TWO CULTURES OF ARTS EDUCATION, FINLAND AND CANADA?
An integrated view

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"How much the fool that's sent to roam
Excels the fool that stays at home"

Michel de Montaigne (1533–1592)

"Thoughts without content are empty; intuitions without concept are blind"

Immanuel Kant (1724–1804)

"The fish will be the last to discover water"

Albert Einstein (1879–1955)

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ABSTRACT

This thesis contains a description of a project carried out in Finnish schools based on Canadian Learning Through The Arts pedagogy. During the project artist-teacher pairs taught different school subjects to school classes, for example mathematics through dancing, biology through fine arts or a combination different art forms together in 'project method' -style learning. When evaluating the project, the emphasis was not found in the individual differences of certain artists or teachers in action, but more than that; in the cultural and structural differences between Canada and Finland. The dissertation reflects the discussion on the justification of arts and the role of arts education in schools.

On its theoretical level, the dissertation integrates curriculum theory, educational history, and philosophy, underlining the importance of arts education as part of the education of man. In the section on curriculum theory, the romantic and the classical curricula are compared in terms of their differing methods, contents, objectives and evaluation. There is a well-known dichotomy between the so-called 'hard and soft' subjects e.g. mathematics and humanities subjects, which has its roots in history and epistemology. Yet, four different approaches to solve the problems of education are suggested: formism, organicism, mechanism and contextualism in accordance with Pepper's world hypotheses theory. Referring to Kant, this dissertation claims the arts to be rational and propositional in their nature and thus them to be not only the medium of communication but one of the ontologies of reality among the other two: knowledge and ethics. In line with this view, art education should always be cultural education by nature.

Based on the findings of this work, it is claimed that multidisciplinary co-operation can enrich work in the schools. However, it is still necessary to ensure that the artists will have appropriate knowledge of pedagogy before using arts in the schools with teachers.

Keywords: Art education, educational philosophy, curriculum theory, R&D-work

TIIVISTELMÄ

Tutkimuksessa kuvataan kanadalaisen Learning Through The Arts -pedagogiikan mukainen suomalainen kokeiluhanke, jonka aikana taiteilija–opettaja-parit opettivat yhdessä eri oppiaineita koululuokille: esim. matematiikkaa tanssien, biologiaa maalaten tai yhdistäen eri taiteenlajeja projektimuotoiseen oppimiseen. Hanketta arvioitaessa nousee esille, ei niinkään yksittäisten taiteilijoiden ja opettajien toiminta, vaan pikemminkin Kanadan ja Suomen rakenteelliset sekä kulttuuriset eroavuudet. Tutkimus sivuaa myös Suomessa käytävää keskustelua taiteen hyödyllisyydestä ja pohtii samalla taito- ja taideaineiden asemaa koulussa.

Työn teoreettisessa osassa integroidaan opetussuunnitelmateoriaa, kasvatuksen historiaa ja filosofiaa, tähdentäen taidekasvatuksen merkitystä osana koko ihmisen kasvatusta. Opetussuunnitelmateorian osalta tarkastellaan romanttista ja klassista opetussuunnitelmaa, jotka eroavat toisistaan menetelmiensä, sisältöjensä, tavoitteidensa sekä arvioinnin osalta. Ns. kovat ja pehmeät aineet tai matemaattis-luonnontieteelliset aineet vastakohtanaan humanismi, voidaan ymmärtää sekä historiallisia että epistemologisia taustojaan vasten. Pepperin maailmanhypoteesien mukaisesti on kasvatuksen ongelmien ratkaisemiseksi hahmotettavissa neljä selvästi toisistaan eroavaa lähestymistapaa: formismi; organisismi; mekanisismi; sekä kontekstualismi. Kantin filosofiaan viitaten tutkimus puolustaa käsitystä taiteesta rationaalisena ja propositionaalisena kokonaisuutena, joka ei ole vain kommunikaation väline, vaan yksi todellisuuden kohtaamisen lajeista, tiedon ja etiikan rinnalla. Näin ajateltuna taito- ja taidekasvatuksen tulisi olla luonteeltaan aina myös kulttuurikasvatusta.

Tutkimuksen tulosten perusteella voidaan väittää, että moniammatillinen yhteistyö monipuolistaa koulun opetusta. Mikäli huolehditaan siitä, että taiteilijat saavat riittävästi koulutusta opettamiseen liittyvissä asioissa, on mahdollista käyttää taiteilijoita opettajien rinnalla koulutyössä.

Asiasanat: Taidekasvatus, kasvatusfilosofia, opetussuunnitelmateoria, T&K-työ

CONTENTS

ACKNOWLEDGEMENTS

Five years ago I embarked on a new venture: to try to find a new way of combining vocational and academic education in a multidisciplinary setting. In practice it meant not only journeys to Canada and managing the project in Finland, but also a deep dive into the theoretical world of searching for meanings in both arts and education. After running the project in Lahti Polytechnic, I moved to the University of Turku; action changed into reflection. The opportunity to write my "integrated view" – opinion about the period, and what is relevant to the issue, is the outcome here.

"The integrated settings in educational research usually fail" was what Professor Emeritus Jorma Heikkilä warned me about as we discussed my research idea. Still, at the same time he was willing to appoint me as a candidate for a grant for international research, which was financed by the fund of the main daily newspaper in Finland; the Helsingin Sanomain 100-vuotissäätiö. The financial support from the fund made it possible to do both the research in Toronto and to make a visit to New York that was essential for my work. I express my gratefulness, as also to the Finnish Culture Foundation, which has supported me twice.

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Without support and co-operation from the Employment and Economic Development Centre for Häme, School Council of the City of Lahti, Lahti Symphony orchestra, newspaper Etelä-Suomen Sanomat, Torkkelin Paperi (Wulff Corporation) and the Regional Council of Päijät-Häme the project would not have been possible.

In Canada, I owe my sincere gratitude to Yvonne and Gene Simpson, who invited me, not only to York University, but also into the intellectually rewarding discussions and seeing LTTA in action. To Bonita Labossiere Mohney I want to express my cordial thanks for showing (among other things) her work in school in Harlem.

Last but not least, I want to thank my family: Heli, Sara and Lauri for being patient with my job.

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Mikko Ketovuori

1. INTRODUCTION

"Grau, teurer Freund, ist alle Theorie, und grün des Lebens goldner Baum" states Mephistopheles in Goethe's *Faust*. Even if the sentence, and its very idea of the dichotomy between theory and practice, might be irrelevant for the modern natural science or its duties, for humanists and educators its importance is crucial. Often the dichotomy finds its form in questions such as:

- How to translate abstract theories into meaningful experiences and learning
- On what basis the content and methods of education should be chosen
- Whether education is more art than science

To provide answers to these questions, one has to deal with pedagogical, curriculum-theoretical or psychological issues. In fact, finding adequate answers requires more than just one field as the ground for searching. This book contains a rare attempt to integrate different views of education in the context of educational history, philosophy, psychology, curriculum theory, and practice to reach an integrated view about arts education and its importance. However, this study can, at the same time, be read for many purposes:

- It is a description of Research and Development (R&D) project and its evaluation in multidisciplinary setting
- It provides a view to various roles of arts in society, arts educations' meanings and the phenomenon of art partnership programs
- It explores educational history and philosophy in order to understand the relation between different world hypotheses and education
- It discusses integrated curriculum, communities of practice and paradoxes in our society that may prohibit such approaches
- And finally: all the above mentioned issues are integrated in comparison of two different approaches to arts education, Finland and Canada

The practical side of this study is contributed through experiences of the project called "Learning through the Arts". In the project, artists and teachers collaborated in teaching different subjects through different art forms in the classroom setting – for example, mathematics through dancing, social studies through music, or geography through crocheting. The main idea of the approach was to combine creative aspects of artistry to be used as a vehicle for learning the other subjects. Since the idea of using artist in teaching in collaboration with the teachers was new in Finland, our concern was, what would be the benefits of the approach or on the other hand; would there be any difference to what is normally done in Finnish schools. Since Learning Through The Arts (LTTA) is a Canadian educational program run by the Royal Conservatory of Music, Toronto, it must be understood in the context of Canadian society. Because our project was carried out in Finland, the notions of this study are, however, mainly aimed at the Finnish educational system. The comparative approach offers us still an interesting viewpoint on arts education and differences between these two countries too. While Canada and Finland, both industrialized Western countries, had similar success in the OECD Pisa assessments, they differ from each other culturally.

One of the objectives in this work is study the meaning of integration at different levels. For example: speaking of integration in the arts education (as holistic approach) has different denotation than it has in the field of curriculum theory, while in philosophy integration can be defined simply as forming a coherent view of issue. Psychologically integration has more to do with the straits of ones personalities or, when speaking of professionalism, integration is an ability to combine formal moods into conditional, multimodal and procedural approaches. In an organizational framework, integration refers to combination of different partners in order to achieve common and shared goals. Integration is also the method in which this work is written: all the levels of a certain system affect all the parts, as they are – mutually interconnected. Another theme that is discussed is the idea of world hypotheses taken from Stephen C. Pepper. Formism, mechanism, contextualism, and organicism are hypotheses that can be found from different approaches to solving the problems of education. It is vital to proceed in clear awareness that limiting one's methods, assumptions, or attitudes to just one alternative causes not only distortion but also the inability to understand those who have a different starting point or culture.

The structure of this work can be described as a ternary form known from music, having a three partite structure. In the ternary form, the first and third parts are almost identical (dealing here with LTTA and arts education); while the second part (curriculum history) is stylistically in sharp contrast to the other two. For this reason, the ternary form is often represented as "ABA" in which the contrasting second section is known as a "trio". For those readers who are already familiar with R&D framework, the first section of "A" part (chapters 1.1.and 1.2.) will not be necessary; those, who are more interested in educational history, might start reading from chapter 4 and then come back to chapters 2 and 7. Still, if one wants to understand the views presented in chapter 7 proceeding through both the "A&B" parts is necessary, since discussion of the contexts, narratives or the cultural differences is not just a thing of its own, but an essentiality for understanding the whole "composition." Since this work is consisted of multiple fields of interests that are not usually combined, analogous reading style is necessity.

The leitmotif of this work is that a synthetic view is best achieved if the objects of study are looked indirectly. In practice this means that in this thesis educational philosophy and history is looked "through" Learning Through The Arts while, the other way round, the opinions expressed about LTTA are stated from larger contexts than just exploring the field of arts education, or plainly the LTTA program itself. Believing that the context we come from affects our view and is partially beyond our ability to neglect, my aim is **not** to state a permanent truth of LTTA or the meaning of the arts as they are changing historically. However, the view of the importance of arts education is expressed and can be verified based on given facts and evidence. Relying on Kant's philosophy, I claim that art, when addressed in balance with ethics and science, may be the unifying element that can combine our intuition, conceptualization, imagination, and reason in our judgments – the central cognitive faculty that gives us the potential to make correct decisions. According to this point of view, the arts ought to be a necessity in education since arts represents not just a medium of communication

but also the quality in which we face the reality; two things that form the essence of humanity.

1.1. Organizational framework

This study is based on a project that took place in 2003–2004 in a research and development forum at Lahti Polytechnic. The project, which included several partners (11 organizations and 15 educators, along with 25 teachers and 14 artists) working with 10 classes of schoolchildren, was carried out by the University of Turku's Department of Teachers Education at Rauma and the team of educators from The Royal Conservatory of Music, Toronto. While the project was promoted[1] from many different quarters, the main funding was appropriated for it from the Employment and Economic Development Centre for Häme and the City of Lahti. The purpose of the whole process was twofold:

1) To find new, innovative ways of using the arts to promote welfare and culture in the Lahti area
2) To test multidisciplinary cooperation with the different quarters and adjust to their needs in one project

The setting was at the same time both demanding and clear; the target of an innovative cooperative approach was based on the new priorities set for the polytechnics by the Ministry of Education (Maljojoki 2002, 226–227). The R&D work at polytechnics should be based on local needs, maintain a tie to applied research, and be linked directly to the work of the faculties within the polytechnics. The national and international connections were also to be appreciated (Liljander 2004, 14). The research and development work that started at Lahti Polytechnic on January 1, 2001, was first called an "RD Center," in a project partly funded by the European Social Fund. The project had several goals, among them the doctoral program for the needs of personnel working in Lahti-area universities, but its main goal was to promote synergistic cooperation among the various universities, industries, and local businesses. The first practical step toward achieving this goal within the Lahti Polytechnic system was to bring the personnel responsible for research and development in the polytechnic's various faculties to the same table: the R&D Forum (*ibid.,* 17).

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[1] Via the Lahti Symphony, newspaper *Etelä-Suomen Sanomat*, Torkkelin Paperi (Wulff Corporation) and the Regional Council of Päijät-Häme.
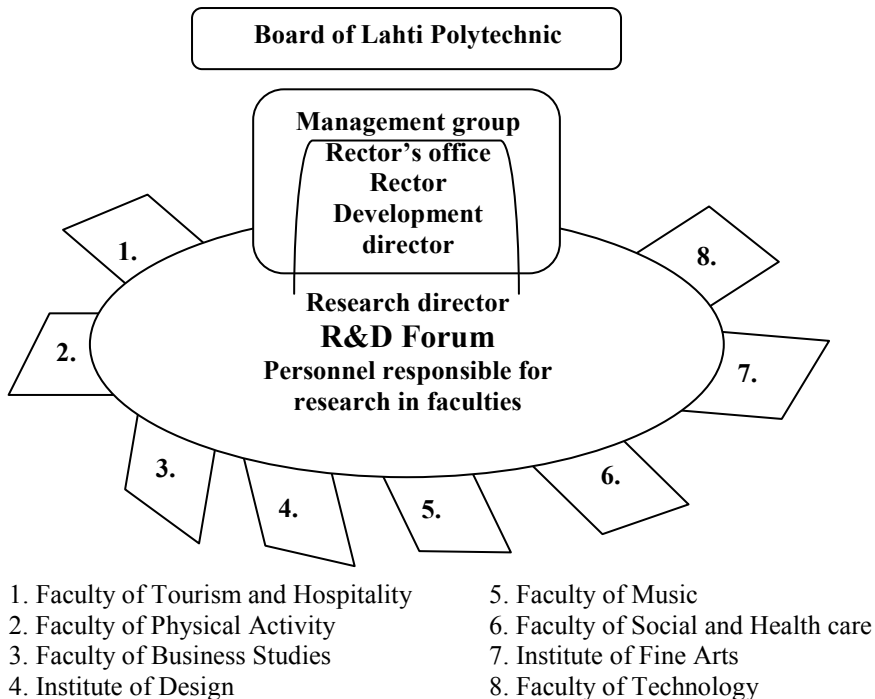
FIGURE 1. R&D organization at Lahti Polytechnic 2002–2004 (Liljander 2004, 19).

The forum, as a collegial discussion arena, had several tasks:

1) To handle the questions related with developing research, which have come up at the faculties.
2) To make sure that the information about research and development flows inside the polytechnic.
3) To prepare decision-making regarding research and development.
4) To profile research and development by mapping out the research areas, which cross the boarders of the faculties and
5) To promote the strengthening of the scientific approach in the policies within the polytechnic and also in its close environment.

The research and other personnel attending the R&D Forum were also responsible:

1) To activate, to develop and to coordinate research and development at their own faculties,
2) To be responsible for formulating, developing and carrying out research and development strategies at their own faculties,
3) To define strength areas of research and development, to think up ideas and to plan research and development projects, which correspond to strength areas, together with the teachers and the other personnel,
4) To direct the developing of the project plans
5) To work out research programs on the basis of the project plans which are carried out in the research groups. The research groups consist of the project

researchers, teachers who do research work, and students. The research programs operate with the aid of an outside funding.

6) To prepare frequently asked questions, which are linked with the own sphere of responsibilities, informed, presented and considered in the research and development forum.

The other goals for developing research and development were:

1) To create a credible profiency in research and development at Lahti Polytechnic from the different cooperation quarters' viewpoint which is able to please regional innovation requirements,
2) To make a tighter network and to increase synergic cooperation with Lahti region, university units in Päijät-Häme, companies and other cooperation parties,
3) To increase considerably the volume of research and development by increasing the use of research in projects and starting new research projects,
4) To make firmer information basis in basic education and post-graduate education at Lahti Polytechnic which is based on an own research and
5) To strengthen the scientific approach by mapping out and improving the possibilities to link research to be a part of teacher's work. (http://www.lamk.fi/engl/rd/forum/)

As one can see, the list of the duties involved in the R&D work was long and the framework firmly set. Still, the actual practices and the content of the projects within the forum were to be discovered during the process by the individual researchers themselves. Naturally, starting them did not happen at once, while the orientation to the forum's affairs took its time. The idea of an open innovative platform and its organizational role were new in the polytechnics, thus a lot of discussion and time on debate on Forum's role was used. For example: how the definitions of the research work would be understood – in other words; how much time the members of the forum would be able to use their "own research work" as opposed to concentrating more on coordinating the R&D activities in general. In the end the discussion was more semantic than pragmatic in its nature. In practice researchers doing their "own" work were at the same time fulfilling the duties found on the list. In addition to the discussion other types of resistance within the organization caused regrettable confusion in forum's affairs and authority. As always, modification of an organization creates structural resistance; just as changing the normal way of doing things affects the personnel.

Despite the aforementioned things, the goals, responsibilities, and tasks set for the forum served as the frame within the various kinds of project were started. Most of all, the R&D Forum at Lahti Polytechnics offered an integrative platform on which innovative initiatives were easy to implement. The discussions between different kinds of people coming from different vocational fields inspired, and yielded, insight into the possibilities of integrative approaches. The R&D framework gave the support needed in planning the projects and finding contacts in other universities, authorities, and organizations, as well as local businesses (Liljander 2004, 18). While the forum had the role of a team extending beyond the borders of the polytechnic, all researchers were

still at the same time working also in their own faculties, in the role of lectures or researchers, to maintain close connections to every faculty's duties and educational standards. The balance between freedom and connection to different departments' duties was useful. The dual role of the researches combined the pedagogical needs of faculties and the goals of a multidisciplinary approach to research work.

1.2. Orientation to the research task

According to LAMK general definition[2] R&D work is:

> *systematic action to increase the amount of information and to apply received information to find new applications and to solve practical problems.*

The criterion included also the idea that R&D ought

> *to pursue to find or to produce something that would not only be new but also consequential.*

Since "consequential" means "important," it also includes the idea that something is found as an indirect result of something else. The integrative setting and the aspiration to establish multidisciplinary projects were aimed, on the one hand, at finding new and innovative ways of doing something and, on the other, at creating knowledge that would be useful also in some other, perhaps even unexpected, way. In essence, the R&D work had its emphasis more on applied research when the fundamental research was in principle left to the universities:

Research & Development

Fundamental Research   Applied Research   Development Work   Customer Services
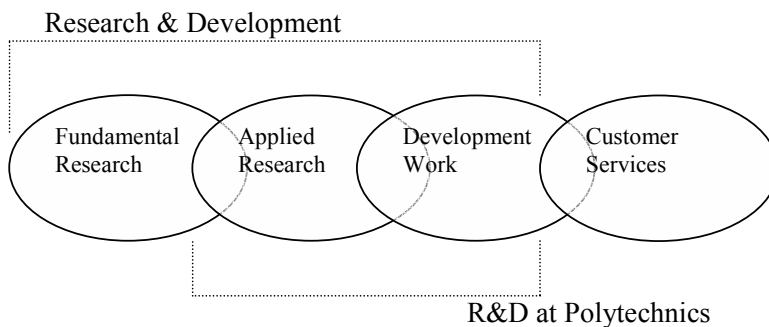
R&D at Polytechnics

FIGURE 2. R&D as applied at Lahti Polytechnics (Liljander 2004, 16).

In the polytechnic's R&D work, the fundamental research was defined in the following way:

> *Fundamental research characteristic of which is to find new information without direct tendency to practical goals or applications. It aims to verify hypotheses, to find and to explain conformities to law and to formulate theories by analyzing properties, structures, causalities, and effects.*

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[2] See (http://www.lamk.fi/engl/rd/definition/)

Still, the focus of polytechnics was to be more on applied research:

> *[This] means searching for individual scientific information which is based on the results of fundamental research. Its goal is to search for new applications or to find new methods to solve practical problems.*

As for the development work, it was to be:

> *practical development work, which is based on a scientific approach and the findings of the research. It aims to develop new products, means of production and processes and to develop services or to improve the existing ones.*

Even though the formulations of the definitions of the sectors within the R&D work were clear, the study and task described here needed more flexible thinking as well as a combination of all of the approaches. On the one hand, the project implemented was clearly oriented to development work (with an action research approach employing a reflexive process and having an aim of improving skills, techniques, and strategies), where, on the other hand, both applied and pure aspects of research were needed.

In the field of educational research, the question involves not only finding the best applications or methods but also exploring the premises behind them. If possible, all aspects of theory, applied research and development of improvement strategies had to be synthesized in a coherent unity. When the framework of R&D work was supplied by the authorities, top down, the local needs and potential was the other framework on which the theory would be built. Working as a member of R&D team meant thus not just having a role of mediator between the theory and practice or research and training but at the same time a role between the vocational and academic worlds. The shading of strict barriers of knowledge was fundamental for implementation of the research task:
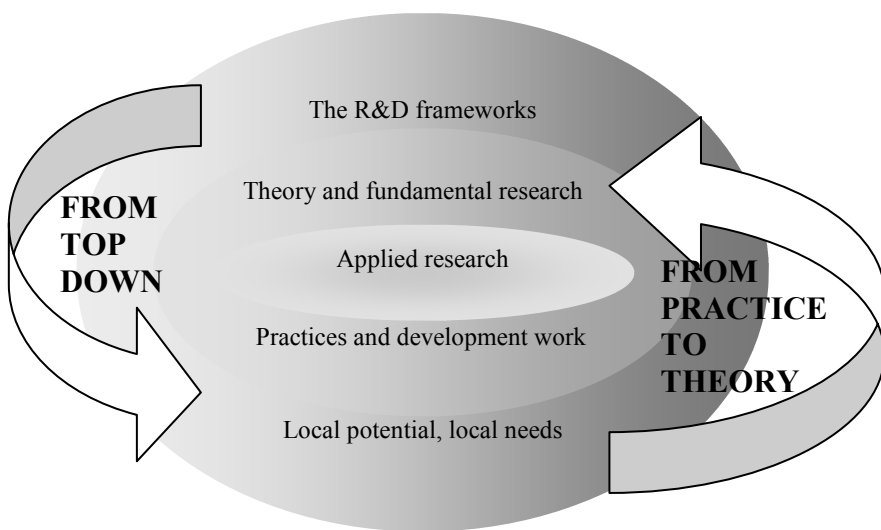

FIGURE 3. Interrelationships in the framework for R&D.

The figure offers a theoretical model of the integrative thinking needed in the R&D work[3]. Analogously, the model corresponds also to the idea of professionalism, which, having its basis in formal modes, still in practice is conditional, multimodal and procedural:

> *A professional person is one whose role in the community requires informed action, skill in carrying out the role, and a theory of guiding its deployment. (Biggs 1992, 43)*

One of the most difficult tasks in education as well as in professional training is the integration of theory and practice, where the perennial endeavor of linking these two together is often doomed to failure. "Bottom-up" learning as advocated by mainly the progressive educators has remained relatively neglected in psychological theory (*ibid.*, 44). Mixing these two levels together here, the organizational and the psychological one, we might suggest two things in order to help the practice and theory to meet:

1) The enabling objectives by lower-order modes help to achieve formal ones
2) The actual goals of activity are mutually important with the definitions involved

However interesting, important, and worthy of investigation this question may be, we leave it in the background now and continue by seeing what was done in the actual project

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[3] However, in practice it still won't tell us how to find the best way to implement multidisciplinary approaches. To provide a successful integrated project, one has to consider carefully the balance between the given goals and the actual needs and potentials that are available for the task. Usually a network model is used to achieve this, in order to fulfill all participants' intentions and derive benefit from the full range of expertise. Another of the advantages of the model is that the different resources can be combined. This, of course, requires not just creativity and broad-minded, even unconventional thinking but also overall understanding of the integrative approach.

2. LTTA PILOT IN FINLAND, 2003–2004

Currently in Finland, the division between academic and vocational education is established by law. The vocational teachers are trained by five vocational teacher education colleges attached to polytechnics, the teachers' training at other levels of general education is provided by the universities[4]. Since vocational teachers' education has its emphasis more on liberal adult education, adult education, and training, the teachers' education in the cultural sector at polytechnics more often has to do with the youth and children. In the Faculty of Music at Lahti Polytechnic, this created a practical problem: with most of our students destined to be teachers in the public music school system, teaching children to play musical instruments, the expectations in our pedagogical studies were not met, for the theories of adult education and the actual needs of our fields did not meet. Among the other faculties sharing these concerns were the Institution of Fine Arts and the Institute of Design, as well as the Faculty of Physical Activity, where pedagogical studies were undertaken not just by physical education instructors but also by aspiring dance teachers. The awkward situation was that a different type of instruction would be needed and yet, under the law, the faculties were not to be allowed to use educators from universities.

In the multidisciplinary R&D project, the above mentioned problem formed the concrete background against which solutions were sought for the renewal of pedagogical studies in entire arts education system in Polytechnics. As a starting point, the questions were raised:

- What would be the common denominators between the different art forms?
- Would it be possible to find new ways of using arts to promote the public welfare in the Lahti area?
- What kinds of strengths in Lahti could be combined in a common project?

As much as these questions were both practical and theoretical ones, the organizational problems were intertwined with them. Though the arts in Finland have always had an important role in education, the distinction made between education and culture is still evident. Most obviously at organizational level, this is seen in The Ministry of Education, which is divided into an Educational Division and a Cultural Division, each having its own ministers. Where on the one hand The Cultural Division supports arts education outside the schools, The Educational Division is responsible for the arts in the schools (see also Bamford 2006, 65). The crucial question for us was whether we could combine these two approaches. The definitions involved in dichotomies such as culture/ education and academic/ vocational had to be studied carefully in order for us to understand their meaning fully. Alongside the solving of the theoretical questions came the actual organizing of the project, which needed several stages.

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[4] Teacher candidates in Finland complete their studies with a higher university degree, at master's level, which is also one of the requirements for having a permanent post in schools.

From the very beginning, it was clear that the Lahti Symphony, one of the most significant Finnish orchestras[5], would be involved in the enterprise. For about 10 years (since 1995), the members of the orchestra had done volunteer work among children and in schools' classes in a project called "Hey, we are composing!" ("*Hei me sävelletään!*"). The model that the musicians were using was based on the approach originally created by the Guildhall School of Music and Drama in London, which represented a typical orchestra community and education program to educate future audiences. However, departing from the source ideas, the musicians had modified the model such that it sometimes served the schools also in the instructional setting; i.e, the musicians could actually teach geography through the means of music[6]. Due to its experience of educational work, it was natural to offer extra training for the team of musicians from the orchestra.

Primary funding for the project was provided by The Employment and Economic Centre (TE-keskus), an organization that is a combination of the three fields of activities. Since it is governed by the ministry of Trade and Industry, The Ministry of Agriculture and Forestry, and the Ministry of Labour, it provides a comprehensive range of advisory and development services for businesses, entrepreneurs, and private individuals. For more than that, its labor force department plans and purchases make vocational education and training available in order to update people's professional skills and improve their expertise[7] (see http://www.te-keskus.fi/). Since the goal was to transform the occupational structures of different vocations in promoting employment, it became clear that our aims of an integrated arts program fit perfectly with their aims. While the art education possibilities in Lahti were plentiful, there were also many artists available who were open to complementary working possibilities. The question was how we would we do it.

Although the idea of different kinds of art-rich programs in community is no longer new internationally speaking, having its roots in 1980s Britain, the approach wasn't that familiar[8] for us. In other words, the art education in Finland has been mainly *education in the arts*, where education *through the arts*, usually coming under the title

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[5] The LSO has won international acclaim for its recordings many times: with the Gramophone Awards (1991, 1996) the Grand Prix du Disque (1993) and the Cannes Classical Awards (1997 and 2001), in addition to renown from its concerts abroad, including those at the White Nights festival of St. Petersburg; BBC Proms in London; the Concertgebouw in Amsterdam; and various locations in Japan, the United States, Germany, France, and Sweden. (see http://www.lahti.fi/symphony/eng/orkesteri.html)

[6] Still, the basic idea of *Hei me sävelletään* was to compose a piece of music collectively. After three to four weeks had elapsed, the school classes were gathered at the Sibelius-Hall to perform their compositions on the given theme. These "final events" gathered children and their parents to hear music that the children were making, in the concert hall – for many, for the first time in their lives. At the end of the event, the symphony orchestra played the original piece of music that had been the theme of the children's work.

[7] The center does not, however, deal directly with the unemployment services. Instead, it serves and gives guidance to local job centers. The actual selection of course members and related duties were managed by the local employment office in cooperation with the project.

[8] In fact, the approach has found more forms quite recently. See for example: The Oak of Finland: Cultural Heritage Program. From 2005 http://www.edu.fi/projektit/tammi/Tammet/english.html

In general, the postmodern view of arts education is not rare in Finland, although the modernists and hierarchical thinking find supporters too.

"holistic teaching" *("kokonaisopetus")*, has been considered to belong with the education at lower elementary levels, originating as far back as in the 1930s (Salo1935). The central idea of our projects, that artist could be used as partners with teachers to promote children's learning in schools, was something never quite seen here before. For the model for the project, we turned to Canada, where collaboration between arts educators and other types of organizations has became a growing sector of society (Bamford 2006, 116).

The program that was found for our purposes was Learning Through The Arts, established in 1995 (Elster 2001) by the Royal Conservatory of Music[9], Toronto. Representing the second largest educational initiative in the country, it involves over 100.000 pupils and 240 elementary and secondary schools, in six Canadian cities (Bamford 2006, 109). As the LTTA has aroused interest in other countries, several international pilot projects have been started. The countries undertaking a similar kind of pilot project to ours include Italy, the UK, Australia, Portugal, the United States, Singapore, Japan, Malaysia and Sweden[10], but the program has seen by far its greatest success in Canada, where it has a natural niche in the field of arts education.

The core idea of LTTA, as it announces itself, is "to transform the goals, culture and methodologies of public education." This is done by integrating the performing and visual arts into teaching of subjects in the school curriculum through a wide variety of methods. As already mentioned, in LTTA the children learn math, science, language, history, or social studies by making images, creating dances, telling stories, and singing songs. Before artists and teachers starts to work together in close relationship, the teachers receive both training and tools related to using the arts in different subject areas, while artists are given training in educational principles and classroom dynamics (Wyman 2004, 56).

The difference between LTTA and traditional art-based programs is that LTTA sets its premises in serving the curriculum through the means of the arts[11]. In this respect, it could be claimed that LTTA is not actually a pure arts education program but a program that uses the arts in school learning. The second difference is that the sustainable coordinated structure promotes schools' cultural exchange when the full model of LTTA implementation lasts for three years, including professional development programs and the support of site coordinators. Normally, the problem is that projects with involving theatre groups, orchestras, or dance ensembles in the schools fail, entailing just short visits with no effects at all on the structures of the normal schooling (*ibid.,* 57). In order to make a difference, LTTA strives for long-term, sequential, cumulative and sustained partnerships (Elster 2001).

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[9] Founded in 1866, RCM in Toronto is the largest and oldest independent arts educator in North America, serving more than 500.000 participants each year. The most famous musician to graduate from RCM was Glenn Gould in 1946.

[10] The Swedish version of LTTA is independent in name, "Skapa och Lära" (SoL) and works in Stockholm. See: http://www.academus.se/historik.asp

[11] The experience of subject contents through different art forms is achieved through practices that are shared in lesson plans. See: http://www.ltta.ca/lesson_plans_link1.html

When the basic premises of our R&D project were decided upon at Lahti Polytechnic, two researchers were sent to the Niagara Falls LTTA conference in April 2003, where the recently released final report of the national assessment of the program just was presented (Upitis, Smithrim 2003).[12] At the conference, it became clear that the LTTA methods were similar to those we had had in mind. Immediately after the conference, the preliminary measures in implementation of the Finish version of LTTA began, since the project was to start in November 2003. The agreement between the RCM and the school board of Lahti was signed, while the polytechnic was to provide the necessary materials, facilities, and coordination of the enterprise. Another agreement was signed between the Employment and Economic Centre and the University of Turku's Department of Teacher Education in Rauma, which covered the Finnish part of training in the course. For achieving the goals of the project it was considered most important that the artists have adequate knowledge of education and the work of teachers in Finnish schools. In addition, since its founding in1896, the teacher education department in Rauma had had a long tradition in arts based-education[13], providing a strong basis for cooperation. The key players of the project were the following:
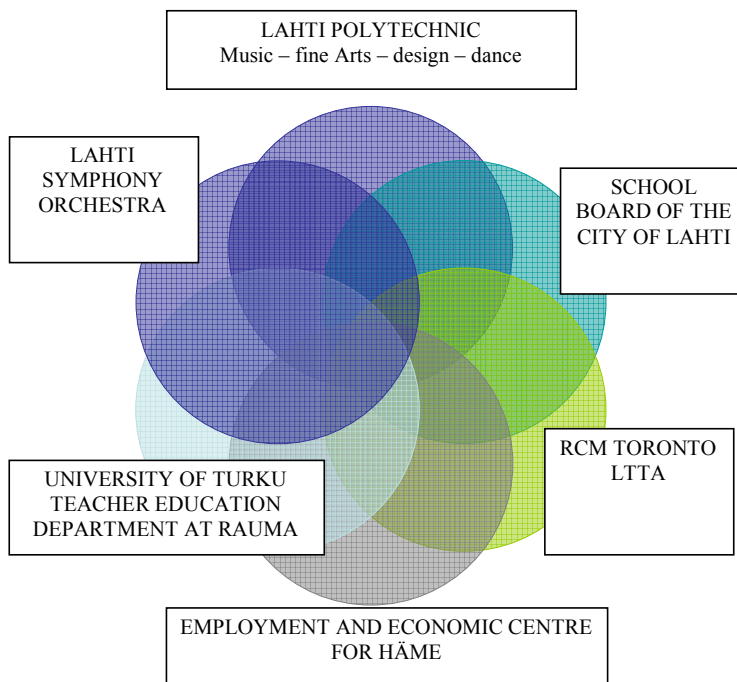
FIGURE 4. LTTA pilot project in Lahti, 2003–2004.

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[12] More on the study in chapter 7.1.

[13] At the moment, Rauma has the only technology teachers' education program in Finland, granting qualification to teach in the field of technology at primary, secondary and upper secondary level. The Department of Teacher Education and the Teacher Training School in Rauma emphasize media education, practical teaching, and research in arts and crafts education. See: http://www.edu.utu.fi/rokl/english/

The figure depicting the LTTA pilot project represents an integrated model, where priorities overlap the existing boundaries between the organizational partners in order to achieve shared but also actor-specific goals. The model is hoped to encourage and allow different organizations to see interconnectedness and interrelations among the various fields and duties. That cannot still occur without a change in the paradigm for understanding the organizations' normal specifications. The benefits of the model are best realized when all the participants have to serve each other according to the principle of reciprocity. In its' best, the use of model changes the ways of using skills, concepts, and attitudes among all participants, although in many cases the structural changes are not permanent or they touch some participants more than the others. Interestingly, while the change in organizational structures can create an innovation, it can at the same time also underline the core knowledge of the separate disciplines. It is presumable that integration can offer us solutions, which would not otherwise be noticed. The model is well worth exploring – since many of the problems faced today are 'integrated' as well.

2.1. Course objectives and selection process

When the course started in November 2003, it had two equally important parts:

1) The intensive one-week teacher and artist training (40 hours), provided by the international team from New York and Toronto. (November 17–21)
2) The program for developing artists' pedagogical skills, provided by the University of Turku teacher's trainers from Rauma (November 14 to April 30), including 49 hours lectures, 120 hours distance learning, and 100–160 hours of field practice in the schools

The objectives of the course's international component for the teachers and the artists were written as follows:

> *At the end of the course, participants will be able to:*
> • *Identify the skills unique to each art form*
> • *Understand the concepts being developed in these art forms*
> • *Make connections between various parts of the Finnish school curriculum*
> • *Use various art forms to help students to understand concepts in other subjects*
> • *Plan an interdisciplinary lesson*
> • *Critique and assess the effectiveness of the lessons*

In the course, the teachers and the artists explored classroom strategies that could help the children grasp concepts by using music, dance and visual arts. The arts were connected to math, language and social studies; simultaneously, the idea of arts-focused classroom and how it would be developed was considered with the participants. After the first week, the teacher–artist teams were created and the planning of the field period began. The field practice for the course (100–160 h) took place in 10 schools, both in Lahti and Helsinki, with guidance from two lecturers from the university in the spring semester 2004; meanwhile, the lectures and the tasks assigned to the artists by the university teacher's educators consisted of:

Didactics, learning, and evaluation	7 h + 20 h
Sociology and school culture	3 h + 40
Planning the work in schools	4 h + 20 h
Communication and interaction	7 h + 20 h
Different learners and learning styles	3 h + 20 h
Learning and teaching skills	4 h
The school laws and the goals of curriculum	7 h
Group tutoring during the field practices	14 h
Total	49 h + 120 h

The artists participating in the course were selected in autumn 2003 through interviews at the local job center at which the course was announced and officially made available. The criteria in selection were that the artist:

- was a practicing artist or had a degree in the field
- demonstrated interest in, and affinity to, children
- was willing to learn about education and the integrative approach to arts
- had the opportunity to participate in all of the training included in the course

The musicians from the orchestra constituted an exception to the last criterion but still attended the interviews and all program content in November. In their case, the program served their own project while they still were sharing and learning from the LTTA ideas and supported the project by bringing their own professional experience with them. The teachers from the City of Lahti were quite different in how they came to the course; all of the lower-elementary schools were given equal opportunity to participate in the course. However, since the invitation letters and course information were sent to the principles in June, just a week after most of the teachers were started their summer vacations, the most motivated schools and teachers were among those who responded and applied for the course.

2.2. Evaluation

From the very beginning, it was made clear that the experiences and ideas generated during the course would be evaluated, and that criticism would be appreciated in order to develop and explore the practices involved. Evaluation was done in the following ways:

- Every artist and teacher kept a diary throughout the course
- A student from teacher education department interviewed artists and sent a questionnaire by e-mail to teachers, reported upon in a master's thesis (Talvo 2006)
- The employment authorities employed their own computer-based questionnaire among the artists
- The teacher education department's lecturer followed and gave guidance in schools during the actual field period of training
- Observation were made by the researcher (project manager)

The diaries were to include notions of the contents of the course and its suitability for the participant's professional use as a teacher or artist. The artists were to describe their duties and lesson plans during the field practice. They were also asked to reflect on whether they succeeded in their artistic teaching methods in classroom. Every participant in the course was also asked to include conclusions on the course overall and the process at the end of the diaries. The idea proved successful, and plenty of material was gathered (8 artists and 17 teachers; N= 25 diaries). The material was left to be explored later since, at the time, project management duties had priority over other obligations.

The themes analyzed afterwards from the diaries are:

1) The opinions on use of arts in education and its importance, potential, and disadvantages
2) The cooperation between artist and teachers
3) The experiences and opinions about the whole course

The chosen thematic structure served for comparing cases and groups and gaining overall picture of the pilot. The same kind of structure was used also in master thesis (Talvo 2006), where similar results were found. When the participants where given detailed orders to keep they diaries, the material was relevantly easy to analyze and compare, as well as it made the research process more intersubjective and explicit in nature (See Flick 2006, 287).

2.3. Notions of Canadian part of training

In view of the fact, that LTTA was something of a type never introduced in Finland before, the planning of the intensive week had a certain strategy. Since it was obvious that at least some aspects of Canadian/US working methods would be familiar to well-trained Finnish teachers, the core idea of the course was still that those methods would be used in a new environment and in a multidisciplinary way. The goal was to create a new kind of thinking. To ensure a sequential, cumulative structure for training, the different techniques and artistic methods for classroom use were to be learned for creating a performance that was shot for the TV news on the UNESCO International Children's Rights Day, November 20.[14] The other goal for the week was to create sustainable relationships between artists and teachers in five days in order to achieve a good foundation for the field practice period starting in January 2004. Since the Canadian trainees were one of the best in terms of expertise, the above mentioned process was achieved.

In the beginning, the teachers coming to the course were curious and a bit confused about what was this all about:

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[14] The Convention on the Rights of the Child, adopted by the United Nations on November 20, 1989, affirms that a child is not only a fragile being that needs to be protected but also a person who has a right to be educated, cared for, and protected, wherever in the world he/she is born – and also that a child has the right to have fun, learn and express him- or herself. See http://portal.unesco.org/education/en/ev.php-URL_ID=9991&URL_DO=DO_TOPIC&URL_SECTION=201.html

T017 *on Monday: "The uncertainty of the goals of the course creates a negative atmosphere. The artist may be used to a certain uncertainty in creative processes, but as a classroom teacher I am used to a clear curriculum that creates rhythm and goals."*

In the original Finnish: *"Epävarmuus kurssin tavoitteista ja sisällöstä luovat negatiivista tunnelmaa. Taiteilijat ovat ehkä tottuneet tiettyyn epävarmuuteen luovassa prosessissa mutta luokanopettajana olen tottunut selkeään opetussuunnitelman luomaan rytmiin ja tavoitteisuuteen."*

T025: *"? What is the use of this course for these artists, especially if you don't have your own pupils? For teachers, this certainly gives something to think about!"*

"? Mitä hyötyä näille taiteilijoille on tämän tyylisestä kurssista? Varsinkin jos ei ole omia oppilaita? Opettajille kyllä on ajattelemisen aihetta!"

T015: *"On the first day, I would have had, for instance, a half- day lecture on what was to come. I was quite 'out of the loop.' I didn't really know what this was all about."*

"Ensimmäiselle päivälle olisin kaivannut esim. puolen päivän luentoa, selkoa tulevasta. Olin aika "pihalla". En todellakaan oikein tiennyt, mikä koko homman idea on."

One of the other things that annoyed teachers as well as some artists was that nametags were not given to the participants in the course. In fact, in the invitation letter it was reiterated that the participants were asked not to tell each other their occupations[15]. The researcher's idea was to see what kind of reaction would emerge:

T025: *"The group dynamics was missing somehow when you didn't have the slightest idea who all these people were. What kind of occupations where represented?"*

"Alkuryhmäytyminen jotenkin puuttui ei tullut minkäänlaista käsitystä, mistä kaikki ihmiset olivat. Mitä kaikki ammattiryhmiä mukana oli?"

A001: *"Not so good that folks names etc. weren't from the very start."*

"Ei niin hyvää ettei väen nimiä ym. tietoja alusta."

Both the missing information on the course's implicit goals and the missing names created tensions that affected some participants until even Thursday, when suddenly the "missing pieces" came together in performances shot on TV. How much easier it would have been if everything had been told in advance and the names as well as occupations were seen and known from the very beginning! How often do we categorize people and label things before than we actually "know" them? How easy, it

---

[15] Canadian Jean Vanier used similar methods in the 1970s in Ottawa, where inmates, ex-inmates, prison guards, prison directors, chaplains and psychologists were gathered together without knowing each other's background (Vanier 2003).

is to belong to one group and thus define the others by our notions of "us" and "them" (Vanier 2003, 43). Providing the exact details of the course in advance, however comfortable this might have been would have provided too obvious an "answer". The creative process needed tolerance of uncertainty.

The other kinds of tensions in the group grew from the natural worry about the artists' actual chances for work, as some of the teachers also wrote about:

> T023: *"Was it right that a situation was created where artists have to "sell" their services? It must be quite humiliating if one has been unemployed for a long time."*
>
> *"Oliko oikein, että tehtiin tilanne, jossa taiteilijat asetettiin "myymään" palveluitaan. Saattaa olla jostakin pitkään työttömänä olleelle ihmiselle melko nöyryyttävääkin."*
>
> A009 on Monday: *"One has to get belief that this can work?"*
> On Wednesday: *"Things seem to be brighter. Things seem to be more sensible and reconstructive. Maybe there is still hope for work."*
>
> Maanantaina: *"Jostain on saatava uskoa, että tämä voisi toimia?"*
> Keskiviikkona: *"Asiat alkavat näyttää valoisammalta. Asiat alkavat näyttää järkevimmiltä koostavimmilta. Ehkä on toivoa työllistymisestä."*
>
> A010: *"I hope we can get jobs! after this training."*
>
> *"Toivottavasti saamme töitä! Tämän koulutuksen päätteeksi."*

Since the individual needs of participant groups were taken account as much as possible, handling of the emotional reactions involved throughout the project was, one could say, a daily routine. The emotional reactions and seeing things from one's own point of view wasn't, however, a feature of individual persons so much as, more than that, an organizational fact: every organization has the tendency to handle things within its own framework and rules. When those rules were or seemed to be threatened, the reaction was emotional. To manage these situations in order to achieve a common ground and language takes time and patience, a duty the project leader has to confront. However, the importance of cooperation between different partners is worth the effort. The strength of the approach lies in the fact that breaking the rules creates new possibilities and meanings.[16]

The doubts concerning the method were in the foreground in the first few days, but after a while the cooperation between the teachers and the artists was seen very positively. The changing attitudes can be traced from diaries:

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[16] Etienne Wenger denotes the people in charge of special projects across functional units as brokers. A broker is a person who is able to make new connections across communities of practice, enable coordination and open new possibilities for meanings. Brokers' role is twofold, since they are often pulled in to become full members of community or, the other way round, rejected as intruders (Wenger 2004, 108–110). I admit to having been a broker.

T017, headings in diary on Monday: *"Underestimating of Finnish teachers' education?"; "Uppermost it reminds us that in the course single ´tricks´ are learned"*

"Suomalaisen opettajankoulutuksen aliarviointia?";"Päällimmäiseksi jäi mieleen, että kurssilla opittiin yksittäisiä `temppuja`"

After a week, the same person writes:

"An artist in the classroom sounds fine. Different professional experience in helping our students. Get the feeling and intuition involved in teaching instead of plain knowledge."

"Taiteilija luokassa kuulostaa hienolta. Eri ammattiosaaja auttamassa meidän oppilaita. Saadaan opetukseen mukaan tunteita ja aistimuksia pelkän tiedon sijaan."

"The artist might have something to give to a school class through not just the artistic skills but through his/hers attitudes in life. Also 'the madness of creativity,' which includes tolerance of uncertainty in a process (when doing something where you are not sure about the outcomes,) would bean important life skill for students to learn. (That is something that seems to be lacking from the teacher.)"

"Taiteilijalla voisi olla annettavaa luokalle ei vain taiteellisten taitojensa, vaan myös elämän asenteensa kautta. Myös 'luova hulluus' mihin sisältyy epävarmuuden sietoprosessitilanteessa (tehdessä ei vielä oikein tiedä, mitä tästä syntyy) olisi tärkeä oppilaille opetettava elämäntaito (tätä taitoa ei opettajastaan tunnu oikein löytyvän).

Another example:

T020:*"What would that artist do in the school? I DON'T GET IT. I have my own ideas, and different views. The artists have only expertise of their own field."*

At the end of the week: *"So many ways to think, different directions... where to collect the ideas, different approaches" "Oh, oh – so many thoughts!"*

"Mitä se taiteilija tekisi koulussa? EN TAJUA OIKEEN minullakin on ideoita ja erilaisia. Taiteilijat ovat vain oman alansa tuntijoita."

At the end of the week:*"Niin paljon eri tapoja ajatella, eri suuntia mistä kerätä ideat, eri lähestymistapoja. Voi voi – niin paljon ajatuksia!"*

Just as there were clear examples of transformation of attitudes among the teachers, there were also those teachers who had already a strong artistic background themselves. In many cases, these teachers had the most realistic but at the same time the most positive attitudes towards cooperation. In fact, no one in the group saw the cooperation as negative.

T019:*"Best part of this course has been the interaction between the teachers and the artists."*

"Parasta tässä koulutuksessa on ollut opettajien ja taiteilijoiden välinen vuorovaikutus"

T022:*"We were lucky to have artists who are enthusiastically bringing their ideas and are cooperative. It seemed after our very first meeting that there were four equal adults having a brainstorm, where common ideas grew into incredible ideas."*

"Olemme onnekkaita, sillä saimme taiteilijat, jotka innolla tuovat esiin ideoitaan ja ovat yhteistyökykyisiä. Tuntui, että juuri päättynyt ensimmäinen tuumaushetki oli 4 tasa-arvoisen aikuisen ideariihi, jossa yhteiset ideat kasvoivat hulvattomiksi ideoiksi."

Despite the positive atmosphere that grew during the week in the course, the field period in the schools didn't always go smoothly:

A003: *"Communication with the teacher has been a bit clammy, and I have had a lack of clarity about the practical issues of period."*

"Kommunikointi opettajan kanssa on sujunut vähän nihkeästi ja itselläni on vähän epäselvyyttä jakson käytännön asioista."

A005: *"In my opinion, the lesson didn't go right at all; the teacher didn't do her share of the planning and didn't tell me about it soon enough. I counted on her doing as she says, but that didn't happen. In addition, she had a really negative attitude and pupils were not enthusiastic at all in what they were doing."*

"Tunti ei mielestäni mennyt lainkaan hyvin opettaja ei hoitanut omaa osuuttaan suunnittelussa, eikä kertonut siitä minulle tarpeeksi ajoissa. Luotin siihen, että hän tekee niinkuin sanoo, mutt näin ei käynyt, lisäksi hänellä oli hyvin negatiivinen asenne ja oppilaat eivät innostuneet tekemisestä lainkaan."

Since there were a lot of positive experiences of the cooperation as well, the main issue is that creating sustainable relationships between the teachers and artists would have needed more time. Such notions are echoed in diaries as well as the interviews done for the master's thesis (Talvo 2006, 41). In the LTTA model, the crucial part of the cooperation is in the hands of site coordinators, who act as a link between the schools, principals, teachers, and artists. Common planning, as well as time for reflection and tutoring services, was something that couldn't be achieved fully in Finnish pilot; even despite the university provided two lectures to provide the guidance needed[17] in the schools. The other difference with the original idea of LTTA was that in Canada there would have been artists in three different fields teaching together in same classes – for

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[17] The Finnish model was based on the idea of giving feedback to artist – not to the teacher and the artist. The former approach would have meant departing from the normal structure in classroom management and at the same time intervening in the teacher's affairs. It was natural that the teacher's education department didn't go so far. (Telephone discussion with Jaana Lepistö on September 12, 2006)

instance, a musician, painter, and dancer. In Finland, we had to use just teacher/artist pairs. The reason for this was that the artists in the course came from similar backgrounds, as painters, sculptors, or people involved in arts and crafts (*ibid.,* 36). With reason, the original Canadian integrated model[18] was replaced with the shared model in the classrooms:

LTTA Canada   Pilot in Finland
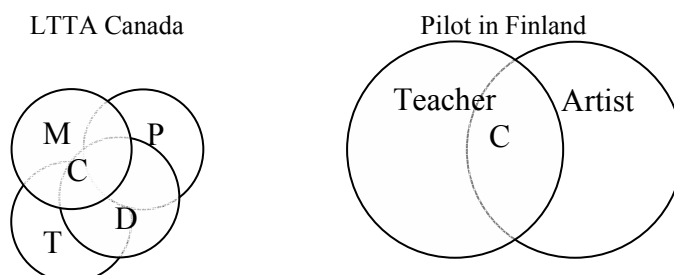
M= musician, P=painter, T= teacher, D= dancer, C=curriculum

FIGURE 5. The integrated and the shared model.

As is clear, following the Canadian model needs a lot of resources and an established organization to deliver the results. Though the Finnish version did not have such resources, the outcomes of the course were still convincing, with the LTTA model working even just between one teacher and one artist. The doubts that were presented about the approach touch upon the necessary time, resources, and educational policy:

> T012: *"The only thing that remained to be considered was how on earth you are able to have time again for this, in the middle of all the trash that has been stuffed into the curriculum?!"*
>
> *"Ainoa asia, jota jäi miettimään oli se, että miten tähänkin taas jää aikaa sen kaiken krääsän keskellä, mitä taas opseissa meille tungetaan?!"*
>
> T012: *"Is it again the case that <u>others </u>have to tell our decision- makers that this is a great thing and to give us resources (= money)? Those have been taken from us and diminished in recent years, especially in the arts."*
>
> *"Pitääkö taas <u>muiden</u> sanoa ja kertoa meidän päättäjille, että tämä on hieno juttu, antakaa resursseja (=rahaa). Niitähän on meiltä poistettu ja vähennetty viimeisten vuosien aikana nimenomaan taideaineista."*
>
> T018: *"Unfortunately, the large class size sometimes limits experiential methods. In addition, the materials in school or the lack of them create the framework for the informal ways of learning."*
>
> *"Valitettavasti luokan suuri koko rajoittaa joskus kokeellisuutta. Lisäksi koulun materiaalit tai niiden puute luovat omat raamit kokeelliselle opetukselle."*

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[18]More on integrated models in chapter 4.2.

The positive comments on the method as well as the course itself were several, as there were also examples of practices that the participants would take with them to their work afterwards:

> T021: *"Team of trainers inspiring, the connections to the practice CLEAR from the very beginning"*
>
> *"Kouluttajatiimi imponoiva, yhteys käytännön toimiin luokassa SELVÄ alusta alkaen."*
>
> T014: *"From pupils it requires skills of using images to imagine…"*
>
> *"Vaatii oppilaalta mielikuvien kuvittelun taitoa…"*
>
> T011: *"I suppose that aftermaths you are going to think about matters quite differently from how you did earlier"*
>
> *"Tästä tulee itselle luultavasti sellainen jälkiaalto, että alkaa ajatella asioita vähän toisin kuin tähän saakka."*
>
> T012 on using dance in teaching math: *"A new point of view in math teaching. Helps definitely also my students who have serious outlining and learning disorders. I will use definitely."*
>
> Tanssista matematiikan opetuksessa: *"Uudenlainen näkökulma matikan opetuksessa. Auttaa varmasti minunkin oppilaitani, joilla on suuria hahmotus- ja oppimisvaikeuksia. Käytän varmasti."*
>
> T016: *"Here it goes! We are the pilots, and it is our task to continue and expand this incredible <u>wonderful</u> project!"*
>
> *"Tästä tämä lähtee! Me olemme pilotit ja meidän tehtävänämme on jatkaa ja laajentaa tätä mielettömän <u>upeaa</u> projektia!"*
>
> T025: *"I was happy to get into this course. I will use what was given in my class and bring the ideas with me to other teachers as well."*
>
> *"Olen iloinen, että pääsin tälle kurssille. Aion käyttää saamiani oppeja luokassani ja viedä ideoita myös muille opettajille."*

These enthusiastic comments, which were made after the week of the Canadian part of the project, reflect the optimistic attitudes among the teachers after having good experiences. Critical comments were in minority but still found:

> T018: *"The teaching is not just about playing."*
>
> *"Opettaminen ei ole pelkkää leikkimistä."*

2.4. Notions of Finnish part of training

To avoid the latter danger and to ensure that the Finnish educational standards didn't suffer, the program for developing pedagogical skills for artists delivered by Finnish

teacher educators was given a lot of responsibility for the project as a whole. The lectures by professors, senior lectures and one principal from Rauma were spread over a longer time, from November to April, while the field practice lasted from January to April. The tasks assigned (essays and curriculum plans, most of them included as attachments to the diaries), as well as the number of hours of given lessons in the schools, provided an efficient environment that most of the artists had not been familiar with previously. At the beginning, analogous thoughts to those expressed by the teachers in relation to the Canadians' work were raised by the artists in the Finnish context:

A002: *"Quite astonished this morning. The professor's lecture was very interesting."*

"Aika hämmentyneenä aamulla. Professorin luento oli hyvin mielenkiintoinen."

A010: *"The beginning of the course was good, but in the afternoon the main thread disappeared. (Tiredness?) Do we have more concrete knowledge? What is the method? Am I in a right place?"*

"Kurssin aloitus oli hyvä, mutta iltapäivällä punainen lanka hukkui. (Väsymystä?) Saammeko konkreettisempaa tietoa? Mikä on metodi? Olenko oikeassa paikassa?"

A005: *"Many of the issues were new for me and I guess that it takes time to understand and assimilate all the things that needs more studying."*

"Monet asiat olivat minulle uusia ja luulen, että kaiken ymmärtäminen ja sisäistäminen vie aikaa ja vaatii lisä-opiskelua."

A006: *"In my case the problem was that I have never studied this field before and some of the concepts were totally unfamiliar to me. I had to really concentrate in order to be able to follow things."*

"Minun kohdallani ongelmana oli se, että en ole aikaisemmin opiskellut alaa ja muutamat käsitteet eivät sanoneet minulle mitään, jouduin keskittymään todella lujasti, jotta pysyin mukana."

After a while, the teacher educators' training for the artists was seen, just as in the Canadians' part among the teachers, more positively, and several useful things were reported in diaries:

A006 on January 13: *"I've gotten some ideas of the issues handled in lessons, or more like loose images, but now those issues were clarified in considerable when you were given them into your hands in written form. Overall, an interesting and surely useful lecture. The examples given were good. The model lesson plans were also useful. I will definitely use them."*

"Minulla on ollut tunnilla käsiteltävistä aiheista jo entuudestaan jotain tietoa, tai pikemminkin irrallisia mielikuvia, mutta asiat selkeentyivät huomattavasti kun ne sai kirjallisena käteen. Kaiken kaikkiaan mielenkiintoinen ja varmasti

> *hyödyllinen luento. Esimerkki tilanteet olivat kivoja. Tuntisuunnitelma mallit olivat myös hyödyllisiä, tulen varmasti käyttämään."*

> A007 on March 3: *"The essay assigned by the lecturer was completed even before it had to be...The writing even felt fun and interesting to do."*

> *"Luennoitsijan pyytämät esseet valmistuivat jopa etuajassa... Kirjoittaminen tuntui jopa hauskalta ja mielenkiintoiselta."*

> A009: *"In the lesson, it be came clear the RESPONSIBILITY of the task given to us! Important are giving correct instruction, <u>planning</u>, the maintenance of the written form of the plans, and evaluation with the written reflection!!"*

> *"Luennolla tuli erityisen selväksi tehtävien VASTUULLISUUS!! Tärkeää ohjeistus, <u>suunnittelu</u>, kirjallinen ylläpito suunnitelmista ja kirjalli. Palaute!!"*

Even though some of the artists were not used to writing essays and some complained about the number of the tasks assigned during the spring, none of them said that the training in the pedagogical skills or lectures about education were useless. Still, some criticisms were laid on the program concerning their suitability for artists and the idea of LTTA:

> A005: *"The teacher training department seems not to be any more aware of the LTTA than we are, and the tasks they are giving to us... sometimes seem impossible and unessential, partly because they are planned for traditional teacher's training?!? When you look at the LTTA Web sites and the lesson plans there, they seem to be more from the angle of the artists themselves, and I would like to know whether they have to study "educational science"; it feels as if the LTTA spirit has disappeared somewhere in between the lines – freedom, spontaneity, creativity, and art doesn't work in Finnish educational style!"*

> *"Opettajankoulutus laitos ei näytä tietävän yhtään enempää LTTA:sta kuin mekään ja heidän antamansa tehtävät...tuntuvat mahdottomilta ja epäolennaisilta osittain koska ne on suunniteltu perinteistä opettajan koulutusta varten?!? Kun katsoo LTTA:n sivuja netistä ja tuntisuunnitelmia ne ovat enemmän taiteilijoiden näköisiä ja tahtoisin tietää joutuvatko hekin opiskelemaan "kasvatustiedettä", jotenkin tuntuu että LTTA – fiilis on kadonnut jonnekin rivien väliin, vapaus, spontaanisuus, luovuus ja taide eivät toimi suomalaisella koulutustyylillä!"*

It was indeed clear that the teacher education department wasn't aware of all details of the LTTA program, yet we have to remember that wasn't its exact duty either. The integration of the two worlds, artistic and educational, was represented in the pilot programs in two separate teams, and the integration, if achieved, would be seen in the field in the cooperation between the artists and the teachers. In many cases, that was also achieved:

A010: *"The feedback from the pupils and their actions in class enthusiasm etc. has been very important for me. Their reactions have been the most valuable way that I know whether my ideas are working"*

"Oppilailta saamani palaute ja heidän toimintansa tunneilla innostus yms. Ovat olleet erityisen tärkeitä minulle. Heidän reaktionsa ovat arvokkaimmat, niistä tiedän toimiiko ideani käytännössä."

A009: *"I just wonder whether we were just lucky to get such a wonderful teacher and class. It felt great to work there! The Children did seem to really like our material and seemed thrilled with the exhibition of their own images."*

"Olisikohan niin että olimme vain tosi onnekkaita niin ihanan opettajan ja luokan saadessamme. Tuntuu tosi hienolta tehdä työtä siellä! Lapset myös tuntuivat todella pitävän materiaalistamme ja olivat silmin nähden innoissaan oma kuva-näyttelystään."

A002, evaluation made from a boy in the third grade: *"I liked every lesson in the period because I love subjects where there are animal themes and [the artist] is a lovely person."*

Kolmannen luokan pojan arvio: *"Pidin joka ikisestä jakso tunnista koska rakastan aineita joissa on eläin aiheena ja [taiteilija] on mukava ihminen."*

When the opinions written in the diaries and the interviews given for the master's thesis are compared, a similar picture of what happened appears. Despite the criticisms mentioned that grew from uncertainty or the natural confusions arising from project's organizational matters, the overall result and the atmosphere of the whole period were positive:

A003: *"For me, the project was never to be forgotten and amid the 'headaches of planning' provided a lot of fun and the experience of success in action. As feedback to the lectures, I thank you for the inspiring lectures."*

"Itselleni projekti oli ikimuistoinen ja tuotti 'suunnittelupääsäryn' lisäksi paljon iloa ja onnistumisen kokemuksia toteuttamisvaiheessa. Palautteena kouluttajille kiitän innostavista luennoista."

A010: *"Thank you for the rewarding course!"*

"Kiitos tästä antoisasta kurssista!"

The numeric assessments for the course, given by the artist and collected by the employment authorities, are also positive.

37. The training has met my expectations:

N=9 Scale:	1= bad,	2= tolerable,	3=satisfactory,	4=good,	5= excellent	Mean
N	0	0	3	5	1	3.7
%	0	0	33,3	55,5	11,1	

26. The tasks assigned in the course have supported my learning:

N=9 Scale:	1= bad,	2= tolerable,	3=satisfactory,	4=good,	5= excellent	Mean
N	0	0	0	7	2	4.2
%	0	0	0	77,7	22,2	

30. The training has increased my willingness to learn new things:

N=9 Scale:	1= bad,	2= tolerable,	3=satisfactory,	4=good,	5= excellent	Mean
N	0	0	3	2	4	4.1
%	0	0	33,3	22,2	44,4	

While the numeric evaluation shows positive results in terms of the content and methods of the course, it, naturally, remains only secondary evidence. The conclusion is that can well-prepared, carefully planned course with professional trainees succeeded. The question is still what was going in the field?

2.5. A glance to the classroom

What were the expectations when the artists were sent to the schools? The intervention had its premises in the idea that co-operation, different learning styles and eventually – arts would change the way classes were normally operating. Could the artist bring something new to classroom? Before going further in analysis, three things have (still) to be taken into account. Firstly, the limited time and resources that were spent on the project; Secondly, the fact that teachers and classes participating in the project were well acquainted with the ideas of holistic and art-based learning – most of the class teachers had also a strong background in teaching arts themselves. Thirdly: researchers limited time and opportunity to participate as a full-time observer in classrooms[19], while the full-scale observation would have required a group of researchers conducting systematic observations typical of classroom research in general (see e.g. Stake, Bresler & Mabry 1991). Despite the limitations some notions can be derived from the experiences reflected, both in diaries, interviews and observations and especially didactical reports that artists had to give to university lecturers. In these written reports the artist gave detailed description of their aims, lesson plans as well as evaluations of the outcomes of the specific sessions their made with teacher and pupils.

As the distribution of lesson hours in Finish curriculum is determined by the national objectives of education referred to Basic Education Act[20] (628/1998); Basic Education Decree (852/1998) and the Government Decree on the General National Objectives and Distribution of Lesson Hours in Basic Education (1435/2001), arts, music, handicrafts are equally present at all Finish schools.[21] Hence, every school (that was) in the project had similar opportunities in providing art-based education – although two of schools were more art-orientated than the others. The following example is chosen, not

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[19] While the project was going at the same time in ten schools, I had still my duties both in Polytechnics and as the manager of the whole project.

[20] In English: (http://www.finlex.fi/en/laki/kaannokset/1998/en19980628.pdf)

[21] See: (http://www.edu.fi/english/page.asp?path=500,4699,4847)

just because the researcher had the opportunity to attend to and follow the process, but also because it represents some of the methods that give us insight into how art can be used as vehicle in emotional and intellectual learning.

The case school described here has had specialized music classes since year 1966, bringing intensive music instruction from the third grade through to the sixth class. The school also has traditional classes where students can study English or Swedish as a first foreign language (http://www.edu.lahti.fi/lotila-a/). The students for the music classes in the school are selected on the basis of tests in musicality. However, as the basic education is free of charge for everyone in Finland, any student in Lahti area can join the school.[22] Following the Finnish core curriculum the subjects taught in Lotila are as seen in table 1:

TABLE 1. Curriculum in Lotila (http://www.edu.lahti.fi/lotila-a/)

Traditional classes	1.	2.	3.	4.	5.	6.	Total
Finnish language and literature	7	7	5	6	5	5	35
First foreign language (English or Swedish)			2	2	2	2	8
Second foreign language (Swedish or English)				(2)	(2)	(2)	(6)
Mathematics	3	3	4	4	4	4	22
Environmental studies	2	2	3	4			11
Physics / Chemistry					1	1	2
Biology / Geography					2	2	4
Religion/ Ethics	1	1	2	1	1	2	8
History					2	1	3
Music	½*	1/2*	2	2	2	2	10-12
Fine Arts	½*	1/2*	2	2	2	2	10-12
Handicrafts	½*	1/2*	2	2	2	2	10-12
Physical education	2	2	2	2	3	3	14
Music classes			3.	4.	5.	6.	Total
Finnish language and literature			5	5	5	5	20
First foreign language (English or Swedish)			2	2	2	2	8
Second foreign language (Swedish or English)				(2)	(2)	(2)	(6)
Mathematics			4	4	4	4	16
Environmental studies			2	3			5
Physics / Chemistry					1	1	2
Biology / Geography					2	2	4
Religion/ Ethics			2	1	1	2	6
History					2	1	3
Music			4	4	4	4	16
Fine Arts			1	2	1	1	5
Handicrafts			2	2	2	2	8
Physical education			2	2	2	2	8
Choir				1	1	1	3

*either first or second year

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[22] Even there are some private schools in Finland they still operate under same principle.

The table of subjects seen above represents quite typical curricula in Finnish schools. Still, while the national objectives of education are given by law, municipality-specific or school-specific curricula are written locally. Teachers and parents have thus the opportunity to participate in drawing up the school's curriculum and in determining educational objectives. In practice this means that even the guidelines of the core curriculum are followed in every school, there is plenty of room for local needs and emphases. Importantly, teachers have their pedagogical freedom in their classes. In the situation, projects like ours are always easy to implement.

In Lotila school we had two artists and teachers. One of the artists had specialized in fine arts and the other in media and scriptwriting. The teachers had strong background as both class teachers and specialized music teachers. The subject taught in the period was geography and the topic Africa. The curriculum expectation was that the pupils would gain in the understanding of Africa's geography, culture and way of living. The necessary background knowledge was available in school textbooks and the Internet, while the plan was to provide meaningful experiences by means of crocheting, mask making, shadow play, music and food making. The sessions were given to pupils in grade 5 to two parallel classes at the same time, which helped planning and sharing the responsibility of running the sessions, which were spread over three weeks of time.

Before the pupils started searching information from the Internet, the media artist demonstrated how the World Wide Web is constructed, how to use e-mail, how to search information, what kind of chat and games one may find on the Net. Also the dangers of the Net were discussed. The artist demonstrated the use of the Web by means of threads while the pupils were taught to crochet colorful scarves, which they would need for the 'African feast' at the end of session. But before the feast several stages had to be explored:

Firstly: the planning was made in two sessions, first with the artists and the teachers; and the second time with the pupils who gave their opinions and suggestions for the project.

Secondly: Six content areas of Africa were to be covered:

1) Geography
2) Culture, tradition
3) Story telling, handicrafts
4) African village
5) Colors and feelings
6) African plays and games

The list seemed to be quite ambitious! However, the children were taken into the planning process and the goal, the African feast, would be depending on their work and achievements. The project was delivered both by workshops and 'tradional' classes.

The first class, already described above, had the title "Google's hut" where the basics of information search from the Net were learned. The pupils were given assignments to find pictures for example about traditional African masks in order to make one for

themselves afterwards. In the workshop "Camp fire" pupils were planning and making exotic tidbits for the feast. In "Building the village" the pupils concretely set up the tents for the happening and decorated the school gym as an African village.

The workshop called "Playing field" included African plays and songs that would be needed in the celebration organized by the teachers. "In the shadow of the tree" included drumming, finding colors and making sounds of the jungle. In handicrafts the pupils were making pearl necklaces and making trays from woodchips. In "African dances" pupils made shadow dancing and Tingatinga paintings.

The evaluation of the project took place on the Internet. The children made their stories for the school's web-magazine and sent e-mail to the artists afterwards. The teachers were also satisfied with the artists' work. The lecturer of didactics had a feedback session with the artists as well as artist delivered reports and diaries of the process to researcher. According to evidence there is no doubt that the session[23] would not have been a success! The children were enthusiastic, the goals that they had set were reached and the atmosphere was positive, and the pupils learned several useful skills.

Still the question remains, what were the benefits of the program? Is it possible that the teachers could have carried out "African village" by themselves? To be honest, probably these skillful teachers would have done it. Another aspect is that in this case they had more opportunity and professional help to do it, and they could resort to the special skills of the artists at hand.

The core question is what kind of conclusions about the LTTA program as a whole or its relevance can be made on the basis of the project described so far. Is the evidence of the positive atmosphere and enthusiasms enough to yield correct judgments of the whole approach? In order to find answers, we have take distance to LTTA and the project, and start to search questions outside of the phenomenon itself. Let me elaborate:

2.6. In search for context

Usually, when the traditional way of doing research derives its results from certain observations and the related theory, the results tend to be advocative, neutral or counter to the case. This approach that has been effective in natural sciences has, in the worst case the danger in educational science, to lead to circular reasoning or inferior conclusions. More than that, it is also likely that such a combination cannot reveal anything really important about the matter or its meaning. To avoid this and to say something relevant about the issue, action, practices or phenomena, we need to have **a context** and **referent**, in which and into the intuitions and reflections are informed with the related theory. The theory and the practice are thus not sufficient on their own. A true meaning of these two can be found through a "third" part, as the same time as all

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[23] It is obvious that kind of 'project method' as 'wholehearted purposeful activity' as known from educational history by William H. Kilpatrick (1871–1965), when profoundly and carefully planned, is both emotionally and intellectually rewarding for the children.

of the parts ought to be explored through the reciprocal relations in the sum of the parts.

In the literacy, this idea of the "third" has been dealt by many writers, from various perspectives. To just name a few, first, in the field of semiotics John Locke in his *An Essay Concerning Human Understanding* (1690) discusses of the components of knowledge, which are "*Physica*", "*Practica*" and "*Semeiotike*":

> *All that can fall within the compass of human understanding, being either, first, the nature of things, as they are in themselves, their relations, and their manner of operation: or, secondly, that which man himself ought to do, as a rational and voluntary agent, for the attainment of any end, especially happiness: or, thirdly, the ways and means whereby the knowledge of both the one and the other of these is attained and communicated; I think science may be divided properly into these three sorts.* (Locke, B4.21.1)

The "Semeiotike" as "the third branch" is:

> *the doctrine of signs; the most usual whereof being words, it is aptly enough termed also Logike, logic: the business whereof is to consider the nature of signs, the mind makes use of for the understanding of things, or conveying its knowledge to others.* (Locke, B4.21.4)

More recently, David Bohm has separated the *"truth of content,"* which relies on observable correspondence, to *"truth in function,"* that refers to the accuracy, meaning, and the implications of the content. The former, being limited in its nature, needs the latter in order to achieve relationship between content and "what is," because without "*truth of content*" has little meaning without *"truth in function"* (Bohm 2004, 114–124).

According to Bohm, in the worst case this may lead to a situation wherein

> *[i]ndividuals with dishonest aims can twist statements with a true content to lead to false implications and meanings, in the form of "half-truths"* (*ibid*., 119–120).

To the researcher of arts education, the concept of "third" is crucial; thus the art itself is something that refers to what is outside itself as a medium for expression. What this "third" is, and how we can find it from arts education, is also a key concern of this study. In my opinion, direct analysis of LTTA is insufficient before and unless we have looked for the relations that might be the referent and the context in which the action was performed. Thus, the statements concerning "all" (i.e. generalizations) that are usually the output of normal research work must be approached in a manner allowing us to say something relevant about our issue. Bearing this in mind, in the chapters that follow we focus on finding a synthetic view of education and the role of arts in it. This is done "through" history, philosophy and the ideas presented about the aims of education. After this journey has been made, we will unite the experiences (intuitions) of our pilot to the concepts and the thoughts found in the literature in order to express the ideas and the meanings related to the LTTA pilot – it is hoped, more profoundly and clearly than could have been done earlier.

The following concepts are explored:

- art
- curriculum
- integration
- narratives
- aesthetics

Where the contexts are:

- educational history
- philosophy
- psychology
- curriculum theory
- culture

Before we go further, it is time to summarize the core ideas from the first and second chapter of this dissertation:

- The integrative approach offers a possibility for new innovations and solutions to problems
- The problem with the approach is that the various organizational, cultural, and occupational barriers restricts the understanding between the partners
- In order to us to combine the theory from top down and the local potential and needs from bottom up, the strict barriers between fundamental and applied research must be shaded
- A professional person is one who combines the formal moods in conditional, multimodal, and procedural approaches
- The integrative approach corresponds to the idea of professionalism
- Enabling the objectives via lower-order modes helps to achieve formal aims
- The process of inquiry needs time, resources, and tolerance of uncertainty
- The most obvious can still be unknown
- Mixing the two different communities of practice in the field of education may bring about a new kind of relationship to given tasks

In the next chapter, we explore art and arts education and give some examples of the practices of the arts in community.

3. THE ARTS AND ARTS EDUCATION IN A CHANGING SOCIETY

Originating from its late-18th-century idea, the word "art" has often been understood through the concept of "beautiful object." In this approach, attaining the genuine aesthetic experience is a matter of contemplation of the work of art. Works like paintings, sculptures, music, dance, or poetry are seen to have a certain distinctive characters that can be grasped through the aesthetic experience in the realm of the arts. This realm, consisting of the galleries, museums, concert halls, critics, and academies, has also as a side effect defined the "high" and "low" culture in society, whereas in previous times the arts were seen differently, having a more direct connection to ordinary forms in life as in rituals, interior or exterior decoration, and a memory in forms of storytelling. In other words, the arts didn't exist for their own sake but were more interrelated with the activity, performance, or agency related to the objects. In that context, the word "art" was used to describe something what we would today call "craft", "skill" or "well-made-ness". In pre-industrial Europe, the arts were inseparable from living, as well as there being no such theory of aesthetics as would presume any superordinate abstract categories, for example, valuing paintings, drawings or carvings against other, similar works (Dissanayake 2003, 13–14).

Parallel development to what took place in the field of the fine arts can be found in the field of music. In the early 1800s, music attained its autonomy gradually in transition from the function of extra-musical occasions in the service of courts and churches to independent practice. At the same time the idea of music as a livelihood gave the way to that of musical work as an opus, which, as Beethoven did, could be sold to the audience. In the era of Bach, the relationship between music and its maker was completely different[24], with musicians were seen as humble servants with a specific field of craftsmanship. In contrast to the Baroque era, the Romantic period included both the idea of composers as geniuses and the idea that musicians were to be guided by their works (Goehr 1989, 55). While Romanticism magnified the art element, the artists, now having an independent position in society, deliberately sought more individual and contradictory ways to express themselves. As both the styles and the artistic expression were to gradually change to more and more complex, also the definition of aesthetics became uncertain. Eventually, the common ground of the aesthetic theory was to vanish and the stylistic plurality, as well as the claims of art's indefinable essence, would render outmoded the search of the common denominator of the arts (Dissanayake 2003, 15). Paradoxically, simultaneously the idea of "high" arts in opposition to the "low" ones was established.

Today, the 19th century's hierarchical view[25] of the arts has been opened to question. In postmodern society, to define what art is or is not is a "lost cause" – a situation, that certainly hasn't helped to convey its meaning and possible importance. Accordingly, the discussion of arts deals often at a surface level, concentrating either on formal

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[24] This is seen for example, in use of improvisation, which, still used in Beethoven's time, eventually gave way to full notation of the musical works.
[25] This refers also to hierarchies such as composer, conductor and musician.

issues like design, composition, materials, and techniques or the expressive, even mystical side of artistry. In the latter case, the arts are seen as something that words cannot reach[26] and therefore something better to left to the artists only. In the former case, the arts are for the experts or critics to address, while the audience or the average person has little or nothing to do with the matter. The obscure situation is that arts, if not completely considered as irrational, are thought of as arational. In other words: the arts may be considered to convey emotions but not much understanding (Eisner 1988, 201–202).

For arts education, the above mentioned development has been unfortunate, as the ideas about arts have affected – at a fundamental level – how they are taught and how relevant they appear to be in education. The idea that emotions are inferior to cognitions is reflected directly in school programs, where the arts are easily seen something additional or something that can be excluded in order to save time for more valuable things. At the same time, in society, where the technical rationality has its emphasis on things like productivity, economical competitiveness, or utility, arts education has been put on the defensive too. The assumptions concerning the nature of the arts, as wrong they might be, manifest themselves in the policy and the debate on the position of the arts. Being multiple, complex phenomena, the arts seem to have to justify their existence in the modern world and in education, even at the same time as they still exists among the people in societies with plentiful different forms. Those forms as they vary from country to country are present in every culture. Astonishingly, despite this cultural dimension, the idea of art's importance in education is often neglected or unclear. According to Anne Bamford (2006), the influences that reflect or can be found from arts educational policy around the world are the ideas of:

- **Technocratic art** presents the view that the arts are comprised of a series of skills that serve the needs of industry and a desire for a capable skilled workforce;
- **Child art** views the arts as a natural development phenomenon of children, governed by the child's physical and psychological growth and the need to freely communicate their needs and emotions;
- **Arts as expression** occurs through free engagement in arts experiences that stress creativity, imagination and authenticity of outcomes, implying a level of therapeutic benefit to the individual;
- **Arts as cognition** focuses on the arts as a form of intellectual inquiry capable of being studied from a critical framework and that the arts embody unique forms of thinking in the process of creating artworks;
- **Arts as aesthetic response** explores sensory and perceptual definitions of art through disciplined inquiry into the principles underpinning the aesthetic;
- **Arts as symbolic communication** treats the arts as a language form whereby people communicate;
- **Arts as a cultural agent** accentuates the role of arts in social action, social reconstruction and the role of culture in society, and;

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[26] It may be presumed that this is also one of the good reasons we have them.

- **Postmodernism** challenges traditional definitions of arts and questions the physicality and performativity of the arts and the definability of a concept called 'the arts'.
  (Bamford 2006, 31–37)

From the historical perspective, the arts have also taken their place in education for multiple reasons. Freedman (1987) finds four strands of purposes for arts education:

1) The first strand is the use of art education for developing skills for a labor market.
2) The second strand views the purpose of public access to art as cultural education and a leisure time activity for the middle class.
3) The third strand concerns art as an illustration of moral character and aesthetic taste for the social person in the project of molding the Good Citizen.
4) The fourth strand conceives of art as healthful and creative self-expression.

In addition, art has, of course, always been linked to the religious purposes,[27] as well as interacting with ideas like nationalism, liberalism, and industrialism. The arts and arts education, always deeply steeped in their time, have been both intertwined and interdependent on with the ideas such as commodity, ownership, specialization and with the social contexts in they are created. Probably more than ever, the role of arts in society has been changing as the rise of entertainment industry, communication technology, and globalization has wrought its change on our societies too. As the market liberalization in Western societies has forced the arts educators, as well as art organizations, to consider their role in society more thoroughly than before, many new ideas of using the arts for different purposes have been emerging. These claims deal with a broad range of issues, some of which we address now.

- Economic advantage

In this approach, the culture is seen as an economic engine, which is connected to facts of how open, acceptant and diverse cities or places are. These indicators of creativity are signs of so-called "Creative Class", whose appearance among "bohemian diversity" reflects on the whole economy (Florida 2002). For example, in Canada, the arts and culture sector is one of the fastest-growing sectors as employer, worth C\$ 22.4 billion in jobs – with the 700.000 people directly employed in the sector accounting for five percent of all jobs in the nation (Wyman 2004, 28).

- On Creativity and tolerance

The ability to think creatively is seen as essential in a knowledge-based economy where adaptation to rapidly changing information is needed. Arts education could provide a way of thinking which combines functional and integrative skills in different contexts. The high tolerance for ambiguity and compassion to those with differences would also be benefits of such an approach (Eccles & Elster 2005, 48).

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[27]In the United States, music was first introduced to school settings in Boston 1838 to promote hymn singing (Goldberg 2006, 4). In Finland, the tradition of hymn singing in schooling originates to medieval Turku in the 13th century.

- Improvement of health

The arts reduce stress levels, reduce fear and the sense of isolation, have beneficial effects on the immune system, reduce the need for painkillers and other medication, and shorten hospital stays. The British Medical Journal suggested that 0.5 per cent of Britain's £50 billion health care budget could be diverted to the arts (Smith 2002, 1432).

- Conflict resolution and character-building

The integration of arts into programs to prevent youth crime and solve other social problems has been developed. In Winnipeg, the International Children's Festival has involved with the fight against youth crime for inner-city children through performing arts program.[28] In the same city, Manitoba Theatre for Young Children has worked in a project on bullying to 3,000 elementary-school children. The children's own experiences showed that the project allowed children to examine and handle those things creatively (Wyman 2004, 69).

- Improvement in learning, motivation and engagement

The claim, that "Mozart's music makes your kids smarter," known as a "Mozart effect"[29], led the state of Georgia to distribute classical CDs to all mothers with newborns. The school districts in several states established the practice of background listening to Mozart during recess (Bresler 2002, 1072).

According to several American art organizations – Americans for the Arts, the Arts Education Partnership, the NEA, the President's Committee on the Arts and the Humanities, the U.S. Department of Education (USDOE) and the National Assembly of State Arts Agencies – the following justifications for the support of arts have been found:

- Arts learning improves overall academic performance. Students with high levels of arts participation outperform "arts-poor" students on virtually every measure.
- Students who study or participate in the arts score higher standardized tests. Music study improves math scores and spatial skills; reading skills are enhanced by arts learning, particularly through theater and the visual arts.
- "At-risk" students from low-income families benefit most from arts participation.
- Arts learning experiences help students to better know themselves and to better relate to those around them.
- Arts learning develops problem-solving skills, improves reasoning and communication abilities, expand creativity, teaches discipline, promotes

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[28] Since 1990, the Central Metropolitan Area (CMA) of Winnipeg has reported crime rates among the highest in Canada. Still today, the area is one of the fourth of highest overall crime rates in the country, about 50% higher than that of Calgary and more than doubles the rate for Toronto (Fitzgerald, Wisener, & Savoie 2004, 20–21).

[29] The Mozart Effect is trademarked by Don Campbell, who wrote a book with the same title in 1997. See: http://www.mozarteffect.com.

teamwork, enhances self-esteem, and provides creative outlets for self-expression.

- Arts programming improves the school culture as a whole by breaking down barriers between disciplines, energizing teachers, motivating students, and improving the physical appearance of school buildings.
- "Nonschool" arts programming reaches many "problem" students not engaged within the school setting. Such programs improve self-esteem, curb delinquent behavior, and help students to perform better academically.
(Gee 2002, 943 – 944.)

Combined together, these claims provide us with not just an interesting picture of our time but also a lot of ideas to consider. How can we know whether the claims are true?

Two important aspects of the matter have to be kept in mind. Firstly, research concerning the arts' significance is actually a quite recent phenomenon,[30] with the approach beginning to flourish especially1990s with the empirical studies of arts' impacts in schools in US [31](Rademaker 2003, 13). The problem with the arts impacts research concerns its objectivity. The question is whether the aim of such inquiries is based on just advocacy or on a search of objective analyses, though the difference between these two is inherently complex and rarely dichotomous. In its clearest form, advocacy refers to the merits of an educational approach bring "proven" *a priori*, whereas research is expected to proceed to refuting or confirming the hypothesis and conclusions through the inquiry process (Bresler 2002, 1067). Thus, whether these studies are seen as a development or progress depends on who you ask. The intense debate of arts impact research divides opinions into two opposite sides – to those who are worried about the arts' intrinsic values versus those who claim that proving transfer is essential for the future of arts education. Since both sides of the discussion probably have something right in their argumentation, it seems to me that both parties are at the same time missing the unifying element that would bring their views together. As **the debate itself** constitutes a profoundly interesting phenomenon, it reflects also the main question of our study.

Secondly; the research of the arts' impact in North America has a close relationship to school improvement programs, sponsorship and school testing. In both the United States and Canada several programs that use arts in education are being developed and implemented in the schools. These programs share some common features:

- While the programs are created to contribute complementary tools for schools in doing their job, they are at the same time providing something that the schools aren't able to do themselves or don't normally have.
- Since the programs have their own funding, background organizations, and marketing via their promotional material and Web pages, philanthropy and the needs of cultural organizations as well as corporations are combined.

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[30] Considered as a pioneer Eisner (1974) was the first to call attention to art programs' impacts, while, on the other hand, National Longitudinal Study of 1988 (N= 25,000 pupils) can be pointed to as a start of this approach (Catterall 1998, 9).
[31] For more on transfer, see Chapter 6.

- The research concerning the programs could be regarded as advocacy.
- Many music and art teachers do not necessarily find the programs completely positive, while the art education in the schools is seen to be in danger.

The two opposite discourses arise clearly when arts programs are discussed: one used by the arts partnership promoters and the other from the arts educators in the schools. However, to avoid juxtaposing the "Quality arts programmes" should be constructed both using the learning **in the arts** and the **learning through the arts** methods (Bamford 2006, 139). The main characteristics of the Quality arts programmes include:

- Active partnership between schools and arts organizations and evaluation;
- Shared responsibility for planning, implementation and assessment and evaluation;
- Opportunities for public performance, exhibition and/or presentation;
- A combination of development within the specific art forms (education in the arts) with artistic and creative approaches to learning (education through the arts);
- Provision for critical reflection, problem solving and risk taking;
- Emphasis on collaboration;
- An inclusive stance with accessibility to all children;
- Detailed strategies for assessing and reporting on children's learning, experiences and development;
- Ongoing professional learning for teachers, artists and the community, and;
- Flexible school structures and permeable boundaries between schools and community.
  (*ibid*., 140)

The critical voice from the other side might still state the following about the approach:

> *At the same time underemployed artists with a college degree in an art form are being recruited as teachers with no pedagogical training beyond that provided by districts or by arts agencies already engaged in training "teaching artists."*

(Chapman 2004, 13)

At this point in our research, I do not wish to take a side in the above debate, which is, after all, more American than Finnish in its nature. In the next few chapters, we leave the arts in the background while exploring the contexts of education and its meanings, in order to return to the issue in greater depth in Chapter 6. Still, before continuing further, it is appropriate to offer two examples of art partnership programs from Canada and the USA, to provide a better idea of the size of the phenomenon for Finnish readers:

ArtSmarts

ArtSmarts, founded 1998 by the J.W.McConnell Family Foundation is the other main arts program in Canada that brings artists, teachers, and children together to learn curriculum via integrated arts education. ArtSmarts has engaged 185,000 young people, 2,800 artists, 5,000 educators and community members with 5,000 volunteers in its first five years. The ArtSmarts provides schools with matching grants for young

people to gain hands-on experience through artist-in-the-classroom activities. The aim is to actively engage students in the art-making process and thus advance their involvement and learning. The programs main objectives are establishing long-term relationships between schools and local artists, and integrating the arts into the K–12 curriculum. According to Dr. Kit Grauer, who works as a professor in the Curriculum Studies Department of the University of British Columbia, the impact of the program on students is profound though difficult to quantify. The cognitive gains are found in attitudinal level; many of the programs themes are related to larger themes such as the environment, human rights, and democracy issues (Wyman 2004, 59).

ArtsBridge

ArtsBridge America is a network of 22 universities in 13 states and Northern Ireland. The initiative is based on the situation surrounding the problem of the elimination of the arts from K–12 schools. The continuing marginalization of the arts was threatening the success of many students, not only those whose strengths are not well matched with standard curriculum but also many pupils who were still learning English. The situation influenced on urgent need for innovative programs to serve as a bridge between the current public school curriculum and the arts instruction that all children should ideally have (Bruilette, Burns 2005, 2). Since its start in 1996, ArtsBridge has expanded to deliver arts curriculum to over 300,000 pupils, professional support for over 1,500 overworked teachers in time of heavy budget cuts, and scholarship support for nearly 4,000 university arts students. (See: http://www.artsbridgeamerica.com)

Before we go further, it is time to summarize the core ideas from the third chapter:

- The role of the arts has changed in the journey from the time of pre-industrialized Europe through the Enlightment to postmodern views, from craftsmanship to "beautiful object" to individualistic expression
- From a historical perspective, art has been brought into education for multiple reasons
- The arts are multiple in nature, and thus the confusions in aesthetic theory has affected the arts and the arts education in a manner that have been seen to be arational
- In contemporary society, the arts have been used in many unconventional ways, with the claims about their benefits being affected by the desire or need to justify the application
- The art partnership programs represents new innovative approaches in using art in education and in the community
- In North America the phenomenon is far more spread than in Finland

In the next chapter, we change our viewpoint to curriculum theory exploring historical, psychological and philosophical aspects involved in order to define the context in which art education among other school subjects has developed.

4. THE PROBLEM OF CURRICULUM

Education is by nature a normative enterprise, and its definition therefore guided by certain beliefs about what matters. These beliefs are reflected in how the curriculum is constituted, carried out, and evaluated. In a democratic or pluralistic society, curriculum creation requires deliberation, adjustment, and compromises, whereas in more authoritarian societies the task is, naturally, an easier one. It is inevitable that the curriculum reflects our society's worldview; sociological and cultural settings; ideas about what is worth knowing, doing, or believing, as well as, finally, what kind of subjects are taught in the schools. To uncover the ideas behind curricula forces us to classify, interpret, and define features of different approaches. To do so, opposite values, theories of life, ideas of knowledge or cultural differences can be explored and compared. Also, questions concerning the effectiveness or suitability of certain curriculum can be posed. These two fields of interest, latter narrow and technical, previous broad and all-encompassing have a central role in the field of curriculum discussion (Jackson 1992, 3).

In dealing with integrated arts learning, our research task has its emphasis more on the broader approach in curriculum research, while the narrower question of LTTA's probable suitability for the Finnish educational system remains interesting as well. Before answering the latter question, we must, however, take into account the way we establish our premises and hypotheses, since these certainly affect our conclusions. If we have a mission of advocacy, we certainly find positive things; by the same token, if we advocate against the proposed action, the negative aspects come to the fore. To be objective, finding the third alternative would be likely to be more believable, with both positive and negative aspects dealt with in the larger context. Unfortunately, quite often, the background premises and the values behind the different approaches of curricula (or sometimes in research) are not clearly articulated, understood, or are totally missing.

For the researcher, it is also important that the articulation or discourse within the educational approach be separated from the real values and objectives that the approach may have; sometimes the values spoken are not necessarily those that are actually thought expect them to be. The best way to get closer to this dichotomy is in the relationship between the practice and its written form. As the written ideas of a curriculum can be analyzed even more importantly, the practices that are seen in tacitly formed expectations and day-to-day operations can be observed. For example, the following notions can have two interpretations set in opposition:

- Schools teach children to be punctual, within the framework of the school schedule.
- Children are taught to be alone in a crowd and wait their turn until they are allowed to answer or do something.
- Children learn to separate different subjects that are largely disconnected. They are given assignments, which they learn to complete in a certain time, rather than generating assignments themselves.

-   Verbal and mathematical intelligencies are emphasized because intellectual ability is typically defined in these terms.
    (Eisner 1992, 305–306)

Whether the above practices represents a decent school culture or repressive structures that kills children's creativity depends on who you ask. The larger question for the curriculum researcher would still be that of what premises behind these two given interpretations. Since the examples give us a fairly common critique concerning schools and their curriculum, they similarly represent views that are usually found among the literature from the critical theorist. The claims going furthest among them say that the whole modern school system is based on structures that lead the pupils to uncritical pervasive acculturation. Students coming from such an educational environment would be readily exposed to propaganda for various reasons:

1)   They have learned a lot of second-hand information, the truthfulness of which they haven't learned to verify.
2)   They have a compelling need to formulate an opinion about every contemporary issue, and that is why they are easily adopting opinions that propaganda is giving to them in small bits of information.
3)   They are less engaged with they natural communities and they don't share opinions which each other because they are expecting to formulate their own opinions individually themselves.
     (from Kellen, 1965 in Puolimatka 2004, 181–182)

The critical theorists' concern typically concentrates on raising the consciousness of schools' "hidden curriculum" consisting of school structures, textbooks, the roles in the schools, and covert messages that are given to children etc. Criticizing the critical theorists is easy, however. The problem with the approach usually is that these theorists have not made a coherent statement of how education and its content, methods, and aims should be organized. In that sense, the critical theory fails to be the constructive force that it might be. If critical theorists' views about schooling were more positive, less strident, more generous, and more concrete, their ideas would be more likely to influence school practices (Eisner 1992, 314–316).

What about the arts? Could they have the kind of role in awakening awareness of different matters and the weaknesses in our society? A positive statement of this can be found from Walter Pitman, who says:

> *All major modern problems are multi-faceted and multidisciplinary, whether it be the environment, international affairs, crime and punishment, urban planning, transportation, or immigration. All demand a spectrum of considered reflection that goes far beyond an isolated, single-disciplined approach. Most of these issues include a confrontation around basis values and demand a position on human rights, justice, equity, and equality. This is the stuff of the arts.*
> (Pitman 1998, 32)

Are the artists aware of the misrepresentative structures of society? Do they verify the truthfulness of information? Do the artists share things with each other? In giving an

answer to these questions, it is again easy to say that the answer depends on the case. To some extent, some artists may do these things, while some other artists definitely do not. The question cannot thus be about the persons; instead, it concerns the quality that the arts may have intertwined them in its processes. The core of Pitman's book, called *Learning the Arts in an Age of Uncertainty,* concerns the processes that art involves. According to him, skills, expression, feelings and activity can lead to a better relationship with one's environment and community. In that sense, the arts should have a central position in education: helping the children to integrate their ideas to the reality, and giving them a means to communicate – all of the aspects that cannot be passed from the shoulders with a shrug.

However, in the reality it is often the case that the arts and the competence needed for delivering them is lacking from the schools or the other things may restrict their potential. In other words, there are primary factors that determine the stability of intended and taught curricula. Factors like students, teachers, principals, and the weight of the past in the historical curriculum or the structures of classroom and schools efficiently influences the culture in which the arts or new ideas and methods are to be introduced. Students, teachers, and principals, for different reasons, are often willing to maintain the status quo in schools (Cuban 1992, 236–238). For this reason, the "business-as-usual" attitude restrains the influence on all efforts to change the way things are done in schools. Many times, alternative approaches to the curriculum and various kinds of progressive efforts usually have more visibility than actual influence in the practices of schooling. This could actually lead to a question: Is education – like the definition[32] of art – a lost cause?

One would hope not. In the next section of this work, we look at the dichotomy of the Classical and the Romantic curriculum, which reveals more to us about the school and the context of teaching.

4.1. Classical and Romantic curriculum

A traditional view of the curriculum is that it is a collection of goals, which can be derived from the content of curricula. Usually in this approach the aims and objectives of teaching are seen as relatively stable and the organization of learning predictable. The evaluation, which takes place at the end of learning period, is done by the teacher. The approach has, of course, certain limitations. One important element that it does not fully take into account is that the teaching expertise is always a fundamentally procedural and situational matter. The other element that it doesn't seem to factor in is that the evaluation ought to be an inseparable part of the teaching process, from the very beginning of the planning to the school class to reflection.[33] The real challenge to the teacher, however, is how to interpret the declarative knowledge from the curriculum, translating it from the written words into procedural and meaningful learning experiences. In the real-life situation, the artificial separation between the theory of instruction and the curriculum content may be difficult or even impossible to

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[32] See page 34.
[33] This is, of course, nothing new; we all expect teachers to know it already.

achieve. This is especially obvious in music and arts teaching, where the teacher has to confront the teaching situation and curriculum content through his/her personality, abilities, and commitment:

> *The interests of practical curriculum making lie in shifting away from the technical-rational notion of teachers as curriculum retailers or interpreters to teachers as reflective practioners; away from the specification of a contextual objectives to the organization of situated preparations and plans; and away from measurement and testing to assessment and evaluation. In sum, and in opposition to curriculum doctrine, practical curriculum making places the teacher-as-reflective-practioners at the centre of curriculum development.* (Elliott 1995, 254)

This quotation, taken from the book *Music Matters,* has its context in the discussion of the philosophical basis of music education, but it certainly fits in any other educational context as well. When Elliott discusses the theme whether music should be taught in a practically orientated manner or one based on understanding the aesthetic values of music, he deals also with the question of whether music is a diverse human practice or a work of art[34] – a social process or final product to be understood. This dichotomy transposed to a more general level can be seen to reflect a wider entirety, the question of the dichotomy of the two traditions of curriculum ideologies – the Romantic and the Classical views of education.

The latter curriculum ideology can be seen as having its roots in the didactic approach of Johann Friedrich Herbart's (1776–1841) teacher- and subject-centered curriculum, where the systematic syllabus concept of *"Lehrplan"* emphasized subjects and subject content at the same time as distinguishing the ends from the means. In clear contrast, the Romantic approach has its roots in Jean-Jacques Rousseau's (1712–1778) child-centered views and pupil-centered curricula of Johann Heinrich Pestalozzi (1746–1827) and Friedrich Wilhelm August Froebel (1782–1852). Also, John Dewey [35] (1859–1952) is sometimes mentioned as one of the main figures of this movement. (Nevalainen, Kimonen, & Hämäläinen 2001, 123–124). The two ideologies in curricula can be seen as follows:

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[34] As discussed already on chapter 3.
[35] This claim is controversial. Dewey's ideas were more reconstructive than child-centered as often is thought. Dewey set himself at the middle of the two opposite forces, the humanists and developmentalist, as presented in William Torrey Harris's and Granville Stanley Halls work (Kliebard 1986, 51–56).

TABLE 2. The Classical and Romantic curricula (Lawton 1975, 22–23)

Elements of the Classical curriculum	Elements of the Romantic curriculum
Subject-centred	Child-centred
Skills	Creativity
Instruction	Experience
Information	Discovery
Obedience	Awareness
Objectives	Processes
• Acquiring knowledge	• Living attitudes and values
Content	Experiences
• Subjects	• Real life topics and projects
Method	Method
• Didactic instruction	• Involvement
• Competition	• Co-operation
Evaluation	Evaluation
• By tests (teacher-set)	Self-assessment (in terms of self-improvement)
• By examinations (public and competitive)	

As contemporary as the table might seem, the dichotomy presented in it has a perennial nature in education. The root of division is closely related to 17th and 18th century's philosophy and the question of the nature of human understanding and its reflections in the culture of schooling in 19th -century Europe. To trace those ideas and their consequences in education leads us to explore connections among epistemological, ethical, social, and historical issues. Certain ideas seem to hang together, and an intellectual history of education can be drawn. Before that is done, certain limitations and premises should be taken into account, for the following reasons:

1) The different philosophies should be interpreted in the context of their own era. Single views separated from the philosophers' complete ideas leads certainly to misjudgements and confusion.
2) Most of the educational and philosophical theorists have created a complex system of theory. Those theories may have opposite or the same views of different issues. The same conclusions may be found from whole different fountains. These differences and similarities may not be in a logically consistent relationship.
3) The followers and practioners of a certain theory might have misunderstood or neglected the writings of their master.
4) The selection of writers and writings serves the purposes of a synthetic view of educational history. There are always books and theories that might not fit in the picture or that make it too complicated.
5) Not all ideas of educational philosophy have been transferred directly to the classrooms; still it has to be assumed that they have a close relationship.

If these premises are accepted, we may continue to trace elements that have influenced the development of a general theory of education. Certain features of educational thinking are most relevant for formation the overall picture of curricula's development and the reflections of this in contemporary education. Synthesis of educational history

is a necessity when we try to find a theoretical basis for arts education and the integration of the curriculum, as well as evaluating the LTTA program.

The issues discussed thus so far are:

- Curriculum reflects our worldviews
- The schools are often accused of having a "hidden curriculum"
- The arts do not necessarily fit in the modern school system
- To make change in school system is hard
- Two "cultures" exists, with the emphasis dichotomised in three areas: the aims, methods, and objectives of the curriculum

It is time to proceed more in-depth consideration of the educational history and explore its philosophical roots.

4.1.1. First empiricist and rationalist approaches

In Medieval Europe, people followed the Aristotelian-Thomistic philosophy for centuries. It this approach, all phenomena were described in terms of their form, purpose, or place in the world and seen as one grand hierarchy from lower levels to God. In the 16th and 17th centuries, the situation changed and new kinds of methods for attaining knowledge were introduced. Those methods laid the groundwork for modern thought and the way in which education was to be formed.

In his book *Novum Organum* (1620), Englishman Francis Bacon (1561–1626) insisted that the collection of data should begin with observation. The observation should be carried out without any preconceptions and conclusions by using induction. The medieval Aristotelian deduction was to be replaced by the inductive method, which would provide the keys to knowing the natural order and thus power over it (Aspelin 1958, 259–265). At the same time, another type of challenge came from the direction of France in the form of rationalism. The rationalism that based on fundamental doubt was presented for the first time in the writings of René Descartes (1596–1650) in his *Discourse on the method* (1637) and *Principles of Philosophy* (1644). To establish a firm basis for knowledge required premises beyond doubt, which Descartes found from the discovery *"Ego cogito, ergo sum"* ("I think, therefore I am"), called the Cogito Argument. This argument was the foundation on which the entire world could be built on. Thereafter, forming of a philosophy could be detached from both history and tradition (Garber 2005, 176–181).

Comparing the ideas of Bacon and Descartes shows the fundamental difference between their views both methodologically and ontologically. Latter, rationalism was based on assumption of instinctual knowledge, which is not dependent on the senses, whereas the former approach, empiricism, was based on the idea that the senses were the only real source of knowledge. Methodologically, rationalism built the world from premises deductively while empiricist used induction (Aspelin 1958, 268). The common feature of both philosophies was that they turned to a human-centered view of the world. The independence of human thought against all authorities was to be an implicit part of human knowledge thereafter. An optimistic attitude towards man's

capability to come to and use his knowledge to advance all men's common good – *"le bien generale de tous les homes,"* as Descartes wrote (Aspelin 1958, 291) – was shared by Bacon's most famous statement *"Knowledge is Power."*

The importance that Descartes had to modern philosophy, and Bacon to experimental science, was shared in the field of education by Moravian educator Johann Amos Comenius (1592–1670). The ideas of Bacon influenced him to such an extent that kinship is easily seen, though at the same time Comenius in his style and system is still Aristotelian (Piaget 1999, 2). In his book *Didactica magna* (1657), Comenius laid down the general rule that man learns through his senses with active participation throughout his life. *"Nihil in intellectu quad non prius in sensu"* was originally a scholastic dictum, which meant that there is nothing in the intellect that is not first in the senses. In his reference to the idea, Comenius said that it was educational labour lost to try to strengthen the faculty of the will before that of reason, to sharpen the faculty of reason before that of imagination, and to exercise the faculty of imagination before the senses (Brubacher 1966, 140–141).

Comenius put emphasis on both deduction and induction. He claimed that active participation and personal experience (autopraxia) was a key secret towards all learning. The method by children could reach knowledge was, for instance, to dig (ruspando), to scan (quarendo), to assemble (colligendo), and to select (seligendo). Regardless of this very experience-based view, Comenius did not underestimate the teacher's role. Instead, he saw that the two approaches should be unified (Leinonen 2001, 120–125). Comenius created a complex philosophical system – pansophism[36]– including very versatile ideas of education. In his epistemological views he was still profoundly influenced by empiricist ideas:

> As soon as we have succeeded in finding the proper method; it will be no harder to teach schoolboys, in any number desired, than with the help of the printing press to cover a thousand sheets daily with the neatest writing...It will be as pleasant to see education carried out on my plan as to look at an automatic machine of this kind, and the process will be as free from failure as are these mechanical contrivances, when skilfully made. (Brubacher 1966, 201)

As a **sense realist**, Comenius emphasized the use of all senses to ensure that the impression of a concept is registered. After registration, the teacher could proceed to memorization, from memorization to comprehension, and thence to judgment. This "natural way of learning" is called in contemporary psychological terms "vertical transfer," which means that all learning proceeds from simple to complex, from parts to a whole[37] (Rauste – von Wright, Wright & Soini 2003, 143–144).

Descartes and Comenius met at Endegeest, Holland in1642 (Piaget 1999, 17). The rationalist and Christian–humanist thinker were not "on the same wavelength," for

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[36] "Pansophism," as a word, refers to the whole of knowledge as the domain of educator. Comenius's philosophical system explains all the eight worlds (Mundus) and degrees (gradus) that man has to explore in a life school. Comenius's Pansophia is an ambitious program similar to that of Aristotle (Leinonen 2001). The difference between him and Aristotle is thus found in his epistemology.

[37] As opposite, "holistic" art education, claims to be natural as well, there seems to be contradiction.

obvious reasons: in rationalism, there was no room for pansophism. Ontologically these men were opposites, and Descartes' Catholic and Comenius' Protestant religious background may have influenced the meeting as well. In1668, Comenius was invited to the Royal Society of London, where he introduced his ideas to an English audience (*ibid.,* 19). Whether or not the ideas that Comenius presented had a lasting impact in Britain, the sense dimension was to become clearly rooted in education by the British empiricists. One of the most prominent empiricist ideas there was presented by John Locke (1632–1705). In his *An essay concerning human understanding* (1690), he claimed that the mind of a child is a totally slate at birth and whatever he learns comes to the mind through the senses:

> *All ideas come from sensation or reflection. Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas:- How comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from EXPERIENCE. In that all our knowledge is founded; and from that it ultimately derives itself. Our observation employed either, about external sensible objects, or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.* (Locke 1690, Vol 1.2.1)

This famous idea of *"tabula rasa"* led to the idea that man's mind is storage, which in schooling should be filled up. Locke's view of knowledge was not, however, as completely based on senses as one might expect. In the above mentioned quotation, Locke still leaves some room for internal operations, which reflects and supplies our understanding. Those operations are the ability to compare impressions, discriminate between them, and generalize them (Ayers 2005, 583). Thus, the mind wasn't exactly totally empty; it had some means of its own to deal with the impressions[38]. Locke's philosophy's epistemological views had an ethical dimension as well:

> Universal consent proves nothing innate. *This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths wherein all mankind agreed, it would not prove them innate, if there can be any other way shown how men may come to that universal agreement, in the things they do consent in, which I presume may be done.* (Locke 1690, Vol. 1.1.1)

Aware of the consequences of his empiricist ideas, Locke claimed that the law is based on nature and that moral good and evil can be derived from conformity or disagreement with the law. Depending on whether we follow the law, it brings us **rewards or punishments** (Ayers 2005, 597). Strikingly, in his utilitarian ethics Locke

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[38] The French followers of Locke – Claude Adrien Helvétius (1715–1771) and Étienne Bonnot de Condillac (1715–1780) – were those who actually followed through to the most extreme conclusions of empiricist psychology. They concluded that the powers of the mind were directly the result of sensations (Brubacher 1966, 144).

seems to anticipate 20th century behaviourist theories of learning, though we may easily conclude that such a direct causality should be regarded as metaphorical; at least, Locke probably wouldn't have imagined such consequences applicable from his philosophy. Locke was one the firsts opponents of Descartes's authority in Europe (*ibid.,* 583). Comenius probably would have agreed with him. Nevertheless, the division in educational philosophy was evident from here on. In Britain, empiricist philosophy was tied to liberality and individualism; on the Continent, philosophy was keen on constructing methodological rational explanations and at the same time a more authoritarian society. The Enlightenment ideas turned from rationalism and democracy towards romanticism and nationalism (Russell 1992, 188–195).

The critique of Locke's epistemological theory exerted a great influence on Kant, whose idealistic epistemology and educational thought had a significant role in the aforementioned development. At the same time Locke's views had direct implications for the thoughts of Hume, whose philosophy has had a lasting impact on every philosophical generation since (Garrett 2005, 414). The watershed role of both Hume and Kant arises from the fact that in intellectual history they represent the two different kind of epistemological conclusions of the natural scientific revolution (Aspelin 1997, 411). Together they have contributed the basis for modern ethics – in Hume's case emotivism, in Kant's case ethical formalism. These two men, as opposite they are, are tied together in a process of constructing a modern-self (Macintyre 2004, 73–85). It is evident that their ideas have also a significant role in modern education. In his lectures, Kant goes so far as to claim that:

> *Man can only become man by education. He is merely what education makes of him* (Kant 1803, C1, 7).

Interestingly, this educational conclusion has its roots in Kant's epistemology. But before fully comprehending his ideas, we have to turn to Hume.

4.1.2. Hume and Kant's Pure Reason

The Scottish David Hume (1711–1776), often described as empiricist or a naturalist, preferred calling himself as a sceptic[39]. Hume's scepticism was among the consequences of his discoveries and many "infirmities" of human cognitive nature. In his scepticism, he went so far that he even recommended a complete suspension of judgement concerning matters entirely beyond our experience (Garrett 2005, 397). Hume's method was based on observation. He thought that the relations of causes and effects couldn't be derived anywhere apart from the senses themselves. Upon introspection into his own mental life, he found nothing but successions of different mental stages. There was no innate unity to hold these impressions together:

> *when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe any thing but the perception. When my perceptions are*

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[39] In contemporary discussion (Read 2000), Hume has been suggested to represent **skeptical realism.**

remov'd for any time, as by sound sleep; so long am I insensible of myself, and may truly be said not to exist. And were all my perceptions remov'd by death, and cou'd I neither think, nor feel, nor see, nor love, nor hate after the dissolution of my body, I shou'd be entirely annihilated, nor do I conceive what is farther requisite to make me a perfect non-entity. If any one, upon serious and unprejudic'd reflection thinks he has a different notion of himself, I must confess I call reason no longer with him. All I can allow him is, that he may be in the right as well as I, and that we are essentially different in this particular. He may, perhaps, perceive something simple and continu'd, which he calls himself; tho' I am certain there is no such principle in me. (Hume 1739 – 1740 THN 1.4.6.3)

The radicalism of Hume's epistemology is pervasive. The every day notion of causality had only a perceptible relationship with priority in time and contiguity in space. Causes and effects were though based on custom, however. At the same time, Hume was skeptical of the external world, existence of God, and the existence of self. Hume's claims are "*so extravagant that we may trace the rise of irrationalism in 19*[th] *century growing out of them*" as Bertrand Russell puts it in his famous *History of Western Philosophy* (Russell 1992, 228). Whether Hume intended to be irrational or just wanted to emphasize the uncertainties of human knowledge, his ideas had lasting impact on modern thought. Undoubtedly, **scepticism** is one inseparable part of our western worldview and a **critical approach** an important feature of our scientific thinking. The well-known Hume's guillotines – how to derive "is" from "ought," experimental methodology, and an atomistic approach to knowledge – are themes that certainly are reflected in a wide variety of things today. In 19th century, Hume's philosophy had a significant impact on a new science of educational psychology through John Stuart Mill (1843, 6.4.3) and William James, whose famous "stream of consciousness" (James 1890, IX) has remarkably similarity to Hume's description succeeding or passing states of mind[40]. His influence has a close connection also to Herbart's "apperception" theory, which has similarities with other British association theorists (Brubacher 1966, 145–152). But before that Hume was the one who had the privilege of waking Kant from his "dogmatic slumber".

Immanuel Kant (1724–1804), describing as joining the key ideas of empiricism and rationalism to transcendental-idealistic philosophy, argued that before we can ask "What exists?" we must first answer "What can be known?" As a solution, he proposed that there are two worlds of reality, **the phenomenal world** of conscious experience and the **noumenal world** of objective external reality. The latter is observed by its effects on the phenomenal world; through intuition, the knower represents **things as they appear**, and the intellect through concepts represents them **as they are** (Guyer 2005, 493). Because we know the world not directly as things *"an sich"* but through our forms of intuition (phenomena) and the categories of understanding (noumena), an essential part of our knowledge is judgment. Thus, to understand the world, the knower's mind must contribute actively to the experience of phenomena before us.

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[40] Though at the same time, he accuses Hume for seeking "the world behind the looking-glass," of exemplifying Absolutism (James 1890, 353).

This activity contains both the thoughts directed by the concepts and things seen through the intuition. As Kant puts it:

> *without sensibility no object would be given to us; and without understanding no object would be thought. Thoughts without content are empty; intuitions without concept are blind.* (Kant 1781, 1778 PII. I)

According to Kant, "judgment" *(Urteil)* is complex conscious "cognition" *(Erkenntnis)*. He argues that returning an objective conscious mental representation is dependent on the "power of judgment" *(Urteilskraft)*. The power of judgment is a cognitive capacity *(Fähigkeit)* that is a **spontaneous and innate***,* and in virtue of these is the "faculty of judging" *(Vergemögen zu urteilen)*, which he believes to be the same as the "faculty of thinking*" (Vermögen zu denken)* (Hanna 2004, 1.1). Because thinking is judging, judging is the central cognitive faculty of the human mind. Judging brings together all the otherwise uncoordinated sub-acts and sub-contents of intuition, conceptualization, imagination and reason. This happens via apperception or rational self-consciousness. The purpose of this process is to generate a single cognitive product – the judgment – and thereby **fully integrate** both distinct cognitive faculties of mind and distinct sorts of representational information.

Judgements are essentially propositional cognitions, meaning that every judgement has an intrinsic logical **form** that is both syntactic and semantic in nature. Every judgement has intension (*Inhalt)* and semantic **content***:* the proposition (*Satz)*. A propositional content is not monolithic in its nature. Instead it includes a unifying composite of individually meaningful proper parts. In spite of this private and personal constructiveness, judgments are always intersubjectively rationally communicable. (*ibid.,* 1.2). In his *Critique of Pure Reason* (1781, 1778), Kant presents a table of judgments (SS5.SII) and table of categories (SS6.SIII). The categories are pure forms of concepts, which through understanding take place – creating a synthesis. The table of judgements presents a list of the possible logical forms of propositions, which presents pure general logic: **pure** because judgements are *a priori,* necessary, and independent from any sensory content; **general** because they are universal and essentially formal; and **logic** because it includes the law of non-contradiction or logical consistency (Hanna 2004, 2.1.1). As a result of this "Transcendental Logic," which summarizes the central concepts of how we are able to think about world, following table is constructed.

TABLE 3. The Elements of Pure Reason.

Table of Judgements	Table of Categories
Quantity (Axioms of Intuition)	
Universal	Unity
Particular	Plurality
Singular	Totality
Quality (Anticipations of Perception)	
Affirmative	Reality
Negative	Negation
Infinite	Limitation
Relation (Analogies of Experience)	
Categorical	Of inherence and subsistence
Hypothetical	Of causality and dependence
Disjunctive	Of community
Modality (Postulates of Empirical Thought)	
Problematical	Possibility-Impossibility
Assertotical	Existence-Non-existence
Apodeictical	Necessity- Contingence

When this is compared to the Aristotelian system of (10) categories, the difference is clear. For Aristotle, categories are laws of being (ontological). In Kant's system, they have become the (epistemological) laws of mind. It is obvious that "Copernican revolution" to which Kant himself referred as his project was to ground the laws of nature and the laws of morality in **human reason** (Guyer 2005, 488).

Yet a warning has to be taken into account: Simplifying efforts to summarize Kant thought lead one readily to refer him as empirical psychologist (Aspelin 1997, 395). This common interpretation should be rejected for following reasons:

1) Kant isolates and discusses the doxic propositional attitudes, which he doesn't confuse with logical modality.
2) He firmly rejects logical psychologism.
3) The notion of "value" *(Wert)* means the truth-value of **whole** proposition not its **content** (which *"contributes nothing to the content of judgement"*).
4) Kant is interested in "thinking in general" (Hanna 2004, 2.1.1).

It is not surprising that Kant's theory of judgements is one of his most controversial, influential, and complex ideas. It is still crucial to take account to that core of his theory can be hold even if his classifications of judgements would be rejected (*ibid.*, 2).The purpose of Kant in *Critique of Pure Reason* was to say that there are certain limits to human knowledge, which can't be exceeded. We can think different kinds of ideas, but the only ones that are valid are those that are limited to the sphere of experience and are legitimated in their use of reason. There are things that do not belong to realm of "Pure Reason." The reality of freedom, the existence of God, and the immortality of the soul have to be assumed as *"postulates of pure practical reason."* They cannot be arrived at via doctrines of tradonal metaphysics (Guyer 2005, 488–489). To find answers to questions concerning education and to have a more

complete picture of Kant's thought, we have to study *Critique of Practical Reason* (1788) and Kant's relationship to Rousseau's ideas.

4.1.3. Rousseau and Kant's Practical Reason

The Romantic school of education was based on Jean-Jacques Rousseau's (1712–1778) view of the child presented in his book *Emile* (1762). Rousseau, who is often regarded as the father of "naturalism,"[41] saw the child as a flower to be allowed to blossom and grow without external shaping of his character. The revolutionary claim in Rousseau's *Emile* was to be typical of the ideas of Romantic education; the society is corrupted and people's lives deformed because of their social relationships and the civil order. Man is good by his nature but is perverted by society[42] (Dent 2005, 919). Rousseau claimed that every invidual child is born with a distinctive temperament. The fundamental ideas he presented were the following:

1) appreciating the value of discovery learning and problem-solving as educational techniques;
2) confining the child's early learning to things that are within his own experience and therefore have meaning for him;
3) stressing the rights of each child to invidual consideration, freedom and happiness;
4) realising the need to understand the child's nature and the way this develops through childhood and adolescence, and using the knowledge of this in determining what he should learn at each stage of his development; and
5) treating the child as a being in his own right, not just a miniature adult, and therefore stressing the enrichment of his present experience rather than preparing him for some distant future
   (Bowen & Hobson 1987, 130)

The common conclusion is that Rousseau brought the idea of childhood in the centre of education as well as he emphasized the experience and nature as a source of learning. Still, more than an educator, Rousseau is regarded as a political theorist. His most famous statement is from *The Social Contract:*

> *MAN is born free; and everywhere he is in chains. One thinks himself the master of others, and still remains a greater slave than they. How did this change come about? I do not know. What can make it legitimate? That question I think I can answer.* (Rousseau 1762 BI, 1)

These words have a remarkable similarity to Kant's often stated "*an answer to the Question 'What is Enlightenment?'':*

> *Enlightenment is man's emergence from his self-incurred immaturity. Immaturity is the inability to use one's understanding without the guidance of another. This immaturity is self-incurred if its cause is not lack of understanding, but lack of resolution and courage to use it without the guidance*

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[41] For further discussion of naturalism, see page 66.
[42] Paradoxically, Rousseau didn't explain how the society can be perverted if its members all are good.

> *of another. The motto of Enlightenment is therefore: Sapere Aude! Have the courage to use your own understanding.* (Kant 1796)

According to Nicholas Dent (2005), both Rousseau's political and educational thought directly influenced Kant, who admits this relationship in his *Conjectures on the Beginning of Human History.* The conflict between culture and nature, man's capability as a moral species, and which direction culture should take in order to ensure proper development formed the key interest both Rousseau and Kant (Dent 2005, 220). The educational and political questions were in close relationship in their philosophies.[43] Thus, both philosophers shared the idea that all men should be autonomous subjects without exploiting each other. For its time, this was both an idealistic and revolutionary idea. The need for man's autonomy and the capability to form himself led in German education to theory of formation (*Bildung*). Its counterpart, theory of education (*Erziehung*), had its emphasis on the idea of educational influence to help man to be able to use his potential (Kivelä 2004, 25). That this potential is achieved when man is capable of using his reason was the core idea of the Enlightment. Good education would bring gradual improvement to the world (Kanz 1993, 791–793). The problem was, however, how to solve the conflict between the idea of educational influence and that of human freedom – in other words, how to cultivate freedom with force. This basic problem has been deemed a pedagogical paradox (Pikkarainen 2004, 121).

Kant offered an answer that was intertwined his dualistic view of the world. He claimed that man is not by his nature a moral being but develops toward this when his reason reaches the ideas of duty and law (Kant 1803, II, 102). The character formation and the method of a catechism of right conduct were needed to achieve this goal (*ibid.,* 97). He believed that right kind of teaching and reasoning could bring a civilized man who would be able to follow the moral law,[44] which he calls *"Fundamental law of the pure practical reason":*

> *"Act so that the maxim of thy will can always at the same time hold good as a principle of universal legislation."* (Kant 1788 BIC1)

Kant presumed that man's autonomy was dependent on his freedom. The source of ultimately value was human freedom as an end in itself. It could be found in the requirement of the universal law when one obeyed it without trying to have any advance from it. Morals, as well as man, had to be autonomous. Still, morality was to be based on duty: the kind of duty which would be obeyed freely. The requirements of law were based on our sense of "Practical Reason," which, as did "Pure Reason," had its own categories.

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[43] Rousseau concretely united political theory in education when included a summary of *The Social Contract* in Book Five of *Emile* as part of Emile's political education (Dent 2005, 917). See also Bowen & Hobson (1987, 122).

[44] Unfortunately, in the light of history, a method of strict character formation and naive trust in man's reason brings us an interpretation of an obedient, well-behaving student who cannot resist dictatorship (Kanz 1993).

TABLE 4. The categories of freedom relatively to the notions of good and evil.

I. QUANTITY.
Subjective, according to maxims (practical opinions of the individual)
Objective, according to principles (Precepts)
A priori both objective and subjective principles of freedom (laws)

II. QUALITY.
Practical rules of action (praeceptivae)
Practical rules of omission (prohibitivae)
Practical rules of exceptions (exceptivae)

III. RELATION.
To personality
To the condition of the person.
Reciprocal, of one person to the others of the others.

IV. MODALITY.
The Permitted and the Forbidden
Duty and the contrary to duty.
Perfect and imperfect duty.

At the beginning of *Groundwork of the Metaphysics of Morals,* Kant admits that the ancient division between morals, physics, and logic is still valid. At the same time, he announces clearly his task: to clarify the premises all categories of different fields of human knowledge:

> *Ancient Greek philosophy was divided into three sciences: physics, ethics, and logic. This division is perfectly suitable to the nature of the thing; and the only improvement that can be made in it is to add the principle on which it is based, so that we may both satisfy ourselves of its completeness, and also be able to determine correctly the necessary subdivisions.* (Kant 1785)

A few lines later, he clearly states that different knowledge shouldn't be mixed, that every art, vocation, and philosophy ought to be handled separately:

> *All trades, arts, and handiworks have gained by division of labour, namely, when, instead of one man doing everything, each confines himself to a certain kind of work distinct from others in the treatment it requires, so as to be able to perform it with greater facility and in the greatest perfection. Where the different*

*kinds of work are not distinguished and divided, where everyone is **a jack-of-all-trades,** there manufactures remain still in the **greatest barbarism.***

*It might deserve to be considered whether pure philosophy in all its parts does not require a man specially devoted to it, and whether it would not be better for the whole business of science if those who, to please the tastes of the public, are wont to blend the rational and empirical elements together, mixed in all sorts of proportions unknown to themselves, and who call themselves independent thinkers, giving the name of minute philosophers to those who apply themselves to the rational part only- if these, I say, were warned not to carry on two employments together which differ widely in the treatment they demand, for each of which perhaps a special talent is required, and the combination of which in one person only produces **bunglers.** But I only ask here whether the nature of science does not require that **we should always carefully separate the empirical from the rational part...** (Emphasis mine)*

The attitude that Kant presents in his writing reflects a concept that could be referred to as atomism. After dividing the world into categories and pure and practical reasons, Kant claims that the realms of knowledge are completely separate. It is easy to see that such thinking has had repercussions at all levels of modern society. The Industrial Revolution divided work in pieces so that a worker on a machine has seldom is acquainted with the entire process of manufacture. The contemporary society is built up through **professionalism** and **expertise**, which are supposed to handle problems concerning just their own areas. The tight limits of knowledge have led to barriers of vocation, and these two factors are connected with the division of faculties in education. Our contemporary so-called expert society reflects profoundly the practises of modern work (Ketovuori 2004, 126).

Before we proceed further; several important questions arise:

1) What does Kant mean by saying that synthesis is an act of **pure activity**? What is the **intermediary** between the categories and judgements?
2) Do the Kantian synthetic *a priori* judgments (which Kant himself saw as a major question of whole realm of philosophy) provide a solution to form and content, experience and rationality dilemma?

The tables of categories and judgements bring together fundamental issues concerning semantics, logic, philosophical psychology and epistemology. It can be presumed that they have a significant meaning for education as well. Why didn't Kant's successors follow him in his epistemological conclusions instead of, on the contrary, being divided and heading in different directions?[45]

John Dewey, in his book *Quest for Certainty* (1929), called attention to this question. Dewey claimed that much of the failure of 19th-century philosophy was due Kant's influence and Cartesian mind – body dualism, which didn't accord scientific

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[45] Kant's role among the most discussed and interpreted philosopher is undeniable. He is a leading figure to Romantic philosophers (Fichte, Hegel, Schopenhauer) but also influenced positivist (Comte), pragmatic (Peirce, Dewey), and materialistic (Marx) philosophies.

knowledge that role in modern world that it ought to have. According to Dewey, Kant's system caused the old belief systems to stagnate further by dividing the world in two. He says:

> *The work of Kant may be regarded as a perpetuation of the method of Kant adjustment by means of partition of territories. . . . he continued the older distinction of one realm where the intellect has sway and one in which the requirements of will are supreme. He retained also the notion of an isolation of the two fields so complete that there is no possible overlapping and hence no possibility of interference. If the kingdoms of science and of righteousness nowhere touch, there can be no strife between them. . . . The titles of his two chief works, the Critique of Pure Reason and of Practical Reason are memorials to this interpretation. The first aims to make secure, on rational a priori grounds, the foundations of natural knowledge; the second performs a like office for the foundations of moral and religious conceptions . . . . Each has complete jurisdiction and undisputed sovereignty in its own realm. ... for certainty was fulfilled; cognitive certainty in the region of phenomena, practical certainty in the realm of moral authority.* (Dewey 1929, 47)

Despite his criticisms, Dewey was deeply interested in Kant. He even titled his dissertation *The Psychology of Kant* (1884). The work itself was never published, and hasn't been found since. However, many of his early writings deal with the Kantian "philosophic method" or "psychology" in spite of his later having discarded Kant's idealism (Väkevä 2004, 39). The work of Kant's summarizes the emerging modern worldview. Optimistic, human-centered inductive thought gave the basement for the ideas of modern science as well as its companion's industrialism and democracy.

Before we go further, it is time to summarize what has been said already. This can usefully be done in diagram form.

THE RISE OF MODERN THOUGHT
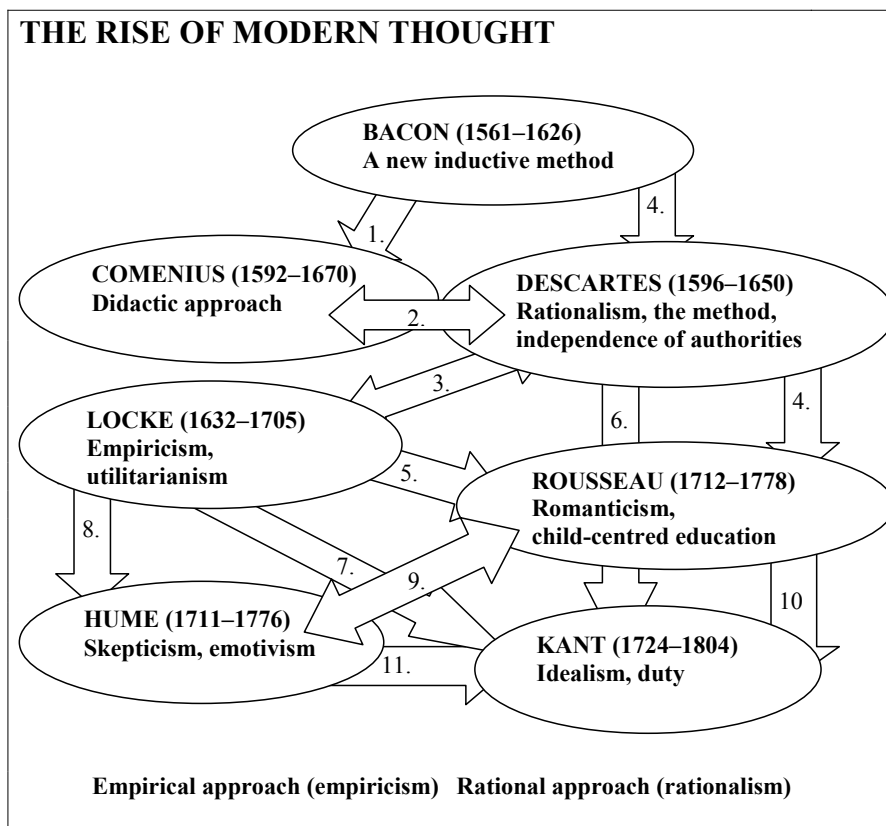
1. The idea of sense realism.
2. The different views are discussed (meeting in Holland, 1642).
3. Division between empiricism and rationalism.
4. The idea of independence of authorities.
5. The ideas of political theory and education.[46]
6. Rationalism in Kant (noumena).
7. Empiricism in Kant (phenomena).
8. From empiricism to (realist) scepticism.
9. Hume offered his help to Rousseau, but they ended deeply estranged.[47]
10. Educational and moral ideas concerning Kant's Practical Reason.
11. "Waking up" effect on Kant.

FIGURE 5. The division of educational philosophy

4.1.4. Instructional turn and the age of schooling

In the early part of the19[th] century, the educational division between empiric and rational ideas was formed along the lines of epistemological and ideological differences. The educational division wasn't, however, plainly philosophical or methodological in nature. A parallel phenomenon was the rivalry between humanism and naturalism. The core question was which subjects would be the most important to learn. This question was seen in the establishment of longstanding rivalry between

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[46] *Second Treatise on Government* (1690) and *Some Thoughts Concerning education* (1695)
[47] Hume tells about the quarrel in *The Concise Account* (1766) (Dent 2005, 16.)

literature and science[48] (Brubacher 1966, 257). The classical or humanistic curriculum had its origins in the Renaissance. The study of what the Greeks and Romans had thought and done was an essential part of the education of the gentleman. The aim of that education was the principal *"sapiens atque eloquens pietas,"* referring to balance among the intellectual, aesthetic, and moral aspects. As greater numbers of students embarked upon study of the humanities, larger grew the number who was incapable of mastering the culture implicit in them. Consequently, teachers who seemed inadequate to transmitting the content to their students concentrated more on the forms – teaching mere words (*ibid.,* 7–9, 248– 250).

When the worldview was gradually changed in the 17th and 18th centuries through modern naturalistic science, the humanists were forced more and more on the defensive. The first real challenge on them came through Johann Bernard Basedow's (1724–1790) Philantrohpinum School, which set out to test the naturalistic educational theories of the time. The humanists' complaint was that the program of this school was leading its students only to a narrow utility. Humanism was seen as promoting broader results of strengthening and disciplining the mind in its basic functions.[49] It also was also seen as something higher than naturalism, more spiritual, and keen on ideas rather than just material things (*ibid.,* 258).

The other forces that exerted a great influence on the curriculum were the same ones that defined the era of Romanticism. Nationalism, liberalism, and industrialism ensured that education became a matter of not only public concern but also public policy (Osborne 2001, 31). Nationalism elevated the value placed on vernacular languages, literature, and history as school subjects. The same occurred with physical education. Physical and national fitness were closely related in Germany, where Friedrich Ludwig Jahn's (1778– 1852) harnessed gymnastic to the cause of patriotism (Brubacher 1966, 262–264). Science and mathematics recommended themselves for the curriculum on account of the Industrial Revolution, a phenomenon most evident in England, where the utilitarian approach had its roots, of course, in sense realism and naturalism. Geography was transformed from a discipline locating places and defining boundaries to a study of man's relationship to his physical environment. Thomas Henry Huxley (1825–1895), one of the first adherents to Darwinian theory, influenced the adoption of physics and chemistry in the curriculum (*ibid.,* 256).

The place of arts in the curriculum was affected both industrial and nationalistic factors. In America, art became a state requirement for industrial purposes via the Massachusetts Drawing Act in 1870 (Freedman 1987, 64–65). In Germany, Johann Gottfried von Herder (1744–1803), a central figure of historicism and nationalism, gave the arts a fundamental role both historically and educationally as a means of character formation (*Bildung*). The role of music education in particular was to become part of formation and intensification of local and national belongingness (Davis 2005, 48–51). In spite of these external influences, the development of the arts education of

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[48] Some would say that it has remained unsettled.
[49] This "faculty psychology," which claimed that the human mind consists of separate powers or faculties, was widely accepted in 19th century: until William James and Edward Thorndike challenged the view. (Brubacher 1966, 153).

the 19th century was to gradual emancipation to symbolism and formalism. The problem with that tendency was that, while gaining independence, the art education lost its connection to other disciplines and areas of interest. "Art for art's sake" was already having an influence in the early 20th century when Dewey wrote:

> *In relating the arts to the relatively trivial role which they finally assumed in schooling, and there is corresponding promise of gain in the efforts making in the last generation to restore these to a more important position. Viewed both psychologically and socially, the arts represent not luxuries and superfluities, but fundamental forces of development.* (Brubacher 1966, 275)

The arts-and-crafts movement, which was built on the work of the Finnish Uno Cygnaeus (1810–1888), constituted an important exception to this development (*ibid.,* 274). "The Father of the Finnish Folk School" centered his curriculum on handwork, drawing from Froebel's idea of introducing such activities as paper folding; weaving; needlework; and work with sand, clay, and colour in the kindergarten, extending those activities to upper- school classes. Cygnaeus extended the concept also by including farm work, gardening, metal and wood work, and basket-weaving, which were to be known collectively as "*veisto"* or "sloyd," from the Swedish word "*slöjd"* (for "handiwork," or manual training) (Encyclopedia Britannica 2006) The role of handicrafts was seen as involving a special developmental task in education and human development as an "intellectually stimulating" and "mentally satisfying" activity (Sunnari 2000, 73), such that, according to the ideas of Cygnaeus, none of the arts would be conducted as means of trade. The educational outcomes would be therefore more aesthetic in their nature, and, above all, the eye and hand were trained to be obedient servant of the brain (Brubacher 1966, 271). Cygnaeus saw the need for schools where balance among students' body, mind, and spirit would be emphasized. As a consequence of Cygnaeus's efforts, the Finnish government made the sloyd system compulsory for boys in all rural schools and for male teachers in training institutions in 1866[50] (Cygnaeus, 2006). This decision was the first of its kind in the world. The importance of Cygnaeus does not, however, arise from only the fact that in the history of technological education he is considered the founder of institutionalised education for work. More importantly, his original philosophy differed from those that were applied later. The integration of work, thinking, skills, and art simply as means in and of themselves reflected the Finnish way of living and culture. As Cygnaeus put it:

> *In Finland the question is not about reforming the school but actually about creating the totally new (Schöpfung)…*

Sweden, where Cygnaeus had close contacts with Otto Salomon, was the second country to include handicraft in its education. The difference with the original Finnish idea was that Salomon's approach was to be more vocational (Kananoja, 1999). As an internationally known institution, Salomon's training college at Nääs, founded in 1875,

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[50] In the seminar's curriculum, **women's handicraft** had slightly different emphasizes. Women were supposed to make various textile products for others, for the family. This state of affairs was typical of the time, despite the fact that, while staying in Sitka in Alaska, Cygnaeus became acquainted with contemporary American feminist writings (Sunnari 2000, 74).

effectively delivered the knowledge of sloyd to Europe. Salomon's writings were translated into German, English and French. He also made several trips, which included conscientiously spreading word of the new school subject (Thorbjörnsson, 2000). The influence of sloyd reached the United States also, when Mr. Larsson, who was trained by Otto Salomon, moved to the U.S. and founded in 1888 the "Boston Sloyd School". It seems that Dewey might have influenced these ideas when developing his Reconstructionism philosophy of work (Kananoja 2000, 15).

TABLE 5. Development of handicrafts education (Kananoja 1999; countries added).

	1850	1860	1870	1880	1890	1900	1910	1920	1930	
Cygnaeus (1830s)		1861; 1866								FINLAND
Salomon			1872							SWEDEN
Victor della Vos		1870								RUSSIA
Kerschensteiner						1901;	1911			GERMANY
Blonski							1919			SOV.UNION
Krupskaya								1929		
Salicis			1873;	1882						FRANCE
Clauson-Kaas		(1866)								
Meldgaard				1886						DANMARK
Mikkelsen				1883						NORWAY
Kjennerud			1880							
Island					1890					

As much as changing society was having more and more influence on school subjects, most evidently in vocational education; the general philosophy was still equally important and closely connected to education. The philosophical theories that had their roots in 18th century were the foundation for the 19th -century applications in teaching. The fruit of that development was manifested in the rise of schooling and the formation of education as an independent science. The **instructional turn** meant that formalized medieval study was replaced by methodized practises of teaching – a general theory of pedagogy (i.e., *Allgemeine pedägogic*) (Hamilton 1999, 138–144). To make sense of the great variety of practice in the field of education in 19th century, we set out to consider those men who contributed their philosophical ideas, not only by lecturing but also in their practical actions.

4.1.5. Four different approaches to education

Pestalozzi

One of the most obvious links between 18th and 19th century's educational philosophy and educational practises was that between Rousseau and Johann Heinrich Pestalozzi (1746–1827). Pestalozzi, who was born in Zürich, was a devout adherent to Rousseau's educational ideas.[51] In 1775, Pestalozzi founded an "industrial school for poor" at Neuhof. The highly original educational enterprise was based on the idea of the children managing their own work. The method of his instruction was based on "trial

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[51] *Émile* was to remain his bedside book throughout his life (Soëtard 2000, 2).

and error": he kept what worked and discarded what failed. Therefore, Pestalozzi could be considered *"a practitioner in search of a practicable theory of what he is practising"* (Soëtard 2000, 7).

Pestalozzi's experiment faced severe obstacles, however. Running Neuhof required all of his efforts while the whole undertaking was based on social work. Pestalozzi soon realized that a philanthropic view of work also had to take into account a socio-economic environment. The school had to be declared bankrupt in 1780 (*ibid.,* 1–3). The failure was fruitful nonetheless: Pestalozzi had to consider what went wrong with the experiment, and he had the opportunity to formate his theory more carefully and fully[52]. He noticed that he had fallen victim to the "educational dream" and made errors of judgement concerning human nature. The errors he made were: his naïve faith in man's ability, a deep-seated belief in the natural freedom of the children of God, and faith in the virtues of an education that merely seconded natural tendencies. Pestalozzi came to the convictions that education should be the means to develop the individual's faculties to think (*ibid.,* 3–5).

The educational thinking, however, according to Pestalozzi, instead of dealing with words should be implemented through activity and concrete things. The aim of education should be the whole child. Pestalozzi looked for balance of the three elements – heart (morality), head (judgment), and hands (art). The implication of Pestalozzi's method was that teachers could no longer be regard themselves as merely lesson-givers. Instead they had to commit themselves to being capable to transmit dependable knowledge and, more than that, be skilful in employing the techniques of cooperative artists (Powers 1991, 204). The methods of Pestalozzi became widely accepted[53] that most of his principles have been absorbed into modern elementary education (Hilgenheger 2000, 1). The major principles he presented were that:

1) Intuition is the basis of instruction.
2) Language should be linked with intuition.
3) The time for learning is not the time for judgement and criticism.
4) In every branch, teaching should begin with the simplest elements and proceed gradually according to the development of the child, that is, in psychologically connected order.
5) Sufficient time should be devoted to each point of the teaching in order to ensure the complete mastery of it by the pupil.
6) Teaching should aim at development and not dogmatic exposition.
7) The educator should respect the individuality of the pupil.
8) The chief end of elementary teaching is not to impart knowledge and talent to the learner, but to develop and increase the powers of his intelligence.
9) Power must be linked to knowledge; and skill to learning.

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[52] His main philosophical treatise,1797's *Meine Nachforschungen über den Gang der Natur in der Entwicklung des Menschengeschlechts* ("My Inquiries into the Course of Nature in the Development of Mankind"), reflected also his personal disappointment.

[53] Pestalozzi had his second chance in a new institute of Burgdorf in 1800 and in Yverdun, where, on 1 January 1805, he opened an educational establishment in the château that rapidly expanded and became famous throughout Europe (Soëtard 2000, 5).

10) The relations between the master and the pupil, especially as to discipline should be based upon and ruled by love.
11) Instruction should be subordinated to the higher aim of education.
    (paraphrased from Miller 1993, 64; Morf 1889, 154–155)

Pestalozzi's Principles' intuitive Romanticism and child-centeredness was obvious, but the principles were put into practise with the formal training of the senses. The paradox between his principles and teaching methods was striking. Pestalozzi, who believed that thought begins with sensation, developed the so-called "object lesson," involving exercises in learning form, number, and language. Pupils determined and traced an object's form, counted objects, and named them. Students progressed from these lessons to exercises in drawing, writing, adding, subtracting, multiplying, dividing, and reading. In this system, all subjects in the curriculum should be reduced to their basic elements; everything in the curriculum should be organized into appropriate grades, and object-lesson instruction should be employed. Oral instruction had precedence over written lessons (Power, 1991, 202–203).

It seemed that Pestalozzi, who as a philosopher was Romantic philanthropic and a social reformer (Hämäläinen 2001, 194–196), in his methodology presented a rationalistic naturalistic philosophy. In his writings, he frequently used phrases such as "psychological necessity", "the mechanism of human nature," and "the mechanical form of all instruction," the reason being that he with his object-centered method of instruction was trying to bring education into harmony with the scientific naturalism of his day (Brubacher 1966, 119–120). Interestingly, the Romantic ideas seemed to lead again back to catechisms – with slightly different connotations from those of the traditional school.

Herbart

Johann Friedrich Herbart (1776–1841), a disciple of Kant in Königsberg University, was the man who officially brought the status of German *Didaktik* to the centre of education.[54] As a neohumanist, a well-trained scholarly thinker, and a university professor, Herbart formulated his theory of education addressing the aims, content, and the methods of instruction. *Didaktik,* which was related to the school education, was established as a science of education, *Wissenschaft* (Kansanen 1999, 22). Pestalozzi, who sought to renew society by means of education, had based his method on "harmonious training" of children's faculties. Herbart rejected this approach,[55] claiming that the mind is unite and cannot therefore be divided. In his educational theory, he combined education and instruction, believing that appropriate teaching could improve students' moral character. The natural development, personal mentality, and intuition should be guided by educational means. The ideal man was best formed by gaining and elevating moral ends through many-sided interests (Brubacher 1966, 16).

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[54] In Königsberg Herbart had the opportunity to set up a pedagogical seminar and test his theories (Hilgenheger 2000, 8–10).
[55] Herbart met Pestalozzi in Burgdorf, where he observed Pestalozzi method in action. Afterwards (1802), he wrote *Pestalozzis Idee einer ABC ser Anschaung* with the idea of advancing the method (Grue-Sorensen 1961, 119–120).

Man's interests came from two sources: his contact with the things in his environment (real things, sense impressions) and from his relations with human beings (social intercourse). His social responsibilities and duties should be determined by the nature of the social organization which he was part.[56] The purpose of the teacher was to give pupils new experiences through contacts with real things, which had to be elaborated in a process by which new knowledge would be assimilated with things that students already knew. This principle, called the doctrine of apperception, which meant in instructional terms that the child had to led into a proper frame of mind to apperceive the new knowledge (*ibid.,* 212–214).

The psychological theory of apperception had it basis in Herbart's metaphysics. According to him, the nature of the world involved a large numbers of independent "reals" similar to the monads of Leibniz's philosophy. The soul or psyche of the learner was just one among of these many reals in the world. As a real, the soul was a simply unity and utterly "colorless"; it had no ideas, feelings or will. Yet, though deficient in these respects, the soul did possess one characteristic feature: it could maintain itself in competition with changing reals. Herbart claimed that all ideas and sensations that entered one's mind stayed there and influenced either consciously or unconsciously the results of their never being destroyed or completely forgotten.[57] With particular combination of reals or ideas, man determined what kind of things he was to pay attention to (Brubacher 1966, 146). In his apperception theory, Herbart followed the road which Hume had embarked. Herbart, who derived his pedagogical thinking from Kant, was in his epistemology closer to Hume and British associationism. Herbart reacted against Kant's assertions that mental phenomena would vary in only a single dimension. For Herbart, ideas were construed as varying not only in time but also in quality and *"intensity or force (Kraft)…an attribute which is equivalent to clearness."* Mathematics could therefore be applied to the analysis of mind,[58] yielding both a mental static's (the mathematics of qualitatively separate ideas varying in intensity) and a mental dynamics (the mathematics of ideas varying in time and intensity) (Wozniak 1999, 53).

The importance of Herbart thus arises from his twofold position: in the field of education he presented the empiricist approach, which had its roots in British philosophy's Bacon, Locke, and Hume (Wright 1992, 38). On the other hand; the standard account of the development of psychology as a science had its first steps in a path from Kant to Herbart following Fechner to Wundt; from philosophy to mathematics following experimental measurement to the laboratory (Wozniak 1999, 55). In the field of moral theory, Herbart differed from Kant. According to Herbart, the foundations of morals were linked to aesthetic. Herbart claimed that ethical ideas were nothing other than aesthetic judgements on elementary states of volition (Hilgenheger 2000, 2). To Kant, morality was purely a postulate of practical reason and thus based on duty. The theory Herbart presented, was a

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[56] This feature of "status que" was to be one of the main targets of criticism leveled against the "old school" in the 20th century.

[57] In this respect, Herbart influenced the empirical psychologies of Wilhelm Wundt but also on the psychoanalysis of Sigmund Freud (Hilgenheger 2000, 2).

[58] Kant rejected the possibility of logical psychologism (see page 55 above).

combination of associationism, educational teaching, and idea of "versatile interests." In terms of apperception, interest, like will, was a function of ideas. Only with the power of interest was the necessary inner force for will reached to take the action needed for the learning process to proceed. The role of the teacher[59] wasn't only to find the interest in a specific situation but to maintain this attitude afterwards. The worst sin of teaching was thus boredom (*ibid.,* 6).

Herbart criticized what he characterized as the atomistic curriculum of his day. Each subject seemed to be on a different shelf in the schools, which, testament to the multiplication of subjects in 19th century, was affecting the atomism and pluralism of the curriculum greatly (Brubacher 1966, 297). To avoid this kind of situation prevailing, Herbart and later his follower Tuiskon Ziller (1817–1882) presented a system of "correlation and concentration" whereby all subjects would be integrated with related ones. Teaching should be multilateral, which meant that geography, economics and history should be linked together in such a way that students could see the relationships that provided the basis for new knowledge (Ozmon, Craver 2003, 75). The theory of concentration differed from correlation in the way that one subject was "concentrated on" as the core of curriculum. For Ziller, that key subject was history.[60] On the basis of Herbart's work, his followers, the Herbartians, designed a system of five formal steps of teaching, which was to form one of the basic principles in modern pedagogies. These were:

1) Preparation – the teacher calls previous learning experiences to the learner's attention.
2) Presentation – the new materials are summarized or outlined.
3) Association – the new ideas are compared with the old.
4) Generalization – rules and general principles are derived from the new materials
5) Application – the new generalizations are given meaning by relating them to specific instances.

According to this method, teachers' function was to import knowledge by utilizing students' previous knowledge. This required that teacher know the children's interest and previous experiences. On the other hand, the method gave teachers an easy-to-apply, predictable form to use in instruction (Tanner, Tanner 1990, 57). This was not, however, what Herbart had in mind. The conceptual means of education derived from Herbart's theory permitted a flexibility that his followers were using in an unjustified way.[61] The formation of the individual student in education was replaced by mechanical methods and ideology, which was suitable in justifying the increasing "schooling" in society. Unfortunately, consensus on the moulding of the minds for docile citizenship via "school curricula" became more and more general. Herbart, who

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[59] As a neohumanist, Herbart argued that the forms of teaching were more important than the content of subjects. The means that what the teacher had in the classroom were Regierung, Unterricht and Zucht – i.e. government, instruction, and cultivation. (Grue- Sorensen 1961, 132–133).

[60] The leading Herbartians in America, Frank McMurry and Charles McMurry, chose geography instead of history (Brubacher 1966, 298).

[61] For instance, the actual writings of German educator were not widely known in Herbart's society in America (Tanner & Tanner 1990, 99).

was originally interested in the individual's formation in the context of the public school, had to enter history as the founder of the passive, intellectualistic listening school against which the "new education movement" – i.e., reform pedagogy in Germany – later was to fulminate (Depaepe 2002, 363).

Froebel

The romantic ideas of Rousseau, as much as they were developed by Pestalozzi, were to be fulfilled in Friedrich Wilhelm August Froebel's (1782–1852) pedagogy and writings. The main goal of education according to Froebel was the child's self-realization, which *a priori* was self-actively constantly striving to assert itself (Brubacher 1966, 288). Froebel, who lost his mother before the age of one, was dreaming of schools that were not dreadful or boring. Instead, he thought, the child would be allowed to be led by his own interests and to explore them freely. Froebel's other area of interest was gardening. Thus, the educational concept of "Kindergarten", the first founded in 1837, was his logical educational conclusion: a place where children could "blossom" as flowers did. The idea of the garden of the children was that children would have the right to play and to be encouraged by interested adults (Cohen, 1993, 27.)

Froebel, who visited Pestalozzi's school in Yverdun 1805 and 1808–1810, derived his philosophical ideas from pure idealism. Pure or German idealists like Johann Gottlieb Fichte[62] (1762–1814) and Georg Wilhelm Friedrich Hegel (1770–1831) reached the view that state was the embodiment of the reflective wisdom of history and that education was the means to form individual in the progress of that state. (Adelman 2000, 105–107). From this idealism emerged Froebel's conception of Divine Unity:

> *In all things there lives and reigns an eternal law. ... This all-controlling law is necessarily based on an all pervading, energetic, living, self-conscious, and hence, eternal Unity. ...This unity is God. All things have come from the Divine Unity. In all things there lives and reigns the Divine Unity, God. All things live and have their being in and through the Divine Unity* (Froebel 1889, 1).

Despite monistic tendencies, Froebel placed an emphasis on education that would bring up free, thinking, and independent men. Compared to Pestalozzi or even more to Herbart, who claimed that education was to be set on observation of outer reality or variety of interests, Froebel differed radically in his view. According to him, the proper aim of education was to provide opportunity for the expression of one's inner principle of activity (Brubacher 1966, 14–16). Thus, learning started from within; it worked outward from within and was a process of realizing an inner self (*ibid.,* 288). The means of Froebel's education were still very similar to those of Pestalozzi. He even incorporated the Pestalozzian object instruction into his own methodology, by presenting his "gifts." The idea of gifts wasn't, however, linked to Pestalozzi's idea of training faculties but was to give children symbolic knowledge of universal aspects of external world like a ball (referring to all-inclusive unity), cube (a form very opposite to ball), and cylinder (a transitional form between the other two) (*ibid.,* 216). Children were able to discover these "gifts" with indoor garden experiences. Among these activities were:

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[62] Froebel attended his lectures at the University of Jena in 1797 (Adelman 2000, 107).

- Plant window boxes with bulbs. Paper-white narcissus bulbs will grow and bloom quickly indoors.
- Create a classroom terrarium in a clear fish tank; filling the tank with layers of gravel, sand, and soil; and planting mosses and ferns. Caring for this mini-ecosystem lets children observe life.
- Planting seeds of rapidly growing vines such as beans and sweet peas.

The idea of Froebel's kindergarten had a more conventional and general characters as well, of course. The aim of education was to involve meeting each child's need for:

- physical activity
- the development of sensory awareness and physical dexterity
- creative expression
- exploration of ideas and concepts
- the pleasure of singing
- the experience of living among others
- satisfaction of the soul
  (from Early Childhood Today 2000, 1)

Paradoxically Froebel's writings, which are peculiar combination of highly metaphorical mysticism, idealistic philosophy, transcendentalism, nationalism and even Gnosticism, were highly valued in educational history, especially in United States, where the Child Study movement was gaining academic respectability in the 1890s (Baader 2004, 428–429, Tanner, Tanner 1990, 103). Still notably, the most famous criticisms of Froebel's thinking were raised by John Dewey in *The School and Society*, according to which Froebel's *"excessive emphasis on symbolism"* led to artificiality in kindergartens and had nothing to do with the child's own imagination. The use of artificial materials instead of ordinary toys in play was surely *"mere superstition"* (Dewey 1990, 122–123).

Despite the facts mentioned above, Froebel's kindergartens formed the very basis of early childhood education as it is today. His role in educational history proved much more important in American than in Germany, where Pestalozzi has been considered a more important figure. The explanation for this is related to the differences between these two societies. In German, family care higher regard than kindergarten. By contrast, the idea of the kindergarten suited well the needs of U.S., where immigration created need for a system where various languages and cultural backgrounds could be integrated (Baader 2004, 437–438).

Spencer and Dewey

The view that society should be organized in accordance with the laws of nature and that the government should interfere least in the lives of individuals is usually attributed to Classical Liberalism, most famously presented by John Locke and John Stuart Mill. In education, liberalism had its most important strand in Anglophone philosophical tradition, a contrast to developments on the Continent (Lovlje & Standish 2002, 329). The other ideas that prospered in British soil – such as sense realism, utilitarianism, and industrialism – led in the 19th century to the development of the naturalistic and later on

positivistic ideas.[63] "Naturalism" is, of course, a term that has been used in several ways. If naturalism is understood by its broader definition, it certainly consists of Romantic and anti-intellectual as well as nihilistic ideas. That kind of definition draws together a variety of rationalistic, utopian and moralistic theories. Rousseau, on account of his contribution to the concept of the "natural man," often has been deemed as naturalist in this sense. His naturalism was, however, "truth to nature" (Dent 2005, 197) and had little to do with the naturalism based on sense realism. Thus, to make a clear distinction on an epistemological basis, it is more logical to call Rousseau and his followers Romantic rationalists. Naturalism with sense realism, in turn, was presented in England.

Herbert Spencer (1820–1903), primarily known as the political theorist of the *"laissez faire"* state, made his major work contribution in the field of sociology. His originality lay in his formulation of the laws of evolution and application to the scientific study of psychology, sociology, biology, education, and ethics.[64] The importance that Spencer had on the field of education[65] arouse from his book *Education,* published in 1861. It begins with his famous essay under titled "What Knowledge Is of Most Worth?" – capturing the essence of naturalism:

> *"Thus to the question we set out with – What knowledge is of most worth? – the uniform reply is – Science. This is the verdict on all the counts. For direct self-preservation, or the maintenance of life and health, the all-important knowledge is – Science. For that indirect self- preservation which we call gaining a livelihood, the knowledge of greatest value is – Science. For the due discharge of parental functions, the proper guidance is to be found only in – Science. For that interpretation of national life, past and present, without which the citizen cannot rightly regulate his conduct, the indispensable key is – Science. Alike for the most perfect production and highest enjoyment of art in its forms, the needful preparation is still – Science. And for purposes of discipline – intellectual, moral, religious – the most efficient study is, once more – Science."* (Spencer 1861, 53)

This list of the necessities of life that Spencer presents was at the time very radical. Not only was the criterion of value just the opposite than traditionally set forth, but also the hierarchy of studies was turned upside down (Brubacher 1966, 281). However, the influence of Spencer's writings was considerable: many of the subjects advocated by Spencer, such as physiology, were introduced, especially in American schools (Holmes 1994, 15). Most profound was the influence to come, when the work of the Commission on the Reorganization of Secondary Education in 1915 began. The Commission issued a report, which was called "The (Seven) Cardinal Principles of

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[63] The first theory of "natural" development of modern society was presented by Frenchman Auguste Comte (1798–1857). He claimed that human intelligence and society are governed by a law of three stages. The society develops through theological grounding to a metaphysical stage and finally a "positive" or scientific stage. This sociological theory had its counterpart in education as culture-epoch and recapitulation theories, the former presented in Hegel's and Herbart's philosophy latter in Froebel's and Darwin's writings.

[64] In biology, his theory of evolution, which was based largely on Lamarckian principle of the inheritance of organic modifications produced by use and disuse, was superseded later by Darwin's theory of natural selection presented in his book *On the Origin of Species* in 1859 (Gray 2005, 984).

[65] L.A. Cremin in *The Transformation of the School* (1961) claims that the revolution in American educational thought in the late 19th century had its origins in the work of Herbert Spencer (Holmes 1994, 15).

Education". According to this, the curriculum in primary and secondary schools was formed to meet objectives within the seven major areas, as follows:

Seven Cardinal Principles	Spencer's List
(1) Fundamental processes;	Self-preservation
(2) Health;	Producing necessities of
(3) Worthy home membership;	life
(4) Vocational efficiency;	Rearing children
(5) Civic participation;	Social and political
(6) The worthy use of leisure time;	relations
(7) Ethical behaviour.	Culture
(Brubacher 1966, 284)	

The Members of the Progressive Education Association, set up in 1918 and led by John Dewey, had the duty of to adopting the problem-solving approach to operationalize these expectations (Tanner & Tanner 1975, 228–229). Thus, the influence of Spencer's naturalism had direct implications to the schooling practises in United States. The philosophical influences, on the other hand spread through the work of pragmatists like Charles S. Peirce (1839–1914), Georg H. Mead (1863–1931) and especially William James[66] (1842–1910). John Dewey, who himself admired Spencer's "single-mindedness," was fully aware of the possibilities that evolutionary ideas could offer for modern education (Holmes 1994, 14).

John Dewey (1859–1952), the most prominent figure of "progressive movement" in American history, did more than any of his contemporaries theoretically unify educational thinking and action at the time when the new, modern society was born. The new kinds of legislation, structures, and citizenship created a need for a new kind of solution in education. More than ever, the role of education was to become central in this "progress". The progressive movement had its counterpart in Europe, where it was usually called the "new education movement". The idea of free, vocational and active schools in contrast to traditional humanist schools was presented in several countries – for example, in Sweden by Ellen Key (1849–1926), in Holland by Jan Ligthart (1859–1919), in Belgium by Ovice Decroly (1871–1932), and in Germany by Georg Kerchensteiner (1854–1932) and Peter Petersen (1884–1952) (Hytönen 1992, 20). Dewey, who was not only a cornucopia of philosophical approaches[67] but also an educational thinker and educational practitioner, never made a distinction between his philosophical and educational ideas. In his *Democracy and Education,* he stated:

> *If we are willing to conceive education as the process of forming fundamental dispositions, intellectual and emotional, toward nature and fellow men, philosophy may even be defined as the general theory of education.* (Dewey 1916, 328)

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[66] James, who in his *Remarks on Spencer's Definition of Mind as Correspondence* defined the pragmatist's views, was closely related in his ideas to Dewey's experimentalism. However the difference between James and Dewey was that James was more related to the individual than that of Dewey, who placed greater emphasis on a social and holistic approach (Väkevä 2004, 44–45).

[67] Dewey's collected works, available at the Center for Dewey Studies at Southern Illinois University at Carbondale, amount to 40 volumes of material (Ozmon, Craver 20003, 154).

In the preface to the same book, Dewey mentions four great movements for which the philosophy of education had to account. Those movements were the growth of democracy, experimental method in science, evolutionary ideas in biology, and industrial reorganization (Dewey 1916, iii). To Dewey, education was an essential part of society's renewal and thus an inseparable part of life. The school should be a microcosm of community and education as a part of living, not just a preparation for it. Dewey saw life as a series of ongoing experiments and felt that the school should be organized in accordance with the way life was (Henson 2003, 9):

> *When it is said that education is development, everything depends upon how development is conceived. Our net conclusion is that life is development, and that developing, growing, is life. Translated into its educational equivalents, that means (i) that the educational process has no end beyond itself; it is its own end; and that (ii) the educational process is one of continual reorganizing, reconstructing, transforming.* (Dewey 1916, 49–50)

Like Hegel, Dewey believed that education was essential for forming virtuous individuals for society. However, unlike the famous German idealist, he questioned the role of institutions in the traditional sense that presumed the young should "fit them in." More like Froebel, Dewey believed that children should be allowed to bring their own experiences and desires to school. According to him the values in education were to be the same as those found in democracy and science. In *Freedom and Culture,* he wrote:

> *...the freedom of inquiry, toleration of diverse views, freedom of communication, the distribution of what is found out to every invidual as the ultimate intellectual consumer, are involved in the democratic processes as in the scientific method.* (Dewey 1989, 81)

Hegel, who had an eminent position in 19th-century thought, was obviously a problematic figure to Dewey. The fact remained that Hegel had a profound influence on Dewey,[68] who admitted that, in particular, Hegel's philosophy's anti-dualistic and integrative perspectives left a "permanent deposit" in his thoughts. The core of the problem was, however, the Hegelian concept of Absolute Spirit. The Absolute Spirit, in which individuals were mere parts of the greater, more complete unified whole, was the state[69](Ozmon & Craver 2003, 26). Dewey claimed Hegel's philosophy led to the authoritarianism and educational conformity and could therefore "swallow up" concrete individuals (Dewey 1916, 59–60).The unity sought by Dewey was not a state but a community.

Dewey's attention to social action and educational unity made his philosophy decidedly pragmatic. He believed that people ought to use philosophy as a means to find new solutions to problems via critical appraisal and reflective assessment of results after trying out ideas and proposals in practise. As did William James, Dewey believed that no immutable absolutes or universals existed and that the only primary datum was thus to

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[68] His teacher George Sylvester Morris introduced him to Hegelian philosophy during his time at Johns Hopkins University.

[69] In his essay "German Philosophy and Politics" Dewey went so far as to claim that Hegel should not be called an idealist, but *''the greatest realist known to philosophy. He might be called a Brutalist''* (Bellmann 2004, 474).

found in experience. Dewey claimed that most thinkers embark on a "quest for certainty" in which they would find truth, instead of looking for practical solutions to practical problems. The terms "experimentalism" and "instrumentalism" as he used referred to the idea that ideas would be used as instruments in finding solutions to the problems. Solutions should be tried on an experimental basis, and we thus learn from our efforts and redirect them in accordance our experience (Ozmon, Craver 2003, 136–138).

In *How We Think* (1910), Dewey presented his theory of inquiry,[70] which consists of five-step analysis:

1) A **felt difficulty**: a state of perplexity, hesitation, doubt, which blocks the ongoing experience
2) Its **location and definition**: finding the meanings of the problem.
3) **Suggestions of possible solution**: finding a hypothesis for the problem with suspended judgment
4) Development by reasoning of the bearings of the suggestions: reasoning the outcomes of possible acts
5) Further observation and experiment leading to its acceptance or rejection: the conclusion of belief or disbelief
(Dewey 1997, 72–78)

The method of inquiry wasn't, however sufficient on its own. According to Dewey, reflective thinking requires, most at all, attitudes that make the real inquiry possible. The importance of attitudes is equally necessary in practical, moral, and intellectual affairs:

1) **Open-mindedness** consists of freedom from prejudice and partisanship, and willingness to consider new problems and entertain new ideas. Its counterpart is empty-mindedness.
2) **Whole-heartedness** is needed for good thinking. When one is thoroughly interested in something, he throws himself into it. When person is absorbed, the subject carries him on. If the interest is divided or external, true learning rarely occurs.
3) **Responsibility**, meaning that one is willing to adopt consequences of one's decisions, secures integrity and unity that is consistency and harmony in beliefs.

All these were needed for good **habits** of thinking (Dewey 1974, 224–227).

Dewey's method of functioning habits had its roots in James's biologically oriented psychology, which emphasized action, need, desire, and interest; his view wasn't rationalistic or mechanical but organic and functional. The transactional functional unity of the self (organism, knower, subject, and mind) and the world (environment, known, object, and body) was Dewey's full solution to Cartesian dualism; at the same time, his formulations opposed the Kantian distinction between the categories and forms of knowledge (Väkevä 2004, 50). According to Dewey, the barrier between formal and vocational education was not justified but an abstraction. The ideal of pure knowledge as Kant had formulated would be replaced by situational understanding, which ought to be

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[70] Same steps are found in *Democracy and Education* with slight differences in connotations. The fourth step is added, with the idea of responsibility (Dewey 1916, 163).

used in formulating judgements in the different contexts. For Dewey, education was rather an art than a science (Ozmon & Craver 2003, 141). The art element had an essential part in Dewey's thinking. In his book *Art As Experience*, Dewey claimed that *"art is a quality of doing and of what is done"* (Dewey 1934, 214). Art was to him a bridge between form and matter, and therefore confusing art with its presentation or objects was a fundamental mistake (*ibid.,* 219). Because the objects of arts were expressive, they were languages in accordance with the medium and especially fitting for that kind of communication (*ibid.,* 106). According to Dewey's unifying logic, art was the meanings that filled the gab between the form and matter. The aesthetic experience wasn't therefore to be left to the artist alone. Art had to be applied to the ordinary activities of life. Good education should unify mind and body, thinking and doing, thus becoming the supreme art form – the art of education (Ozmon & Craver 2003, 141).

Dewey's method laid considerable expectations on the educator. Knowledge of the academic subject matter no longer made a good teacher. To teach well, a teacher had to connect the subject matter to the needs, desires, and interests of the student in the context of the social, physical, and political environment. The virtue of teachers was the capability to make a distinction between the knowledge of student and of the teacher. The greatest fallacy of pedagogy, according to *Experience & Education,* was *"the notion that a person learns only the particular thing he is studying at the time."*

Collateral learning in enduring attitudes was probably more important than the subject matter at hand because formation of attitudes was the thing that fundamentally counted for the future (Dewey 1938, 48). In his philosophy, Dewey didn't separate thinking, feeling, and acting. That did not mean that Dewey would have ignored books, the relevant subject matter, and the need for periodic drill in education, but those were just parts of the process. The aim of education was growth in personal judgment and social intelligence. That aim was to be found in purposeful human activity, which had its potential in the individual's intellectual, emotional, aesthetic and moral growth (Ozmon & Craver 2003, 154).

As did Kant in his philosophy, Dewey thought that he had wrought a *"Copernican revolution"* in the field of education. As famous as his laboratory school in Chicago was and as productive as his long career proved, Dewey's thinking was probably too liberal and complicated for his time. His method was also difficult to undertake and was misunderstood by progressivism.[71] The struggle between different curriculum types wasn't solved by the Deweyan approach; instead, S – R bond psychology or connectionism was efficiently affecting education, as stated by Ellen Lagerman:

> *[O]ne cannot understand the history of education in the United States during the twentieth century unless one realizes that Edward L. Thorndike won and John Dewey lost...* (Gardner 2004, 196)

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[71] In *Experience & Education*, he tried to explain his position between the traditionalists and progressivism.

The school Dewey was dreaming of was one in which old divisions and methods would have been overcome. The question is whether he was too utopian and how the unity of the curriculum would be achieved.

Before examination of these issues in greater depth, a conclusion concerning what has been discussed has to be drawn. In Figure 6, educational thinkers who actually took action to develop education and teaching are reinforced with thicker lines for their cell.
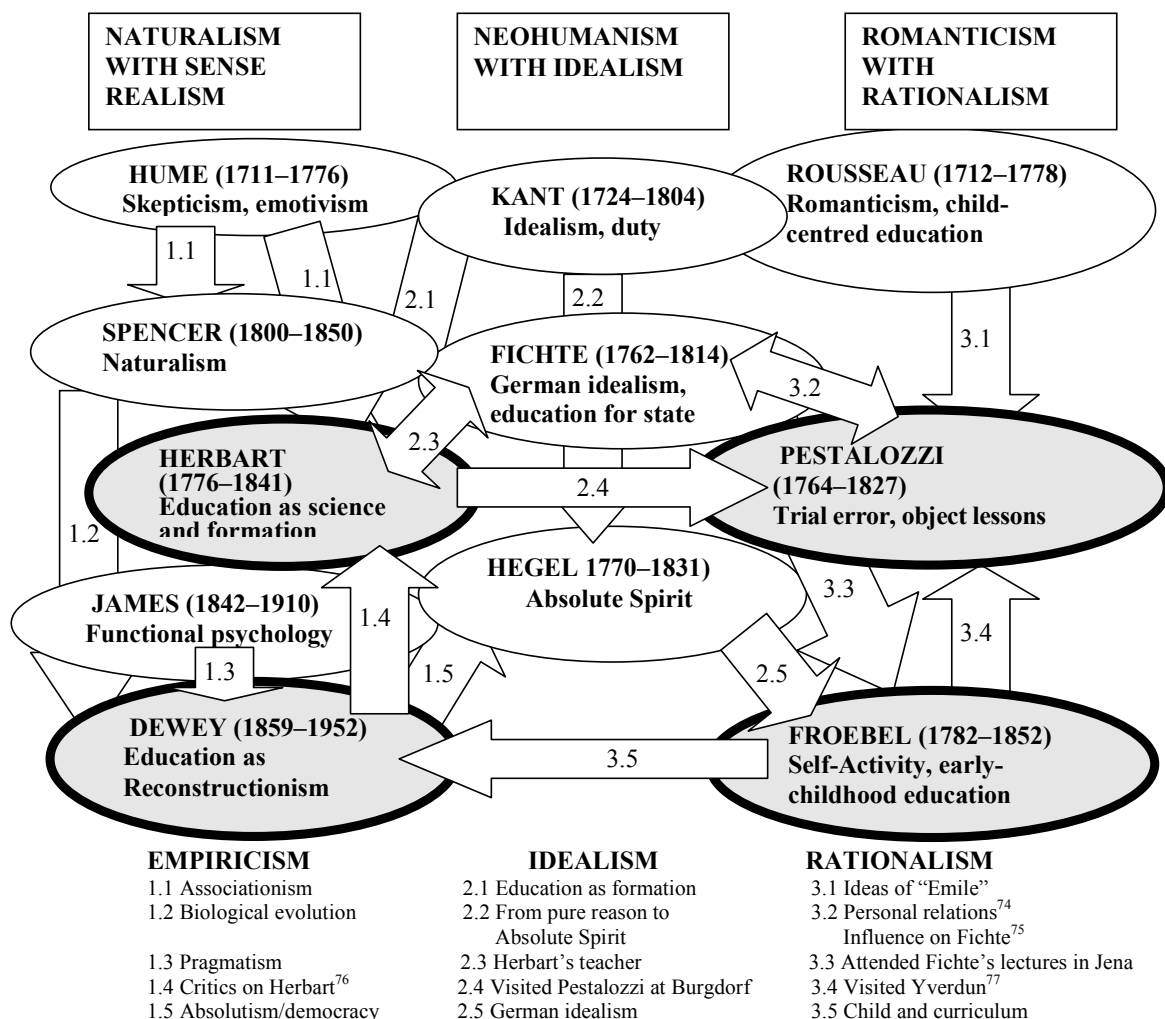

EMPIRICISM	IDEALISM	RATIONALISM
1.1 Associationism	2.1 Education as formation	3.1 Ideas of "Emile"
1.2 Biological evolution	2.2 From pure reason to Absolute Spirit	3.2 Personal relations[74] Influence on Fichte[75]
1.3 Pragmatism	2.3 Herbart's teacher	3.3 Attended Fichte's lectures in Jena
1.4 Critics on Herbart[76]	2.4 Visited Pestalozzi at Burgdorf	3.4 Visited Yverdun[77]
1.5 Absolutism/democracy	2.5 German idealism	3.5 Child and curriculum

FIGURE 6. Three philosophical streams in education

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[72] However, Pestalozzi didn't agree with Fichte's philosophy of state. The correspondence between their wives has remained as evidence of personal relationships (Adelman 2000, 107).

[73] Especially during 1807 – 1808 while writing *Addresses to the German Nation*.(Dimic2003, 779).

[74] In the *First Yearbook of the National Herbart Society*, in 1895, Dewey criticized Herbartian psychology for its social implications. Despite this *"schoolmaster's psychology"* not all aspects of similarity between these two men's work have been discussed fully (Bellmann 2004).

[75] In 1808–1810 (Adelman 2000, 110).

It seems that the streams of educational thought in 19th century create a net of meanings to explore. However, the situation isn't so complicated if we take a look at the teaching-and-learning process through a combination of curriculum and instruction. To have these two combined, following figure can be presented.
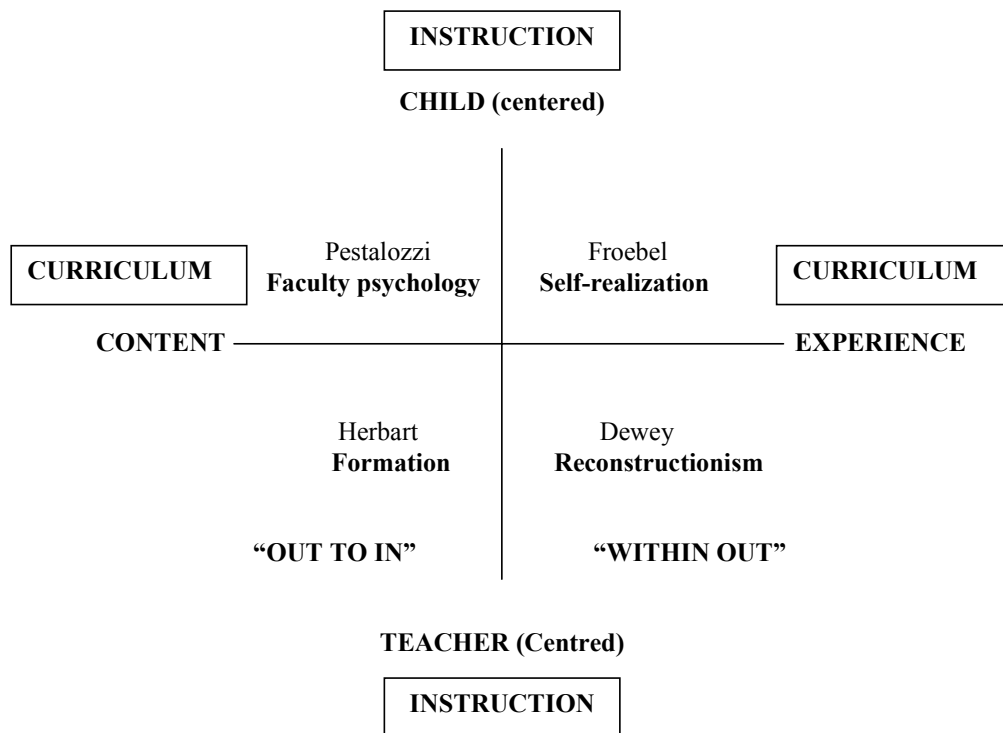

FIGURE 7. The four approaches to education.

The basic "ontological question" of learning divides the figure into right and left sides. Learning from "out to in" is situated on the left side, while the concept of learning from "within out" is found on the right-hand side. The epistemological division between empiricism and rationalism, by contrast, is situated differently. Rationalists and idealistic educators are presented in upper part of the map, with empiricists and pragmatists in the lower part. As already claimed, German idealism and naturalistic Romanticism had their roots in rationalism. In the same manner, pragmatism has an analogous relationship to empiricism.

The methodology separates all four educators as labelled in the figure: training faculties, self-realization, formation, and reconstructing the reality. In spite of the differences, the ideas that these men shared similar traits also: for Pestalozzi, of key importance was the balance between the three elements – heart (morality), head (judgment), and hands (art) – while for Froebel the key was "divine unity," for Herbart the united mind was elevated through many-sided interests, and for Dewey unity was achieved between experience and the subject matter. The common feature of these

approaches was the quest for the balanced curriculum and criticism of the "traditional" school and whatever it then was.

The fallacies of these approaches have been mentioned already. Herbart, who believed to the elevating force of the reals, was accused of creating a passive, intellectualistic listening school that didn't heed the needs of pupils. Pestalozzi's insistence upon the active use of the senses had its failure, splitting reality in a mechanical way, which didn't aid in the student's to understanding of the whole. Froebel was accused of superstition and putting too much emphasis on the child's capabilities. This criticism, which was quite common, was also put forth methodically by John Dewey.

Dewey, who put emphasis on reorganization and transformation of the curriculum, saw experience as a conscious mental state. The experience was an agent's "doings" with accompanying "feelings", a dimension captured by the expression "what is like". The idea of experience was so central for Dewey that he even used the concepts of the child and experience as if they were synonymous. He also posed the problem of learning and thinking in relation to social institutions, schools, and society in such a way that he used "child" referring to mind and "curriculum" to society, with education as the negotiation between those two (Olson 2003, 123–126).

The failure in this approach is that it does not consider the normative dimension of institutions nor draw a distinction between belief and knowledge. In other words, what is taken as known by an invidual may be defined as assumption but when taken up by an institution becomes simply "knowledge." Institutional knowledge is the forms of knowledge that is known in science, law, or any legitimate institution (including the school) (Olson 2003, 77). A peculiar notion is that Dewey's philosophy in this respect had a blind spot. The instruction and curriculum was treated one-dimensionally, and the role of instruction was taken over by psychology. As Dewey wrote in *The Child and the Curriculum*:

> *Hence the need of reinstating into experience the subject-matter of the studies, or branches of learning. It must be restored to the experience from which it has been abstracted. It needs to be psychologized; turned over, translated into the immediate and individual experiencing within which it has its origin and significance.* (Dewey 1902, 200)

As radical as Dewey thought he was, the idea wasn't exactly new.[76] The 19th century's social science movement, both in Britain and the United States, had contributed multiple corrective, remedial and improving actions based on new social sciences. Those actions also influenced education significantly. For example, in Britain the National Association for the Promotion of Social Science (NAPPS), established in 1857, took a strong interest to the question of compulsory education. In the United

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[76] For example, similar thoughts, practises, and experiments (without using the word "psychology") had been presented in Britain as early as in 1816 by industrialist, social theorist, and educational pioneer Robert Owen. The aim of Owen's "Institution for the Formation of Character" in New Lanark, Scotland, was the social reconstruction of character through habit formation. This formation was training, and education should involve natural and spontaneous experience such that children enjoy themselves (James 2002, 11–12).

States, the premises for a new kind of educational psychology were discussed by the American Social Science Association (ASSA), established in Boston 1865. Education, as Professor W.P. Atkinson from Cambridge, said, had to be "founded on a science of the mind" (Silver 1983, 102–115.)

Even the science of mind had two straits, one linked to the pragmatists and the other to the connectionists; the fact was that they both had a close relationship to each other.[77] Educational psychology in its true sense was established by the work of William James's student Edward Lee Thorndike (1874–1949) at the Teachers College of Columbia University. Through his writings and the impact of his students, Thorndike redefined the relationship between scientific psychological research and educational practice. He brought learning to the forefront of scientific psychology and defined psychology as the scientific study of the relationship between stimulus and response (Wozniak 1999, 192). In those circumstances, the role of curriculum development became central. The difference between the Continental and Anglo-American approaches to teaching and education grew even more evident than it already was historically.

In educational research this phenomenon has been raised for discussion by Brian Simon's article "Why No Pedagogy in England?" (Simon, 1981). The core of Simon's claim is that pedagogy, the act and discourse of teaching in England, has been neither coherent nor systematic, but has been concerned instead about learning. English educators have not developed anything comparable to the Continental European *Didaktik* (Alexander 2004, 8). Looked at plainly, the usage of words in German and English helps us to notice that the term of "didactics" doesn't really exist in Anglo-American countries. Instead, "curriculum" and "teaching," or sometimes "pedagogy," is used. In the German tradition, *Didaktik* is linked to the theory of *Erziehung* while the Anglo-American approach is more concerned with empirical emphasis (Tella & Harjanne 2004, 27).

Whether this state of affairs is cultural in nature, having deep roots in different countries' philosophical orientation, or is a result of different psychological straits developed in those countries cannot be answered completely. One possible solution to this paradox could be found perhaps in the history of Herbart and his followers. While Herbart himself focused in his theory on education (*Bildung*) and teaching (*Erziehung*), the Herbartians focused only on the organization of instruction (Hamilton 1999, 144). The Herbartians' influence in North America with the domination of social sciences shaped the theory of instruction and linked it to the idea of curriculum development. Pertti Kansanen (2002, 437) has summarized this difference as follows:

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[77] Even in the midst of a widespread reform movement in education, gathering reliable quantitative data concerning student outcomes was an essential goal for all parties involved in education (Wozniak 1999, 150).

TABLE 6. Main aspects emphasizing typical elements of didactics and educational psychology.

	Didactics	**Educational psychology**
Mission	Building models or systems for the instructional process in the society	Developing theory in the area of educational psychology
Background philosophy	*Geisteswissenschaften* with hermeneutics, also empiric-analytic	Empiric-analytic approach, also interpretative
Value background	Values defined according to some curriculum	General value basis in the society
Context	Some institution	The instructional process in general including institutions
Concern	Achieving the aims and goals of some curriculum	Motivation and learning, student characteristics
Object of the attention	Totality of the instructional process	Some special topic of the instructional process
Focus	Selecting content and organizing it for the instructional process	Activities in the instructional process
Content	Subject matters in the curriculum	Not restricted by some curriculum
Relation to practice	Normative with recommendations and advice	Descriptive and analytical

When we compare this table to one presented on the first pages of this chapter, the Classical and Romantic curricula of Lawton, the difference between Continental and Anglo-American thought becomes even more evident. It seems that Anglo-American education is rooted in Romantic ideas of curriculum. Continental European education, which has its didactic tradition, seems to rely on more a traditional curriculum and formal instruction. Interestingly, these two cultures are both integrated in the Finnish teacher education system.

TABLE 2. The Classical and Romantic curricula (Lawton 1982, 22–23).

Elements of the Classical curriculum	**Elements of the Romantic curriculum**
Subject-centred	Child-centred
Skills	Creativity
Instruction	Experience
Information	Discovery
Obedience	Awareness
Objectives	Processes
• Acquiring knowledge	• Living attitudes and values
Content	Experiences
• Subjects	• Real life topics and projects
Method	Method
• Didactic instruction	• Involvement
• Competition	• Co-operation
Evaluation	Evaluation
• By tests (teacher-set)	• Self-assessment (in terms of self-improvement)
• By examinations (public and competitive)	

For more evidence supporting our hypothesis of cultural difference, let us look at how Jerome Bruner (1966) defines his theory of instruction in *Towards a Theory of Instruction*:

> *A theory of instruction has four major features: First, a theory of instruction should specify **the experiences** which most effectively implant in the invidual **a predisposition** toward learning...*

> *Second, a theory of instruction must specify the ways in which a body of knowledge should be structured so that it can be most **readily grasped** by learner...*

> *a body of knowledge; structure must always **be related to the status and gifts** of the learner. Viewed in this way, the optimal structure of **knowledge is not absolute but relative...***

> *Third, a theory of instruction should specify the most **effective sequences** in which to present the materials to be learned...*

> *Finally, a theory of instruction should specify the nature and pacing of **rewards and punishments** in the process of learning and teaching. Intuitively it seems quite clear that as learning progresses there is a point at which it is better to shift away from extrinsic rewards, such as a teacher's praise, toward the intrinsic rewards inherent in **solving a complex problem for oneself**....*
> (Bruner 1966, 40– 42; emphasis mine)

It is interesting to note how the historical traits of Lockean sense realism, Romantic ideas, and pragmatism are mixed here. Also, the name of the Bruner's book is revealing. *Towards a Theory of Instruction* is by written a psychologist who seems to have an utter lack of historical grip on his work.[78] Bruner seems unaware that theories of instruction exist:

> *Finally, one is struck by the absence of a theory of instruction as a guide to pedagogy – a prescriptive theory on how to proceed in order to achieve various results, a theory that is neutral with respect to ends but exhaustive with respect to means. It is interesting that there is a lack of an integrating theory in pedagogy, that in its place there is principally a body of maxims. (ibid., 31)*

Finally, the hypothesis of teaching as a psychologized curriculum treatment is confirmed:

> *But a theory of instruction, which must be at the heart of educational psychology, is principally concerned with how to arrange environments to optimize learning according to various criteria – to optimize transfer or retrievability of information. (ibid., 37–38)*

This analysing is made not to minimize the value of Bruner's words[79] but to enlighten, and comprehension of the idea that teaching practises reflects the large sociocultural, historical, and philosophical premises:

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[78] Though he mentions Dewey and Goethe once, there is no historical perspective. As we noted earlier, modern science (even in humanism) could be detached from both history and tradition after Bacon and Descartes.
[79] In *Acts of Meaning* (1990) and *The Culture of Education* (1996), Bruner represents a totally different cultural view of education, though *"still holding firmly"* (1996, 39) what he said in the 1960s.

> *Looking at the literature, there is a powerful argument that systems are the main determinant for differences between countries. What is often neglected is that national cultural traditions are the philosophical and intellectual base on which systems are built. These traditions depend on philosophical beliefs about education, but once in place they become part of the structure of the system and teachers have to work within them.* (Pepin 1999, 14)

Though education is a complicated form of social institution, it can be delineated and systemized in the context of historical and comparative science. In this manner, Tanner & Tanner in their *Curriculum Development: Theory into Practise* (1975, 66–67) have specified the conflicting educational views.

TABLE 7. Synoptic view of conflicting educational philosophies (Tanner & Tanner 1975).

Philosophy	*Controlling Aim*	*Curriculum*
Perennialism	Cultivation of the rational powers; academic excellence	Liberal Arts; Great books
Essentialism	Academic excellence; cultivation of the intellect	Fundamental academic disciplines
Experimentalism	Reflective thinking for social problem solving; democratic citizenship; growth	Comprehensive, unified, problem-focused studies, in democratic class-room setting
Reconstructionism	Building an ideal democratic social order (a practical Utopia)	Social problems, corrective programs scientifically determined for collective action
Romantic Naturalism	Invidual freedom to develop one's potentials	Learning activities based upon child's felt needs
Existentialism	Inner search for meaning of one's own existence	Themes on the human condition; learning activities, free of rational constraints, designed to free the invidual to find his own being
Philosophy	*Method*	*Ideal of learner*
Perennialism	Mental discipline; literary analysis	Rational being guided by first principles; mind elevated above biological universe
Essentialism	Mental discipline; mastery of academic subject matter	Rational being in command of essential facts and skills that undergird the intellective disciplines
Experimentalism	Social problem solving through reflective thinking (scientific method) and democratic processes	Autonomously thinking; socially responsible democratic citizen: organism in biological continuity with nature
Reconstructionism	Critical analysis of societal flaws and programmatic needs for corrective action	Rebel committed to and involved in constructive social redirection and renewal
Romantic Naturalism	*Laissez faire*; free learning environment for artistic self-expression	Unfolding flower
Existentialism	Introspection (examining one's own feelings, impulses, thoughts) in a free learning environment	Flower in search of the meaning of its own existence

Now, let us relate these views to the four-sector table presented earlier. With the figure changed according to the criticisms made of Dewey's work, the basic premise in that the teaching – learning process has two dimensions, having curriculum content and the form as well as education, which is interaction between the students and teacher. In this formulation, the teacher teaches children according to a curriculum, which is an institutional entity having both content and form. The experience is neither a child nor the form. Experience is a combination of feelings, thoughts and judgements, which are made through the instructional process and institutional setting.

INSTRUCTION

CHILD

Existentialism

Essentialism

CURRICULUM

Romantic
Naturalism

CURRICULUM

CONTENT — EXPERIENCE AND
JUDGEMENTS — FORM

Experimentalism

Perennialism   Reconstructionism
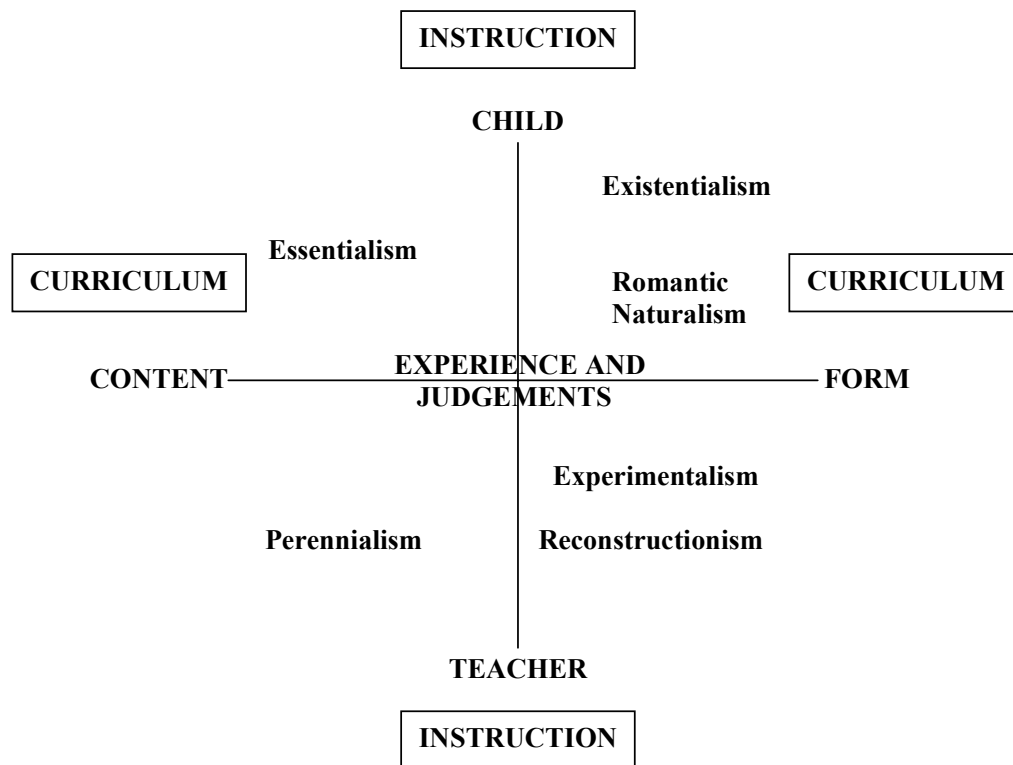
TEACHER

INSTRUCTION

FIGURE 8. Conflicting educational philosophies in four-sector table

In this figure, the experiences and judgements are something considered meta-cognitively, with room being left at the same time for the personalities and the ideas presented in instruction. The instruction is thus something that is not completely personal or plainly institutional in its nature. It is both and thus to done in cooperatively in institutions in order to achieve not just knowledge but also understanding of what it is like to live with other people in community and culture. The judgements and experiences in this frame are vitally important. Whether the judgements fail to be knowledge, instead remaining as assumptions or even misconceptions, is, of course, the greatest concern of any educational system. The results of educational philosophy should be analysed according to their aims, means, and outcomes as well as the historical and sociological background. On the other hand, we have to understand that looking at outcomes or means or aims alone does not give

us trustful comprehension of a single educational enterprise. How the judgements (at personal level, experience) are formed and how are they in balance with the reality is the key question. To test our hypotheses on well-known educational approaches, the following classification system can be drawn:

| INSTRUCTION |

CHILD

A)
Steiner
Suzuki

Montessori
Computer-based
learning
Vocational education

| CURRICULUM |

B)

Summerhill
Froebel

| CURRICULUM |

Reggio Emilia

CONTENT ———————————————— FORM

PBL
Liberal education
Great books
Latin schools

Multiple intelligences

C)

D)

TEACHER

| INSTRUCTION |

A) Methodological or ideological curriculum
B) Expressive curriculum
C) Subject-based curriculum
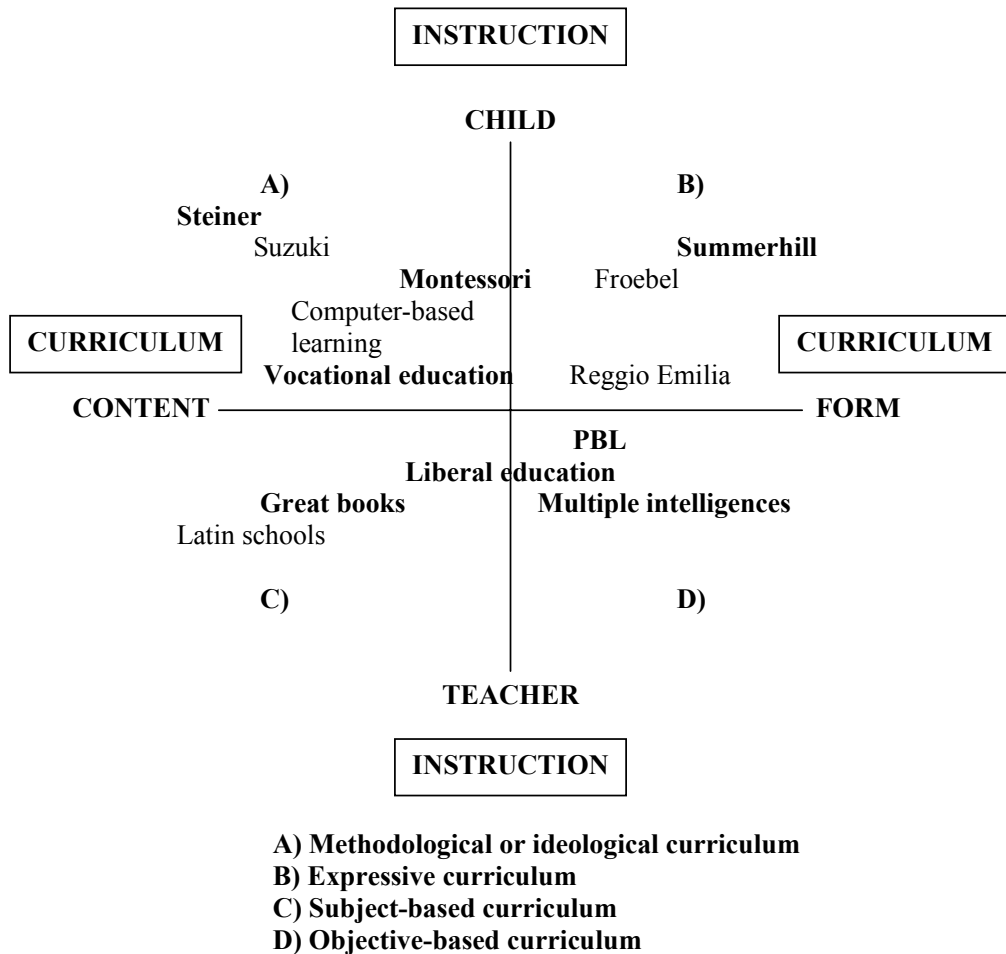**D) Objective-based curriculum**

FIGURE 9. Well-known educational approaches in four-sector table.

Since curricula in section A may seem child-centered (as we saw in the case of Pestalozzi), they share a definitive character of ready-made programming. That programming concerns as well as the material, learning environment and the methods that are used. The other characteristic common of these movements concerns the undoubted premises of the method or the literature on which the method is based. In our analysis, oft-applied counter-arguments that a certain kind of ideology ought not to be taken literally and that the teacher has the freedom to apply of his own version of a certain kind of education do not apply. In particular, this concerns **Steiner pedagogy**, which is often linked to artistic education. In our view, it is certainly not. To be just "artistic" is not art education. In addition, art has a special role in Steiner's curriculum; it has purposes and "theory" of its own.

The expressive curriculum differs from the methodological curriculum in that it allows more invidual meaning making than the latter. For instance, **Montessori education** often has been deemed expressive in its nature. However, it relies on certain material, methods and environments; thus, in our map it is situated in section A, although nearer to section B if we are precise. The expressive curriculum can be artistic or therapeutic in its nature. The variety of the pupil's freedom depends on the case at hand; the extreme example of the **Summerhill School** is found on the top right corner of the map.

In the subject-based section, we find two separate views, which are usually called as "**great books**" and "**liberal education**" movements. The former is based on the "core knowledge" or "cultural literacy" idea of intellectual capital – that is, the knowledge and skill a person possesses at a given time. The role of school is to provide all children equally with this matter as an opportunity to be independent and a free man (Hirsch 1996, 18–19).

The Liberal education in its turn has more to do with the forms of knowledge. Hirst (1975) has suggested that all knowledge and understanding is located in a number of domains, and he has proposed mathematics, physical sciences, knowledge of persons, literature, the fine arts, religion and philosophy as all having distinctive "ways of thinking." In teaching, the subject content is selected to exemplify the key concepts, criteria, and procedures that best represent the structure of a body of knowledge. It is assumed that within knowledge there are a number of distinct types of rational judgments. This kind of approach puts emphasis more on the techniques of different kinds of reasoning than actual subject (Martin 1998, 269).

In opposition especially to Hirsch (Gardner 2000, 24) and to a lesser to Hirst (Gardner 1993, 61–62), Howard Gardner claims that *a priori* knowledge cannot be the basis of curriculum. His list of **multiple intelligencies** and constructive views are based on cultural theory of learning and analysis of the symbol systems. Developed as an alternative to traditional **vocational education** (found in section A), in which the apprenticeship and content have not allowed much freedom for the learner, problem-based learning **PBL** allows the students to be more responsible for seeking out the knowledge they need in order to approach a certain problem. However, usually it is still the teacher who sets the problem in the first place and who has a fairly good idea of the general learning needs of the students and the resources required to help them clarify the issues.

While our figure was first drawn from educational history, a valuable idea to consider is that its theoretical background can be found also from the metaphysical system that Stephen Pepper book called "World Hypothesis"[80] (the assumption that learning would involve some isomorphism between the structures of social knowledge can be derived from common sense, too, of course). While Pepper discusses issues very similar to those we do – for instance, the tensions between the formal and common sense (Pepper, 1942, 44–46) – he also claims that all philosophies can be rooted in and are

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[80] The book was consequently found **after** I had defined my model. Once again it shows that the research can be made from grasping the reality to the theory.

cognitively refined to four relatively accurate world hypotheses (Kolb 1984, 109–110). The world hypotheses are the basic metaphysical assumptions that can be traced accordingly their view of the world. Every hypothesis has its own "root metaphor", in which the essence of world hypotheses is captured. The first of hypotheses is formism, also known as realism, whose root metaphor is the observed similarity between objects and events. The second metaphor is mechanism, also known as naturalism or materialism, with the root metaphor of the machine. The third hypothesis is contextualism, known also as pragmatism, with the root metaphor of the changing historical event. Finally but not least, the fourth hypothesis is organicism, also called absolute idealism, with a root metaphor of **integration** (Pepper1942, 280) or, as David Kolb put it, "achievement of harmonious unity" (Kolb 1984, 111). In his well-known book *Experiential learning*, Kolb presents a figure in which the processes of learning and Peppers world hypothesis are combined.
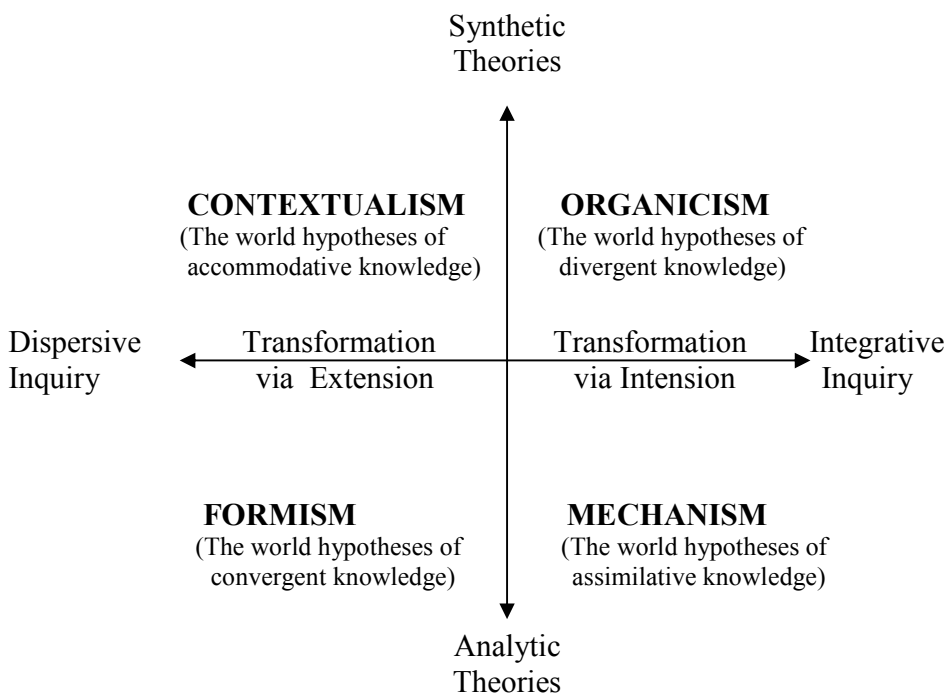
Synthetic
Theories

CONTEXTUALISM   ORGANICISM
(The world hypotheses of   (The world hypotheses of
accommodative knowledge)   divergent knowledge)

Dispersive   Transformation   Transformation   Integrative
Inquiry   ←   via Extension   via Intension →   Inquiry

FORMISM   MECHANISM
(The world hypotheses of   (The world hypotheses of
convergent knowledge)   assimilative knowledge)

Analytic
Theories

FIGURE 10. Pepper's System of World Hypotheses and the Structure of Learning (Kolb 1984, 112).

As one can see, the figure above is not fully equivalent to mine; contextualism and mechanism have been situated opposite to my "faculty psychology" and "Reconstructionism". However, apologising the possible inconvenience to the reader, I do not change my figure to correspond Kolb's, since the content of the two are the same (the y and x axes must be flipped). Still, since one of our goals is to present a definition setting forth the meaning of integration, we continue with a table constructed by Kolb.

TABLE 8. A typology of knowledge structures (world hypotheses) and their respective fields of inquiry (Kolb 1984, 120).

A Typology of Knowledge Structures (World hypotheses) And Their Respective Fields of inquiry				
World hypothesis	Contextualism	Formism	Mechanism	Organicism
Root metaphor	Changing historical event	Similarity	The Machine	Harmonious unity
Inquiry strategy	Discrete synthesis	Discrete analyses	Integrative analyses	Integrative synthesis
Modern philosophical forms	Pragmatism, phenomenology	Realism, scientific empiricism, Positivism	Materialism, naturalism, structuralism	Idealism, absolute idealism
Theory of truth	Operationalism – workability verification, qualitative	Correspondence	Causal adjustment, correlation of structure with confirmation, secondary qualities	Coherence – inclusiveness, determinacy, organicity
Basic inquiry question	How	When, where	What	Why
Basic units of Knowledge	Events	Natural laws; empirical uniformities	Structures: the locations and laws governing primary qualities	Processes
Dominant method of portraying knowledge	Actions	Thinks	Symbols	Images
Field of inquiry where it dominates	Social professions	Science-based professions	Natural science and mathematics	Humanities and social sciences

If the integration is to have one meaning, it would be the aim to the combination all world hypotheses. In education, that would mean that none of the subject areas in schools would be neglected at the expense of pursuit of general culture. In fact, the basic meaning of education would be to **see** and **understand** the world hypothesis in order to (it is hoped) **act** accordingly.

Thus, as important as experience in education is, equally important are the judgements related to them. The judgements ought to be truthful, beautiful and just. Education, like a proposition with the content and the form, is three-dimensional. It refers outside from itself to the "third" – to the meanings and the needs of the world as – referent.
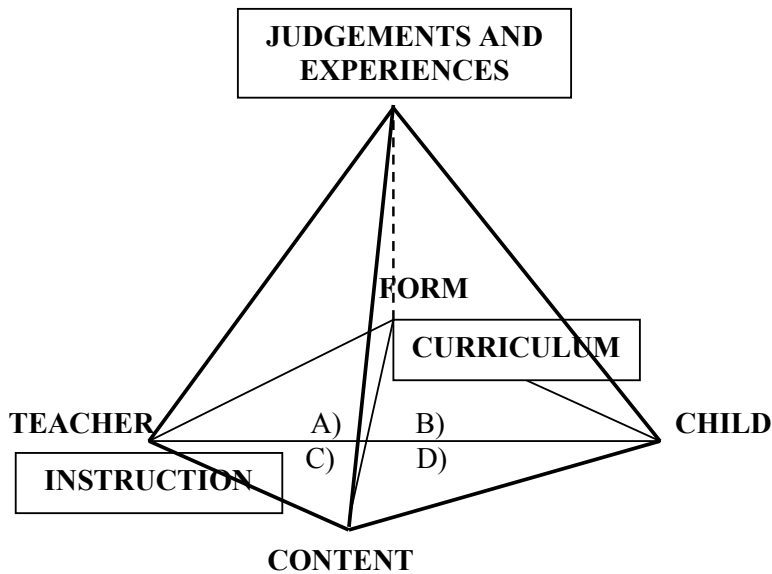
FIGURE 11. Model of education as meaning making

The model of education as meaning making:

1) Defines curriculum and instruction as institutional and social relationship
2) Separates experience from forms as well as child from curriculum
3) And; The experiences and judgments are seen to be different but equally important parts of the education

As Kant declared the unity between thoughts (content) and intuition (form), Dewey was looking for the unity and meaning of experience in the curriculum. Integrating these two views necessitates two tasks: to refine Kant's dualism of practical and pure reason and at the same time separate the institutional and personal levels in education. Content is not the real nor "experience" a child.

Having completed this overview of synthesis of educational history, we are ready to examine a more integrated curriculum. Before doing so, we summarize the ideas presented:

- The idea of unity in the curriculum has been central for many educational theorists.
- The educational approaches can be linked to the idea of world hypotheses.
- The various national cultural traditions, as well as the philosophical and intellectual ideas, are the foundations on which the educational systems are built.
- Continental European education, which has its didactic tradition, relies more on traditional curriculum and formal instruction when Anglo-American education has as its pillars the Romantic curriculum ideas as well as, paradoxically, elements of empiricism.
- John Dewey seemed to neglect the institutional aspect of education.
- Education should be in balance, with two equally important aspects: the curriculum and the instruction.
- From curriculum content and form judgements can be derived.

- From instruction involving teacher and the child, experiences are delivered.
- To teach and learn together can be defined as study.

When considering the LTTA model, where teachers and artists serve the school classes with their own methods, one may think that both instruction and experiences are in use for children. The reorganization and transformation of the curriculum with artist and arts with LTTA serves the idea of the experience "what is like" or "how it feels" of which Dewey spoke. What about finding out the correct judgements?

Once again, before trying to give the answer straight away, we have to explore the integrated curriculum in greater depth, especially how it has been defined in Canada and the U.S.

4.2. Integrated curriculum

To understand the integrated curriculum requires bearing three things in mind:

- Firstly, the marginal position that the integrated curriculum has in mainstream education
- Secondly, that the discussion of an integrated curriculum divides opinions often into "pros and cons"[81] and cannot be understood without the context of the "educational struggle" of the 20th century's American educational history (Cremin 1961; Tanner & Tanner 1975; Kliebard, 1986; Tanner & Tanner 1990; Ravitch 2000)
- Thirdly, the fact that much of this arguing arises from the **lack of theoretical foundations** that is still mouldering away in its ideological and political[82] circumstances, while on the other hand the research into the subject that might influence decision-makers is anecdotal (Drake & Burns 2004, 28) or only just emerging (Lewis & Shaha 2003; Upitis & Smithrim 2003; Feng & Tassel-Baska & Quek, Bai, & O'Neill 2005)

On its practical side, implementing integrated curriculum needs teachers as reflective practitioners, which sets high expectations for teachers' skills and motivation. The current standardization of assessment and school testing is, however, what drives the educational efforts; this does not suit integrative ideas well. The educational policy in the United States and even in Canada is largely based on standardized tests (Kysilka 1998; Grant & Littlejohn 1999; Murphy 2001; Colwell 2002; Ingram 2003). The question is whether the teacher takes the risk of the pupils failing to achieve appropriate test scores. The "test-driven" mentality of legislatures, especially in the U.S. has led to situation where the teacher is held responsible for the students' achievements. In some states, students' failure to achieve in state-wide assessment tests can mean the teachers' dismissal. Naturally, working in such an environment means hesitancy toward trying ideas and risk taking (Kysilka 1998, 207). From the

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[81] See, for instance, Fogarty (1998) George (1996).

[82] A typical accusation leveled against progressivism and integrative ideas in America was that progressive education was the work of communists. For example, The Sputnik shock 1957 and McCarthyism influenced education in the U.S. The word "integration" was dropped from the headings of the U.S. educational index in 1974. Meanwhile, the work done in Great Britain by Bernstein (1975) Hirst, and Peters (1970) kept the discussion going (Beane 1997, 30–32).

fundamental ideas presented by Dewey (1916), Kilpatrick (1918), Oberholtzer (1937), Squires (1972), Vars (1969, 1987) and Beane (1993) the characteristic ideas of integrated curriculum can be precipitated to by the following:

- Genuine learning takes place as students are engaged in meaningful, purposeful activity.
- The most significant activities are those most directly related to the students' interests and needs.
- Knowledge in the real world is not applied in bits and pieces but it an integrative fashion.
- Individuals need to know how to learn and how to think, and should not be receptacles for facts.
- Subject matter is a means, not a goal.
- Teachers and students need to work cooperatively in the educative process to ensure successful learning.
- Knowledge is growing exponentially and changing rapidly, it is no longer static and conquerable.
- Technology is changing access to information, defying lock-step, sequential, predetermined steps in the learning process.

These beliefs, since they are general in nature, cannot be taken as a definition of an integrated curriculum. However, if we take them as valid curriculum beliefs, it follows that they can be actualized through curriculum integration (Kysilka 1998, 198).

Thus, finding one exact definition for the integrated curriculum is difficult. According to Humphreys, "*integrated study is one in which children broadly explore knowledge in various subjects related to certain aspects of their environment*" (Humphreys & Post & Ellis 1981, 11). Beane says that "*Curriculum integration is a curriculum design that is concerned with enhancing the possibilities for personal and social integration through the organization of curriculum around significant problems and issues, collaboratively identified by educators and young people, without regard for subject-area boundaries*" (Beane1997, x–xi). Put in another way, "*In its simplest conception, integrated curriculum is about making connections*" (Drake & Burns 2004, 7). Drake & Burns identified three models for the framework of the curriculum: the multidisciplinary, the interdisciplinary, and transdisciplinary approaches. In the multidisciplinary approach, the curriculum is first focused to a theme, which is explored through different subjects. The interdisciplinary approach puts the emphasis on concepts and the skills related to the theme. Finally, under the transdisciplinary approach, themes, concepts, and skills are used in project-based learning in a real-life context (*ibid*., 7–15). According to Lake, all of the definitions of the integrated curriculum or interdisciplinary curriculum include the ideas of:

- A combination of subjects
- An emphasis on projects
- Sources that go beyond textbooks
- Relationships among concepts
- Thematic units as organizing principles

- Flexible schedules
- Flexible student groupings

If we are looking for a more precise description of the integrated curriculum, a few do exist. One is found in the book *The Mindful School* (1991) by Robin Fogarthy. The different curricula present deepening levels of interconnectedness, from the simple fragmented curriculum to the multiple networked one. All curricula are given a name, description, and assessment, as depicted in Figure 12.
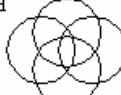
Name	Description	Advantages	Disadvantages
Fragmented	Separate and distinct disciplines	Clear and discrete view of a discipline	Connections are not made clear for students; less transfer of learning
Connected	Topics within a discipline are connected	Key concepts are connected, leading to the review, reconceptualization and assimilation of ideas within a discipline	Disciplines are not related; content focus remains within the discipline
Nested	Social, thinking, and content skills are targeted within a subject area	Gives attention to several areas at once, leading to enriched and enhanced learning	Students may be confused and lose sight of the main concepts of the activity or lesson
Sequenced	Similar ideas are taught in concert, although subjects are separate	Facilitates transfer of learning across content areas	Requires ongoing collaboration and flexibility, as teachers have less autonomy in sequencing curricula
Shared	Team planning and/or teaching that involves two disciplines focuses on shared concepts, skills or attitudes	Shared instructional experiences; with two teachers on a team it is less difficult to collaborate	Requires time, flexibility, commitment and compromise
Webbed	Thematic teaching, using a theme as a base for instruction in many disciplines	Motivating for students, helps students see connections between ideas	Theme must be carefully and thoughtfully selected to be meaningful, with relevant and rigorous content
Threaded	Thinking skills, social skills, multiple intelligences, and study skills are "threaded" throughout the disciplines	Students learn how they are learning, facilitating future transfer of learning	Disciplines remain separate
Integrated	Priorities that overlap multiple disciplines are examined for common skills, concepts, and attitudes.	Encourages students to see interconnectedness and interrelationships among disciplines, students are motivated as they see these connections	Requires interdepartmental teams with common planning and teaching time
Immersed	Learner integrates by viewing all learning through the perspective of one area of interest	Integration takes place within the learner	May narrow the focus of the learner
Networked	Learner directs the integration process through selection of a network of experts and resources	Pro-active, with learner stimulated by new information, skills or concepts	Learner can be spread too thin, efforts become ineffective

FIGURE 12. 10 views of the integrated curriculum (Fogarthy 1991).

Later (Fogarthy & Stoehr1995), (in the book *Integrating curricula with Multiple Intelligences*), the list of curricula is complemented with examples and symbols:

1) The fragmented curriculum has one sighting, a narrow focus on a single discipline, which means the traditional model of separate and distinct disciplines. The metaphor is a periscope.

2) The connected curriculum has details of one discipline focusing on subtleties and interconnections. The aim is to relate isolated parts of a domain to parts of other domains. These connections may be retrospective or prospective. Within each subject area, course content is connected topic to topic, concept to concept, one year's work to the next, and it relates to explicit ideas. For example, the teacher can relate the concept of fractions to decimals, which in turn relates to money, grades, etc. The metaphor is opera glasses.

3) The nested curriculum means that, within each subject, the teacher targets multiple skills: a social skill, a thinking skill, and a content-specific skill. These generic skills are isolated from the content of each domain and are understood as cross-curricular. For example, the teacher designs the unit on photosynthesis to simultaneously target consensus-seeking (social skill), sequencing (thinking skill), and plant life cycle (science content). The metaphor is 3-D glasses – multiple dimensions of one scene, topic, or unit.

4) In the sequenced curriculum, topics or units of study are rearranged and sequenced to coincide with one another. Similar ideas are taught in concert while remaining separate subjects. For example, the English teacher presents a historical novel depicting a particular period while the history teacher teaches that same period. The metaphor is eyeglasses – varied internal content framed by broad, related concepts.

5) The shared curriculum is a meta-curricular approach, which threads thinking skills, social skills, multiple intelligences, technology, and study skills through the various disciplines. The general focus is on the same theme, which different teachers may apply after considering what they think is central to a certain subject. For example, the teaching staff targets prediction in reading, math, and science, while the social studies teacher targets forecasting current events. The metaphor is binoculars – two disciplines sharing overlapping concepts and skills.

6) The webbed curriculum shares a broad view of an entire constellation as one theme, webbed to the various elements. As Kysilka (1998, 200) explains, the disciplines remain intact, and the content of the disciplines is not changed, but the teachers make a special effort to address the theme in different ways "*as they individually work with the students on the content to be learnt.*" For example, the teacher may present a simple topical theme, such as the circus, and web it to the subject areas. A conceptual theme, such as conflict, can be webbed for more depth in the theme approach. The metaphor is the telescope – a broad view of an entire constellation as one theme, webbed to the various elements.

7) The threaded curriculum is the meta-curricular approach, which threads thinking skills, social skills, multiple intelligences, technology, and study skills

through the various disciplines. Each subject domain is therefore understood as a vehicle for the delivery of a set of skills, which may be illustrated within each domain through a variety of content. The content is chosen not because it reflects the principles and criteria underpinning that domain but because it most appropriately reflects the cross-cultural skills identified as of prior importance to content domain knowledge (Scott 2000, 138–139). For example, the teaching staff may target prediction in reading, math, and science lab experiments while the social studies teacher targets forecasting current events and thus threads the skill (prediction) across disciplines. The metaphor of this approach is the magnifying glass – big ideas that magnify all content through a meta-curricular approach.

8) The integrated curriculum is the interdisciplinary approach, which matches subjects for overlaps in topics and concepts with some team teaching in an authentic integrated model. The boundaries between the domains are weakened considerably as teachers abandon their disciplinary orientation and seek to provide a curriculum that integrates knowledge. For example, in math, science, social studies, fine arts, etc., teachers look to patterning models and approach content through these patterns. The metaphor is the kaleidoscope – new patterns and designs that use the basic elements of each discipline.

9) In the immersed curriculum, the disciplines become part of the learner's lens of expertise; the learner filters all content through this lens and becomes immersed in his or her own experience. Immersion allows students to construct their own curriculum from different content areas. For example, a student or doctoral candidate has an area of expert interest and sees all learning through that lens. The metaphor is a microscope – an intensely personal view that allows microscopic explanation as all content is filtered through the lens of interest and expertise

10) In the networked curriculum, the learner filters all learning through the expert's eye and makes internal connections that lead to external networks of experts in related fields. For example, an architect adapting CAD/CAM technology for design networks with programmers and expands her knowledge base, just as she had traditionally done with interior designers. The metaphor of this approach is a prism – a view creating multiple dimensions and directions of focus.

The models presented by Fogarthy are based on the idea that curriculum integration means the incorporation of processing skills and meta-cognitive skills in the discipline-based curriculum. If curriculum integration means the dismantling of disciplines as they normally are known, only the three last curricula in the list fulfill the definitions needed. The problem of implementation of an integrated curriculum is the relationship between what is planed to teach and how that is done. The most common fallacy here appears when the question "how" takes precedence over that of question of "what".[83] To have balance between these two, even with the partnership of teachers, requires a tremendous amount of time and thought (Kysilka 1998, 201).

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[83] Thus the problem is the same that the Pestalozzian approach had.

Another classification system for the integrated approach is offered by Heidi Hayes Jacobs (1989). In her list, five curriculum options are treated as degrees of integration:

1) With "parallel disciplines," the disciplines are maintained, but the teacher attempts to sequence topics that are taught concurrently within the separate areas.
2) The multidisciplinary approach brings related disciplines together in a formal way. A theme is analyzed and studied in several disciplines. This type of integration is often implemented under the title of a "new course" offered in a school.
3) The interdisciplinary approach constructs units of study designed around themes. The units are taught for a specified period of time, and specific blocks of time are set aside on a daily or weekly basis to accommodate the interdisciplinary units. The units are complementary to the disciplines.
4) The integrated day is a theme-based full-day program focused on a certain theme.
5) Complete integration is determined by students' interests, experience, and needs. Specific activities are constructed, and independent study and learning contracts are made.

Jacobs's classification is more general, concentrating more on organizational aspects than Fogarty's, which is more methodological in nature. The similarity of these and other integrated curriculum definitions is their descriptive use of language and the aim moving towards experimental way to bring meaning to the curriculum by rethinking how it could be planned, organized, or reconstructed to provide opportunities for meaningful learning. The degrees of integration can be seen also as a continuum:

TABLE 9. The integrated curriculum continuum of Kysilka (1998, 204).

	Separate disciplines	Disciplined-based	Interdisciplinary	Total integration
Content	Separate subjects	Sequenced Correlated ideas Focused content themes Multiple lenses Modified courses	Multifaceted lens Broad themes Process themes Student interests New courses	Student needs/interests Cross disciplines Integrated day Apprenticeships Experiences
Time	Distinct units/periods	Distinct units/periods	Blocked	Varied
Teachers	Separate	Separate	Paired/teamed	Teamed/facilitators
Students	Receivers	Receivers/doers	Doers/decision-makers Creators	Decision-makers Creators Independent investigators

Even though the classifications and categorizing methodological continua are useful in comprehension of the idea of the integrative approach, the same problem remains: how

to implement, develop, and evaluate different approaches. Is more integration better than less? Hargreaves, Earl & Ryan (1996) answer:

> *Educational continuums often embody implicit values where movement along the continuum is construed as growth or progress towards a better state. However, progress along a continuum does not guarantee continuation towards progress. Given the many different kinds of curriculum integration, more integration is not always better. Sometimes it can be worse.* (Hargreaves, Earl, & Ryan 1996, 103)

It is obvious that a more profound theory of curriculum and instruction is needed before one can decide the format of design for the curriculum. Drawing from Tyler (1949), Wiggins & McTighe (2005, 17–20) define *"a backward design process"* consisting of three steps:

Tyler:

1) What educational purposes should the school seek to attain?
2) What educational experiences can be provided that are likely to attain these purposes?
3) How can these educational experiences be effectively organized?
4) How we determine whether these purposes are being attained?

Wiggins & McTighe:

1) Identify desired results.
2) Determine acceptable evidence.
3) Plan learning experiences that lead students to desired results.

Drake & Burns (2004) claim that, when traditionally planning their work, teachers start by selecting activities that they have already used successfully. Planning of the implementation of assessment is left to the end. Many times, the parts of the curriculum do not align. The students may have enjoyable activities, but the learning stays artificial. The process of integrating the curriculum has thus followed the model of "backward design". The goal of teaching is for students to understand what is the most important to know and to be able to do (*ibid.,* 32). To achieve good teaching and integration, Drake and Burns offers their Know/Do/Be framework. The first step according to the backward design is to identify the desired results for student achievement. The questions can be asked: "What is the purpose of this unit? How do we want students to be different at the end?" The aim is that the framework serves as the foundation for a Know/ Do/ Be bridge. The bridge connects the disciplines and acts as an umbrella to transcend them. To create a powerful bridge of this sort, teachers have to find answers to following questions:

1) What is most important for students to KNOW?
2) What is most important for students to be able to DO?
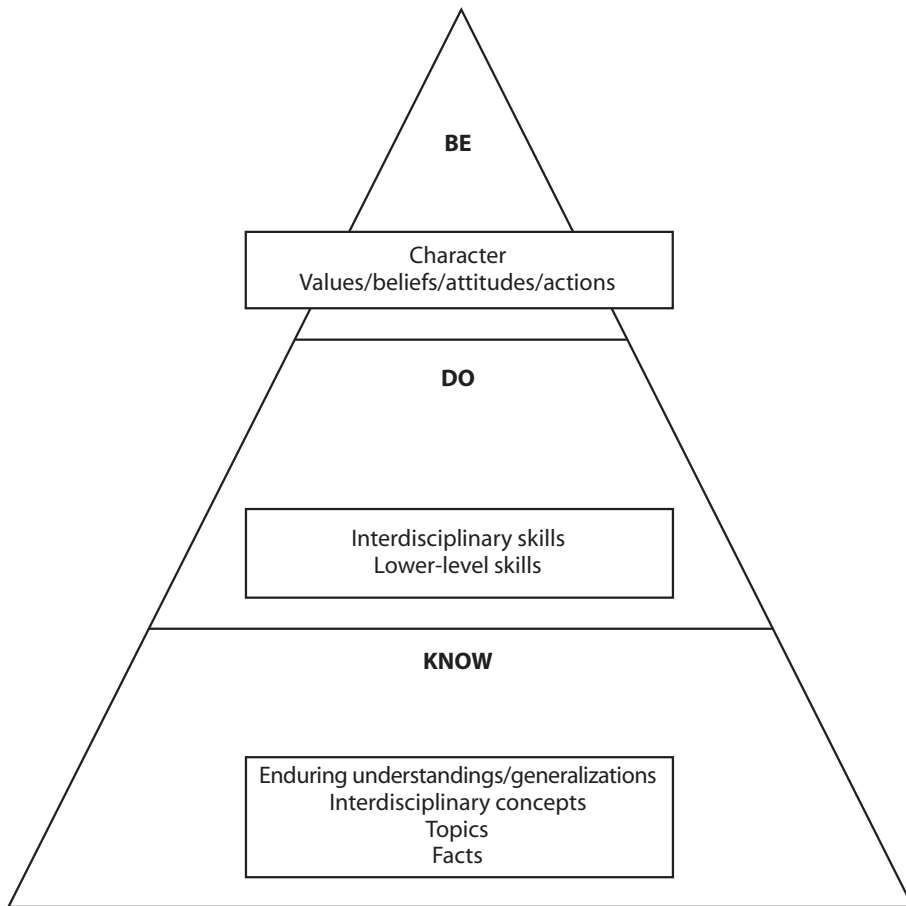3) What kind of person do we want students to BE?

FIGURE 13. The Original KNOW/ DO/ BE Framework (Drake 1995, 1998, 2000; Drake & Burns 2004, 34).

The first version of Drake and Burn's framework consisted of three categories, decreasing in size, from "know" to "be." The largest category, "know," included facts, topics, concepts, and generalizations or enduring understandings. "Do" included cross-curricular, broad-based skills, like communication, research, information management, and higher-order skills (such as analysis, synthesis, and evaluation based on Bloom's taxonomy) as well as low-order skills like memorization and recall. The "be" category included attitudes, beliefs and actions that students were expected to demonstrate. (*ibid.,* 33).

The problem with the model, when introduced to a wider audience – students as well as teachers and educators – was that "be" appeared as the smallest area of triangle. The area normally linked to character education, democratic education, forming the habits, or teaching of the whole child was seen more and more important among the educators. After reflection, the framework was reformed to find a more balancing and integrative view (*ibid.,* 35). To **know** something was suggested to be intertwined with active participation in the "do" area, as shown in the figure below.
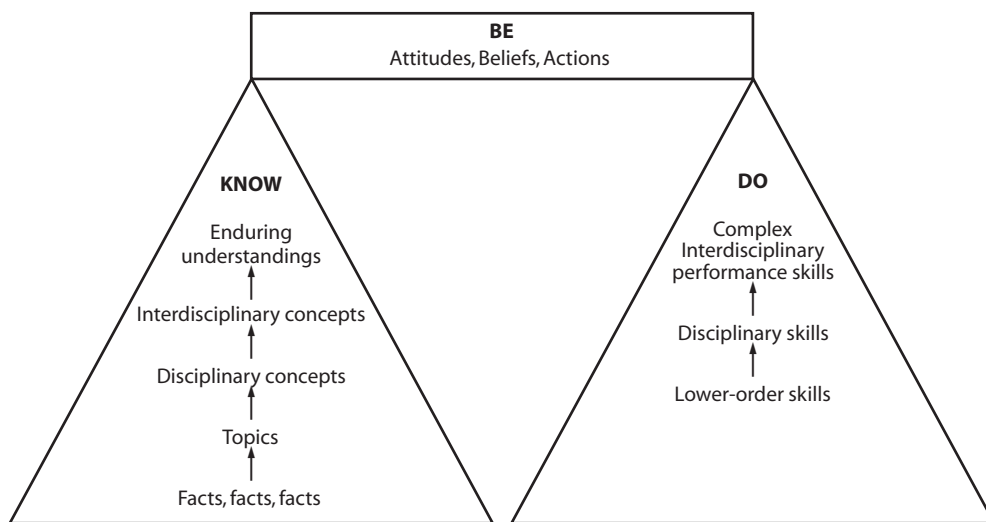
FIGURE 14. The know/do/be bridge (Drake & Burns 2004, 50).

In this new version of the model, the bridge of "be" is constructed between the "know" and "do." The content of the curriculum is approached by categorizing existing standards by curricular priority:

1) Enduring understandings (most important)
2) What is important to know and do (less important)
3) What is worth being familiar with (least important)

When planning a curriculum, teachers have to determine what falls into each of these categories and how they are preceded. What is the most important to know, and what is most worth doing? The enduring understandings can be characterized by certain features:

- The enduring understandings represent a big idea that transfers to beyond the classroom.
- They reside at the heart of the discipline and require active learning.
- They require a lot of time to uncover because they are often abstract or misunderstood.
- They engage students.

According to Drake & Burns, to achieve these priorities lies at the core of concepts and structures of knowledge. The answer to what is most worthwhile is broad-based interdisciplinary skills like literacy and numeracy woven into lessons at all levels of knowledge. To develop critical thinking skills requires work at a conceptual level, since knowledge and skills are inseparable (*ibid.,* 37). The model Drake & Burns represent is very similar to the structure of the Ontario Curriculum,[84] where all subjects have been defined with two elements: expectations and achievements. The factual expectations are defined with answers like "identify," "describe," "recognize," and "name etc." The conceptual focus integrates facts and topics in a transferable way, which means that they

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[84] See http: //www.edu.gov.on.ca/eng/curriculum/

have a higher level of abstraction and thus can be used as interdisciplinary approaches. For example; sustainability, order, cycle, system, conflict, cause/effect can be used as an interdisciplinary concept. The enduring understandings are what it is hoped that students remember after the units of teachings are completed (*ibid.,* 39–40).

Compared to the Drake & Burns model, those of Jacobs and Fogarthy seem to have more emphasis on students' needs than on just the organizational aspects of a curriculum. A question, however, remains; does the framework represent a model for a wholly integrated curriculum if the contents and processes are still treated separately? If students are taught through the concepts, do we just replace the contents with processes? Is any attempt to name or select particular information or method as valid just a choice between Scylla and Charybdis?

Being fully aware of the purposes Drake and Burns have in their model, I would still go further. If the integration is seen as the combination of the all world hypotheses, the question cannot simply be one of curriculum practices. To find an answer to the nature of full integration, we have to look outside the curriculum. As I indicated in my model of "education as meaning making," the "be" might have relation to the judgments and experiences students have with them before, while and after they are being educated. The education is not the aim itself, nor is it just the preparation for life.

The experiences and judgments, as well as the curriculum, are culturally formed and situated in culture. The culture is interplay between the versions of the understandings of the world that people form under its institutional sway and the versions that people have with their invidual histories (Bruner 1996, 14). Thus, the education that does not take into consideration the culture calls to mind Kant's idea that *"Intuitions without concepts are blind."* Culture as well traditions forms the structure that is to be integrated in the education:
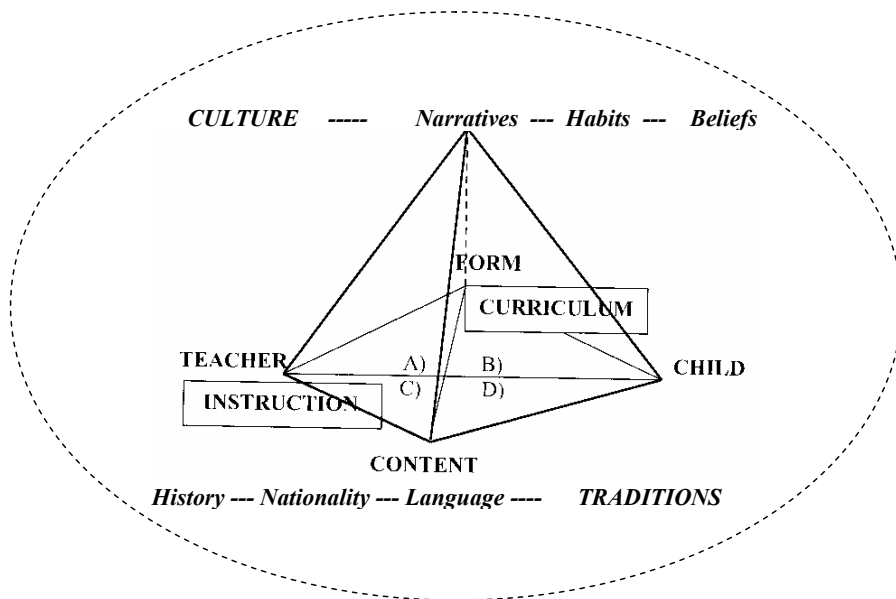

FIGURE 15. Education in cultural context.

To have a culture and the tradition means, for example, having a language, history, habits, and narratives – all of the things that are presented in the arts. To say it clearly, to define education in cultural basis, means that we have to re-evaluate the premises behind the existing order in our schools[85]. In education the scientific and logical method of explanation has overshadowed the interpretive and narrative methods of history, social studies and literature (*ibid.,* 91) without noticing that much of our interaction with the world, people, and things is based on the latter type of understanding. In other words, our understanding of the meanings of culture is severely diminished and that ought to be one of the great concerns of education, as Bruner states:

> *The fallacy of normal schooling is linked both to the idea of education as a technical enterprise with the well-managed information processing as well as well-intentioned "learning-theories" applied to the classroom to find more "learner-centred" ways to accomplish needed expectations and results. Each of these approaches is of course necessary but the failure to equip minds in cultural world "risks creating alienation, defiance, and practical incompetence".* (Bruner 1991, 43)

The question is thus not really whether we can afford to see the role of the culture in education but whether we understand its consequences. A culture of education means not just the transformation of schools and the role of the teachers and teachers' education but the transformation of the education itself. Whether this change occurs is not a matter of curriculum so much as one of attitudes. As Kysilka (1998, 209) says:

> *Culture is an attitude, not a curriculum design. Maybe we need to worry more about attitude. With the right attitude, the curriculum design may be irrelevant.*

Let us summarize what has been said about the integrated curriculum:

- The integrated curriculum has been at the margins within mainstream education.
- The idea has been developed mainly in progressive contexts.
- Various models of the integrated curriculum has been presented
- The problem is whether the structures are enough
- The idea of integration probably being more than curriculum should be found in the context of culture
- Cultural forms (which are strongly represented in the arts) may have a greater role in learning than normally is expected.

In the next chapter we move on, sociologically speaking, from structures to culture. The way we speak forms the world we see and the stories we tell, narratives, are explanations about us. Interestingly, modern thinking has connection to modern self as indicated by Charles Taylor. Would it be that individualism, disenchantment of the world and sense of loss of freedom could be cured by arts? Should we place the focus of learning more in participation, as suggested by Etienne Wenger? These themes have to be explored before we return to the arts again.

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[85] This opinion is seen in Finland as well as North America.

5. CULTURE, COMMUNITIES AND LEARNING

Tradition is meaning making delivered from generation to generation, with a role that can be stable and long-lasting, securing the knowledge passed down in a certain culture. On the one hand, tradition can exert a preventing influence and thus be hostile to new ideas, when the danger of tradition losing its freshness and vitality is prevailing and felt. On the other hand, at its best, tradition can be a source of cultural identity with dignity of one's roots. Traditions are parts of larger entities, the culture. Cultures consist of languages, religions, and places as well as habits, rituals, and histories. Culture formulated as a sum of human doings consists of common, shared meanings in the context of praxis in the daily social environment. The ways things are emerges as narratives that people tell about "who they are" and where do they come from. Sometimes these narratives indicate who they think they are not as well.[86] In other words, culture is a system of meanings that people attach as labels for meaningful things in the world. From this point of view, the culture is the concept of a system of meaningfulness (Hall 2003, 85–128).

The most efficient tool for sharing meanings is, of course, language. Native speakers of the same language are able to communicate at more profound level than those of differing language backgrounds. On the other hand, a person who comes from another culture may see things differently, in line with his culture and language:

> *Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication and reflection. The fact of the matter is that the "real world" is to a large extent unconsciously built up on the language habits of the group.* (Sapir 1929, 209–210)

The above quotation from anthropologist Edward Sapir (1884–1939) is most well known in its formulation as the Sapir–Whorf hypothesis in linguistics. Sapir's conclusions were based on his several years' studies of different American Indian languages. The ideas he presented was later developed and popularized by his follower and colleague in Yale University Benjamin Whorf (1897–1941), who claimed to introduce "*a new principle of relativity,*" referring to that of Einstein:

> *all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated* (Whorf 1940a, 214)

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[86] For instance, Finland has always been between Sweden and Russian: the saying "Swedish we are not; Russians we shall never become; thus be Finns" captures the essence of Finish independence.

The core of the Sapir–Whorf hypothesis is that thoughts and behavior are determined or at least partially[87] influenced by language in culture. The culture influences the structure and functions of a group's language, which in turn influences the individual's interpretations of reality. If the Sapir–Whorf hypothesis is right, it means also that the development of mental processes is determined by mediation in the context of a specific cultural environment. The socio-cultural view proposed by Lev Vygotski (1896–1934) held to the idea that language and thought were generally separate and independent but still in close relationship:

> *the most important fact uncovered through the genetic study of thought and speech is that their relationship undergoes many changes. Progress in thought and progress in speech are not parallel. Their two growth curves cross and recross.* (Vygotsky 1962, 33)

Vygotky's main idea was that human mental processes, just like human labor, were mediated by tools. The tools of mind, like those used in labor, were invented by human society and acquired in the course of interpersonal communication. Having been acquired and internalized, psychological tools such as language, signs, and symbols begin to mediate children's mental processes:

> *the most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously independent lines of development, converge.* (Vygotsky 1978, 24)

According to the Vygotskian view, human mental processes are neither developed in the course of children's independent activity (as constructivist would hold) nor a result of unfolding maturation (as nativists would hold) nor inculcated into children by adults (as behaviorists believe). The development of the child was determined by mediation in the context of the social environment[88] (Karpov 2003, 139). Thus, the reason Chinese children become Chinese is the Chinese cultural environment; a small child brought from China and adopted in Finland becomes a Finn.[89]

In the article "The Narrative Construction of Reality" Jerome Bruner (1991), espouses the Vygotskian view that cultural products, languages, and other symbolic systems mediate thought and place their stamp on representations of our reality. At its simplest, socially constructed knowledge means that:

> *An individual's working intelligence is never "solo". It cannot be understood without taking into account his or hers reference books, notes, computer*

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[87]The weak version of the hypothesis leads to the idea that each culture experiences events differently from another. A more radical view states that the language actually **causes** that culture to perceive events differently from the other.

[88] This does not, however, mean that children would not transform and differentiate themselves. They do; still, the context and social processes are needed. See, for example, Moro (2005, 165–182).

[89] How obvious this statement appears to be! The significance of stating it is linked to human rights and standing against those views that put emphasis to "racial ""differences".

> *programs and data bases, or most important of all, the network of friends, colleagues, or mentors on whom one leans for help and advice.* (Bruner 1991, 3)

Because knowledge and skills are domain-specific and uneven in their accretion, few people are able to master the whole range of their culture's "toolkits". Other people are needed so that we can accomplish whatever we are trying to do. The domains of human activity are there for some purpose. That purpose ought to be inter-subjective and communicable in public, appreciable, and negotiable way.

According to Bruner, narratives are the forms in which we organize our experiences, memories, and happenings. Our stories, excuses, myths, reasons for doing or not doing, etc. are linked to our logical reasoning, though the narratives seldom can be verified empirically or logically. They represent our mode of thought and the forms of discourse in what is probably an inseparable way (*ibid.,* 5). In narratives, judgements are not a matter of "true or false" but one of "either ... or," depending on context[90] and "reader."

The 10 features of narratives are the following:

1) **Narrative diachronicity**. A narrative happens in time; it has temporality and pattern. Even nonverbal media have diachronicity, like "left-to-right" and "top-to-bottom."
2) **Particularity**. Narratives have a sense of generic particularity in which they may be categorized and typified.
3) **Intentional state entailment**. The people in narratives have beliefs, desires, theories, and values that can be interpreted according to their intentions.
4) **Hermeneutic composability**, which means that in narratives the events need to be constituted in light of the overall narrative. The story has to be interpreted in accordance with its events and the events in accordance with the whole story.[91]
5) **Canonicity and breach**. The canonical or normal state of a narrative is that of a script – the way things normally are presented (ordering in a restaurant, for instance). The breach can be used as a creative component in the narrative that breaks the normal "code" and thus affords seeing things differently.
6) **Referentiality**. To be acceptable or understandable, a narrative has, in some form, references to reality – not directly but in a way that offers verisimilitude.
7) **Genericness**. Narratives are told in particular ways that are genres.
8) **Normativeness**, which means that the narrative in some way refers to cultural legitimacy.
9) **Context-sensitivity and negotiability**. Related to hermeneutic composability and interpretability, context-sensitivity and negotiability require a negotiated role between the author or text and the reader.
10) **Narrative accrual**. Narratives are cumulative, creating something called "culture," "history," or "tradition."
(Bruner 1991, 6–20)

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[90] This does not, of course, imply total relativity of knowledge, as sometimes is understood. The matter has more to do with our lack of capability of "objective" knowledge.

[91] The lack of this feature is situated at the core of the problem in structures of modern society. It is a question of the parts functioning according to the whole.

A peculiar situation in education is that the culture's and narratives' centrality to humans' formation of self and actions still hasn't been given the role it might have been[92]. The fragmentation of psychology as a science, the computational approaches to education,[93] and insistence upon the explanation in terms of "causes" have reduced the interpretative factor of human study (Bruner 1990, ix – xii). At the same time, the discussion of modern or post-modern society is seen in the context of the diminishing shared values and meanings. It is presumable that the wide-spread loss of purpose[94] may have something to do with narrowing individualism centering on the self and loss of the social aspects of life – evident in a certain lack of shared narratives. This lack might have something to do with the post-modern cultures "self-expressiveness" giving an excuse to choose one's own stories not necessarily linked to or grounded in those of others. This tendency to the free choice of "self-fulfilment" is accompanied with *"an extraordinary inarticulacy about the constitutive ideals of modern culture"* (Taylor 1993, 18).

The paradox of the modern society is that, while our scientific worldview is based on logical, objective reason, our life world seems to rely on Romantic freedom of self-determination, "*the idea that I am free to decide for myself what concerns me, rather than being shaped by external influences"* (*ibid.,* 27). At the same time, the scientific-technical rationality, which is seen as non-social, neutral, and formal in form and has nothing to do with "self-realization," seems to dominate in work as well as in social life.[95]

In his books *The Sources of Self* and *The Malaise of Modernity*, Charles Taylor (1989; 1993) reflects the connection between the self and culture. In the latter book, he names three "sources of worry," which are:

1) Individualism
2) The disenchantment of the world
3) Loss of freedom

These worries reflect modern society and its dualism in following ways:

1) The individualism, as already noticed, has led in western world to a situation where people have the right to choose for themselves their pattern of life. Whether this choice is seen as total selfishness or a positive approach to the freedom depends on our viewpoint. Individualism seen as the aspiration to authenticity has to be considered as a valid idea, but at the same time its ideals must be explored critically (*ibid.,* 23). The concern of the fragmentation of

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[92] The discussion of professional learning communities may be a sign of change here. See e.g. Dufour & Eaker (1998).

[93] Modern times' emphasis on Cartesian reason and the Lockean punctual self can be seen as reflecting also atomistic and instrumentalist science. See Taylor (1989, 159–176).

[94] The list of writers dealing with related themes is long. To name a few, we might choose Marcuse pointing to the one-dimensional man, Kierkegaard's jump, Erich Fromm describing the ways of escape from freedom, and Egon Friedell claiming rationality to be a disease of the modern age.

[95] The members of the School of Frankfurt (e.g., Adorno, Horkheimer) claim that instrumentality itself is domination and that in that sense the technology is never neutral (Feenberg 1996 45).

common shared values is real, though, and has its presentations as fruits of a "permissive society" in the doings of the "me generation" and the prevalence of "growing narcissism" (*ibid.,* 4).

2) The disenchantment of the world has been an outcome of instrumental reason. Maximum efficiency, the best cost: output ratio, is its measure of success (*ibid.,* 5). As instrumental reason has brought us efficiency and wealth, the cost has also been high; the poor understanding of qualities, lack of nuances and helpless alienation of life are features not rare in contemporary society. The understanding of the holy and the meaning of art has also weakened.

3) The third worry is the greatest. The loss of freedom is not just loss of choices, which industrial-technological society imposes on us, but the "soft" despotism related to it. The modern life seems to offer us democratic forms but in fact little means to have true control of our lives. Bureaucracy with impersonal use of power over the citizen threatens the dignity of persons and threatens the true democracy, leaving the political control to the few.[96] (*ibid.,* 8–11)

When these dires matters are set out in context with the features of the scientific-technical rationality as mentioned earlier, the following pattern is found.

TABLE 10. Comparison of scientific-technical rationality to the features of modern self.

Scientific-technical rationality		Modern self
Non-social (Uncommitted, external attitude)	–	**Individualism**
Neutral (Not involved, without emotions, not stating an opinion)	–	**The disenchantment of the world**
Formal (Meaning the following the correct or official methods)	–	**Loss of freedom**

The conclusion of these analogies seems to be the scientific-technical rationality is deeply intertwined with the consequences Charles Taylor discusses. At a most profound level, the modern self reflects the domination of modern scientific worldview and its premises. Proceeding from our culture, the way we think reflects the way we are.[97] What follows logically is that, for an attempt to change the existing order, the existing culture and related structures of thought has to be revealed and understood.[98] Thus, to transform ourselves is a process of transforming our culture also. Education, in my opinion, would have an important role in that process, but, to face these challenges, we have to "calibrate" our scientific-technical-rationality-based thinking and comprehend the connections between culture and education.

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[96] Here Taylor refers to political theories of Alexis de Tocqueville.

[97] One might argue also that the situation is the other way around. My claim is that usually being precedes thinking and that exceptions occur when people break their boundaries and find different qualities related to being. The ideological Marxist view of work as a source to self is reductionism and hostile in nature.

[98] Paulo Freire deals with this issue in his *Pedagogy of the oppressed* (1993).

The theory of situated cognition offers one explanation. The approach has its emphasis on the learning that actually takes place in the real world. The theory derives its ideas from writers like Vygotsky and Heidegger as well as pragmatists suggesting that learning is always "situated" and contextual. The gulf-separated categories of "knowing what" and "knowing how" (declarative and procedural knowledge), which ordinary educational theory hasn't fully taken into account, are in this approach integrated and seen as a part of fundamentally situated cognition (Brown & Collins & Duguid 1989, 32). Etienne Wenger[99] has defined the "*communities of practice*," based on the social perspective of learning, thus:

> *Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.*

The communities in their endeavour share three characteristic features:

1) The domain

> A community of practice has an identity defined by a shared domain of interest. To be a member of the community implies a commitment to the domain, and therefore a shared competence that distinguishes members from others. The domain need not be necessarily something that is recognized as "expertise." For instance, "*a youth gang may have developed all sorts of ways of dealing with their domain: surviving on the street and maintaining some kind of identity they can live with.*"

2) The community

> The community is based on the shared domain, joint activities with discussions, and helping of one another. The relationships are there for some purpose, and the members are able to learn from each other – to have just a Web site or share the same job doesn't make a community. In community, the various tools ought to be used for a shared purpose and people should learn and act in interactive way. For example, "*The Impressionists used to meet in cafes and studios to discuss the style of painting they were inventing together. These interactions were essential to making them a community of practice even though they often painted alone.*"

3) The Practise

> The members of community of practice are not there because of interest but as members of a community of practioners. The practioners develop a shared repertoire of resources: experiences, stories, tools, and ways of addressing recurring problems, which takes time and sustained interaction. Tacit knowledge and historical roots of practice have an important role in shaping the shared repertoire of one's field.

Human engagement in the world is a process of negotiating meaning, not just plain activity or plain knowledge, so the community is inseparable from its meanings. The

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[99] All the next citations and definitions are taken from Wenger's homepage: http://www.ewenger.com/ theory/index.htm.

meanings are socially constructed in a productive process. They are not preexisting neither simply made up. The negotiated meaning is historical, dynamic, contextual, and unique (Wenger 1998, 54). Discourses of meanings are shared in communities of practice with:

1) mutual engagement
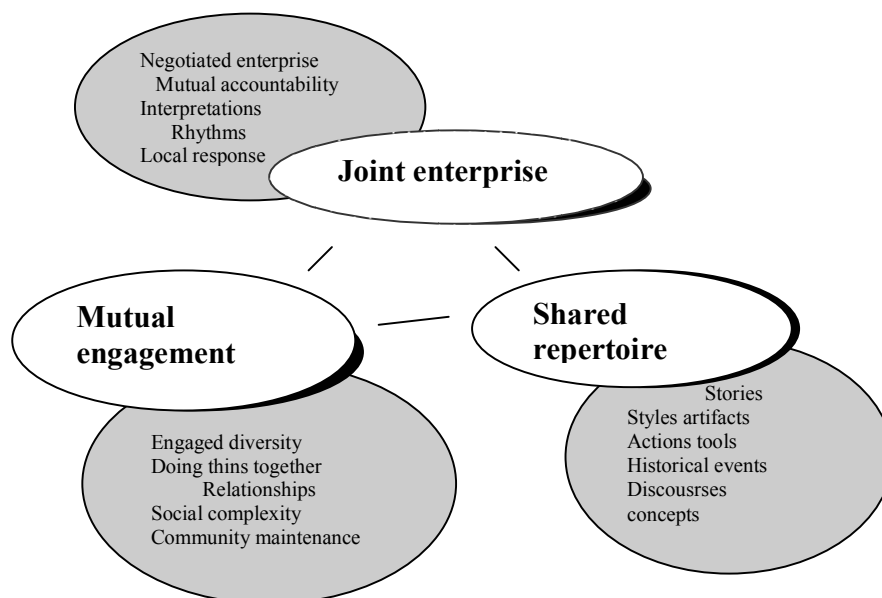2) a joint enterprise
3) a shared repertoire

FIGURE 16. Dimensions of practice as the property of a community (Wenger 1998, 73).

Mutual engagement means that being included in what matters is a requirement for being engaged in a community's practice. The coherence of the group doesn't necessarily require persons who share the same backgrounds; instead; it needs belonging, community maintenance, sharing information, and creating atmosphere, all of which requires a lot of work. The homogenization of the group constitutes neither advance nor the development of a community of practice. In the best case, the different persons and their competencies are complementary, helping each other and strengthening the mutual engagement (*ibid.,* 74–77).

A joint enterprise is not just a stated goal but something mutual that reflects and is defined by all participants joining the process. The enterprises may be complex, including the personalities, different views, and relations of mutual accountability that might be reified into statements but evolve into a negotiated interpretation of that statement (*ibid.,* 77–81). As Wenger puts it, *"An enterprise is a resource of coordination, of sense making, of mutual engagement; it is like rhythm to music."* (*ibid.,* 82).

The shared repertoire of practice includes routines, words, tools, ways of doing things, as well as stories, gestures, symbols, and genres, which are seen in actions, in concepts

that the community uses in its existence. The repertoire, while being historical in nature, remains inherently ambiguous, providing space for new interpretations. Because the repertoire is shared in dynamic and interactive negotiation, it serves the meanings of the coordinated action (*ibid.* 83–84). In this sense, the shared repertoire comes near the narratives.

The idea that organization is a constellation of communities of practice that share ideas, enterprises, and discourses is, of course, widely known from the knowledge management field[100] and the term of learning organizations (Senge, 1990). However, what hasn't been taken into fully account is how deeply the structure of such approaches is opposite that of the modern world. To examine this, we place features of the scientific-technical rationality this time opposite those of the learning communities.

TABLE 11. Comparison of scientific-technical rationality to the learning communities.

Scientific-technical rationality		Learning communities
Non-social (Uncommitted, external attitude)	–	**Social** (Mutual engagement)
Neutral (Not involved, without emotions, not stating an opinion)	–	**Interpretative** (Joint enterprise)
Formal (Meaning the following the correct or official methods)	–	**Conceptual** (Shared repertoire)

The only conclusion we can draw in the end is that the idea of learning community is totally contradictory that of scientific-technical rationality and the way the culture is inherited within it. In practice, this means that to changing schools, organization, or vocation is not a technical or formal operation but a transformable change of culture. To change one's way of thinking affects at the same time the paradigm as a whole. The difference between tradional learning theories and the situated cognition is that the latter approach sees the education more as a process of enculturation. The assimilation of the cultural approach means reappraisal in both the theory and practises of education. This reappraisal would need to have three contexts: ethics, knowledge and art of doing:

The mutual engagement is about **ethics**	-	**Sharing**
The joint enterprise is about **knowledge**	-	**Knowing**
The shared repertoire is about **art**	-	**Doing**

Since there is much numerical evidence that traditional approaches to instruction often produce inert knowledge (Whitehead, 1929) lacking in correspondence with outside contexts, the idea of bringing the community in participation in education could be the key element in bringing about change in the schools. In this respect, LTTA incorporates

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[100] Quality management systems like ISO 9000 and like are being developed with sometimes really not considering whether or not they are appropriate to ones field of business. In this point of view the idea of learning organization is often totally misunderstood as a continuum of tools of modern work.

many features of learning community when transforming the traditional boundaries of the existing school system. The core values LTTA sets forth for itself are:

- Curriculum
- Partnership
- Quality Professional Development

When these values are reflected through the ideas discussed above, the following table can be presented.

TABLE 12. Comparison of the core values of LTTA with the two contexts.

The Core Values of LTTA		Learning communities		Modern self
Curriculum	–	**Interpretative** (Joint enterprise)	against	**The disenchantment of the world**
Partnership	–	**Social** (Mutual engagement)	against	**Individualism**
Quality Professional Development	–	**Conceptual** (Shared repertoire)	against	**Loss of freedom**

The core values of LTTA in relation to the issues previously presented seem to match to the idea of the learning community, with the first value being about knowing, the second about sharing, and the third about doing things. In these respect, it is quite safe to state that LTTA represents, indeed, a new paradigm for the education. However, before rushing to the further conclusions, we still have to look at the field of the arts again and see whether the ideas presented and the synthetic view of education from Chapter 4 have something to contribute together. To integrate the meaning of the arts education, we now turn back to the arts and thereafter search for their possible importance. After doing this, we are ready to evaluate the Finnish Pilot of LTTA and present some thoughts on the whole approach.

To summarize the principles of social and cultural perspectives of learning, we lean to the definitions given by Wenger:

- **Learning is inherent in human nature**: it is ongoing and integral part of our lives, not a special kind of activity separable from the rest of our lives.
- **Learning is first and foremost the ability to negotiate new meanings**: it involves our whole person in a dynamic interplay of participation and reification. It is not reducible to its mechanics (information, skills, behavior[101]) at the expense of meaning tends to render learning problematic.
- **Learning creates emergent structures**: it requires enough structure and continuity to accumulate experience and enough perturbation and discontinuity to continually renegotiate meaning. In this regard, communities of practice constitute elemental social learning structures.

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[101] For instance, Drake's & Burn's model of "know, do and be."

- **Learning is fundamentally experiential and fundamentally social**: it involves our own experience of participation and reification as well as forms of competence defined in our communities. In fact, learning can be defined as a realignment of experience and competence, whichever pulls the other. It is therefore impaired when the two are either too distant or too closely congruent to produce the necessary generative tension.
- **Learning transforms our identities**: it transforms our ability to participate in the world by changing all at once who we are, our practices, and our communities.
- **Learning constitutes trajectories of participation**: it builds personal histories in relation to the histories of our communities, thus connecting our past and our future in a process of individual and collective becoming.
- **Learning means dealing with boundaries**: it creates and bridges boundaries; it involves multimembership in the constitution of our identities, thus connecting – through the work of reconciliation – our multiple forms of participation as well as our various communities.
- **Learning is a matter of social energy and power**: it thrives on identification and depends on negotiability; it shapes and is shaped by evolving forms of membership and of ownership of meaning – structural relations that combine participation and non-participation in communities and economies of meaning.
- **Learning is a matter of engagement**: it depends on opportunities to contribute actively to the practices of communities that we value and that value us, to integrate their enterprises into our understanding of the world, and to make creative use of their respective repertoires
- **Learning is a matter of imagination**: it depends on processes on processes of orientation, reflection, and exploration to place our identities and practices in a broader context
- **Learning is a matter of alignment**: it depends on our connection to framework of convergence, coordination, and conflict resolution that determine the social effectiveness of our actions.
- **Learning involves an interplay between the local and the global**: it takes place in practice, but it defines a global context for its own locality. The creation of learning communities thus depends on a dynamic combination of engagement, imagination, and alignment to make this interplay between the local and the global an engine of new learning.
(Wenger 1998, 226–228)

The foregoing list is long and thorough, covering not just organizational or cultural matters of learning communities, or the framework in which a project leader applying a multidisciplinary approach has to work. The list offers us also a framework in which to understand the complexity of learning and the activity that is needed to achieve it.

Let's consider for a moment whether the word "**learning**" in the list could be changed to the word "**art**"...

...and now, it is time to proceed to look at these two again.

6. THE PREMISES OF ART LEARNING AND ITS IMPORTANCE

The most popular and widely used arguments for advancing society's support of arts and art education are usually instrumental nowadays. The justification for the arts and the meanings thereof is seen either externally or problematic, as well as arts place in school curriculum is seen more or less voluntary or optional[102]. The fact that the arts represent the Romantic side of the curriculum is reflected in the arts education debate that shares features familiar from discussions related both to progressivism and to the integrated curriculum. Discourse of this kind is, of course, typically North American, but, unfortunately, it can be found in Scandinavia and Great Britain, too. Continental Europe,[103] relying on its history and cultural heritage, seems to have its own relationship to the arts with its own ideals.

Even if the arts' role in contemporary society may be questioned by the "outsiders," it is worthy of note that within arts education there exist unique boundaries. In music education, the liberal Anglo-American tradition has been presented in "Music Education as Aesthetic Education" (MEAE), which is based both on the idea of art works as object as well as they study as a means for shaping one's "taste." As opposed to[104] "Praxial Music Education," which places its emphasis on musical understanding and enjoyment in performance, it is seen as promoting self-growth, self-knowledge, and more democratic values for all children (Woodford 2005, 16–17). Similar discussion to that in the area of music has been occurring in the field of visual arts. Formalism, in which the value of art is determined solely by the art work itself, or, on the other hand, expressive art theory, with its emphasis on the individualized feeling state, doesn't necessarily meet the needs of postmodern society (Räsänen 1998, 2). It can be presumed that the core of the problem of all arts education lies in finding a proper balance between the latter opposites.

Lately, as a third addition to discussion, the burning topic of the arts' enhancement of learning of other school subjects has arisen. The issue is twofold; some say that the emphasis on art's contribution to other subjects is at the expense of intrinsic values of art, while others believe that maintaining art's position in schools demands evidence of its broader value as well (Parsons 2000, 195–196;[105] Brewer 2002).

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[102]Recently in Finland, debate has continued on this issue; however, the lack of arts in teacher's education in Ontario, Canada is so evident that the situation in Finland seems magnificent by comparison.

[103] Sir Simon Rattle, the principle conductor of the Berlin Philharmonic orchestra, referred to this question when he moved from Great Britain to Germany: *"There is something about being in a place where the arts are essential, even to politicians. No civilized politician in Germany does anything except support the arts. It is simply a mark of intelligence there, just as it should be... Everybody in the arts (in Britain), spends too much time trying to survive. It's endless cycles of crisis management. The arts need help and money, but most of all the arts need respect. And it's all a question of political will"* (Smith 2002, 1432–1433).

[104] Recently this discussion has been leading to a search for synthesis; for example, Elliott (2005) and also Westerlund (2002).

[105] Consider, for example, the debate between Eisner and Catterall in Art Education (Eisner 1998, 7–15; Catterall 1998, 6–11).

Especially in the United States, the question of transfer has become the dominant issue in arts education, due to President George W. Bush's education reform plan No Child Left Behind Act of 2001 (NCLB), in which the arts has been defined as among "the core academic subjects". Accountability for the results, and for research work to enhance the education, has been incorporated in the agenda by law[106] (Purnell 2004, 155). As a result of this development, evidence-based education (EBE), an approach better known in most circles from British evidence-based medicine,[107] has arisen, offering a new phrase describing one of the key elements of recent U.S. federal education legislation.

According to Davies, evidence-based education operates on two levels:

> *The first is to utilizing the existing evidence from worldwide research literature on education and associated subjects."*

> [Second is] *to establish sound evidence where existing evidence is lacking or of a questionable, uncertain, or weak nature. Practioners of evidence-based education working at this level need to be able to plan, carry out, and publish studies that meet the highest standards of the social sciences, and the humanistic and interpretative methods.* (Davies 1999, 109)

Following the principles of the NCLP act, The Arts Education Partnership[108] (AEP) has gathered evidence of the correlation between arts learning and cognitive capacities, social behavior, and academic achievements in *Critical Links* (2002), a compendium including reviews of 62 art education studies conducted by the partnership. Without attempting to cover the compendium in a detailed manner, we refer to its outcomes by way of a summary written by James Catterall. According to his inventory, evidence of transfer exists in following relationships:

Arts learning	Cognitive Capacities and Motivations to Learn
Visual Arts	
Drawing	Content and organization of writing.
Visualization training	Sophisticated reading skills/interpretation of text.
Reasoning about arts	Reasoning about scientific images.
Instruction in visual art	Reading readiness.
Music	
Early childhood music training	Cognitive development
Music listening	Spatial reasoning.
	Spatial temporal reasoning.
	Quality of writing.
	Prolixity of writing.

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[106] This "...means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (NCLB 2001).

[107] This is exemplified in the debate between Hargreaves and Hammersley (1997).

[108] The AEP "is a national coalition of arts, education, business, philanthropic and government organizations that demonstrate and promote the essential role of the arts in the learning and development of every child and in the improvement of America's schools" (http://www.aep-arts.org/).

Piano/keyboard learning	Mathematics proficiency
	Spatial reasoning.
Piano and voice	Long-term spatial temporal reasoning.
Music performance	Self-efficacy.
	Self-concept.
Instrument training	Reading.
	SAT verbal scores.
Music with language learning	English skills for ESL learners.

Classroom Drama

Dramatic enactment	Story comprehension (oral and written).
	Character identification.
	Character motivation.
	Increased peer interaction.
	Writing proficiency and prolixity.
	Conflict resolution skills.
	Concentrated thought.
	Understanding social relationships.
	Ability to understand complex issues and emotions.
	Engagement.
	Skill with subsequently read, unrelated texts.
	Problem-solving dispositions/strategies.
	General self-concept.

Dance

Traditional dance	Self-confidence.
	Persistence.
	Reading skills.
	Nonverbal reasoning.
	Expressive skills.
	Creativity in poetry.
	Social tolerance.
	Appreciation of individual/group social development.
Creative dance	General creative thinking – fluency.
	General creative thinking – originality, elaboration, flexibility.

Multi-arts Programs

Integrated arts/academics	Reading, verbal and mathematical skills.
	Creative thinking.
	Achievement motivation.
	Cognitive engagement.
	Instructional practice in the school.
	Professional culture of the school.
	School climate.
	Community engagement and identity.

Intensive arts experience	Self-confidence.
	Risk-taking.
	Paying attention.
	Persevering.
	Empathy for others.
	Self-initiating.
	Task persistence.
	Ownership of learning.
	Collaboration skills.
	Leadership.
	Reduced dropout rates.
	Educational aspirations.
	Higher-order thinking skills.
Arts-rich school environment	Creativity.
	Engagement/attendance.
	Range of personal and social developments
	Higher-order thinking skills.

> (Catterall 2002, 152–153)

However useful the list presented may be or how adequate the research in this area,[109] the problem and the justified source of criticism are linked to its connection to the NCLB act (see Chapman 2004). Bearing in mind the highly controversial nature of American educational policy, we would find easier, of course, to say that history will tell us how relevant the approach was. Still, some ideas and criticism must be set forth.

It is quite obvious that the standardized, utilitarian educational policy presented in NCLB can be defined according to the word hypothesis behind it. From the perspective of Pepper's system, educational policy that is based on testing and equates education with training represents the mechanistic worldview with assimilative knowledge.[110] Because of this mechanistic worldview, the EBE approach fails to see, or neglects, several important aspects of education:

Firstly, the "evidence" is never value-free. As discussed above, our knowledge is based on the forms and contents which we derive judgments. The judgments are context-dependent, relating to one's world hypothesis as well as to the social-historical background. The scientific thinking or logical model of propositions covers only a limited sphere of reality. The meanings of those propositions are always situated and filtered through our experiences. To reiterate, this does not mean the lack of an objective reality; the question has more to do with our limited ability to be truly objective. Education as an intentional endeavor always carries its own objectives and values as well as elements of the personalities involved. Educational practices are always based on values that are based on beliefs. Even if we do not share the values, we know they exist, and they should be communicable in their nature.

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[109] This is called into question by Winner & Hetland of Harvard, who ask, "*In what sense are the links summarized in 'Critical Links' actually 'Critical'?*" (2003, 13).

[110] Some would claim that the formalism is another option; I do not know whether Allan Bloom would agree with that.

Secondly, the type of evidence sought in EBE is often incomplete, nonexistent, or equivocal. For example, in the research conducted in Harvard University's Project Zero on the effects of non-art cognition from various types of art instructions, only three of 10 meta-analytic reviews demonstrated generalizable causal relationships. Five times the evidence didn't exist, while two time's equivocal findings were obtained from dance and spatial reasoning as well as music and mathematics (Winner & Hetland, 2000). Another problem is that educational research seldom reports the failed cases or tries to explore conflicting evidence. In those circumstances, evidence remains anecdotal.

Thirdly, explanation and understanding are confused and the complexity of the evidence neglected. In the case of finding evidence by statistical means, we have to consider two things, one concerning the methodology and the other dealing with ethics. Since education is complex by nature, it involves so many variables that the evidence is hard to interpret simply. This does not mean, however, that statistical methods should not be used where appropriate. However, the all-encompassing need to explain everything in causal terms, often at the expense of understanding the phenomenon concerned, is neither believable nor ethically sustainable. In other words; the existence of correlation between the arts and academic achievements doesn't necessarily tell us about causality, nor does it take into account that the correlation may be caused by a third (or fourth...), independent factor.

Fourthly, in education, easy solutions or quick fixes are rare. Every practioners know that, in real teaching, situations change. Something that worked well yesterday may not work today. There may be some basic principles that guide us as a framework but procedural solutions in real-life situations need more than just "best practices." To have a good school isn't just a matter of good strategy or well-defined operations; the endeavor must also incorporate culture as the way of doing and – more than that – of being.

The core of the criticism of the evidence-based approach is that the unidirectional and linear model of learning, in which certain capacities engendered in the arts transfer to other subject, is not believable, nor does it capture the essence of arts leaning and its importance. However, this doesn't mean that transfer does not exist; we just have to look for a more sophisticated explanation: The possible impact of arts learning may be found from the explanation that perceptions of transfer are partially a functions of the degrees to which different disciplines share certain cognitive elements, dispositions, or ways of thinking. These capacities or ways of thinking do not translate to other domains unless they are practiced in that way purposely. The various skills, attitudes, and ways of doing do not usually generalize as a matter of course; they are dependent upon **instruction** (Burton, Horowitz and Abeles 2000, 228–230). In other words, to enhance learning by using art, we have to do so deliberately, relying on both the distinctive character of different art forms and the characters of other domains. The assumption that arts would influence learning and student's character directly, like penicillin influences to inflammation, is not merely oversimplification but, in essence, superstition.

Comments like the following, both idealistic and trustful to scientific worldview, lack still the necessary historical awareness:

> *The arts should be supported not only because research supports their value but also because they are as dynamic and broad-based as more widely accepted disciplines. They contribute to the development and enhancement of multiple neurobiological systems, including cognition, emotional, immune, circulatory, and perceptual motor systems. Ultimately, the arts can help make us better people.* (NEA 2002, 21–22)

As much as the Germans valued the arts and their culture, it did not prevent the rise of Nazism; on the contrary, the arts had an essential role in the Nazis' ideology. To be a better person requires virtues, which cannot have their focus in the arts so much as in putting the virtues into practice. The arts may tell us about the moral world but cannot make us moral. The recent claims of the importance of the arts are understandable, but they still lack the theoretical depth necessarily for them to be thoroughly convincing. Looking to common sense, we can see that people usually do not create art to be smarter, to grow wealthier, or to become better citizens. They do it because they like it.

To have a deeper understanding of the role of arts in society, we have to integrate the salient parallel dimensions of the arts and the **other** domains. This constituting interpretation brings us back to Kant.

6.1. Parallels in pure, practical and aesthetic reason

In order to understand art, we have to look at its essence, how it is related to the human mind and its processes. In her 1998 doctoral dissertation, Marjo Räsänen has defined processes that are related to meaning giving in arts learning, as shown in Figure 17.
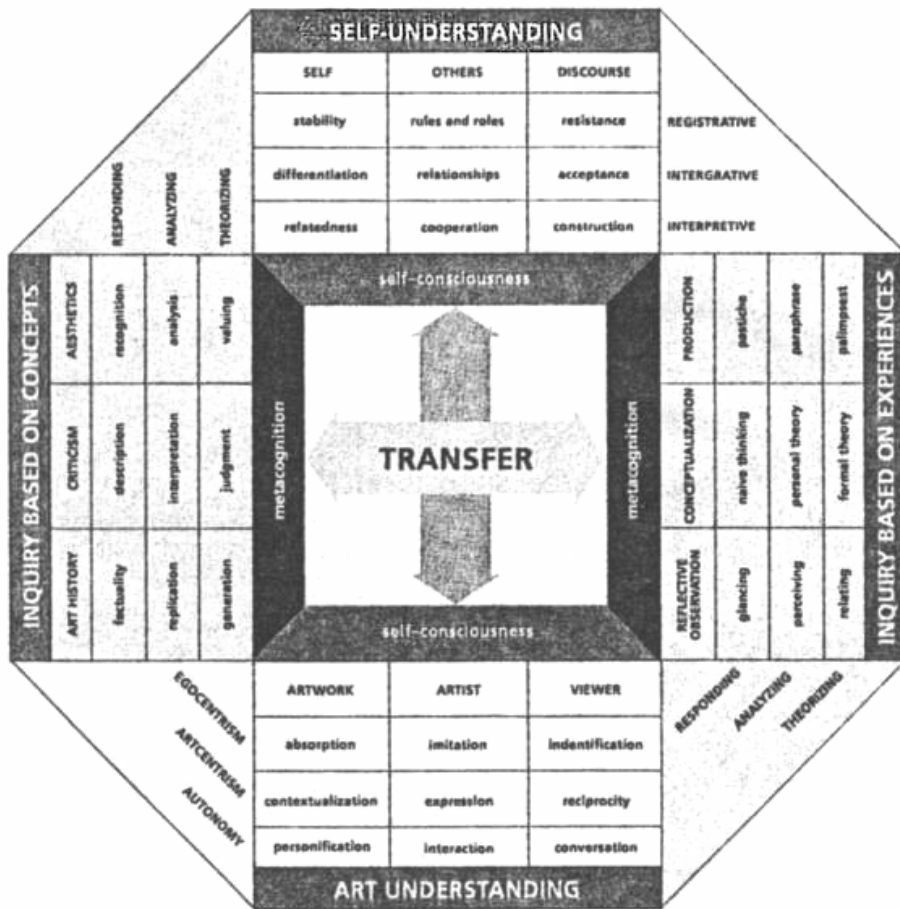
FIGURE 17. The model of "building bridges" according to Räsänen (1998).

The model consists of four categories: self-understanding, art understanding, inquiry based on concepts, and inquiry based on experiences, each of which is divided into three subcategories with three property codes. Each of these codes is set vertically from top to bottom into a hierarchy, while the horizontal layers from left to right describe the properties as dimensions of consciousness and meta-cognition. The processes of art, self, experiences, and concepts are thus linked analogically in the model – art and self-understanding relating to each other, inquiry based on concepts and experiences to one another. The transfer relates to former pair and transformation to latter (Räsänen 1998, 94). The model describes how experiences turn into understanding through reflection, conceptualization, and production. Deriving the idea from Rudolf Arnheim (1969), Räsänen claims that artistic thinking and conceptualizing are equivalent to other cognitive processes, such as memory, thinking, and learning. The work of art can be seen as presenting abstract themes that unite individual and general aspects of reality in the processes of perception and conception. In other words, works of art are statements about something, propositions that make a conscious or unconscious declaration about the nature of human existence (*ibid.,* 84).

This is the same notion that I referenced earlier in the "model of education as meaning making." Art has both form and content that refer to its proposition. The propositions are both general (judgments) and invidual (experience) in nature. In that way, the arts are profoundly linked intrinsically to human capacities of meaning making. If we fail to educate these capacities, we are surely missing something very essential and neglecting also one of the ways that humans perceive the world. The artistic meanings are metaphoric in their nature. The messages are open for interpretation but at the same time use the contextual symbolic language that attributes to certain meanings to them. In this sense, art uses indirect informing that can be either pervasive or revealing. According to some thinkers,[111] this feature of art has always been noticed by dictators, who are eager to maintain control over the arts.

To educate children as active, multiple doers and thinkers, one must give them the right tools. These are the ways of thinking that construct our worldview. The questions, definitions and metaphors are tools whose through interpretative use may enchant this approach. Art that has its own character (in all of its different forms) has also features, which can be found in other domains too. To have a clearer picture of these differences and similarities, we look more closely at the categories from the model. We then compare these to the categories Kant set forth in his *Critiques of Pure and Practical Reason.*

According to Räsänen, the table of self-understanding is based on Gergen's (1984) definition of the post-modern self, which is connected with the self-development model of Damon & Hart (1988). The former theory is socioconstructivist while latter is a theory of social–cognitive personality development defining the individual's increasing ability to understand the self and others (Bauer & McAdams 2004, 115). The registrative, integrative, and interpretative dimensions in table are taken from David Kolb,[112] as shown in table:

TABLE 13. Self-understanding.

SELF-UNDERSTANDING			
	Self	**Others**	**Discourse**
Registrative	Stability	Rules and roles	Resistance
Interpretative	Differentiation	Relationships	Acceptance
Integrative	Relatedness	Cooperation	Construction

Art understanding is derived from the theory of aesthetic development set forth by Parsons (1987). Originally having a connection to Kohlberg's moral theory, aesthetic development is defined as the ability to respond relevantly to a work of art as an aesthetic object. In this framework, aesthetic judgments and experiences are not treated separately (Parsons 1976, 306–307).

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[111] For example, Bruner (1996).

[112] In experiential learning theory, the levels of adaptation and the structures of consciousness are the registrative, **interpretative**, and **integrative** (Kolb 1984, 152–153). What is seen in the figure 17 is a misprint. (Räsänen, telephone discussion in April 2006).

TABLE 14. Art understanding.

ART UNDERSTANDING			
	Artwork	**Artist**	**Viewer**
Egocentrism	Absorption	Imitation	Identification
Art centrism	Contextualization	Expression	Reciprocity
Autonomy	Personification	Interaction	Conversation

The experiential learning theory defines learning as a process whereby knowledge is created through the transformation of experience (Kolb 1984, 38). Since the arts are experiential and interpretative in their nature, they share both the processes of production and those of conceptualization. In this process, two languages are used: the forms that are intertwined with activities (often non-verbal) and the concepts that carry the verbal meanings of those intentional activities embodied in products.

TABLE 15. Inquiry based on experiences.

INQUIRY BASED ON EXPERIENCES			
	Reflective observation	**Conceptualization**	**Production**
Responding	Glancing	Naive thinking	Pastiche
Analyzing	Perceiving	Personal theory	Paraphrase
Theorizing	Relating	Formal theory	Palimpsest

The logical conclusion of changing experience is that the language used to describe those experiences changes as well. Being part of social knowledge art, having of course, its individual, expressive side, changes normally through the transaction between the social forms and personal experiences.

TABLE 16. Inquiry based on concepts.

INQUIRY BASED ON CONCEPTS			
	Art history	**Criticism**	**Aesthetics**
Responding	Factuality	Description	Recognition
Analyzing	Replication	Interpretation	Analysis
Theorizing	Generation	Judgment	Valuing

Having its basis in the visual arts, the model that Räsänen[113] presents can be applied in other arts as well. At its core lies a balance between the formalist and expressive strands of arts education. However, it is plausible that to achieve arts true role we have to look outside of the arts themselves. To determine this role, we must integrate what has been said already about the arts.

As much as Kant's categories of pure and practical reason have affected Western thought in the fields of reason end ethics, his *Critique of Judgment* (1790) is to be considered the systematic conclusion of his critical project. With the aim of the *Critique of Pure Reason* being to determine the necessary limits of human theoretical knowledge, it disclosed the sphere of morality to be elaborated upon in *Critique of Practical Reason.* In these two critiques, human beings were divided, as citizens of two

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[113]Räsänen, telephone discussion in April 2006.

irreconcilable worlds: the natural world of science and the moral "kingdom" of freedom. In the third critique, Kant sought the unity between the human sensibility and its interplay with understanding and reason. According to him, that unity is found from the "faculty of judgment," which constitutes the human experience and the relationships of the world (Nuzzo 2005, xi–17).

If Kant is right, the analogies between pure and practical reason would probably have their counterparts in aesthetics, a table that Kant never created. In the tables that follow, the elements of pure and practical reason are put together with the definitions used in the model of experiential arts learning. The tables are classified accordingly: 1) and 2) the forms of perception (for quality[114] and quantity), 3) The forms of judgments (relation), and 4) the postulates of practical reason (modality). The tables allow more ready consideration of the hypothesis.

TABLE 17. Art as disinterest.

Quality			
1. Affirmative	Practical rules of action	Responding	ART
2. Negative	Practical rules of omission	Analyzing	AS
3. Infinitive	Practical rules of exceptions	Theorizing	DISINTEREST

The "responding" categories in the affirmative stage are the pleasant, beautiful, and good, which are connected to **inclination**, to **favour**, or to **respect**. Among these qualities, the beautiful is the one without interest:

> *Taste is the faculty of judging of an object or a method of representing it by an entirely disinterested satisfaction or dissatisfaction. The object of such satisfaction is called beautiful.* (PI, §5)

TABLE 18. Art as universal.

Quantity			
1. Universal	Subjective (opinions)	Egocentrism *Sense*	ART
2. Particular	Objective (precepts)	Art centrism *Reflection*	AS
3. Singular	Both objective and subjective (laws)	Autonomy *Judgment*	UNIVERSAL

The paradox with the satisfaction of art is that after the disinterested choice of taste has been made it relates itself the idea of universalism:

> *For since it does not rest on any inclination of the subject (nor upon any other premeditated interest), but since he who judges feels himself quite free as regards the satisfaction which he attaches to the object, he cannot find the ground of this satisfaction in any private conditions connected with his own subject; and hence it must be regarded as grounded on what he can presuppose*

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[114] For some reason, Kant starts with quality, not quantity as he did in previous critiques.

in every other man. Consequently he must believe that he has reason for attributing a similar satisfaction to every one. (PI, §6)

Kant calls the opinions of taste as "sense", while the second taste is "reflection", and autonomy is related to the capacity of making judgements. In this table, we obviously see clearly how the idea of *Bildung*[115] is related to parallel development from universal to singular and from subjective to autonomy.

The **beautiful** is that which pleases universally, without a concept (PI, §9).

TABLE 19. Art as contextual.

Relation			
1. Categorical	Personality	Registrative (*intuitive*)	ART
2. Hypothetical	To the condition of the person	Interpretative	AS
3. Disjunctive	Reciprocal	Integrative	CONTEXTUAL

The relations that art or the ideal of beauty has are relative:

> *There can be no objective rule of taste which shall determine by means of concepts what is beautiful.* (PI, §17)

However, the judgments of it can be derived from the ideas of "normal" and "rational." The normal idea is not derived from propositions of the experience as definite rules "*but in accordance with it rules for judging become in the first instance possible."*

Paradoxically: *"Beauty is the form of the* purposiveness *of an object, so far as this is perceived in it* without any representation of a purpose*"* (PI, §17). Thus art is contextual.

TABLE 20. Art as normative.

Modality			
1. Problematic	The permitted and the forbidden	Responding	ART
2. Assertotical	Duty and the contrary to duty	Analyzing	AS
3. Apodeictical	Perfect and imperfect duty	Theorizing	NORMATIVE

The problem with the judgments of taste is that it requires agreement. This requirement as **ought** is, however, subject to conditions (PI, §19):

> *Since an aesthetical judgement is not an objective cognitive judgement, this necessity cannot be derived from definite concepts, and is therefore not apodictic.* (PI §18)

The **beautiful** is that which without any concept is cognised, as the object of a **necessary** satisfaction (PI, § 22).

If we keep with the idea that the way of thinking[116] creates its own faculty as a "field of experience," we have probably given the answer to question raised earlier "*What does*

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[115] See chapter 4.1.3.
[116] "Dengungart" (Nuzzo 2005, 135).

Kant mean by saying that synthesis is an act of pure activity? What is the intermediary between the categories and judgements?" Art has a distinctive character yet shares vital processes with other human domains. In this sense, art acts through and involves our participation in both the sensible and the intelligible world. In the next chapter, we formulate a model to provide an interpretation of this relationship as well as the balance between the domains discussed.

6.2. The model of competent integrated knowledge

The theoretical background of the model discussed in this chapter can be found mainly from the Kolb's theory of experiential learning as well as the ideas from Venkula (2003), Lipman (2003), and Swanwick[117] (1986). However, the model isn't constructed only from the theories; more than them, it reflects the practical side of this research in procedural theory that was needed during the multidisciplinary project discussed in chapters 1 and 2. Being synthetic, in incorporates philosophical, practical, epistemological, and social features. As a starting point, we have to define knowledge.

In this study, knowledge has been seen according to its domains, situated, historical, consisting both of judgments and of experiences. In examples taken from Locke ("*Physica,*" "*Practica,*" and "*Semeiotike*") on page 32, Kant (...physics, ethics, and logic) on page 59, or Pestalozzi (heart/morality, head/judgment, and hands/art) on page 66, the human reality can be seen through three different dimensions of knowing. As Gardner states, these realms are **truth** (its flip side being what is false or indeterminable), **beauty** (its absence lying in experiences or objects that are ugly or kitschy) and **morality** – what we consider to be good or evil (Gardner 2006, 16). Since all of these realms have their own distinct quality, they form three dimensions of knowing that are reified in three forms of cultural knowledge thus.
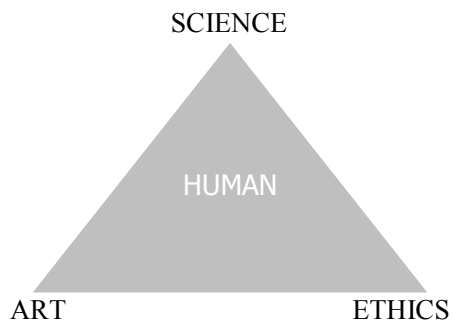
SCIENCE

HUMAN

ART   ETHICS

FIGURE 18. Three forms of cultural knowledge. (Ketovuori, 2004; 2005.)

The forms of cultural knowledge appear as they are from and in experience to oneself in informal settings much earlier than they appear in formal settings. In praxis, those forms are involved with the processes of knowing, doing, and feeling and have their own **ontology** – the way they exist in the world with their own special quality (Venkula 2003, 16).

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[117] Swanwick has presented a model of sequences of musical development in children's compositions with Jane Tillman, derived from Piagetian approach.

When the forms are put in action, meaning that the different domains and disciplines are examined, models and taxonomies are being constructed simultaneously. Those models and systems give us explanations of reality that address both the experiences and the judgements of the matter. In other words, the world is expressed through our actions, observations, and apprenticeship. At the same time, verbal meanings of our experiences are determined within the frames of our culture. Thus the forms of cultural knowledge have their own special **epistemology**. The collection of experiences (ontology) and the verbal meanings (epistemology) are the basic elements of education.[118]

Since all knowledge is like language, having a content, form, and referent, its constituted parts construct our worldview. The methods of inquiry differ, of course, depending on the situation, the context, and the domain within which it is taking place. The method guides us in how to collect a certain kind of information about certain kind of things. It guides our way of thinking, communication, and the way we learn things. It affects also our pedagogy and practises. Thus, the forms of cultural knowledge have their particular **methodology** in which they are practised. If the differences of the cultural forms and domain are taken seriously, we have to accept that different disciplines and forms have their own specialized way of doing things. To expect the arts to have a similar function to mathematics; or biology to languages; is not only foolish but a serious misunderstanding. Every domain has also its counterpart in modes of thinking. According to Matthew Lipman, the most important dimensions to be cultivated in schools ought to be critical, creative, and caring thinking. The modes of thinking are mutually interrelated and in that way to be used as parts of multidimensional learning. The integration refers to not just the integration of content or methods but also the forms and referents of the domains, as Figure 19 shows.
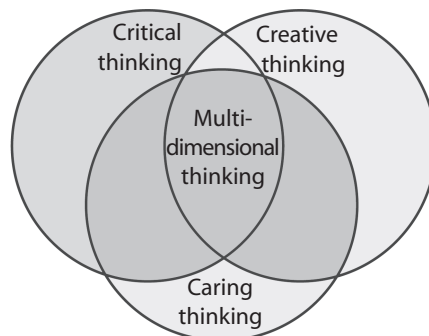

FIGURE 19. Major modes of thinking (Lipman 2003, 200).

The major modes of thinking are based on the "disciplined mind," as Howard Gardner claims. Critical thinking is related to science, creative thinking to the arts, and caring thinking to ethics. As object, those things are presented in cultural entities like tradition, products, artworks, habits and that way they are given *a priori* status in the culture, history and the tradition.[119] Multidimensional thinking includes understanding

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[118] But the consisting problem is how to teach them both, especially, if only cognition is regarded to be valuable.
[119] As suggested in page 45 the change from the Aristotelian-Thomistic philosophy to rationalism included that *"forming a philosophy could be detached from both history and tradition."*

of these entities and comprehension of their meanings and functions. The modes of thinking in education are thus about making judgements, feeling experiences and finding relationships. As Lipman puts it:

> *Disciplines are only trivially the information they contain; more important, they are the structures of relationships into which such information is organized. They are our understandings.* (Lipman 2005, 22)

In order to achieve multidimensional thinking in education, we should find the proper methods. According to Lipman, the most relevant skills for these purposes are inquiry, reasoning, information-organising, and translation (Lipman 2003, 178–189).

- **Inquiry** is a self-corrective practice in which subject matter is investigated with the aim of discovering or inventing ways of dealing with what is problematic. The products of inquiry are judgments.
- **Reasoning** is the process of ordering and coordinating what has been found our through the inquiry. It involves finding valid ways of extending and organising what has been discovered or invented while retaining its truth.
- **Information-organizing** involves organizing information into relational clusters and then analysing and clarifying them so as to expedite their employment in understanding and judging. Conceptual thinking involves the relating of concepts to one another so as to form principles, criteria, arguments, explanations and so forth.
- **Translation** involves carrying meanings over from one language or symbolic system or sense modality to another and yet retaining them intact. Interpretation becomes necessary when the translated meanings fail to make adequate sense in the new context in which they have been placed.
  (Moseley, et al. 2005, 158–159)

These skills represent an essential criterion that ought to be used within the major modes of thinking. The modes thus have their own ways to making inquiry and criteria related to how to find meanings. These are shown below.

Critical thinking
— sensitivity to context
— reliance on criteria
— self-correction

Creative thinking
— imaginative
— holistic
— inventive
— generative

Caring thinking
— appreciative
— active
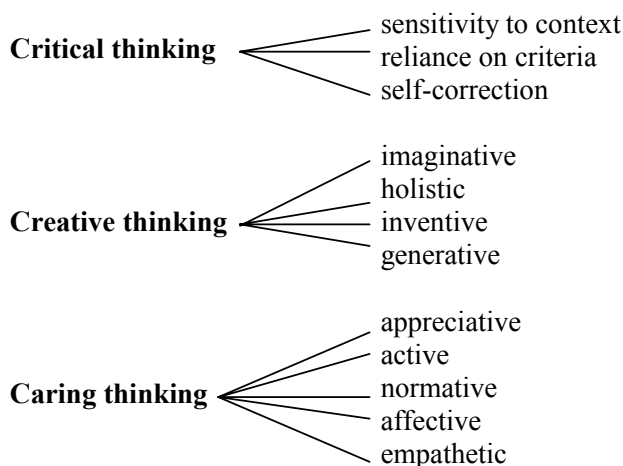— normative
— affective
— empathetic

FIGURE 20. Major modes of thinking (with criteria) by Lipman. (Moseley, et al. 2005, 159).

Achieving the balance with different modes requires disciplines that **are used** in action. In addition, the intellectual flexibility and thought's resourcefulness, which are usually needed in the field of arts and humanities, would certainly benefit all disciplines and all school subjects. Techniques like bridging, transfer, and translations should be used to develop students' capability to analogical reasoning, which is the most generic of the creative skills. (Lipman 2005, 56)

To presume that students would be able to learn multidimensional thinking by themselves is obviously too optimistic.[120] The only way to achieve all of the necessary levels of thinking **requires the experience of those modes**; i.e., they **have to be practised, not just talked about!** If the ability to make a connection between different modes of thinking and different cultural knowledge were seen essential, it certainly would have profound implications for the whole field of education. To achieve these aims, education has to reach meta-cognitive level, not just in reasoning but in metacognitive **feeling and actions** levels also. In addition, critical reflection[121] should be on the agenda. It would mean that we would be able to consider how the different dimensions of cultural knowledge are situated and affect our daily lives. However, critical thinking, in all modes is not an end in itself. It ought to be a means of changing things in one's life. To be more exact, the aim of the critical reflection should be **transformation –** of our behaviour, attitudes and assumptions. This is depicted in Figure 21.

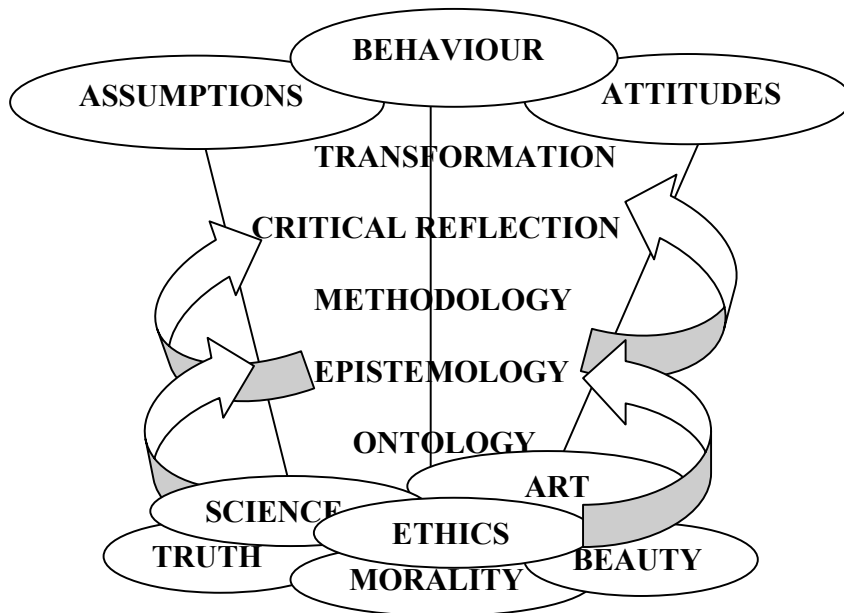FIGURE 21. Realms, stages of cultural knowledge and modes of acts.

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[120] Sometimes is said that they do, but in many cases that happens often before they reach school age.
[121] Teaching for critical thinking is not equivalent to teaching for thinking (Lipman 2003, 72). Instead of the word "critical," I would prefer "reflective." However, both criticism and reflection are needed in inquiry.

The process of learning should involve the various modes as well as areas of interests. For us to transform, we need to be able to face the things that we are not already familiar with. That doesn't mean, though, that we all would have to be "Renaissance geniuses"; not at all – we must just be more **willing to see** things from different perspectives. Only in that way the real chance for critical thinking come about through **the ability to change one's perspective.** While the three lines from the forms of cultural knowledge, from science to assumptions, from ethics to behaviour, and from art to attitudes, are the basic relations between the realms and how they appear in human acts, they are still interrelated and equally important for the development of human understanding.

What are the relations? Firstly, the assumptions are essential for science, since without them we probably wouldn't have it at all. Secondly, the behaviour is linked to ethics, which is the epistemology of the realm of morality. Morality, as we know, is in its nature ontological and related to our feelings. It isn't hard to see that our feelings affect our behaviour, which at least if judged by its consequences is always a matter of ethics.

Thirdly, art, I claim, is a matter of attitude. The basic feature of art is a process of seeing differently. This kind of attitude, while it need not to be conscious (it normally isn't), is driving force in creativity and an artistic approach. Of course, one could claim that attitudes are important also in ethics and science. Those claims are, of course, right, while the arts are really intertwined with them. However, usually, in the modern world, beauty is considered secondary to the truth, and morality is seen as something separated from these two. The question is to be asked "What kind of society we would have if the realms and forms of cultural knowledge were treated separately?"

The fallacy of science:
If we stress science too much, society is dictated by technical rationality. The lack of ethics within it would lead us to insanity. Here, all horrible things, including the atom bomb, gas chambers, and biological weapons, are not just be created but used as well.

The fallacy of ethics:
If we stress the importance of ethics in our lives, we find ourselves neglecting the scientific facts (and sometimes all facts) and also the beauty of life. That kind of single-mindedness would lead us to the fundamentalism, war, and political tyranny.

The fallacy of art:
If we emphasize art, we find ourselves immersed in aestheticism and sensuality. From this point of view, elitism and entertainment would be the two sides of the same coin. Exaggerating art could lead us also to sensationalism, which would deem ugliness and provocation to be art.

When referring to the above list, one could claim that the fractured worldview on which our education and vocational structures are based might have some negative effects on society. The problem, though, is that even we wouldn't disagree as to the importance of a more holistic approach, it is unclear how the different modes of thinking could be achieved. If we aim at the teaching of thinking skills, how do we maintain the standards and expectations of the knowledge curriculum at the same time?

We rightly must ask as well whether caring thinking or creative thinking can be taught and what kind of role the arts would have in this.

The word "art" in reference to multiple human doings and skills is involved in human understanding and knowledge in several ways. Categories used in arts learning are, for example, searching, knowing, appreciation, comparing, grasping, and understanding. The process of art involves participation in a holistic way. It includes much more than just a verbalization of the reality. The justification of arts does not arise on the basis of other dimensions of knowledge. It has its own values. The values of art are:

1) The value of beauty
2) The value of self-esteem
3) The value of personality
4) The value of creativity
5) The value of purposeful and meaning

The arts might help man to integrate himself into the world when they give him the tools to understand his culture. In this role, the arts would have the most significant meaning in human development. From this point of view, art education's importance is found in forging a link from human development toward competence and authenticity, with competence meaning that one has the capability to consider, act, and create something. It means also that one appreciates what he is doing. Authenticity refers to the reliability and honesty of one's personality requiring the recognition of one's roots and selfhood – the knowledge of one's culture.

The development of skills is addressed by the four-dimensional model consisting of the following stages, originally presented by Keith Swanwick (1986) (Ketovuori, 2004; 2005).
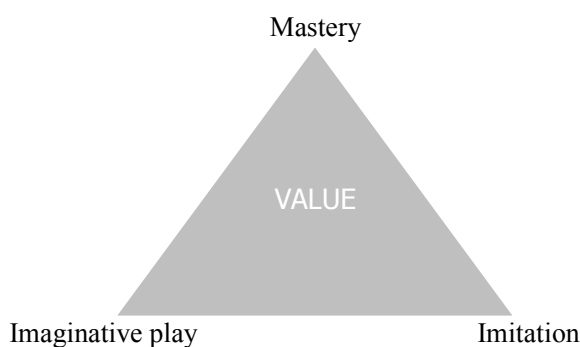
FIGURE 22. Model of skills development

In this figure, **mastery** is seen as in essence being sensory-motor capability, which is needed in the various tasks of human doings. Mastery refers also to the basic formation of concepts, which are used in different tasks. The tasks are generated in cultures as traditions, principles, or rules of certain doings. **Imitation** is needed for performing the task in a certain way. It is also the natural way of learning things informally. Especially in the arts, imitation has a significant role in learning of skills. However, to do things

well we need **imaginative play**, which arises when we have good mastery and a certain tradition, in which we are making an interpretation. These three dimensions being in balance it contributes to achieving the aim of the act. This is the time when **value** of that doing is realized. Whatever the task is, sometimes the things called **flow**[122] or **empowerment** are included with it.

The skilful act is always valuable, when it occurs in balance with ethics and knowledge. The act is especially valuable when it is done with purpose, thoughtfully, and with free will. To have competence means that we are able to use multiple abilities that take into account all dimensions of cultural knowing. The form of art requires imaginative play and a set of skills. The form of science requires mastery of concepts, ideas, symbols, and logical thinking. The form of ethics requires imitation, which includes also the idea of freedom. None of these things exist separately. Competent knowing is based on interaction between the different ontologies of the world. It means that competence is seen as a capability to build bridges between different kinds of qualities.

SCIENCE – Mastery – Logical thinking

Value for Human

ART – Imaginative play – Skills   ETHICS – Imitation – Freedom
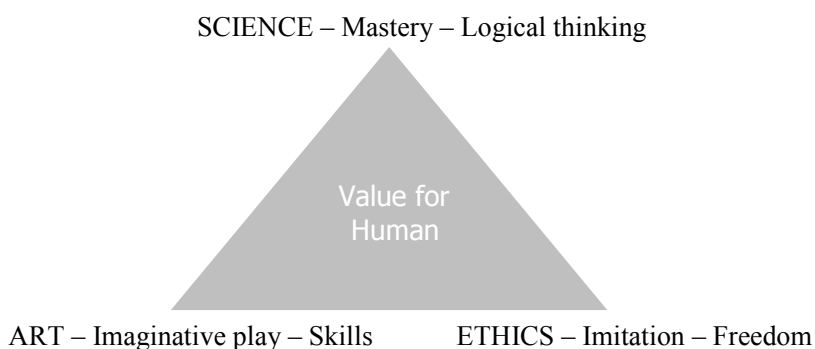
FIGURE 23. Cultural forms – levels of skills (Ketovuori, 2004; 2005).

When we put together the three ways of knowing and the development model of skills, we have a figure that I call as an integrative competent model of knowledge. The model shows us how the culture and man's ability is ought to be connected together.

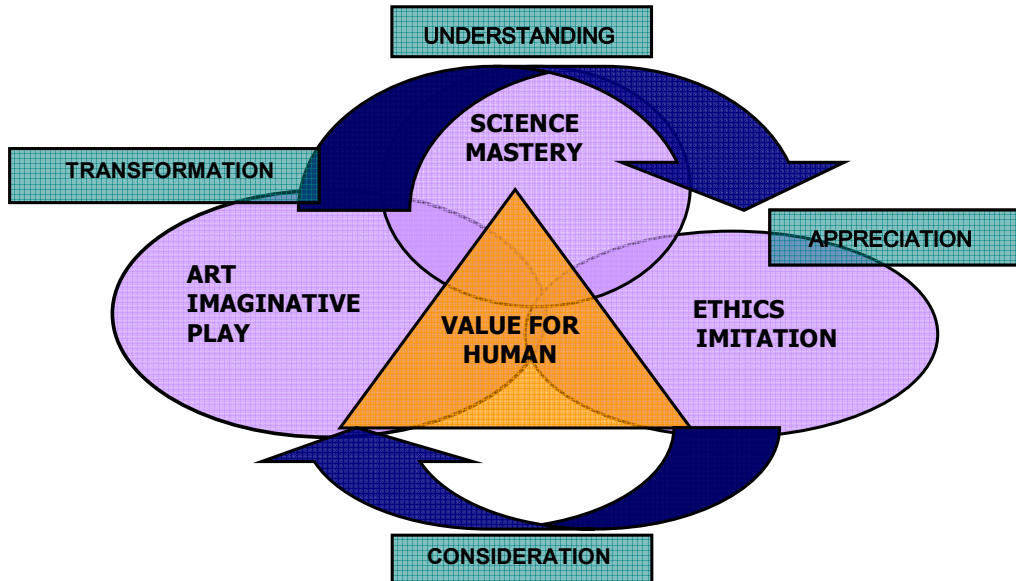[122] Referring here Mihaly Csikskszentmihalyi's term (2002).

FIGURE 24. Integrative competent knowledge model (Ketovuori 2004; 2005).

If we look at the picture from the left, we see that being able to do something leads, when verbalized, to understanding the thing. At the same time, in the doing of something, the world, culture, and human beings are constantly being **transform**ed – whether with conscious effort or from ignorance. If you are able to do something and you **understand** what you are doing, it certainly involves **appreciation** of those things. However, in this picture, there is a break in the arrow from science to ethics. This indicates that sometimes doing and knowing are not connected with appreciation. In philosophy, the gap is expressed as Hume's guillotine. Hume's *Treatise of Human Nature* famously explains:

> *In every system of morality, which I have hitherto met with, I have always remark'd, that the author proceeds for some time in the ordinary ways of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surpriz'd to find, that instead of the usual copulations of propositions, is, and is not, I meet with no proposition that is not connected with an ought, or an ought not. This change is imperceptible; but is however, of the last consequence. For as this ought, or ought not, expresses some new relation or affirmation, 'tis necessary that it shou'd be observ'd and explain'd; and at the same time that a reason should be given; for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it.*

How exactly **can** you derive an "ought" from an "is"? That question, Hume's guillotine, has become one of the central questions of ethical theory, and the position is usually ascribed to Hume that such a derivation is **impossible.** Well, does it or does it not go against common sense that one appreciates what he is doing knowingly? Unless

one does not appreciate what he is doing, you cannot wholly understand the true nature of the task. One who does not appreciate and understand the true nature of his doings cannot do things well. The point I am underlining here is that knowing what one is doing is not enough. You ought to understand **the purpose of** the action, what it means. The bridge from ethics to art is called **consideration**, and too often we seem to miss it, as well as the overall balance of our doings. In our world, the referent of our doings seems to be missing.

A brief note must be made on equivalent theory to mine.[123] As Robert Sternberg (2001) states, in the United States cognitive skills have become equated with intellectual skills. This equation is a mistake. Although memory and analytical skills are important for schools and life success, they are not sufficient. Instead, wisdom-related skills are more important, with wisdom defined as *"power of judging rightly and following the soundest course of action, based on knowledge, experience, understanding, etc."*(Sternberg 2001, 227). According to Sternberg (*ibid.,* 230), wisdom cannot be directly taught but more as indirectly acquired. In relationship with the domain as a formal body of knowledge and the field as the social organization for discovering and transmitting the knowledge, wisdom is still more tacit (informal) and wedded to its context. Tacit knowledge is: 1) procedural, 2) relevant to attainment of goals, and 3) acquired usually by oneself alone.[124]

Wisdom is a combination and the balance between tacit and explicit knowledge, as Sternberg puts it:

> *as mediated by values toward the achievement of common good through (a) intrapersonal (b) interpersonal (c) extra personal interests, over the (a) short and (b) long terms, to achieve a balance among (a) adaptation to existing environments, (B) shaping of existing environments, and (C) selection of new environments, as shown in the figure:"*

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[123] As with Pepper, I found Sternberg "theory of wisdom" after already presenting mine in Salzburg 2005.
[124] "With the little help from my friends" perhaps.

Goal **Common Good**

Balance of Responses to
Environmental Context **Adaptation**

Shaping **Selection**

V
A
L
U
E
S

Extrapersonal

Balance of Interests
Over the Short- and
Long-term

Intrapersonal **Interpersonal**

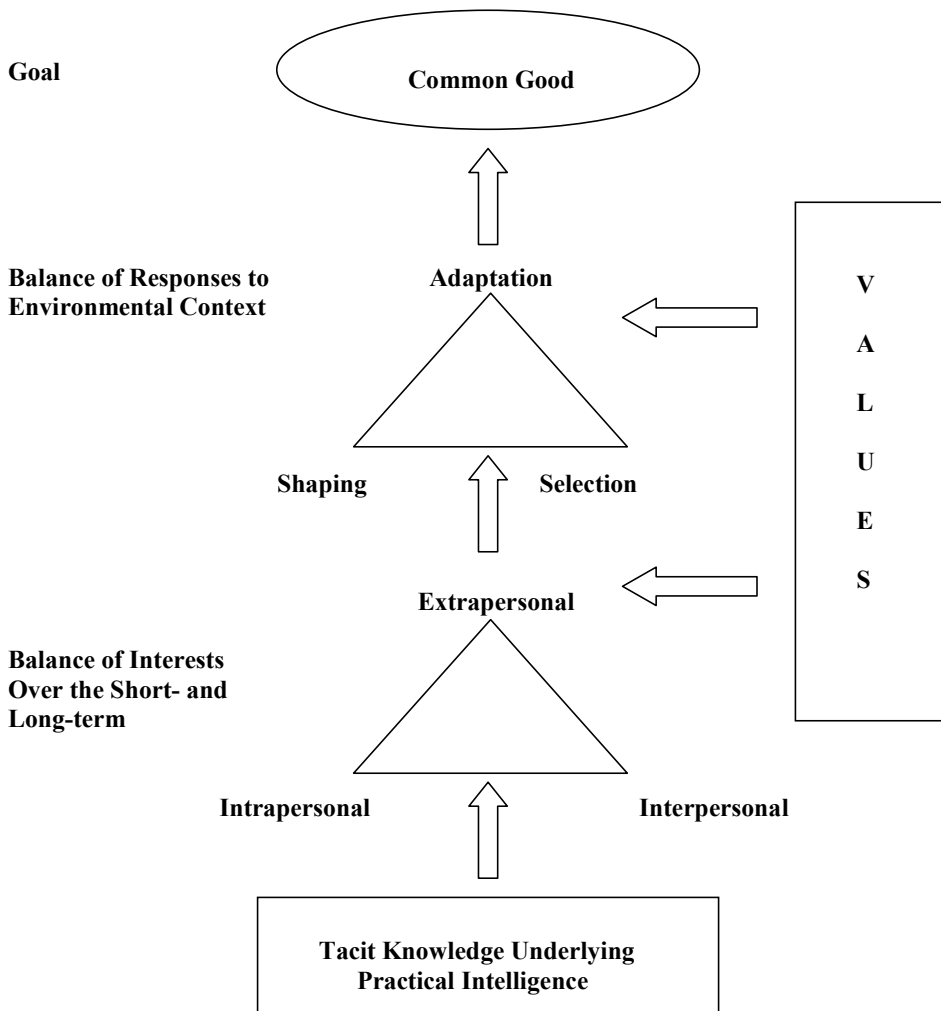**Tacit Knowledge Underlying**
Practical Intelligence

FIGURE 25. A balance theory of wisdom.

In the figure, tacit knowledge underlying practical intelligence is applied to balance intra-personal, interpersonal, and extra-personal interests to achieve a balance in the responses to the environmental context of adaptation to, shaping of, and selection of environments in order to achieve a common good. Values mediate how people use their tacit knowledge in balancing interest and responses (Sternberg 2001, 227–245; 2004, 169–186).

As one can see, Sternberg's and my model deal with the same thing. Because my focus is on integrated competent knowledge that is historically related in experience and doing things, the balanced theory of wisdom constructs several elements that involve analytical, creative, and practical intelligences.

- Wisdom requires knowledge with tacit knowledge (TK) and informal knowledge involved.

- Wisdom needs analytical thinking that is used at the meta-cognitive level.
- Wisdom needs creativity to find right solutions.
- Wisdom is practical but not just practice.
- Wisdom is social as well as emotional regulation but still going beyond the understanding, regulation or judgments of emotion.

In short: wisdom is a balance of intra-personal and interpersonal levels with understanding of extra-personal factors (Sternberg 2001, 233–234).

In my model, art is both the domain of art with the attitude of "imaginative play" and the "way- of- doing things" that is intertwined within the processes in all of the domains and cognitive areas of one's personality. If there is a difference between my model and Sternberg's, it is probably found in the setting in relation to the terms "value" and "the common good." In both models, these terms are left open, to receive content, context, and application later. However, where my model is linked to the cultural forms and the competence, Sternberg's model is linked to psychology. The difference between these models might be, in sum, that integrated competent knowledge is more integrated, having the cultural forms in it. That is, I suggest that (autotelic) wisdom is about not the goals but more than that: the quality of its own essence. The idea that we certainly agree with is this: wisdom is not a specific culture or the content of a domain; it comes **through** the culture and the domains, in and between the people living together in this world.

After this long theoretical journey, it is time to summarize what we can say about our research object; the Finnish LTTA pilot and its Canadian counterpart.

7. FINLAND AND CANADA: TWO CULTURES OF ARTS EDUCATION?

Overall, in Finland the arts have always been connected to the nature, the nation and the identity of its people. In the era of Sweden-Finland (in the 14th and 18th century), the Finnish language was given written form via the work of Mikael Agricola (1510–1557), whose first book, a 24-page work called "ABC-book" for school purposes, was printed in 1543. The Finnish language, used only by common people,[125] was given also a New Testament and 900 pages "Rucouskirja" (prayer book) by him in which he set forth ideas from Luther, Erasmus, and Melanchton. After the 1809 peace agreement of Russia and Sweden in Fredrikshamn, Finland was an autonomous grand duchy under the Russian Tsar. In that portion of 19th century when the Russians were concerned with ensuring Finnish loyalty and separate Finns from Sweden, the Finnish language gained ground and the area's distinguishing elements of culture began to flourish. In these circumstances, Finnish culture found its form especially on the basis of the national epic the Kalevala (1835), a collection of the ancient poems and songs gathered from the region of Karelia by Elias Lönnrot (1802–1884). Later on, several artists, among them painter Akseli Gallen-Kallela (1865–1931) and composer Jean Sibelius (1865–1957), were inspired by these themes and created their well-known works, which, under the influence of the 19th century's nationalistic tendencies, led to national awakening and ultimately to Finland's independence. The incontrovertible fact was to be that the arts, as well as education,[126] were to be essential part of the national project in Finland from its very beginning.

The arts, which gave voice and language to the Finnish people, were at the same time in the central role of education, passing the cultural heritage to coming generations.[127] The arts have had in important role in Finnish school programs ever since 1863, when the first Elementary School Statute was implemented. Even today, an essential feature of the Finnish school system is that every ordinary comprehensive school can provide all arts to all children. Teachers specialized in music, handicrafts and fine arts give classes for pupils aged 12 to 15, and class teachers[128] are able to provide art lessons to younger children. In Bamford's (2006) global research compendium, Finland holds first place as a country education **through the arts** in the schools among the 40 countries that investigated (*ibid.,* 60).

Unlike that of Finland, Canada's history has never been formed around a single centralized idea of nation – as became clear from the very beginning of Canadian federal experiment – despite and against the ideas presented by John A. Macdonald's (1815–1891), Canada's first prime minister (LaSelva 2004, 17–33). When the

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[125] While the upper classes spoke Swedish.

[126] See about Cygnaeus in chapter 4.1.4.

[127] This does not, however, mean that the tradition of our arts education has become a relic; rather, it has maintained it freshness, adapting to the new genres and cultures awareness. For instance, pop music has been part of music education in schools almost 20 years.

[128] Every teacher attends the arts lessons in teacher education. The other controversial question is how sufficient that education is, and whether all teachers should participate in it. My view is that they should.

Confederation Settlement was declared in 1867, the Constitution Act gave exclusive jurisdiction over education to provinces (Simeon & Robinson 2004, 106–108). Ontario, Quebec, Nova Scotia, and New Brunswick, as well as the Protestant and Catholic schools already established, were safeguarded under it. When the new provinces joined the confederation, each brought its own approach to parochial schools. Due to this background, educational policy in Canada is difficult to talk about, at least as a homogenous entity (Irwin & Chalmers, 1996). Today Canada, unlike many of other industrialized countries, does not have a national ministry of education; all of its' 10 provinces and two territories have independent education systems. Still, the educational organizations have their mutual forum in the Council of Ministers of Education (CMEC), where national educational organizations and the federal government concerns are debated, consulted upon, and acted on (http://www.cmec.ca/).

As a result of the situation, the national arts educations organizations, as well as the other arts organizations,[129] have the primary role in the concerns of the nation's arts education policy. In 2003, all of the major art educators' organization together developed a paper titled "Policy Guidelines for Arts Education in Canadian Schools" (NSAE, 2003), which summarized the objectives and role of arts in Canadian society. However, the ideas that were presented were just recommendations and therefore not binding in provincial jurisdiction. In spite of great concerns of the art educators and the place that art officially has in school curriculum (for example in Ontario), presently the arts in the schools are not available for all children as "core" subjects like reading and math. The level of arts instruction varies greatly from school to school and district to district across Canada. In many elementary schools, virtually no arts instruction takes place (Upitis & Smithrim 2003, 5), and also notably in teachers' education the level of given instruction is obviously insufficient.[130] In addition, the elimination of art coordinators and qualified specialist arts teachers across Canada has reduced the amount of art education, too (Hanley 2003, 12). What is the underlying reason for the situation?

One possible answer is found in a broader perspective to Canadian education. While education in Canada did earlier share the goal of general education, it can be described as shifting in the mid-1980s towards a map with schools as training grounds for the new global economy. In this process, the idea of citizenship education has been lost, along with the time devoted to subjects like art, music, history, social studies, and even physical education, whose emphasis has been reduced to allow more emphasis on mathematics, science, literacy, and computer science (Osborne, 2000). "Global competition" is the magic phrase even in the promotion of the arts education:

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[129] Educational organizations such as the Canadian Music Educators' Association (CMEA), Canadian Society for Education through Art (CSEA) or National Symposium on Arts Education (NSAE) do not have a truly national mandate like the art organizations covering all of Canada. Among these national institutions is The Royal Conservatory of Music, which has a position enabling it to influence national issues related to education (Hanley 2003, 16).

[130] These notions are based on my observations at Toronto's York University in 2006. The actual course descriptions can be found from http://www. edu.yorku.ca/.

Competition that Canadian business faces is global and some of the tools that we need to meet that competition are: high level of literacy, analytical ability, flexibility and ability to resolve conflicts. The Royal Conservatory of Music's integrative arts curriculum has proven that it can develop those skills which are valuable in the business world. Galen Weston, Chair & President, Georg Weston Limited, quoted at http://www.rcmusic.ca/ContentPage.aspx?name=learningThrough

Among the challenges that the global economy strives to education; the other challenge of globalization is seen in Canada in the Canadian cultural mosaic. From that standpoint, suggestions that the arts should have a more important role in education are clear:

The arts are an integral part of our children's lives. They provide important ways of making our lives meaningful. From an early age, children naturally immerse themselves in drama, dance, music, the visual arts, literary arts and media: to play, to learn, to communicate, to celebrate, and to find out who they are. The arts both express and engage the human spirit in profound and powerful ways. They give our children and youth a sense of the world outside themselves, uniquely touching the timelessness of history and the limitlessness of the universe while helping them celebrate community. The arts are an integral part of Canadian society (NSAE 2003, 1).

The suggestion going furthest in what it says of the role of arts comes from Max Wyman, the current president of the Canadian Commission for UNESCO, who writes:

as there are necessities of vital human needs like the right to read, the right to shelter, the right to eat, etc. there should be also the unassailable human right called culture. (Wyman 2005, 10)

Canada, as multinational and multiethnic society, with its different languages, habits, and backgrounds, has given its commitment to accept newcomers from diverse cultures. This multiculturalism rejects assimilation and thus allows and supports immigrants to maintaining various aspects of their ethnic heritage (Kymlicka 2004, 37). The arts as an essential part of the culture are seen as important from this perspective. These two sides of globalization, market liberalization and multiculturalism, are the context in which LTTA is implemented.

7.1. LTTA in Canada

In the situation where arts educators in Toronto's area schools[131] are lacking in numbers, LTTA brings the artist into classroom, breaking the normal mold for teaching and learning in the classroom, while providing also tools for multicultural and aboriginal lessons featuring indigenous art forms. Proclaiming itself *"a comprehensive design framework for public school improvement"* LTTA outlines its features in its promotional material in following ways:

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[131]   One of the reasons that Jukka-Pekka Saraste announced that he would have leave his post at TSO Toronto in April 2000 to Finland was to have a sufficient arts education for his children (Eatock, 2002).

- At the core of the program is a research-based instructional model. LTTA teachers learn to use participatory music and art activities to present the core curriculum.
- LTTA offers schools a comprehensive implementation program, which includes extensive professional development, in-class facilitation, curriculum integration models, student assessment tools, program evaluation, and managerial expertise.
- LTTA is a school-wide initiative. Every teacher and student participates. Each year, teachers spend five half days in professional development. They gain practical experience with new instructional methods through nine in-class workshops given in partnership with trained artist-mentors.
- LTTA provides innovative models for integrating different strands of the curriculum. This allows students to understand the connection between different areas of knowledge and helps teachers implement today's more comprehensive curriculum.
- LTTA evaluation tools allow teachers to better understand their students' unique talents and strengths.
- LTTA Showcases engage parents in their children's learning and provide an opportunity for all to experience pride of achievement.
  (list drawn from Hanley 2003, 13)

Even leaving aside qualified specialist arts teachers being rare and general classroom teachers having insufficient training in the arts, it is obvious that the arts education has to be taken care of by someone. By reading the LTTA promotional material (as well as personally being attended their conferences and P.D. program), one seems clearly that the RCM has taken much responsibility in this new field that formerly did not belong to its duties,[132] as Peter Simons, Royal Conservatory of Music president, announces in *The Globe and Mail:*

> *We have evolved from a school of music to a national force for education and cultural development. Our work across Canada and throughout the world has provided tangible evidence of our status as a leader in the development of arts-based learning programs, and we take our place as artistic innovators, both nationally and internationally, in a genuine revolution of educational enterprise.*
> (Monday, April 24, 2006.)

Or, as the Executive Director Angela Elster put it in the same publication:

> *If I take an objective view and look at what we've built" says Elster, "growing from nine schools to 350 schools in just 12 years, at the numbers of students, the numbers of teachers, the numbers of LTTA artists; and when you add the academic research findings, I would say that the RCM and LTTA must be at the leading edge of creative thinking in education.*

The academic research to which Elster refers is the LTTA National Assessment Final Report (Upitis & Smithrim 2003) submitted to The Royal Conservatory of Music. The

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[132] The change is though political as the national arts organizations and institutions today **must** have educational functions to receive government funding (Hanley 2003, 12).

research involving 6,675 students from grades 1 through 6 was carried out both in both LTTA and two types of non-LTTA schools in three years time (1999–2002). In the report the effects of LTTA program are described, and achievements in the academic subjects are measured. Also, the beliefs and practices of parents, artists, teachers, and administrators are described. On the basis of the research, the following evidence of LTTA's success is presented:

- Interviews with teachers as well as questionnaire data show that the majority of LTTA teachers believe that using the arts as a teaching method helps in reaching hard-to-educate students and in providing them with positive learning experiences. The same belief is not held as strongly by teachers in non-LTTA schools.
- Music lessons have a positive effect on achievement in language arts and math regardless of socio-economic status.
- Children in LTTA schools believe they learn a lot from studying the arts at school.
- 98% of teachers surveyed believe the arts are fundamental to quality learning.
- 98% of teachers surveyed believe the arts are an effective way to reach hard to educate students.
- 99% of teachers surveyed believe that students can express knowledge and skills through the arts.
- 89% of teachers surveyed believe the arts are an effective way of teaching other subjects.
- Nevertheless, only 22% of teachers surveyed have had specialized training in the arts.
- 78% of teachers surveyed believe that the arts are an effective way of increasing parental involvement in schools. Other research indicates that parental involvement in schools is correlated with higher student achievement.
  (in the main, from http://www.ltta.ca/assessment.html)

According to the assessment findings the arts education contributed to engagement and motivation in learning, still no significant differences between the two groups in the reading Comprehension, Vocabulary, Writing or Geometry and Applications Canadian achievement tests were found. However, in math the difference was interpreted to be significant as reported later (2005) in following table:

TABLE 21. Computation and estimation in LTTA and non-LTTA schools (Upitis & Smithrim 2005, 115).

"Differences in Group Means in Pre- and Post-test Canadian Achievement
Test Scores for Mathematics and Language and Writing Samples"

Computation and Estimation	N	mean	S.D.	t	Df	sig.
LTTA schools		429	12.80	5.0		
Non-LTTA schools		286	11.44	4.8		
				3.619*	713	p<0.001

*p<0.05

In the original report, the figures were missing; only the following text was released:

> *At the end of three years of LTTA programming, the grade-6 LTTA students (10-to 12-year-olds) scored significantly higher on tests of computation and estimation than students in the two types of control schools (p < .05). In terms of percentile differences, calculated by using the standard deviation of the LTTA group and the mean of the comparison group, the difference was equivalent to approximately 11 percentile points.*
> (Upitis & Smithrim 2003, 17; also 2005, 116.)

However, in the promotional material, the following was seen:

> Grade 6 **LTTA students scored significantly higher** on mathematical tests of computation and estimation than students in the two types of control schools, equivalent to a difference of 11 percentile point in raw scores.
> (http://www.rcmusic.ca/ContentPage.aspx?name=LTTAAssessmentEvaluation)

What kind of conclusions we can make out of this? Firstly, as I have stated clearly earlier (in chapter 6), the evidence-based research concerning school achievements in arts education involves as unfortunate misunderstanding that doesn't help us much in understanding the arts and their meanings – I promise to change my view immediately after the first results showing math's effects on musical learning are released.

Secondly, as do the arts, science deserves to be treated appropriately. Even if the Computation and Estimation results can be interpreted to be statistically significant they are still **modest,** as the researchers themselves admit too (*ibid.,* 46). The fact is that a minor change in the students' test points affects the results in a way that it would not be statistically significant anymore. It has to be noticed that, especially in large samples, the levels deemed necessary are easily achieved, which mean that conclusions cannot be based on them. For more than that, the results do not tell us about **causality**. In addition, the reporting should be clear enough that one could understand how the results are derived. In the original "National Assessment," this criterion is not met.

Does this criticism nullify the other results of LTTA or the experiences that people involved are reported? Of course not, – the notions of attitudes, practices, and beliefs cannot be denied. In my personal visit to one of the LTTA schools in Toronto the principal convinced to me: "*This program really has made a difference in our school".* Indeed, I have no reason to doubt her. In its experiential level LTTA is important for schools and surely can help pupils to enjoy more of school where the arts otherwise wouldn't be presented at all. Still quite striking from the European point of view is the market-orientated environment with which LTTA and as similar programs has to contend. The program's promotional materials are a peculiar mixture of fact and fiction, and the research included presents its argumentation on an *ad hoc* basis. The use of results to justify the approach and the argumentation for saying that the program is good can though lead to contradiction, though:

> *If Learning Through The Arts does nothing more than help children and teenagers cope with the emotional challenges they face, as it has already done for these young people, **it will surpass any expectations anyone could have for its success.***

> (Joyce Wilkinson, OISE University of Toronto; emphasis mine; from http://www.rcmusic.ca/ContentPage.aspx?name=LTTAAssessmentEvaluation, the same page where the numbers are presented)

The question is: why would have any such expectations, if the numbers are presented correctly? It seems quite obvious that the aforementioned statistical efforts to gain evidence are used in combination with emotional arguments[133] "in order to convince those who wouldn't believe otherwise." The paradox is that even in its expressiveness the LTTA, which basically should represent an opposite force to the modern technical calculation, has to use the same methods, to justify its existence. Unfortunately, in the contemporary educational environment there is a tendency to, on the one hand, assimilate the invidual minds into social practices or, on the other hand, reduce minds to cognitive processes or the stuff of computational theories (Olson 2003, 131). In the postmodern society, justifying purposes are thus looked at in terms of either statistical evidence (science) or from emotional arguments (advocacy, commercialism) more than the practices internalized values or the intentions behind the practices.[134] Things (empiricism) and ideas (ideologies) are given more respect than are the actual people who were supposed to be helped. In this kind of environment, seldom are the different organizations able to meet the ethical questions about their authority, and the boundaries of their task.

How about the world hypotheses behind the LTTA? Since the philosophical background of the approach, according to Angela Elster as interviewed on January 26, 2006, has connections to Carl Rogers,[135] the ideas involved in LTTA can be traced to the views of artistic psychotherapy and humanistic psychology. It might be appropriate to look at the views that Rogers states on education in his "Personal Thoughts on Teaching and Learning":

a. *"My experience has been that I cannot teach other person how to teach."*
b. *"It seems to me that anything that can be taught to another is relatively inconsequential and has little or no significant influence on behaviour."*
c. *"I realize increasingly that I am only interested in learnings which significantly influence behaviour."*
d. *"I have come to feel that the only learning which significantly influences behavior is self-discovered self-appropriated learning."*

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[133] The confusion and fragmentation of modern worldview, also discussed by Alasdair MacIntyre so vividly in his book *After Virtue*, has its consequences. The historical background for this striking phenomenon can be traced as far as to Hume who in his ethical theory presented emotivism and in his epistemology the empiricism. See pages 50–52 of this work.

[134] The ideas of the Enlightment have given way to "mumbo-jumbo" as discussed by Francis Wheen (2004).

[135] In northern America, it is not so much about of theories as it is of practice. Even as analyzed here, the ideas of Rogers do not represent official statements of LTTA (*ibid*).

e. *"Such self-discovered learning, truth that has been personally appropriated and assimilated in experience, cannot be directly communicated to another. "*

f. *"I realize that I have lost interest in being a teacher."*

g. *"Hence I have come to feel that the outcomes of teaching are either unimportant or hurtful."*

h. *"When I look back at the results of my past teaching, the real results seem the same – either damage was done – or nothing significant occurred."*

i. *"I realize that I am only interested in being a learner, preferably learning things that matter, that have some significant influence on my behaviour."*

j. *"I find it very rewarding to learn, in groups, in relationships with one person in therapy, or by myself."*

k. *"I find that one of the best, but most difficult, ways for me to learn is to drop my own defensiveness, at least temporarily, and to try to understand the way in which his experience seems and feels to the other person."*

l. *"I find that another way of learning for me is to state my own uncertainties, to try to clarify my puzzlements, and thus get closer to the meaning that my experience actually seems to have."*

m. *"It seems to mean letting my experiences carry me on, in a direction which appears to be forward, towards goals that I can but dimly define, as I try to understand at least the current meaning of that experience."*
     (Rogers 1989, 301–303)

Since the above claims have a very person-centred view, they don't seem to fit in with the idea of teaching. Rogers distinguishes two types of learning: cognitive (meaningless) and experiential (significant), where the former corresponds to the academic knowledge:

> *But we have been schooled for years to stress only the cognitive, to avoid any feeling connected with learning. We have been denying a most important part of ourselves, and the awful split I have described is one result. Another result is that the excitement has, in large measure, gone out of education – even though no one can take the excitement out of real **learning.***

> *I have days when I think that educational institutions at all levels are doomed, and perhaps we would be well advised to bid them farewell – state-required curricula, compulsory attendance, tenured professors, hours of lectures, grades, degrees, and all that – and let true learning begin to blossom outside the stifling hallowed walls. Suppose every educational institution, from kindergarten through the most prestigious Ph. D. program, were to close tomorrow. What a delightful situation that would be!*
> (Rogers 1995, 268–269)

Being provocative in his statements Rogers still might have some truth in his ideas about schooling. The solution, however, is not definitely closing the doors of institutions or denying the significance of teaching – the solution, as suggested in previous chapter, is found from the balance between the different ways of knowing. Denying being a follower of Rousseau's (Rogers 1989, 402), Rogers cites names like

Martin Buber, Sören Kierkegaard, Erich Fromm, Phil Slater, Wilhelm Reich, John Holt and A. S. Neil as important facilitators for leaning (Rogers 1995, 274.) While asking in his essay "Do We Need 'A' Reality" Rogers comes to conclusion that:

> *There are as many "real world" as there are people!* (*ibid.,* 102.)

Referring to his views, we find it relatively easy to see that combining his therapeutic, philosophical, and educational views leads to the existentialism,[136] and thus in Pepper's theory of world hypotheses he represents an organics worldview, as shown below:

Synthetic
Theories

CONTEXTUALISM
(The world hypotheses of
accommodative knowledge)

**(Rogers)
ORGANICISM**
(The world hypotheses of
divergent knowledge)

Dispersive
Inquiry   ← Transformation
via Extension   Transformation
via Intension →   Integrative
Inquiry

FORMISM
(The world hypotheses of
convergent knowledge)

MECHANISM
(The world hypotheses of
assimilative knowledge)
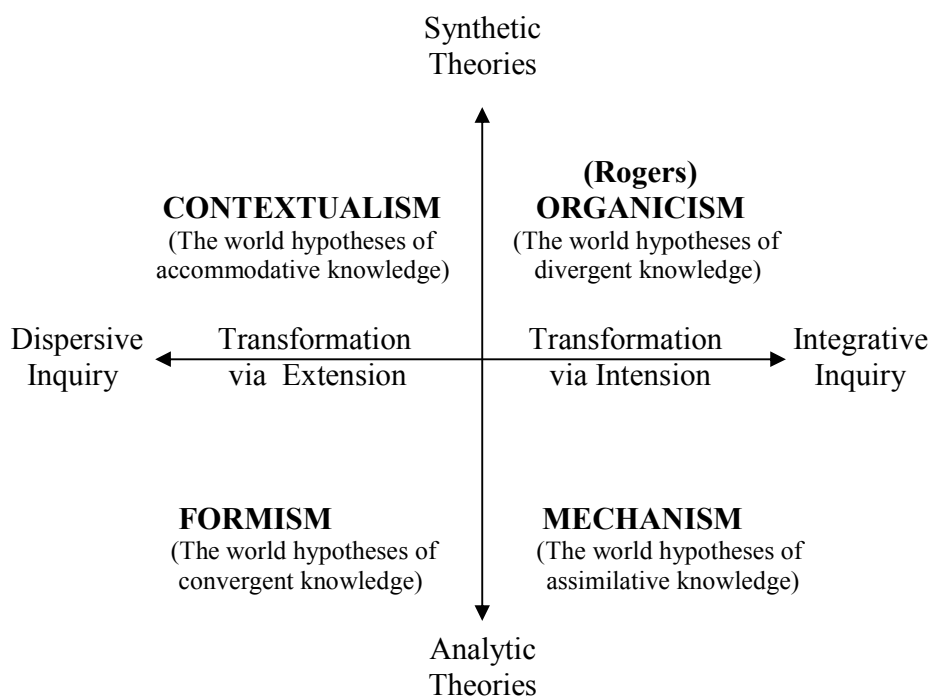
Analytic
Theories

FIGURE 10. Pepper's system of world hypotheses and the structure of learning (from Kolb 1984, 112, with Rogers added).

But, how relevant is this for understanding LTTA? Have we become sidetracked in talking about Rogers instead of analysing LTTA, when, after all, LTTA holds on firmly to teaching? The LTTA claims to be about the collaboration between the teachers and the artist, as officially stated:

- *To promote the academic, social and emotional growth of students*
- *To engage all children successfully in learning through the participatory hands-on activities*
- *To improve the academic achievement of all the students*
- *To provide teachers with a diverse array of instructional tools*
- *To develop a strong sense of purpose and direction in every student*
- *To promote creativity, problem solving and teamwork*

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[136] See the list of Tanner & Tanner on page 77 as well as four-hold table in page 78.

- *To provide opportunities for self-expression and self-discovery*
- *To create a means to explore cultural, ethical and social issues*
  (from http://www.ltta.ca/program_description.html)

When we look at the list, it doesn't seem that LTTA would neglect "the educational institutions". Let us continue, examining more of Rogers's ideas. To Rogers, experiential learning is equivalent to personal change and growth. All the human beings have a natural propensity to learn; the role of the teacher is that of the facilitator that includes:

- Prizing, acceptance, and trust
- Empathic understanding
- Perception of these attitudes (i.e., "*Realness in the Facilitator of Learning*")
- Balancing of the intellectual and emotional components in learning
- A "*Trust in the Human Organism*"
- "*Living the Uncertainty of Discovery*"
- Sharing of the experiences in a group
- Self-evaluation as the principal method of assessing progress or success
- Significant learning taking place when the subject matter is relevant to the personal interests of the student
- Learning that is threatening to the self (e.g., new attitudes or perspectives) being assimilated more easily when external threats are at a minimum
  (Rogers 1989, 304–322. 1995, 269–289)

Since all of these ideas can be found from LTTA, signifying sharing and the idea of "kindred-spirit", the relationship is much clearer. A humanistic orientation that places emphasis on the facilitating the learning with interpersonal relationship in transforming the tradional manner of education can be definitely found in LTTA. As Elster quotes herself:

> *Caring is an attitude that is known to foster creativity – a nurturing climate in which delicate, tentative new thoughts and productive processes can emerge.*
> (Rogers 1995, 160; citing Elster 2001)

As much as LTTA officially speaks about teaching and on paper (Elster, 2001) shows the full model of LTTA practices, the real situation in the field doesn't necessarily always correspond to the expectations, as reported by the researcher's from the University of British Columbia:

> *...Often the views held by the teachers and artists about integration were totally different and not well communicated. Most participants also held different views about what learning through the arts meant in the LTTA program. Teachers were often expected to make the links to curriculum areas without a clear conception of the artists' pedagogical content. Barnes (1993) distinction that the arts need to retain their integrity in the light of the curriculum links and subject learning was difficult to achieve with the lack of depth of content understanding in the partnership...* (Grauer; Irwin; de Cosson & Wilson 2001)

The core problem of the LTTA model in Canada is that it doesn't fully recognize the need of integrative partnerships with educational institutes. Transformation of education cannot be accomplished in work with just the schools or school boards; instead, it is a larger matter, and it is worth considering who has the responsibility for this field.[137] In Finland, it would lie within the expertise of teacher education. Since educational institutions such as universities or the art specialists are not integrated into LTTA's efforts, the RCM works in their field all by itself. The situation is thus not integration but closer to competition – I just wonder what RCM would say if the teacher educators began to accredit musicians.[138] Real integration requires two or more independent partners, mutual respect, and bringing about the best from common efforts. That change has to be made at the organizational level and between organizations. Even though LTTA idea is innovative, creative, and successful in Canada, the practical problems beneath it are real.[139] An example of teacher's concern from the LTTA discussion zone could prove illustrative:

> *We were very excited to run the program at our school for the first time last year. However, we ended up somewhat disappointed, as we felt that the artist did not do anything with the children that we could not have done ourselves! We are a school where the teachers are quite arts-smart, but the artist nevertheless should bring some level of expertise that we don't possess, in my understanding. The project sounded good in the planning/proposal stage, but the end result as planned never materialized. Also, the artist seemed unprepared for the age level of our children. How could this have been prevented?*
> (http://www.ltta.ca/discussionzone/index.php?action=displaythread&forum=teacherszone&id=6&realm=default)

Maybe the question has something to do with the teacher's education? Despite it success, LTTA has to face the challenges of the context in which it struggles. The dependency on its sponsors, the schools' willingness and ability to join the program, and finding and maintaining good artist and practices are hard work, as is the continuing dialogue with partners. Despite the criticism mentioned above, in practice many of the things discussed have been noticed in the LTTA organization. In fact, many Canadian artists from the LTTA program have gone on to study education at the university level, and some teachers have become artists. Real, everyday life is, of course, never as dichotomous as academic research depicts it. The ultimate question for LTTA, though, is whether it really wants to be *"a template for future education"* or *"a parachute program"* of arts education (Hanley 2003, 36) in Canadian schools. The answer to that question must be found, in a Rogerian way, by LTTA itself.

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[137] And because of Canadian structures, the responsibility rests with the government of the provincial level. The inequality states from the fact that RCM is a nationwide organization and education is not.

[138] See also Hanley (2003), who writes about the same theme under the heading"Denigrating Teaching."

[139] As well as the solutions that can be found to them.

7.2. Education in Finland

As we have discussed already, the Finnish educational system has been culturally intertwined with arts and culture upon the grounding of Uno Cygnaeus ideas of "arts and crafts" (Brubacher 1966, 274) since the mid-19th century. These "Pestalozzian ideas" are not the only German influence on educational theory and practice in Finland; the other notable source has been the Herbartian – Zillerian formal patterns of teaching, which have served as the basis of Finnish teacher education programs. After World War II, while English was replacing German as the first foreign language, the authoritative sources of education and curriculum theory were to be looked from the United States and the field of educational psychology (Autio 2003, 321). As mentioned earlier (on page 15), holistic education as well has had its place in the Finnish curriculum. All of these strands are equally presented in Finish education today:

Synthetic
Theories

(Educational psychology)
CONTEXTUALISM
(The world hypotheses of
accommodative knowledge)

(Holistic education)
ORGANICISM
(The world hypotheses of
divergent knowledge)

Dispersive   Transformation   Transformation   Integrative
Inquiry   via Extension   via Intension   Inquiry

(Herbart-Zillerian)
FORMISM
(The world hypotheses of
convergent knowledge)

(Cygnaeus)
MECHANISM
(The world hypotheses of
assimilative knowledge)
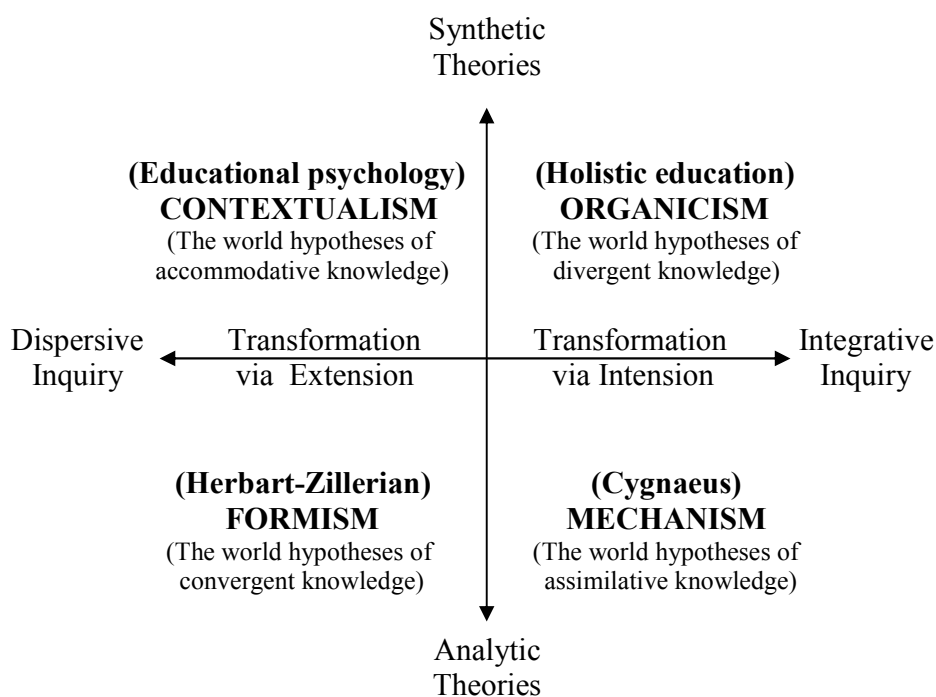
Analytic
Theories

FIGURE 25. The world hypotheses behind Finnish education.

Placed in the figure, all four different strands of education are seen as the world hypothesis presented in Finnish teacher education. Despite the battle between the various interest groups, the balance between the approaches has largely remained, regardless also of the current trend toward enforcing educational psychology, which hasn't totally diminished the normative and didactive aspects of teacher education. Since critical and scientific thinking has been an essential part of teacher education ever since 1979, when the classroom teachers' training was raised to the master's level (Simola1998, 341), the old ideas from teacher seminars, as well as subjects taught therein (like sloyd, handicrafts, music and arts), haven't been lost in transition. To fully

understand the Finnish educational context, one must pay consideration to the history, institutions, culture and the current social context.

Firstly, the role of state is essential for education in Finland. In the 19th century, for this small nation under Russian rule, the whole national project was intertwined with the idea civilizing nation, which included the question of schooling (Kemppinen 2001, 356–357). In those circumstances, teachers and the profession of teaching were to have a role of civil servant – teacher as "a candle for the people" ("kansankynttilä"). Today, in the field of education the state authorities have the monopoly for accrediting teachers in Finnish primary schools (Simola, Kivinen, & Rinne 1997, 879).

Secondly, a prerequisite for adequacy of the teaching profession is seen through cognitive consensus and creation of the body of knowledge legitimized by science (*ibid.,* 878). In other words, in Finland the knowledge is institutional[140]; the experiential or tacit knowledge can be found from its practices and the forms of education. Additionally, despite the school-like compulsory curricula in the teacher education departments and the formal accrediting criteria, the teachers in the field, as do the teacher educators at universities, have the freedom of choosing their means of pedagogy. The teachers are trusted to be professionals and active developers of their own expertise.

Fourthly, the teacher education prepares not just the generalists but professionals with a broad range of skills who are able to demonstrate, guide and direct artistic learning both **in** and **through** the arts.

The success that Finland has achieved in PISA Programme for International Student Assessment has been explained by several reasons:

- Equity
- Education as integral part of culture
- Flexible schools-based teacher planned curriculum along with student-centered instruction, counseling and remedial teaching.
- The number of out-of -school activities
- Special education
- Small teaching croups
- High qualified teachers
- Scope and depth of teacher's education
- High expectations on reading skills
- Pedagogical freedom
- Teachers vested within authority of decision making
- Cultural homogeneity
  (Välijärvi, Linnakylä, Kupari, Reinikainen, & Arffman 2000, 39–45)

I suggest adding to that list one further item:

- A balanced curriculum, with all the world hypotheses behind it.

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[140] See pages 80 on the"Deweyn blind spot".

Is our situation really that positive? According to Simola, Kivinen, & Rinne (1997), the tradition of teachers' education discourse have been dramatically changed since the late 1960s when the comprehensive school reform was made. The word "ethics" disappeared from teacher training documents, and the psychology has shifted toward educational psychology while also the educational sciences have become the scientific basis for educational studies. The processes like individualization, disciplinization, and goal-rationalism has been intertwined with decontextualism (*ibid.,* 880–882).

- **Individualization** has meant change from the idea that the schools were to be places, where pupils are trained to the citizens to the idea of to responding to individual learning needs and qualities of the individual's personality (Simola 1998, 342).
- **Disciplinization** has meant moving from the model of the teacher as a well-educated handyman to that of the research-legitimated expert. (*ibid.,* 343).
- **Goal-rationalism** has meant that the goals were to be the basis for choosing the methods, materials, organization, and equipment of teaching (*ibid.,* 345).
- All of the above have been possible and credit in the **decontextualization** that has meant gradual vanishing of such terms as "teaching" and "learning" – and eventually, paradoxically, the school.

While the above mentioned trends are seen from the educational documents' context, we have to notice that people do not change as quickly as discourses do. At the same time as educational policy trends are expressed, classroom teacher' education retains many features of its old seminar traditions. In addition, the teachers in the schools construct their own policies themselves. The tradition is often the counter-force that as "common sense" prohibits ideological over-stretching. Recently, as globalization has also been strengthened the themes listed, the neo-liberalist discourse has been dominating the field of education policy also in Finland: decentralization, goal-steering, accountability, managerialism, evaluation, choice, competition, and even privatization are the key ideas presented in current educational environment (Rinne, Kivirauma, & Simola 2002, 644).

In that process, also the art education has been reduced in prominence and quantity in 1990s, alongside the diminished focus on the idea of the meaning of the culture. The embrace of vulgarity has become the favored option in education in the name of markets. The question in Finland no longer relates to the rivalry between formalism and aesthetics, on one side, against the expressive or Praxial education in the arts. Sadly, the issue has more to do with whether we really understand why the arts are taught in the schools in the first place.

While writing this, I hope the answer is still: "yes, we do."

8. CONCLUSIONS ON LTTA PILOT

What could we learn from Canadians and LTTA? Words that immediately come to my mind are attitudes, tolerance, and creativity. It is obvious that the joy of learning that LTTA brings to classroom, would be welcomed also in Finland, where the schools are said to be lacking of it. Pragmatic prejudiced idealism and positive attitudes towards other people are also features worth thinking about here. Maybe the Finnish stubbornness and melancholic mindset is not a stereotype or completely based on fiction, while the Canadians' social giftedness, openness, and pursuit to the authenticity are evident, as reported also in research (See: Adams 2003).

The model of LTTA is innovative. It provides many possibilities in the field of education – especially in multicultural settings, a situation that Finland is encountering already. For teachers' education in Finland to be able to respond this new challenge, new kind of initiatives, such as LTTA, is a possibility. Still, at the same time we have to rely on our tradition and maintain our unique educational system. This condition is essentiality for real partnerships where both teaching and learning through the arts are possible. Even our Finnish LTTA pilot was successful; deriving final conclusions just on the basis of one project experiences would be exaggeration – a fact that hopefully is made clear enough by now. If justification for certain approach is looked for, it must always be found on larger contexts, not just the approach itself. Clearly, there has to be a difference between public service and commercialisms; as well as research and advocacy.

Changing the educational structures in Finland the way that artists could be employed to school is a matter of the Ministry of Education. If there is such a need, I would recommend the approach with certain reservations. One of the most important is assuring that the artists would have the pedagogical knowledge under the instruction of teacher education departments. Still, another more urgent question is: are we going to take care of our present art education in schools? I think Canadians would recommend us to do so.

Personally, thinking the practical level of the project, I find it pity that the artist attaining to course couldn't be accredited to be as "school artists" as they really approved to be such. I believe that the experiences and knowledge they gained were still useful for them, as indicated in numeric assessment. The teachers, who were selected for the course, had both the talent and the motivation for the arts, still told to found new ideas and especially, joy for their working. Addressing the possible lack of basic knowledge of the skills needed in **learning in the arts** is the foundation on which **learning through the arts** can be built. In that sense, these two approaches are complementary, there is no latter without the former. As far as the artists were concerned, they not only met the teacher educators' expectations, but some of them even exceeded them, which was shown by the significant development or the best artists during the field period. (Lepistö, September 12th, 2006).

How did LTTA working in Finland differ from that in Canada then? Is there really "Two cultures of arts education" as proposed in the title of this book? As seen from the course objectives and its operational level, our project in Finland was built on strong

teacher educational presence. That was something, which I did not found while visiting Canada, even seeing some excellent artists doing their work there. I am afraid that I have to agree with the Canadian researchers team Irwin, Gouzouasis, Grauer & Leggo (2006) who reports about LTTA following:

> *"Teachers, artists and learners responded with enthusiasm to the change of activities presented to them, for each activity represented an invitation to experience the world in ways the regular curriculum did not permit. The arts, in the broadest sense of the word, offered a vehicle for intervention, a shifting of consciousness, an opportunity to consider other ways of knowing our world. However, **the arts content being presented often lacked integrity and/or pedagogical expertise**. When teachers and artists were asked to reflect upon the program they often spoke about the impact of the program offering heightened participation, self-esteem building, better school attendance, and excitement for learning, **while less attention was given to the impact of the arts on student knowledge construction.**"* (Emphasis mine)

I believe still, these weaknesses do not depend only on the program or work done in individual schools but more than that, the structures and social-culture settings involved. I hope following comparison illustrates the issue:

TABLE 22. Differences in art education in Finland and Canada.

Finland	Canada
Idea of Nation	Cultural diversity
National core curriculum	Independent educational policy in provinces and territories
Homogenous school system	Heterogeneous schools
Arts in all schools	Art partnerships[141]
Masters level teacher education (Including studies in all arts)	Bachelor level teacher education (Mainly without/ little studies in arts)
Learning through arts historically and internally integrated in education	LTTA innovation as trade mark

As above mentioned dichotomies are evident, much more discreet are the mental and cultural aspects that undoubtedly affects the situation. The task of portraying them could lead us easily to stereotypes, while proper way to explore them would be more art than science in its nature. After all, being Canadian differs from being Finn, or at least, these two countries are different.

As derived from both the theory and the practical framework of this study, full integration means balance between the different domains in *"a priori"* institutional knowledge (independent of experiences) and the experiences of the people participating *"a posteriori"* (dependent on experience) synthesis in coherent unity, in other words:

> *Human engagement in the world is first and foremost a process of negotiating meaning ... Meaning is not pre-existing, but neither is it simply made up.*

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[141] The phenomenon is significant, as there still are (of course) arts taught by teachers in some schools.

> *Negotiated meaning is at once both historical and dynamic, contextual and unique…Meaning exists **neither** in us, **nor** in the world, but in the dynamic relation of living in the world* (Wenger 2004, 53–54).

Evidently, the "third" soughed in this study was not just the arts, but the meanings and the combination of the ways of thinking in balance **through** which the different domains can be examined**.** Referring to this idea, one of the most important issues is look after that all forms of knowing are taught and used in schools. As a society we do need different types of people, who are at the same time capable to understanding each other.

The other lateral theme in the research was the question of the relationship between the theory and practice. In order to make better judgements of educational issues the close ties between educational science and the field has to be maintained. If science neglects practice or practice theory, the result is **inert**; as seen by Paulo Freire (1993):

> Action
>
> Reflection } Word= work=praxis
>
> Sacrifice of action = verbalism
> Sacrifice of reflection = activism

I hope to be avoiding these two fallacies in this work. Still, one must add one thing: what is the missing part that secures the ethical nature of the praxis? Appreciation is the key, as indicated in chapter 6.

In education taking care both of knowledge and experiences means giving full appreciation to all school subjects and especially those that promote experiential and participatory understandings. At the same time, art educators ought to be aware and willing to use interdisciplinary approaches, since their important duty as educators and members of their community is to strengthen those connections. Art, music and handicrafts, are thus not just about techniques or aesthetics, but more than that about understanding society and its values. A theory of art is a theory of **culture** (Bresler 2002, 18). In that sense arts not just tells about us, but also binds culture and us together.

Having considered the scientific context, this thesis has based the justification of the arts on scientific rationalism derived from Kant. The usual interpretation of Kant's philosophy, which has been criticized for stark division of knowledge between the autonomous aesthetic and the cognitive judgment, is understood and interpreted here differently. Within the informal logic domain, the aesthetic is seen to be an essential part of cognition[142] and thus suggested that the arts could be understood within the terms of propositional language and that the premises for such an approach can become fact. In *Kant and the Unity of Reason*, Angelica Nuzzo (2005) states the following:

> *For Kant, sensibility includes functions as different as sensation, intuition, perception, emotion, passion, drive, moral feeling, and feeling of pleasure and displeasure. Kant's discovery of an independent "Faculty of judgment" is the*

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[142] For more on the justification of the arts, see Siegesmund (1998).

*discovery of the third Critique. Such a faculty is responsible for articulating the **interplay between sensibility and rationality,** the world of nature and the human mind, in order to constitute human experience and the world of human relationships.* (*ibid.*, xi)

That is what is most crucial and must be learned from and through the arts.

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The Employment and Economic Development Centre: http://www.te-keskus.fi/

City of Lahti: http://www.lahti.fi/www/cms.nsf/pages/indexeng

Lahti Polytechnic: http://www.lamk.fi/material/ects_guide_05.pdf http://www.lamk.fi/engl/rd/forum/

The Royal Conservatory of Music: http://www.ltta.ca http://www.rcmusic.ca

Lahti Symphony Orchestra: http://www.lahti.fi/symphony/eng/orkesteri.html

Turku University Department of Teacher Education in Rauma: http://www.edu.utu.fi/rokl/english/

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