program on children's treasoning skills. Data are not complete and the differences between control and experimental group are not conclusive.

30. MALMHESTER, M. (1999): "The 6 Years long Swedish Project: "Best in the world in thinking" As partly presented at the ICPIC congress 1999. The author offers a general reflection on the implementation of the program. He mentions the positive impact on curiosity and general and mathematical reasoning. Mimeographed report.

31. MARTIN, JOHN F. y WENSTEIN, MARK L. (1985): "Thinking Skills and Philosophy for Children: The Bethlehem Program, 1982-1983" *Analytic Teaching,* Vol. 5,2. 1.420 students. They used Hary, Mark and Lisa. They used Questioning Task and a reading and math test (SRA). Significant

improvement. No control group. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)

32. MEEHAN, KENNETH A.: "Evaluation of a Philosophy for Children Project in Hawaii" *Thinking*, vol. 8, no. 4. Around 100 students in classes spanning kindergarten through sixth grade participated in the evaluation. A growth of critical thinking skills was observed in participating children using NJTRS. Teachers reported in a questionnaire of other positive results of implementing PO4C. There are not complete data.
33. MEYER, JOHN R. (1988): " A quest of the possible? Evaluation of the impact of the Pixie programme on 8-10 years old". *Analytic Teaching*, Vol. 9, 2. PP. 63-64. A quasi experimental research, using NJTRS and Metropolitan Achievement Test 6. The statistical results do not support the hypothesis of the positive impact of the program on thinking and reasoning skills. However, other data from students' interviews suggest significant educational gains as a result of the program. There are not any data in the article.
34. MOREHOUSE, R. & M. WILLIAMS (1998): "Report on Student Use of Argument Skills" *Critical and Creative Thinking*, vol. 6, no. 1, pp. 14-20. This study analyses and scores student written responses on an exercise which asked them to prepare and write arguments pertaining to a given problem. They evaluated three year six classes: 37 students (control group), 32 students (experimental group after one year in the Philosophy for Children program, and 40 (two years in the program). The difference between the control group and the two years experimental group is significant at the 0.0001 level in the written part of the instrument.
35. NIKLASSON, J., OHLSSON, R., RINGBORG M.: "Evaluating Philosophy for Children", *Thinking*, Vol. 12, No 4, 1996. They offer a qualitative evaluation of the differences between children who have been trained two years and a half before and children who had not. They find significant differences in the way the children discuss philosophical problems. There is not any data.
36. PÁLSSON, HREIN (1996): "We Think More that Before About Others and Their Opinions. An Evaluation Report from Iceland". *Thinking*, vol. 12, no 4. There is a significant improvement in thinking skills (NJTRS) and a positive attitude from children and teachers towards doing philosophy. Some other comments are made to improve the implementation of the program
37. REED, RONALD & HENDERSON, ALLEN (1984): "Preliminary Report of a Three Year Study Teaching Analytic Thinking to Children in Grades K-7", in *Thinking* Vol 5, no. 3, 45-58. They discuss the study, the methods of testing and the results found. Results suggested that all children, from Kindergarten upwards, could benefit from the P4C program, using a reading test and NJTRS.
38. REED, R. and HENDERSON, A. (1981): 4th grade students in Fort Worth. EG: 51; CG: 25. EG had significant improvements on post test scores compared to CG. They used formal and informal reasoning test and an early version of NJTRS. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)
39. SCHLEIFER, MICHAEL and LOUISE COURTEMANCHE (1992): "The Effect of Philosophy for Children on Language ability" *Thinking*, vol. 12, no 4. It is a very short paper. From their research, they conclude that the philosophical discussions improve the capacities of children at communication and expression in the French language. Well done research, but there are not specific data in the article.
40. SCHLEIFER, MICHAEL, PIERRE LEBUIS and ANITA CARON (1987): "The Effect of Pixie Program on Logical and Moral Reasoning" *Thinking*, vol. 7, no 2. Experimental and control groups, both of 100 children age 8 and 9 using Pixie. The EG shows a significant gain in logical skills; the EG gained significantly in self-concept in two schools. The results part confirm and part are against Piaget's claims. There are not enough data in the paper.

41. SCHLEIFER, MICHAEL, FRANCOIS NEVEU, MICHEL MEYER and HELENE POISSANT (1997): "Arguing with the Government". *Thinking,* vol. 14, no 3. It is a research about children's abilities at argumentative written discourse, with children from grades 4 to 6. They find some significant improvement of the experimental group in "consideration of the opponent's argument", logical reasoning, and usual language components in reading, writing and oral expressions.
42. SCHLEIFER, MICHAEL and GINETTE POIRIER (1996): "The Effect of Philosophical Discussion in the Class-room on respect for others and no-Stereotypic Attitudes". *Thinking,* vol. 12, no 4. Experimental group, after one year doing philosophy in the classroom, using *Kio and Guss* program, becomes more sensitive to the traps of jumping to conclusions or too wide generalization. There are not data.
43. SHIPMAN, V. (1982): 6th grade students in Pennsylvania. Harry implemented for 1 year 2 ½ hours a week. They used formal and informal reasoning test, and Ideational fluency and flexibility (WCU). EG had great gain than CG in reasoning and most of EG in ideational fluency. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)
44. SHIPMAN, VIRGINIA C. (1983): "Evaluation Replication of the Philosophy for Children Program - Final Report", in *Thinking* Vo. 5 no. 1, 45-57, Data were obtained on Questioning Task 4, a test designed to assess the thinking skills taught in the P4C program, for approximately 2.200 5th through 7th grade students in New Jersey. Despite differences in the extent of teachers' understanding and implementation of the P4C program, and in students' background characteristics and abilities, the data from this large diverse sample of New Jersey school systems and students indicated that even after adjusting for initial relevant group differences, students in program classes were superior to their non-program peers in formal and informal reasoning skills. Some data are included in the article.
45. SIMON, CHARLANN (1979): "Philosophy for Students with Learning Disabilities", in *Thinking* 1(1):21-34. Research paper on effects P4C has on learning disabled children. An experimental group of five children improve significantly more than the control group in critical thinking skills. Abstract in LIPMAN, M: *Philosophy goes to school* p. 219.
46. SLADE, CH. (1990): "Logic in the International Elementary School", in *Thinking* Vol. 8, no. 4. This paper justifies the content of P4C program; it describes experiences and the results achieved at International School of Brussels. The implementation of the program has a positive impact on the experimental group. Data are included, without specific mention of number of subjects or test used.
47. SLADE, CHRISTINA (1988): "Logic in the Classroom" *Thinking* vol. 8, no 2. Two experimental groups one of 15 gifted mathematics students and the second of 10very weak; two control groups of the same characteristics. EG showed a significantly greater improvement in logical skills (NJTRS) but there were not any difference in Mathematics. Data are included.
48. SLADE, C. (1992): "Creative and critical thinking. An evaluation of Philosophy for Children". *Analytic Teaching,* Vol. 13, 1. PP. 25-36. First, she shows that students improve a lot in NJTRS, but she analyze the test and concludes that it cuts far too narrow with respect to critical thinking skills. After analyzing other critical thinking tests and disregarding them as also too narrow, she moves to the concept of creative thinking such at it is embedded in P4C curriculum and suggest that new evaluation should be done using the analysis of critical and creative thinking through the analysis of the dialogues in the classroom.
49. SOFO, FRANK (1986): (1986) "Revival of Reasoning in the Modern Age by Developing a Classroom Community of Inquiry within College Students", in Thinking 6(3):25-29, Describes students reactions to discussion based approach using P4C methodology. Experimental research conducted with students doing Diploma of Teaching. Gives findings and conclusions of study. Positive results for P4C. (Quoted by T. Sprod)
50. SPROD, TIM (1997): "Improving Scientific Reasoning through Philosophy for Children: an Empirical Study" *Thinking,* vol. 13, no. 2. A significant improvement in scientific reasoning is

verified. Other interesting conclusions about the implementation are suggested; the author proposes to use epistemic episodes as a key category for analysis of the conversations. The complete report is available in Word files.

51. SPROD, TIM (1999): "I can change your opinion on that: Social constructivist whole class discussions and their effect on scientific reasoning" *Research in Science Education* 28 (4) 463-480. Probably, it is the same research that that presented in the previous paper. We have the electronic copy, which includes full transcripts and other data.
52. STROHECKER, M. (1986) "Results of the 1983-84 philosophy for Children Experiment in Lynbrook", *Thinking*, Vol. 6, no. 2. 3rd grade students in New Jersey. EG (36 students) and CG (32) Pixie implemented for 9 months. Ideational fluency and flexibility tests. EG improve performance in both measures, significantly more than CG. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ.)
53. THOMPSON, A. GRAY & DUPUIS, ADRIAN. (1979) "Bilingual Philosophy in Milwaukee", in *Thinking* 1Vol, no 1, 35-40. Report of an early pilot program in P4C with disadvantaged bilingual learners. Teachers report an improvement in children academic performances, mainly in language. There are not data, just the positive comments from teachers
54. WEINSTEIN, MARK. (1989): "The Philosophy of Philosophy for Children: An Agenda for Research", in *Analytic Teaching* 10(1):40-46. University of Melbourne - (Quoted by T. Sprod)
55. WEINSTEIN, MARK & MARTIN, JOHN F. (1982): "Philosophy for Children and the Improvement of Thinking Skills in Queens, New York", in *Thinking* 4(2):36.
56. WILKS, SUSAN (1992): "An Evaluation of Lipman's Philosophy for Children Curriculum and its Implementation in Schools in Victoria", unpublished M Ed thesis, University of Melbourne.
57. YEAZELL, M. (1981): 5th grade students in West Virginia. Harry implemented one year one session a week. As compared to norming data, EG had significant improvement in reading scores. (Quoted in *Philosophy for Children. A report on Achievement*. IAPC, Montclair State Univ

2. AFFECTIVE AND SOCIAL SKILLS

58. CAMHY, DANIELA (1998): "Entwicklung einer praxisrelevanten Strategie gegen Fremdenfeindlichkeit am Beispiel der Kinderphilosophie" Complete report of the research about xenophobia. Experimental group shows a significant improvement in tolerance towards foreign people and open-mindedness.
59. GARDNER, SUSAN (1999): "Participation in a "Community of Inquiry" Nourishes Participants Perspective-Taking Capacity: A Report of an Two Year Empirical Study." PALSSON, H., B. SIGURDARDOTTIR, Y B. NELSON: *Philosophy for Children on Top of the World*. Akureyri: Univ. Akureyri. Probably it is the same study they published in *Critical and Creative Thinking*, 6 (1) 1998 under the title: "Philosophy for Children Really Works!" It is a report on a two year study. Experimental group increase its scores on the social values, overall self-esteem and self-esteem relative to family; the scores decrease on self-protection, intolerance for ambiguity and general external orientation.

3. BOTH: COGNITIVE AND AFFECTIVE

60. CRESSWELL, R. "Spreading thoughts", in Thinking (Vol.10, nº8) Report on a pilot project to create interest in Philosophy for Children. Students and teachers express their interest ad positive attitude regarding the program, and they claim the need of a more complete formation in the program.

61. DANIEL, M.F. & A. M. (2000): "Learning to think and to Speak: An Account of an Experiment Involving Children Aged 3 to 5 in France and Quebec". *Thinking*, vol. 15, no. 3, 17-25. The present

an experiment conducted in France and Quebec with two groups of kindergarten pupils, (from 2½ to 4 years in France and 5 years old in Quebec). They worked with a story for kindergarten, *Audrey-Anne's Tales*. It was a pre-experiment, and there are not conclusions about the development of awareness in relation to the body, to violence and prevention of violence., but there are sufficient

62. HOPE, HAAS J. (1975): "Miller Street and Morton Street. Newark". 200 students in the experimental and 200 hundred in th control On the sixth grade level, substantial improvements in reading, critical thinking and interpersonal relationships. Fifth grades showed gains in their attitudes toward intellectual freedom. The combined sixth and fifth grades showed significant improvement in reading (p was less than 0.2). Results in other categories tested were inconclusive. Abstract in LIPMAN, M: *Philosophy goes to school*
63. JACKSON, TOM (1993): "1990-1991 "Evaluation Report of Philosophy for Children in Hawaii" *Thinking* Vol. 10, no 4. It is a report of the evaluation of the implementation of the program during the 1990-91 school year, with the involvement of 56 teachers. The report is based on two questionnaires answered by students and teachers, who offer their perception of the program. The results are very positive. The article includes the questionnaires.
64. KYLE, JUDE (1987): "Not A Success Story: Why P4C Did Not 'Take' With Gifted Students In A Summer School Setting". *Analytic Teaching. Vol. 7, no. 2*. The author makes a descriptive narration of the lack of success using Philosophy for Children in a summer program for gifted and talented children. Some ideas about a better implementation of the program are suggested.
65. McDERMOTT, MAUREEN (2002): "The Encouragement of 'Reasonableness' through the Practice of Philosophy with High School Children at Risk". Positive impact of implementing Harry with a group of 12 students at risk in school. At the end of the implementation, 8 students succeeded in recovering their academic performance. Students improve in reasonableness. Word file.
66. MALMHESTER, B., OHLSSON R. (1994): "Children's Protests against Philosophy", CAHMY, DANIELA G.: *Children Thinking and Philosophy. Proceedings of the 5th International Conference of Philosophy for Children*. Graz: AcademiaVerlag, Sankt Augustin.
67. MALMHESTER, B., OHLSSON R. (1994): The 6 Years long Swedish Project: "Best in the world in thinking". Qualitative report of the impact of doing philosophy with children in their cognitive skills and some affective dimensions. It focuses also in the possible danger of fostering relativism. Word file
68. MALMHESTER, B. (1999): "The Dynamics of Pupils in Philosophy Classes" Qualitative description of children attitude during the philosophical discussion in the classroom. Word File
69. MURRIS, KARIN: "Evaluating Teaching Philosophy with Picture Books". Memo graphic report. K. Murris summarizes the report of a research project carried out in 1992 in 18 schools of Wales (Improving Reading Standards in Primary Schools Project). Six schools delivered the thinking skills and the reading intervention; six schools delivered only the reading activity; and six schools delivered not additional intervention. They gathered evidence by the teacher/researcher analyzing evidence of the discussion or through self assessment by the participants. The program resulted in gains in; thinking and reasoning; listening skills, expressing language; discussion and debating skills; confidence and self esteem.
70. NORTHERN TERRITORRY DEPARTMENT (1991): "A report on the Philosopher-In-Residence Proyect", in *Thinking (*Vol.10, nº4) The favourable introduction is based on the reactions from principals, teachers, parents and pupils. About 2400 children, more than 300 teachers, parents and others participants offer a positive evaluation of the implementation of the program. There are not quantitative data, just qualitative comments.
71. SASSEVILLE, MICHEL (1994): "Self-esteem, Logical Skills and Philosophy for Children" *Thinking*, Vol. 11, no 2. Four experimental groups (3rd to 6th grades, 96 students) and five control groups (123 children). The students in the first and second quartile show a positive and significant

increase in self-esteem and logical skills. Students in the third quartile do no show significant difference in self-esteem, but there is an increase in logical skills. They observe a significant drop for the students of the fourth quartile in self-esteem and there is not any change in logical skills. There are not enough data in the paper. .

72. THOMPSON, A. GRAY & ECHEVERRÍA, E.: "Philosophy for Children: A Vehicle for Promoting Democracy in Guatemala". *Analytic Teaching*, Vol. 8, 1. PP. 44-52. It looks interesting. They focus on thinking skills and democratic attitudes, using NJTRS and other test the not mention. There are no data but the offer some pieces of evidence from teachers' comments.
73. YEAZELL, MARY (1981): "What Happens to Teachers Who Teach Philosophy to Children", in *Thinking* 2, 86-88. Study to determine the effect of using P4C material on teachers' attitudes and critical thinking skills. Critical thinking skills did not seem to be significantly altered; however there was significant change in personal attitudes, specifically affirmation of self-actualizing values. The study involves 8 teachers and data are included.
74. YULE, SANDY AND GLASER, JEN (1994). Classroom Dialogue and the Teaching of Thinking, unpublished research report, University of Melbourne.
75. Unknowed author (I lost the name) (1997): "Philosophy with Children. Evidence of Effectiveness" It offers a short report of benefits from doing philosophy in some schools in United Kingdom: Wapping, Tuckswood First Schools, 'Improving reading standards in primary schools project' (Dyfed LEA, 1994) and a research carried out by Elizabeth Doherr - clinical psychologist (July 2000). Word file

3. METHODOLOGICAL AND THEORETICAL ASPECTS

76. CHERVIN, M.I & KYLE, J.A (1993): "Collaborative inquiry research into children's philosophical reasoning". *Analytic Teaching*, *Vol*. 13, 2. PP. 11-32. It is a long report of a research on the implementation of the program. There is not any precise information about the results, but interesting reflection on methodology and on philosophical assumptions related with educational and psychological research.
77. DEND PENG, ZHANG SHIRA, LIAO BOQIN (1997): "Will Philosophy for Children take Hold in Mainland China", in *Thinking* Vol.13, n. 3. This paper question if Chinese P4C is as legitimate as its American prototype and if it's possible a genuine dialogue between the two. It also evaluates Chinese teacher's opinion about the educational values of the program.
78. ELLEN, ARTHUR S. "Review of the NJTRS". Critical comments of the New Jersey Test of Reasoning Skills. Photocopy
79. GARCÍA MORIYÓN, F.; COLOM, R.; LORA, S.; RIVAS, M.; Y TRAVER V. (2002): *La evaluación de la inteligencia cognitiva y la inteligencia emocional.* Madrid: De la Torre. The book explores all the questions related with the research on the implementation of the program and offers a guide to do future evaluations.
80. HABAS, K.G.: "Children and Philosophy", in *Thinking* Vol.13, n. 3. She describes the objectives of P4C after she had asked 9 to 11 years students on first school-day. No data.
81. HELMUT REICH, K. ">From either/or to both-and though cognitive development", in *Thinking* Vol. 12, n. 2. He analyses a particular rational and contextual reasoning (RCR) response, and discuses about the components of RCR and some applications
82. HENDERSON, A. (1988): "Program evaluation issues and analytic teaching". *Analytic Teaching*, Vol. 8, 2. PP 43-55. The author does a theoretical analysis of the requisites and standards of any evaluation of the implementation of the program. Her main theses are very closes to our own approach to research.

83. HEYNES, FELICITY ANN (2001): "Growing Communities", Paper presented in Winchester, July 2001. Her main thesis is very critical of the use of standard and normative pen and pencil tests alone. She propose to use a more complex model: a broader range of inclusive evaluation measures, focusing on self-evaluation of the community of inquiry itself

84. IAPC. "New Jersey Test of Reasoning Skills. Background information". A very detailed report about the test. Mimeographed.

85. KENG LIM, TOCK (1994): "The Philosophy for Children Project in Singapore". *Thinking*, vol. 11, no. 2. It is a general introduction. She announces further information after processing the data from a research. Feedback from teachers and students in previous implementation of the program are positive.

86. MAYKUT, P. & MOREHOUSE, R. (1994): *Beginning Qualitative Research. A Philosophical and Practical Guide.* This book offers a wide and complete exploration of the qualitative research foundations and methodology. It is a guide to get a good understanding of the qualitative research and an introduction to the design, conduction, data collection and data analysis in qualitative research. The pay specific attention to the philosophical underpinnings.

87. MOREHOUSE, R. (1995): "Research in Philosophy for Children. An Outline and an Agenda" *Critical and Creative Thinking*. Vol. 3, no. 2, 74-82. After a short reference to early research of the implementation of the program and it success, the author focuses on qualitative research, as the most suited to evaluate the kind of knowledge construction and community of inquiry dialogue that goes on in the Philosophy discussions. He analyze four directions (experience based reflections; individual qualitative projects; theory based individual projects; and an interdisciplinary team) and mentions the most important questions to be asked in new studies and researches, using qualitative methodology and offering suggestions to teachers to improve their practice.

88. MORRIS, SCOTT B. & RICHARD P. DESHON (2002): "Combining effect Size Estimates in Meta-Analysis with Repeated Measures and Independent-Groups Designs". A method for combining results across independent-groups and repeated measures designs is described and the conditions under which such an analysis is appropriate are discussed.

89. NICOL, DAVID (1991): "An Evaluation of the Lipman Project in an English Comprehensive School" *Thinking*, vol. 9, no. 3. He offers generic and descriptive comments about the implementation of the program without any experimental research .

90. NORRIS, S.P. & ENNIS, R.H. (1989): *Evaluating Critical Thinking*. Pacific Grove, CA: Critical Thinking Press & Software. 204 pp. Address questions about how evaluations of Critical Thinking should be conducted and about how practitioners in the field can know how well theirs students are grasping the essentials of critical thinking. Specific mention to P4C curriculum and New Jersey Test of Reasoning Skills are included.

91. PÁLSSON, HREIN (1994): "Interpretative Research and Philosophy for Children" in CAHMY, DANIELA G.: *Children Thinking and Philosophy. Proceedings of the 5th International Conference of Philosophy for Children*. Graz: Academia.. pp. 343-361 In this paper it is argued that the stated aims of P4C require an interpretative research. This kind of research is compared and contrasted; the main discussion is drawn from a interpretative study the author did in Reykjavik (1987)

92. SANTI, MARINA (1993): "Philosophizing and Learning to Think: some Proposals for a Qualitative Evaluation" *Thinking*, Vol. 10, No. 3. She offers a theoretical reflection about the evaluation of the program. The author defends a qualitative approach to evaluation. She proposes four different methods, and, in order to analyze the transcriptions of the philosophical discussions, suggest six elements of argumentation (from Toulmin), ten epistemic categories and five roles of teachers and peers.

93. SANFORD, J. COHN (s.d.): "New Jersey Test of Reasoning Skills. Virginia Shipman." Review of the NJTRS. Photocopy.

94. SCHLEIFER, MICHAEL, PIERRE LEBUIS M.F. DANIEL and ANITA CARON (1995): "Philosophy for Children Teachers as collaborative researchers" *Analytic Teaching*, Vol. 16, no. 1, 23-26. It is a short and interesting reflection on the possibilities of articulating a discussion group with teachers about their own practice. They follow the main directions of collaborative action-research projects and find that the concerns of the university researchers and those of the teachers have become one.

95. STERNBERG, ROBERT; BHANA, KASTOOR: "Synthesis of Research on the Effectiveness of Intellectual Skills Programs: Snake-Oil Remedies or Miracle Cures? En *Educational Leadership*, v. 44, n2, pp. 60-67. October 1986. "Review the research on five leading thinking skills programs, including Lipman's P4C curriculum, conclude that more rigorous evaluation research is needed and that more attention be given to outcome measures, transfer and durability of training". Quoted from Henderson (1988)

96. TORRE, SATURNINO DE LA Y VIRGINIA FERRER (1991): "Los estilos sociocognitivos en el programa de FpN". *Aprender a Pensar*, nº 3. The authors analyze a questionnaire to discover the cognitive styles of students. Some significant differences between experimental and control group are discovered, but there are not specific data from the research.

97. WEINSTEIN, MARK (1989): "The Philosophy of Philosophy for Children. An Agenda for Research" *Analytic Teaching*, Vol. 10, No. 1. Central claims of the program are presented, followed by a series of statements and questions that are central for the analysis and assessment of the theory and practice of philosophy for children.

98. ZESALEGUI, J. "Philosophy for Children: An Exploraty study of "Doing Philosophy" with a grade 7 class and first and third-year student teacher in Zimbawe" in *Thinking* 2 (1), (27-29) This paper describes the exploratory study which was carried out in Zimbabwe at teacher training college using Limman´s Pixie and Harry novels. It proposes a critical inquiry methodology. The authors includes the perceptions of the participants

WAITING LIST

99. TOCK, KENG LIM (1998): "How to Evaluate Philosophy for Children", *Critical and Creative Thinking*, Vol. 6, No. 1 March (Quoted by T. Sprod)

100. SIGURBORSDOTTIR, INGIBJORG (1998): Philosophy with Children in Foldaborg: Development Project in Foldaborg. A Preschool in Reykjavik for Childrenform 1-6 years. *International Journal of Early Childhood.* Vol.30, n. 1 pp.14-16.

101. BRANSFORD, J., SHERWOOD, R. & REISER, J. (1986): "Teaching Thinking and Problem Solving. Research Foundations. Review" in *American Psychologist*, 41 (10), 1078-1089. (Quoted by T. Sprod.)

102. ENNIS, R. (1991): "Critical thinking assessment" *Theory into Practice*, 32 (3), 179-186 Citado por Daniel, M.F. (1998). It might be useful.

103. KYLE, JA, MOSTERT, P. & MOREHOUSE, R. (1985): "Transcript analysis" *Analytic Teaching*, vol. 5, 2, 2-34

104. OLKINOURA, E., SALONEN, P. & LEHTINEN, E. (1984): *Toward an interactive theory of cognitive dysfunction: research projects on the interaction formation of learning difficulties*. Turku, Finland: Institute of Education. The explore the relationship between and among teacher, student and task. Quoted by Morehouse (1995)

105. PERROT, CHRISTINE: “Epistemic analysis” The author focuses on the construction of knowledge in a qualitative research. Her model of knowledge construction involves three orientations: epistemic stance and the position of participants, epistemic tenure of the dialogue and epistemic character and content of the utterance. Quoted by Morehouse (1995) without any specific reference to the paper.

106. VAN DER LEEUW, K. & MOSTERT, P. (1987): “Learning to operate with philosophic concepts” *analytic Teaching*, 8, 1. Looking carefully and critically at what children said in a *Harry* discussion, the authors explored the questioning and reasoning of children: generality, abstractness and complexity. Quoted by Morehouse (1995)