

not  
white

*diversity in beginning design education*



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PROCEEDINGS of the  
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## Investigative Space

“As you can see, the world is a never-finished sketch. Always brazenly and wonderfully fresh.”  
Loris Malaguzzi

As one of the founders of the Reggio Emilia schools, Loris Malaguzzi expressed the view of the educators there: that each child has a distinct, wondrous perspective to offer us. The early childhood programs of Reggio Emilia, Italy have been the object of much focus over the last 15 or so years; actually, the tradition of “high-quality early care and education are defined as socio-educational services and a right of all Italian children and their families”.<sup>1</sup> When I first began investigating why these particular schools were generating such interest, I learned that the schools and care centers for children under five years old are based around an *atelier*; a space for art. Beyond that, the schools allow the students to move about freely during the day, delving into whatever project interested them. The schools’ spaces are concerned conceptually with many architectural ‘basics’ - light, color, texture, form - but use them in innovative ways. They reflect “the role of the environment-as-teacher.”<sup>2</sup>

Working from the ideals of Reggio Emilia and appreciating other successes around the United States and the globe, an architect designing an Early Education (EE) or daycare space must take into consideration the physiologic impact the space they create will have on children, beyond the typical concerns of the requisite square footage per child. In today’s family framework, children will typically spend more of their waking hours in these spaces rather than their own home; they must be part of the strength of the program and hopefully, be part of the strength of the child. These spaces must contribute to the well being, creativity, and sense of play of the children. They must promote connection to the outside world, irrespective of what the immediate surroundings are. From Piaget through Gardner, it is understood that children react in a visceral, immediate way with their surroundings; concurrently, the environment is important for quality early childhood experiences for children, as they develop both on their own and in their community. In writing about the Reggio Emilia schools, Tiziana Fillipini points out that the educators think of space as a container which favors social interaction, exploration and learning, but also that they see the space as having educational ‘content’. Relative to architecture, it is seen as the ‘third educator’ behind a set of 2 teachers.

The way children interact with architecture is important to their development, relative to their sense of well-being and their intellect. If they have experienced well-designed, evocative space, it could be labeled ‘investigative’, as it supports the children as they learn about their world. Carlina Rinaldi of Reggio Emilia has noted, “Children are asking ‘why?’ before they can say ‘why?’ “

“Why is it that children in the early grades of schools are curious, creative, risk-taking problem solvers and why is it that those qualities diminish as they proceed upward through the grades?”<sup>3</sup>. Once our students arrive at the age of 17 or 18, quite often we have to ask them to relearn these capabilities they had as children. There are many aspects of the Reggio Emilia use of emergent curriculum which apply and can be used to great effect in the first years of design studio. These include: “the role of the environment-as-teacher, children’s multiple symbolic languages, documentation as assessment and advocacy, long-term projects or *progettazione*, the teacher as researcher”<sup>4</sup>. From the educator’s side, there is a desire for creative thought and analysis, from the student’s side, a desire for recognition of autonomy and

abstract

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competency. In some ways, the traditional view of the young architect who “knows nothing” is the same flawed view of society’s value of the intellect of children. We ask our young architects to think differently, to truly ‘see’ or observe, to use all of their modes of expression, and to recognize the truth in the statement by Carlina Rinaldi of Reggio Emilia: “Observation is not what you see, it is choosing what you see.”

As Rinaldi noted when asked about the reaction of the schools to the September 11th tragedy, “it is not neutral; the schools parallel humanity.” Our schools are the same, our students look to one another for peer evaluation of their experience or current world events. “Children listen to the meaning of life in all its colors; they listen to each other using peer groups as constructors of knowledge - rather than adults alone...they understand that differences have power...(and) that uncertainty is not insecurity.” Together the cohort group of each year support one another’s growth and learning about their differences through open investigation and dialogue – they form their community in their public space. The class’s diversity, racial, economic, geographic, allows these citizens of the world to begin to also work with one another, to ‘read’ one another as they will ‘read’ clients in the future.

Being cognizant of Gardner’s theory of multiple intelligences, this paper will stem from the idea that education about architecture starts with the first spaces one experiences, and will explore the parallels between Reggio Emilia pedagogy and the objectives of the first two years of design education.

#### NOTES

<sup>1</sup> New, Rebecca. “Reggio Emilia: Catalyst for Change and Conversation” in ERIC/EECE Digests, December 2000.

<sup>2</sup> Ibid.

<sup>3</sup> President of the National Academy of the Sciences, Alberts, 1997.

<sup>4</sup> New, Rebecca. “Reggio Emilia: Catalyst for Change and Conversation” in ERIC/EECE Digests, December 2000.

paper

#### INTRODUCTION / ENVIRONMENT:

*“As you can see, the world is a never-finished sketch. Always brazenly and wonderfully fresh.” -Loris Malaguzzi*

As one of the founders of the Reggio Emilia schools, Loris Malaguzzi expressed the view of the educators there: that each child has a distinct, wondrous perspective to offer us, through expression via their “100 languages”. The early childhood programs of Reggio Emilia, Italy have been the object of much focus over the last 20 years; where the tradition of “high-quality early care and education are defined as socio-educational services and a right of all Italian children and their families”.<sup>1</sup> “Over more than 30 years, this system has evolved its own distinctive and innovative set of philosophical and pedagogical assumptions, methods of school organization, and principles of environmental design that, taken as a unified whole, we are calling the Reggio Emilia approach. This approach fosters children’s intellectual development through a systematic focus on symbolic representation. Young children are encouraged to explore their environment and express themselves through all of their available ‘expressive, communicative and cognitive languages’, whether they be words, movement, drawing, painting, building, sculpture, shadow play, collage, dramatic play, or music, to name a few.”<sup>2</sup>

In today’s family framework, most children will typically spend more of their waking hours in a care or education program rather than their own home; these spaces must be part of the strength of the program and hopefully, be part of the strength of the child.

The spaces must contribute to the well being, creativity, and sense of play of the children. They must promote connection to the outside world, irrespective of what the immediate surroundings are. From Piaget through Gardner, it is understood that children react in a visceral, immediate way with their surroundings; concurrently, the environment is important for quality early childhood experiences for children, as they develop both on their own and in their community. As well, it is the earliest form of learning about space and architecture. If they have experienced well-designed, evocative space, or as I label it, 'investigative' space, it supports them as they learn about their world. When I first began researching why the Reggio Emilia (RE) schools were generating such interest, I learned that the schools and care centers for children under five years old are based around an atelier; a space for art. Beyond that, the schools allow the students to move about freely during the day, delving into whatever project interested them. The schools' spaces are concerned conceptually with many architectural 'basics' - light, color, texture, form - but use them in innovative ways. In writing about the RE schools, pedagoga Tiziana Fillipini points out that the educators think of space as a container which favors social interaction, exploration and learning, but also that they see the space as having educational 'content'.

Carlina Rinaldi of Reggio Emilia has noted, "Children are asking 'why?' before they can say 'why?'"<sup>3</sup> The idea of the children having potential is reflected in an RE building – it is the place of potential, for learning, encounters, expression, sharing of experiences of life. The clarity of the pedagogical stance is translated into architectural space – with a high level of transparency allowing for an awareness of the learning happening in the school. Quite often the teachers and children are informed by other's work and this is allowed to transform their investigations. As Isaacs notes: "...Piaget's whole psychology rests on the principle of continuous interaction between the child and the world around him; it is this that which furnishes all the material, as well as the motive force, for his intellectual advance."<sup>4</sup>

The transparency allows for the outside green space to be understood by the children, but also for them to be connected to the city, and the city to them. Their buildings are considered public, civic buildings, in that the children are the future richness of the city. Also, quite often the atelier is used for community programs, art workshops, etc. The public is also involved through the clear reflection of the value awarded the children and their space – in Emilia Romagna, new facilities have to be designed by a group made up of local officials, an architect and pedagogic experts, understood to be bringing differing competencies to the design. The space allotments allocated for these spaces are much higher than elsewhere in the European Union: 7.5m<sup>2</sup> per child for 3-6 year olds and 10m<sup>2</sup> per child for under 3s versus 2m<sup>2</sup> per child in Denmark and 2.3m<sup>2</sup> per child in Britain.<sup>5</sup> The value of the teacher's work with the children is also spatially recognized with meeting and work spaces, as well as adequate storage. Unlike the American tendency towards a high level of control via regulation, the idea of safety – physical and interpersonal – is important, but not primary; it is considered more important to be careful with glass beads and be able to use a beautiful material, more important to have a rich project than avoid conflict over ideas.

The Reggio schools are not formally excessive; indeed, they are straightforward, rational forms, and wondrous spaces to be in. The clarity of vision is typically expressed via clear spatial organization using predominantly masonry construction which allows for openness and transparency. There is a copious amount of daylight and the generous spaces tend to be thoughtfully organized, which allows for a feeling of order. Lella Gandini of Reggio Emilia stated, "these spaces tend to be pleasant and welcoming, telling a great deal about the projects and activities, the daily routines, and the people large and small who make the complex interaction that takes place there significant and joyful."<sup>6</sup> My first impressions of the schools were that there were no boundaries of expression, imagination, or creativity. Also striking was the thoughtful, careful organization of the materials visible. Pencils were separated by in order to communicate the importance of the choice of one color over another and collage and construct materials were separated by type in take-out clamshell boxes collected at the children's homes. Documentation panels describing prior investigations were graphically beautiful. While touring one of the Reggio schools, an American teacher said she could never replicate the same potency in her classroom, but when I asked her to look past the materials and provocative layouts of differing materials, she saw that it was a basic, high-ceilinged rectangular room with grey metal shelving of the sort found in many garages in this country. This potency of this visual clarity is achievable anywhere. The buildings

which have been designed for the program are seen as precious, essential, important, not simply a cover; they are minimalist but rich in detail to serve as a foil for the people and experiences to fill them.

Through critical analysis of their spaces, the teachers, atelieristas and pedagogistas of Reggio Children developed a 'metaproject', an investigation to document the richness of the environments of RE as a framework and a way of sharing ideas with others. Clarifying the new ideas of their pedagogy with current architectural thought, the "keywords" they used to describe their objectives were: "overall softness, relation, osmosis, multisensoriality, epigenesis, community, constructiveness, narration, rich normality". Secondary to this, the "design tools" are listed as: "relational forms, color, materials, smell, sound and microclimate".<sup>7</sup> Fundamentally, all of my observances and experiences at RE expressed the utmost respect given to the primary focus of all that occurred there: the children's work, their thoughts, and their efforts.

## COMPETENCIES

"Why is it that children in the early grades of schools are curious, creative, risk-taking problem solvers and why is it that those qualities diminish as they proceed upward through the grades?"<sup>8</sup> Once our students arrive at the age of 17 or 18, quite often we have to ask them to relearn these capabilities they had as children. From the design educator's side, there is a desire for creative thought and analysis, from the student's side, a desire for recognition of autonomy and competency. In some ways, the traditional view of the young architect who "knows nothing" is the same flawed view of society's value of the intellect of children. We ask our young architects to think differently, to truly 'see' or observe, to use all of their modes of expression, and to recognize the truth in the statement by Carlina Rinaldi of RE: "Observation is not what you see, it is choosing what you see."<sup>9</sup>

There is a small but strong groundswell to integrate design education in the K-12 realm; Connecticut's ARC Program is an example of the integration of a design process as a platform for an integrated curriculum which is quite parallel to the beginning curriculum of most architecture schools; the math, science and humanities are covered, while allowing the students to generate and understand connections between these disciplines. The American Architectural Foundation is looking to these program for "Citizens for a New Century": "To prepare children for their adult years – to prepare them to participate as citizens in designing their own communities, shaping their own environments – educators must help them now to develop qualities of strong character and essential thinking skills."<sup>10</sup>

There are many aspects of the RE pedagogy which apply and can be used to great effect in the first years of design studio. These include: "the role of the environment-as-teacher, children's multiple symbolic languages, documentation as assessment and advocacy, long-term projects or progettazione, the teacher as researcher."<sup>11</sup> I will review these relative to the first architectural education at the ages of 0-5, and then relative to the first two years of design studio.

## ENVIRONMENT AS TEACHER

The focus on the educational quality of the architectural envelope may seem obvious to architects but it is inspiring to hear education commissioners in Italy speak of it this way. It is expressed to the children in RE that composition is important, from a wonderful shadowbox to the proportion of a shelf above a sink. Visual clarity allows them to notice what is considered important by the teachers and to develop a subconscious critical framework. The import of this cannot be overstated; the modern sensibility of the space and the surrounding classical structures of the city impart their lessons to the children. "But on (Piaget's) own premises one would expect that favourable or unfavourable outward conditions would bear strongly on the success and extent of development. The former might go far to promote it; the latter to arrest or warp it."<sup>12</sup> As well, children want to impact and change their space, as they begin to form their spatial awareness – large, small, open, lower, many types of experience should be available to them. Moveable elements, large blocks and fabric allow them the capacity to reformulate the given architecture, and the transparency into other spaces gives them multiple readings of the same spaces. In terms of exterior space, in RE the landscape is considered the playground and interventions on it are open-ended or driven by the children.

Learning from studio - who has not used the studio space as a datum in their discussions in studio? Perhaps to discuss scalar issues, perhaps as an example of what not to design, but a clear awareness of it develops over time. The Reggio schools used their spaces in the same way early in their growth, and through this investigation, realized aspects of their use of the buildings which became fundamental to the future growth of the program, and the design of their future schools. Unfortunately, less than half my current 1<sup>st</sup> year class claim to have experienced a space they were excited or inspired by, and our studio is hardly inspiring, so relative to an architectural framework, we focus our energies on analysing the positive and negative qualities of the spaces we experience together. I have used common exercises in workshops with preschoolers, architecture camp with elementary aged children and with 1<sup>st</sup> year design students including rubbings and sketches of building materials, 'hide and seek' architecture quizzes, etc, with equal success at each level.

In the first year studio, I have asked the students to focus themselves on their immediate surroundings as a means of looking at them anew, as a means of tangibly putting themselves in the space, testing what they know about the topic and perhaps creating a greater understanding. I do this by using the RE Keywords developed for the 'metaproject' on their spaces: relational forms / light / color / materials / smell / sound / microclimate. Relative to scale, we break into groups of 3 and measure each other's height, arm span, reaching height etc, and then measure an area in studio and their dorm rooms in order to place themselves in a part of their universe and as a way of understanding our bodies as relational forms in space. Their understanding of these concepts relates to Piaget's ideas and investigations into "movement and space".<sup>13</sup> Daylighting is introduced via mapping the light in their dorm rooms

at various times. Then students are asked to change the light in the studio in some way; some choose to work with the artificial lighting, some with the daylight at the windows. Color and materials are introduced in a general way and then the students are asked to change the studio in some way using color. Quite often, these two exercises merge. We do not have partitions between desks in the studio; this allows for the RE ideas of transparency to become part of the environment, such that work and knowledge is shared. Smell, sound and microclimate are more amorphous but approached in the same open-ended way. Perhaps depressingly, the students tend to bring in artificial copies of natural smells (pine soap instead of pine needles, etc). These three RE keywords also tend to merge as students create small different microclimates using smell and sound and some sort of encapsulating device. Later in the semester, a construct is developed to investigate a commonly agreed upon current interest, an emergent curriculum, which allows them to form an occupiable space with these new awarenesses, reflecting a statement by Lella Gandini: "It must undergo frequent modification by the children and the teachers in order to remain up to date and responsive to their needs to be protagonists in constructing their knowledge." <sup>14</sup>

#### CHILDREN'S MULTIPLE SYMBOLIC LANGUAGES

A very early and basic premise of the RE approach was to recognize and encourage the children in their use of their 'one hundred languages' to support their investigations. Children have amazing insights daily; at RE these are recognized and allowed to inform the process of their learning. Because of the inclusive nature of the pedagogy and mode of inquiry, the children feel confident to express whatever they may. Typically, once an idea for exploring is settled on, the children first discuss verbally what their current expectations are, then they quite often are provoked by the teachers via different media. The first stage of investigation usually is focused on line drawings of one color, moving to clay investigations or painting or constructs. This common beginning focuses them on the subject matter; the other media evoke differed readings -like moving from parti to plan to section to model. Of course, just because children are building in 3 dimensions does not mean they understand them; this can be true in our studios as well, in 1<sup>st</sup> year studio especially. "The inquiry continues: I make to think, as I think to make." <sup>15</sup> Quite often, the use of visual media to investigate allows pre-verbal communication. "According to Vygotsky, both receptive and expressive language have their origins in the social and cultural experiences of children. He also believed that in infancy and up to about age 2, language was not essential to thinking. This is in line with Piaget's belief that, in the beginning, thought precedes language." <sup>16</sup>

Very parallel to the concept of "hundred languages" is Howard Gardner's theory of "multiple intelligences", recognizing eight differing areas of intellect. <sup>17</sup> In his work with Harvard's Project Zero Gardner has collaborated with Reggio Children to develop a new study, "making learning visible" focused on documenting the learning of children as individual and group learners. <sup>18</sup>

Architecture is a study that fully supports growth in all aspects of multiple intelligences, through the use of the student's "100 languages". The capacity for our students to uncover talents they did not realize they had, and for us to guide the strengthening of these is where I feel the relationship to RE pedagogy is closest. The focus in the upper years of design education on the final design, the final review, need not be the case in the first two; the objective should be to develop a design methodology that works for each student. The fluid nature of the progettazione of RE is expressive of this. A recognition of the worth of the investigation itself is primary. It has been my observation that our students compartmentalize, that is, I need to point out to them that what they are learning in drawing class could be furthered with their work in studio, and vice versa. At the high school level, unless they were in a school that favored an integrated curriculum, this compartmentalization was the norm. As noted in the Boyer Report, "innovation (in the American classroom) does not exist because education is still primarily about learning what's been done, simple accumulating information. Students are not taught to become dexterous at transforming, changing and handling information." <sup>19</sup>

In our varied situations, we need to develop a place of acceptance, in order to support our students in the same way to cultivate these same insights. It is a difficult task we are setting for them – to drop all pretext of social correctness and the need to be 'right' all the time in order to make the forward movement towards a truly open-minded, creative

way of thinking. A true and thoughtful respect for their situation is important; we are asking them to relearn how they see, speak and think in most cases. A suspension of disbelief is important, as well as a capacity to question their existing mental framework. Almost every year, the 1<sup>st</sup> years are surprised at the creation of as many different projects as there are students, who in high school predominantly were expected to work toward the same ‘correct’ outcome as their peers.

#### DOCUMENTATION AS ASSESSMENT AND ADVOCACY

The documentation of an RE project is a reflection of the process of the learning. It is compiled onto documentation panels; the teachers assemble their copious notes and images, which include notations of who said what while looking at whom and formalize the overall event and the learning that took place and transcribe the salient to the boards. The documentation of a RE project is visually composed such that the focus is evident, without losing playful details. The mounting of the panels in the building is a conscious, public declaration of the worth of the work, and serves to inform all. They are posted for some time, and the students proudly remember their leaps of understanding as well as use the panels as research material for their future investigations.

In our studios, the primacy of the work is apparent as well – it is everywhere! Asking the students to compose their presentation in a thoughtful manner that represents the conceptual thought of their project is a close parallel to the RE documentation panels. However, allowing for a beautiful layout of the common studio materials – site photos, case studies, earlier work, etc, will express to the students the level of respect you have for their work, and by correlation, they should have too. This also does away with the separation of design from the sundry – structure, systems, zoning – that quite often develops in these first years. A lack of complete understanding of these elements does not mean an awareness is not imperative; the attitude towards this ‘harder’ information is formed now. If it is seen as an integral component, an expression of the “logical-mathematical” if you will, perhaps in the upper years the inclusion of these aspects in design will come more readily to them, rather than being seen as unimportant.

A formalized reflection on the cycle of inquiry while in the cycle itself allows process work as we know it to become more informative to the learning experience. Quite often, mostly due to time constraints, the progress of a studio project becomes quite linear – try this, try that, etc; through a perhaps scheduled reflection event, maybe a weekly event, a richer process a deeper learning, can be achieved. This is true at the Thesis level as well; quite often each presentation loses material from the first, such that students are not restating their question or the initial direction of their research, but this is a valuable exercise, for new connections can be made, and new directions forged by using this basic reflection. We document our student’s work as well, through sketches, and discussions. The process trace pinned up at the end of the project might include some moments of our input; in this way, process parallels the documentation panels.

Another effort in documentation and reflection common to both is the portfolio, expecting self-evaluation: “...ascribing value to the learning experience, first in the identification and understanding of the criteria and standards used, second by judging what is considered meritorious and third by synthesising the implications for future action.”<sup>20</sup>

#### LONG TERM PROJECTS/PROGETTAZIONE

“Activities stem from the interests and the ideas of the children. They have an active role in the planning of the curriculum, and their personal input is shown in their creative art experiences. The result is that children express themselves artistically in a much more mature way than most children their age (Katz, 1990).”<sup>21</sup> RE teachers use the term *progettazione*, which means to plan, design, project, (rather than the norm *programazione*, to program)<sup>22</sup> focusing on learning versus teaching – the first an active, conflictive, rich process, the second, a discrete dissemination of a known quantity. This leads to projects abandoned, investigated to varying degrees, etc., and in this way the open-ended *progettazione* can be different from the typical studio project, in that we are meeting NAAB requirements and usually need to give our students some concepts of deadlines. However, the process and the richness can be the same, and as has been noted in RE, one deeply studies project can be better than three shorter ones. I have used a communal project in studio to investigate the idea of emergent curriculum; commonly establishing a topic or idea to investigate, and working on it as a group through different media while the overarching studio project is worked on individually by the students continues. Because it is not the primary focus of the studio, the projects tend to wax and wane, but the students have noted that they saw value in working together on a separate topic.

RE classes are together for 3 years with the same teachers and the same cohort group, which allows for deep, intense relationships. As in studio, there are usually small groups which form but are very fluid, in investigations – they might be in parallel or not, but they inspire one another and prompt new thoughts. In studio, I feel due to the time and closeness to the topic we all feel that this same intensity can be achieved, although it may not be desired. In an RE class, rules are discussed and agreed upon – learning to be respectful, together. This can and must happen in studio as well; the students and faculty have a vested interest in their space and their relations. As with most architecture schools, the children of RE have a high level of respect for each other’s work; I have seen exuberant 4 year olds slow down to walk carefully around a construct one of them was building in the piazza space with bits of plastic and glass.

The strength of each of the settings is the passing around of knowledge by the group, each having a different reaction to it. This social constructivism or “mental activity bound to social context”<sup>23</sup> is fundamentally orchestrated by the teachers, but the students complete it. In both cases, the strength of long term projects/*progettazione* come through allowing the students to learn to learn, through exploration, creation and appreciation.

As Rinaldi noted when asked about the reaction of the schools to the September 11th tragedy, “it is not neutral; the schools

parallel humanity.” Our schools are the same, our students look to one another for peer evaluation of their experience or current world events. “Children listen to the meaning of life in all its colors; they listen to each other using peer groups as constructors of knowledge - rather than adults alone...they understand that differences have power...(and) that uncertainty is not insecurity.”<sup>24</sup> Together the cohort group of each year support one another’s growth and learning about their differences through open investigation and dialogue – they form their community in their public space. The class’s diversity, racial, economic, geographic, allows these citizens of the world to begin to also work with one another, to ‘read’ one another as they will ‘read’ clients in the future and to share the richness of their experiences and outlooks.

#### THE TEACHER AS RESEARCHER

In the RE schools, the primary objective is learning together, rather than simply teaching; this image of the teacher as co-researcher accommodates their role as provocateur, complicating already complex thought. The teachers work out which inspirations they could bring to the children that might have greater potential – drawing a soccer player rather than drawing a random body, wrapping a room with paper and leaving the crawling children some markers. Like a scientist, the RE teacher is setting up an experiment and reporting on the results; however, the subject matter of the experiment has been determined through the children’s discussion and decisions. “Meanings for children are constructed in context, and this can be assisted through many planned experiences. When teachers talk with children about their ideas and encourage them to talk with each other, children are better able to construct and reconstruct concepts. Children’s thinking becomes more explicit because they are using verbal symbols as well as thoughts. Likewise, children’s thinking becomes more explicit as they express their thoughts through artistic symbols.”<sup>25</sup> This constructivist view of knowledge being constructed by the learner rather than being transmitted to the learner is obvious; however, in conflict with Piaget, the teacher’s role is fundamental to the RE process. The cycle of inquiry is open and constantly being reevaluated by the teachers; noting insights, reframing questions and bring these back to the students.

In studio, we typically bring a formed project idea along for the studio to work on, rather than a free form search for an objective, but the results are as rich. In terms of the pedagogical model - is it acceptable for us to allow our students to know that we are learning from them and their insights? I believe so; the tangible, (NAAB criteria) should of course be directly expressed to support their explorations, but how often have you wanted to step in and ‘take over’ a student’s project due to it having some wonderful quality that you wanted to investigate further? This enthusiasm and interest usually directly translates to the student. As Loris Malaguzzi noted in ‘A Charter of Rights for Children’: “...And this is so much truer when children are reassured by an effective alliance between the adults in their lives, adults who are always ready to help, who place higher value on the search for constructive strategies of thought and action than on the direct transmission of knowledge and skills.”<sup>26</sup>

#### NOTES

<sup>1</sup> Rebecca New, “Reggio Emilia: Catalyst for Change and Conversation”, ERIC/EECE Digests (December 2000).

<sup>2</sup> Carolyn Edwards, Lella Gandini, George Forman, eds. *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections*, 2<sup>nd</sup> Edition. (Greenwich, CT: Ablex Publishing Corporation, 1998).

<sup>3</sup> Carlina Rinaldi, notes from presentation, Reggio Emilia Study Tour: May 2002.

<sup>4</sup> Nathan Isaacs, *A Brief Introduction to Piaget*, (New York: Schocken Books, 1972).

<sup>5</sup> Mark Dudek. *Kindergarten Architecture: Space for the Imagination*, 2<sup>nd</sup> Edition, (London: Spon Press, 2000).

<sup>6</sup> Lella Gandini notes from presentation, Reggio Emilia Study Tour: May 2002.

<sup>7</sup> Giulio Ceppi, ed. *children, spaces, relations: metaproject for young children*, (Modena, Italy: Grafiche Rebecchi Ceccarelli, 1998).

<sup>8</sup> President of the National Academy of the Sciences, Alberts, 1997.

<sup>9</sup> Carlina Rinaldi, notes from presentation, Reggio Emilia Study Tour: May 2002.

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