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Seeking a higher level of arts integration across the curriculum

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ABSTRACT

To seek a higher level of arts integration across the education curriculum, I investigated designs of teaching through arts activities that would motivate educators to adopt the spirit of “aesthetic teaching.” Two different designs were tested, with the second as a continuation of the first. Each ascribes a different educational role to arts activities—in the first design the role of art is that of a teaching medium, while in the second its role is as a teaching approach to the taught subject. The study followed the steps of a “teaching design experiment.” The preschool teachers who constituted the sample used these activities with groups of kindergarteners. The analysis of the data was based on the reports of the teachers, which were examined for indicators of “aesthetic teaching.” The findings of this study suggest that there is a correlation between the educational role of the arts and the level of aesthetic orientation of educators in applying arts integration. Generally, the sample experienced the second design (in which the role of art is that of a teaching approach to the taught subject) as more of an aesthetic teaching situation than the first design (in which the role of art is that of a teaching medium).

KEYWORDS

Aesthetic teaching; arts integration; preschool education; teaching through the arts

Introduction

In formal education the arts are either a distinct cognitive teaching subject or a teaching medium for other, non-arts subjects (Bamford 2006; European Commission, Education, Audiovisual and Culture Executive Agency 2009). The basis for the latter case, which is the subject of this article, can be found in the works of Dewey (1934) and of Read (1943). In later works (Amadio, Truong, and Tschurennev 2006; Burton, Horowitz, and Abeles 1999; Deasy 2003; Lindstrom 2012; Ingram and Riedel 2003), the terms “arts integration,” “teaching through the arts,” and “with the arts” can be found to describe a situation in which children are engaged with the arts while being taught a subject for the purpose of improving their academic achievement and/or encouraging their personal development. These teaching practices have won over part of the teaching and academic community, because an approach of teaching through the arts creates a favorable and multimodal learning environment. This can lead to many academic and social benefits, such as achievement motivation, cognitive engagement, a better school climate, and the development of verbal and mathematics skills (Baker 2012; Bresler 2007; Burnaford et al. 2007; Cornett 2011; Deasy 2002; Dickinson 2002; Efland 2002; Fiske 1999; Lindstrom 2012; Richmond 2009; Robinson 2013; Rooney 2004; Winner and Hetland 2000).

However, although educators have acknowledged the benefits of this approach, teaching through the arts has also been the target of fierce criticism (Abbs 1994; Eisner 1999; Gardner 2000; Johnson 2007; Smith and Simpson 1991; Winner and Hetland 2000). It has been observed that when the arts are used in teaching a non-arts subject, the process frequently focuses more on the subject being taught, and less on the arts. This seems to suggest that both those who design curricula and the educators who follow them tend to regard the arts as necessary only when they are proven to contribute to children’s performance in the “serious” academic disciplines. Educationally important elements, such as creativity, imagination, children’s ability to express their own viewpoint, aesthetic understanding, and aesthetic pleasure, risk being neglected when children encounter the arts in such a way. Because of this, it is important to explore further the practices employed in teaching through the arts, and in particular the criteria used when designing such arts activities.

Theoretical background

Scholars of “aesthetic teaching” have provided a theoretical basis for a high level of teaching through the arts. In a spirit reminiscent of the essays of Greene (1995), Pike (2004) argues that the function of “aesthetic teaching” is

to allow students to experience awe and wonder at what they are learning. According to this author, “the teacher engaged in aesthetic teaching can be seen as a poet who, like the prophet, allows the reader to perceive in new ways, thus allowing greater truth to become visible, to be apprehended and acted upon” (33). Macintyre Latta (2004) maintains that in the learning encounters of aesthetic teaching, teachers must put an “emphasis on acts of mind instead of end products” and aim “to create experiences that foster student participation in the world aesthetically” (94–95). Building on the foundations Granger (2006) lays out for the term, in “aesthetic teaching” students are given opportunities “to imagine the world as other than it is” (Macintyre Latta 2008, 696).

In the same vein, other contemporary scholars have examined why imagination, exploration, and the expression of feelings must be incorporated into students’ learning experience, and have offered suggestions on ways this can be done (Eisner 2002; Eisner 2006; Fredricks, Blumenfeld, and Paris 2004; Girod, Rau, and Schepige 2003; Harland et al. 2000; Johnson 2007; Leder et al. 2011; Winner and Hetland 2007; Wong 2007).

In attempting to explain what is attributed to the term “aesthetic teaching” on a practical level, I conducted a descriptive study (Sotiropoulou-Zormpala 2012a) and then carried out pilot implementations of activities/teaching sessions (Sotiropoulou-Zormpala 2012b). The findings indicated that aesthetic teaching in practice is a situation in which the educator can impart an aesthetic understanding of a subject (Eisner 2002); utilize alternative and multiple literacies (Albers and Harste 2007; Anstey and Bull 2006); create a space in which meaningful elements may arise for the children (Vygotsky 2004); allow logical information to interact with the moods, desires, and emotions that the taught subject elicits from each child (Broudy 1994); hand over the development of the activities to the children and encourage their active engagement in them (Csikszentmihalyi 1997; Suttie 2012); and give children opportunities to think in multiple ways (Gardner 2000) and be creative with the subject being taught. Briefly, it could be said that in these situations art encourages children to learn while they are creating, and to create what they are learning (Sotiropoulou-Zormpala 2012b).

Methods

Purpose and stages of the research

The purpose of this study was to seek a higher level of arts integration across the curriculum. For this reason, designs of teaching through the arts activities were investigated that would motivate educators to adopt the spirit

of aesthetic teaching. Two different designs of teaching through the arts activities were tested, with the second being a continuation of the first. Each ascribes a different educational role to arts activities—in the first design the role of art is that of a teaching medium, while in the second its role is that of a teaching approach to the taught subject.

This study adopted many characteristics of a “design-based project” (Cobb et al. 2003; Collins, Joseph, and Bielaczy 2004; Joseph 2004), focusing on the function of “teaching through the arts” and examining two versions of this environment. In the first stage, four teaching activities sessions were designed in which art was used to achieve the goals of the curriculum for kindergarten, illustrating or embellishing the subject taught along the lines identified in contemporary curricula as “teaching through the arts” (Deasy 2003; Lindstrom 2012). These activities will be referred to as “medium activities” (MAs). The preschool teachers who constituted the sample used these activities with groups of kindergarteners. The analysis of the data was based on the reports of the teachers who used the MAs. These reports were examined to find indicators of “aesthetic teaching.” Later in the study, I investigated ways to maximize the indicators of aesthetic teaching within the sample. With this purpose in mind, another four arts activities/teaching sessions were designed as a way to approach a taught subject and are henceforth referred to as approach activities (AAs). In practical terms, they were structured to give children the opportunity to aesthetically approach the subject being taught, that is, to render what they learned in the MAs as an aesthetic work and/or look at it as an aesthetic stimulus. The data that emerged from using the AAs in kindergarten classes were analyzed, again based on the reports of the generalist teachers who used them, for the specific indicators of aesthetic teaching.

Sample

This study explores the experiences that classroom teachers have while teaching through the arts, because it is they who are usually called upon to do this work (Balantyne 2007; Eurydice 2009). The sample was composed of sixty-five generalist in-service preschool teachers who took part in postgraduate teacher training seminars I offered at a school training educators in using the arts in education. Of these, thirty-two took part in the seminar from October 2012 to February 2013, and thirty-three took part from October 2013 to February 2014.

The members of the sample were informed that they were taking part in a study on “the integration of arts activities in the kindergarten teaching process,” but they were not informed of the differences in the activities,

that is, they were not aware that there were two stages to the study. This was done so that they could express their beliefs, concerns, and the meaning they gave to their experiences frankly and without being guided. The participants functioned not only as the sample, but also as contributors, because their comments helped shape the design of the second stage of activities.

This sample could be considered a purposive sampling. These individuals were the only people who took part in the seminars mentioned previously, and all had access to preschool classrooms. The age of the sample was from twenty-five to forty-seven years old, and fifty-six women and nine men took part. The sixty-five members of the sample carried out the same teaching sessions, thus giving me the opportunity repeatedly to investigate the object of this study. The teaching sessions were carried out with a total of 787 kindergarteners in kindergartens in Athens and Boeotia.

Means of collecting data

The individuals of the sample were called upon to work as participant observers of the MAs and AAs that were used with groups of kindergarteners. Individuals recorded their observations in specially formatted diaries containing four removable sheets for each activity. On the first sheet, they recorded observations on “preparation for the activity”; on the second, “use of the activity”; on the third, “outcomes of the activity”; and on the fourth, “general comments on and comparisons among the activities.” On every sheet, individuals wrote about “what happened,” “why I think it happened,” “what I was thinking,” “what I felt,” and “other.” The preparation sheet included an additional paragraph in which the individuals wrote down the objectives of the activity. While the first three pages of the diary for each activity were given to me at the next seminar meeting after an activity was implemented, the fourth sheets were handed in all together at the end. Together with these, the individuals also submitted the nonverbal productions of the children (drawings, designs, scripts) and photographic material. The activities were recorded on audiotape and, wherever possible, video. Every educator could go back to the recordings whenever he or she thought necessary.

As part of the seminar, the sample members and I had a three-hour meeting every week. In total, there were thirteen such meetings with each group of educators, which functioned as focus group discussions. These discussions were organized chronologically, so that every meeting focused on an issue that related to the immediately preceding observation data. Thus, individuals in the sample had the opportunity to present orally what they had written in their diaries, to highlight things they

considered very important in more detail, and to reflect or even reconsider. The discussions followed the same points on which their observations were based—that is, preparation, implementation, outcomes, and general comments for every activity. My concern was that the speakers be “guided” only as regarded the discussion points, and that they could express themselves frankly and spontaneously. Indeed, I made an effort to ensure that the content of the discussions was not strictly limited to the questions of the study by not excluding broader descriptions of the educators’ experiences that might prove useful for the study. The video recordings of all the meetings gave me the opportunity later to pinpoint important elements that I did not have the time to evaluate in situ.

Data analysis process

Key issues of aesthetic teaching were pinpointed in the data collected. In analyzing the data I located references by members of the sample that indicated the existence (presence) or nonexistence (absence) of an aesthetic teaching situation. Seven indicators of the presence and seven of the absence of aesthetic teaching were chosen to form an improvised model. These indicators are considered to be some significant signs—although not the only possible signs—of an aesthetic teaching situation. Specifically:

- References to multimodal and/or the aesthetic nature of a teaching situation were considered indicative of the presence of aesthetic teaching. That is, references to alternative forms of communication such as music, art, drama, and movement were noted. References to the language-centered and denotative nature of the arts activities were considered to be signs of the absence of aesthetic teaching.
- References to the emergent nature of teaching sessions and the occurrence of unforeseen, unplanned elements based on the pupils’ interests during teaching were considered indicative of the presence of aesthetic teaching. At the other end of the spectrum, references to the strictly structured, predictable, and programmed nature of the activities were considered to be signs of the absence of aesthetic teaching.
- References by the sample indicating that they strove for the holistic development of the children (on a social, emotional, and physical level, or in combinations thereof), and/or that they themselves or the children functioned in this way, were noted as indicators of the presence of aesthetic teaching. References indicating that the educators were aiming

mainly to develop the children intellectually-cognitively, and/or that they and/or the children were functioning in this way, were taken as signs of the absence of aesthetic teaching.

- References that the children were self-motivated and controlled developments in the classroom were considered indicative of the presence of aesthetic teaching. Situations in which the educators controlled outcomes were considered indicative of the absence of aesthetic teaching.
- References that the children and/or the educators were actively engaged with the experimental activities and exhibited flow experience indicated the presence of aesthetic teaching. References to a passive-mechanical teaching situation, boredom, or an unwillingness to participate were considered signs of an absence of aesthetic teaching.
- Creative behavior (imagination, humor, original interpretations of the taught subject) in the educators and/or the children was considered an indicator of the presence of aesthetic teaching. References to a convergent attitude (literal-mindedness, reproduction of objective elements of the taught subject) by the educators and/or the pupils were considered indicators of an absence of aesthetic teaching.
- Finally, references by the educators that the outcomes of the teaching were different from child to child were considered indicators of the presence of aesthetic teaching. References to outcomes as being homogeneous and assessed on objective criteria of the taught subject were considered signs of an absence of aesthetic teaching.

Arts activities—Sessions

Arts activities were designed to be suitable for incorporation into the teaching of mathematics in kindergarten, and more specifically into the teaching of the unit entitled “Numbers—Numbering and the First Mathematical Operations.” According to the curriculum, the aim of this unit is for children to “use, organize and expand their knowledge on numbers” (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, 4317–18). This topic was chosen as a “negative model” because on the one hand it does not seem to contain “aesthetic interest” or have evident aesthetic dimensions, and on the other hand it is typically dealt with as a negative, unstable, and masculine subject (Palmer 2009).

The activities of each stage (MA and AA) were implemented within a time period of two weeks, and both stages were completed in forty-five days.

Medium activities: Description and basic goals

The first activity designed as an MA was entitled “number sculptures.” The teacher painted a numeral on an A3-size paper on an easel. One or two pupils were then called upon to form the shape of that numeral with their bodies: with their extremities (hands, fingers), with all of their bodies, or in pairs. The class observed and commented on the similarity between the shape on the paper and that of the sculpture. In this activity, examining body stances was a medium used to allow children to correlate the names of the first numbers with their written symbols.

In the second MA, entitled “touching numbers,” the teacher wrote the graphemes of the numbers being taught (e.g., 1 to 4) in a large size and posted them in a visible place. The children were then given modeling clay and were asked to make one of these numbers. Afterwards, the teacher put a scarf around a child’s eyes and placed before him or her a numeral one of his or her classmates had made. With eyes closed, the child felt the clay form and identified the number while his or her classmates looked on. Taking the scarf off, the child looked to see if he or she had correctly identified the number. The same process was followed with all the children. This activity was designed to allow children to learn the graphemes of numbers in an arts environment.

In the third MA activity, entitled “volleyball with numbers,” the children and the teacher stood in a circle. The teacher explained that they were going to play with an invisible ball that they would throw each other swiftly. When the children got to know the game, the teacher instructed them that when they threw the “ball,” they had to say a number, beginning with 1, and then in chronological order. The teacher played with the children and encouraged a brisk pace (e.g., “Don’t hold the ball for a long time because it burns”). Then, different instructions were given based on the children’s knowledge of numbers (e.g., “Now, together with the ball, we’ll say a number from 1 to 7 all mixed up”). In this activity, it was expected that mimetic motions and physical communication would support the academic aim of the activity, which was that the children would recite numbers verbally and practice the order of the first numbers.

The fourth MA activity was entitled “the rhythms of numbers.” The teacher and children each held a simple percussive object (e.g., drumsticks, triangles, tambourines). The teacher played a simple rhythmic set (e.g., beats of a fourth/eighth/eighth/fourth). The children were called to listen once or twice with their eyes closed, and then everyone repeated the rhythm with their instruments. When all the children played together, the teacher acted as the conductor to help ensure synchronization.

Then the teacher asked the children to say how many sounds the composition comprised. The child that answered the question was asked to reveal how he or she arrived at the answer (how he/she counted). The teacher then asked other children if they counted differently, such as by using their fingers, in their heads, or with lines on a paper. The same process was repeated with the children's compositions. As a variation of this activity, the teacher determined from the beginning the total number of sounds that the composition should have, either saying a number or giving the children an addition problem (e.g., asking the children to compose with "5 sounds" or "2 + 3 sounds"). The academic aim of the activity focused on numbering and executing simple mathematical operations. To achieve these aims, the children used simple musical objects and composed and executed rhythmic beats.

Approach activities: Description and basic goals

After the MA were implemented and a first processing of the data done, I designed other arts activities suitable for integration into teaching numbers in kindergarten, as a continuation of what the students had already learned in the MA. These activities were designed so that the educators could experience to a greater degree an aesthetic teaching situation. In these situations, the educational role given to the arts activities was an alternative, untapped educational role, that of an approach to the taught subject (Sotiropoulou-Zormpala 2012a). In other words, the idea that determined the design of these activities was that the children approach the subjects they were taught aesthetically, that is, to discover their aesthetic characteristics or to produce aesthetic works related to those subjects. There were as many AAs as there were MAs for teaching the first numbers.

In the first AA for teaching numbers, entitled "favorite numbers," the teacher hung pictures of the numbers, printed one by one on sheets of laminated A4 paper, on a cord. Each number was discussed as to its real and imaginary characteristics. In addition to its name, shape, and cardinality, the children were encouraged to personify each number, to describe how it stands, walks, behaves, or talks. The children were called upon to represent their ideas physically and theatrically. Finally, the teacher called upon each student to come up with his or her favorite number without telling anyone. Then the children were blindfolded and told to walk slowly around the room with outstretched arms, repeating their number. When they heard someone else calling out the same number, they joined hands and continued to search for other children with the same preference. In the end, they all removed their blindfolds, each team stated its

number, and the majority's favorite was revealed. Besides exposing children to the objectives of the curriculum (e.g., the names of numbers, graphic symbols, and cardinality), the activity also aimed to take a creative, kinetic, and theatrical approach to the taught subject and the expression of opinions.

The next AA was entitled "numbers exhibition." Children were asked to draw their favorite number on paper, color it in, and modify it as they wished. Afterward, the class tried to identify the number that served as the basis for each drawing and talked about what every child drew. The drawings of the numbers were put into groups and placed around the classroom. An exhibition took place to which children and teachers from other classes in the school were invited, and during which the artists were available to explain the meaning of their work and the manner in which they made it. As a trigger for creating art, this activity encouraged children to look at and process the graphemes of the numbers being taught, and to express a realistic or imaginary personal perception of them.

In the next AA, entitled "the disappearance of numbers," the children were called upon to discuss with their teacher "what would happen if there were no numbers, and we did not know how to count." The teacher could ask more specific questions when the children needed it, such as questions about various systems of measuring time, space, money, and weight. The children were then divided into small groups, and each group put on a theatrical sketch based on things that were said during the discussion. Finally, each group presented its sketch to the rest of the class. This activity was designed so that children could theatrically approach how they use numbers and various systems of numbering in life.

In the last AA, entitled "sound recipes," the teacher told the children that they were going to play at being "sound-sauce cooks"—strange people who go around with nets, catching sounds, mixing them well, and making various sound-recipes: sound-creams, sound-salad, and so on. The children were asked to remember the "sounds they caught with their nets this morning" so that they could make a sound-breakfast (e.g., a rooster, an alarm clock, a mother's voice calling out "Wake up!"). When a child suggested a sound, the group repeated it and decided if they were going to use it in the recipe. While the sounds were being voiced, the teacher assumed the role of "head chef" (coordinator-maestro). After the children had decided on the ingredients of the recipe (sounds), the group decided the order in which they would be heard. Then the teacher gave the children an A4 piece of paper that was divided by lines into as many sections as there were sounds in the recipe. The children made a simple drawing for each sound. Then

they decided on the quantity of every ingredient in the recipe, that is, how many times each sound would be heard, and they wrote the number next to the relevant drawing to make the written “recipe of their sound-breakfast,” which they could then “cook” either individually or together. In the first performance, the children evaluated and interpreted the auditory result, and discussed whether there was too much or too little of some ingredient. They did the necessary fine-tuning so that the “sound recipe” turned out well. In this activity, the children numbered, added, and subtracted while in a musical environment in which they were composing and recording a group work that they then performed individually or as a group.

Findings

The findings will be presented first for the MAs and then for the AAs. The data from the diaries and the focus group discussions will be presented simultaneously. This decision was taken because in examining the results for each educator separately, it emerged that there was only a 6 percent disagreement between the two sources. In such cases, an educator either reported the indicators of the presence or absence of aesthetic teaching in only one of the two sources, or in the focus group discussions they negated what they had reported in the diaries. In the first case, the feature was noted, whatever the source. In the second case, when something was negated, the result was recorded according to the data drawn from the discussions, which were chronologically the second source of the data and therefore the result of the educator’s rethinking.

The work of decodifying and quantifying the data was carried out by two independent associates. The quantified findings of the analysis are presented in Tables 1–4. These tables show the indicators of the presence or absence of aesthetic teaching, as determined by the educators’ references. Because of the major differences between indicators of the presence or those of the

absence of aesthetic teaching, references could only be put in one category. The same educator could be counted as referring to both the presence and the absence of aesthetic teaching if his or her references contained such indicators. Each educator was counted only once, even if he or she referred repeatedly to an indicator with regard to the same activity. The following sections provide some indicative excerpts on the MAs and AAs, drawn from the sample’s diaries and from the focus group discussions.

Findings on the medium activities

This section reports quotes from the sample regarding the MAs. Indicative of a situation considered multi-modal/aesthetic were the comments: “Two children thought of forming the shape of 0 by making two half-moons with their arms, which they then put together. All of us thought the image was lovely on an aesthetic level” (sculptures); and “Children used various forms of art in the activities” (all MAs). Indicative of the emergent nature of the MAs was the comment: “When we liked something, we decided to take a photograph” (sculptures). Indicative of the holistic nature of the MAs was the observation: “Some children felt nervous and were shy” (sculptures). Indicative of the children’s control of the MAs were the comments: “The children were happy because they could throw the ball to their friends” (volleyball); and “The children themselves made corrections” (rhythms). The educators reported the active/flow nature of the activities thus: “The children were focused because they wanted to do it” (volleyball); and “The children were enthusiastic” (touching, rhythms). On the creative nature of the MAs, the educators stated: “One child said, ‘If we don’t put feet on number 1, it will fall’” (sculptures); and “I said to them, ‘I brought you a ball so that we can play’—I pretended to hold a ball—‘can you see it?’ One child answered, ‘Yes! It’s red’” (volleyball). Reports on the diversity of outcomes among children included: “They had many ideas on how to count. One

Table 1. Educators who reported indicators of the presence of aesthetic teaching for every medium activity ($N = 65$).

Indicators of Presence of Aesthetic Teaching	Number Sculptures		Touching Numbers		Volleyball with Numbers		Rhythms of Numbers		Total
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Multimodality/use of aesthetic modes	64	98.4	47	72.3	36	55.3	33	50.7	180
Emergence	51	78.4	18	27.6	36	55.3	39	60.0	144
Holistic approach	45	69.2	44	67.6	37	56.9	45	69.2	171
Control by children	36	55.3	12	18.4	37	56.9	26	40.0	111
Flow/activation	40	61.5	56	86.1	33	50.7	53	81.5	182
Creativity/divergent approach	37	56.9	16	24.6	19	29.2	31	47.6	103
Differentiated results	36	55.3	13	20.0	30	46.1	34	52.3	113
Total	309		206		228		261		1,004

Table 2. Educators who reported indicators of the absence of aesthetic teaching for every medium activity ($N = 65$).

Indicators of Absence of Aesthetic Teaching	Number Sculptures		Touching Numbers		Volleyball with Numbers		Rhythms of Numbers		Total
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Language-centeredness/denotation	14	21.5	20	30.7	30	46.1	17	26.1	81
Predetermined progress	32	49.2	53	81.5	44	67.6	45	69.2	174
Cognitive orientation	61	93.8	63	96.9	58	89.2	61	93.8	243
Control by the educator	35	53.8	51	78.4	37	56.9	49	75.3	172
Passive participation/negativity	15	23.0	12	20.0	28	43.0	13	21.5	68
Conventional/convergent approach	25	38.4	29	44.6	29	44.6	34	52.3	117
Homogeneous results	33	50.7	44	67.6	36	55.3	30	46.1	143
Total	215		272		262		249		998

child said, ‘I whisper it in my head.’ Another said, ‘With every sound, I move my head’” (rhythms).

The following are excerpts of reports that were counted as indicating the absence of an aesthetic teaching situation. On the language-centered/denotative nature of the MAs, the educators said: “Each shape was described verbally” (sculptures); and “We talked many times about what ‘standing in a circle—breaking the circle’ means” (volleyball). On the predetermined nature of the MAs, one commented: “I felt pressure to try to keep to the time schedule” (sculptures). The cognitive orientation of the educators was expressed by comments such as: “I noted which children had done the shapes in a mirror image” (touching); and “The children got many benefits in terms of the mathematics curriculum” (all MAs). Comments on educators having control of the development of the activities included: “I gave children ideas on how to make the shape of the number better” (sculpture). Sample comments on children participating mechanically included: “The children were playing their instruments and did not hear anything” (rhythms). On the conventional nature of the MAs, one educator commented: “When I asked the children to say the numbers from 2 to 7, one child said, ‘So, miss, we’re not allowed to say 1!’” (volleyball). Comments on the

homogeneity of the results among children included: “I did not keep the shapes made of modeling clay—they were similar” (touching).

Findings on the approach activities

Some of the sample’s references to the multimodal/aesthetic nature of the AAs included: “The numbers became works of art. The children analyzed their works like great artists” (exhibition); and “Some children drew the timbre of the sounds in interesting abstract designs” (sound recipes). References indicative of the emergent nature of the AAs included: “They played out a scene in which the teacher could not count the children when they were out on a school trip and a child was left behind. This disturbed the children and was discussed for a long time” (the disappearance of numbers); and “I did not feel adequately trained to use such emergent activities” (all AAs). The teachers referred to the holistic nature of the AAs in comments such as: “It was special for me and for the kids that they were learning to love numbers” (favorite numbers). Comments that expressed a belief among educators that the AAs were controlled by the children included: “A month later they remembered all of the numbers, because they had made them themselves”

Table 3. Educators who reported indicators of the presence of aesthetic teaching for every approach activity ($N = 65$).

Indicators of Presence of Aesthetic Teaching	Favorite Numbers		Numbers Exhibition		Disappearance of Numbers		Sound Recipes		Total
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Multimodality/use of aesthetic modes	55	84.6	58	89.2	62	95.3	62	95.3	237
Emergence	62	95.3	57	87.6	58	89.2	58	89.2	235
Holistic approach	61	93.8	54	83	63	96.9	59	90.7	237
Control by children	57	87.6	61	93.8	58	89.2	56	86.1	232
Flow/activation	59	90.7	63	96.9	60	92.3	63	96.9	245
Creativity/divergence	62	95.3	60	92.3	57	87.6	63	96.9	242
Differentiated results	57	87.6	55	84.6	55	84.6	40	61.5	207
Total	413		408		413		401		1,635

Table 4. Educators who Reported Indicators of the Absence of Aesthetic Teaching for Every Approach Activity ($N = 65$).

Indicators of Absence of Aesthetic Teaching	Favorite Numbers		Numbers Exhibition		Disappearance of Numbers		Sound Recipes		Total
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Language-centeredness/denotation	20	30.7	4	6.1	29	44.6	16	24.6	69
Predetermined progress	15	23	27	41.5	14	21.5	19	29.2	75
Cognitive orientation	28	43	33	50.7	56	86.1	32	49.2	149
Control by the educator	13	20	14	21.5	6	9.2	16	24.6	49
Passive participation/negativity	19	29.3	2	3	11	16.9	—	0	32
Conventional/convergent approach	22	33.8	9	13.8	9	13.8	15	23	55
Homogeneous results	4	6.1	—	0	6	9.2	11	16.9	21
Total	121		89		131		109		450

(favorite numbers). Indicative comments on the flow/activation of the AAs included: “When the children went out during recess, they explained the activity to the children of the other class enthusiastically” (disappearance of numbers); and “In the last three activities, children participated who usually do not” (exhibition, disappearance, disappearance). Commenting on the creative nature of the activities, the educators said: “A little girl said: ‘But of course numbers are alive! I went close to number 2 and it bit me!’” (favorite numbers); “Maria said that 3 was a snowperson who had half-melted” (favorite numbers); and “The children were laughing; some ideas seemed funny to them. In many cases they applauded” (disappearance of numbers). Some comments on the diversity of outcomes included: “In explaining the sounds that they had thought of, they shared various experiences from their lives” (sound recipes).

Some characteristic references to the absence of aesthetic teaching for the AAs follow. On the language-centered nature of these activities, one educator commented: “We discussed the characters of numbers at length, but the children did not want to enact them theatrically” (favorite numbers). References to the predetermined nature of the AAs included: “The activity had to be done precisely” (sound recipes). On the cognitive nature of the AAs, one teacher commented: “The children learned the importance of using numbers” (disappearance of numbers). References indicating that the educators felt they were controlling the AAs included: “To make them understand what I was asking them to do I made a model” (numbers exhibition). Some references indicating that the sample felt the children’s participation in the AAs was passive included: “Some children did not know what a gallery was, and walked around without understanding why” (exhibition). References to the conventionality of the AAs included: “I asked the children what kind of character 2 had, and they showed me how much 2 was” (favorite numbers); and “I think I did not have a

suitable space or equipment to do such activities” (all AAs). The outcomes of the AAs were considered homogeneous in comments such as: “In making suggestions, some children simply repeated what their friends had said” (disappearance of numbers); and “Some drawings were influenced by the examples I gave” (sound recipes).

Discussion

The findings of the study could be characterized as “subtle realism” (Hammersley 1992), because as regards arts integration they reveal what could be feasible in today’s schools. The results should not be considered generalizable, but they are evidence of what generalist preschool teachers can experience in teaching through the arts in kindergarten. In the following discussion one must keep in mind that the research was carried out in an institutional environment, that is, in postgraduate teacher training school and preschool education. As such, the behavior of the sample was relatively conventional. What must also be taken into account is the doubly mediated nature of the findings, which means that they are my reflections on the experiences the educators reported on the experimental activity teaching sessions.

Evidence was sought in the findings on how the experiences of the educators who used the activities were influenced depending on whether the educational role of the activities was that of a teaching medium (MAs) or that of a teaching approach (AAs). A first general finding is that thirty-nine of the sixty-five members of the sample (60%) had clear comments differentiating the MAs from the AAs. Although the educators were not aware that the activities were divided into MA and AA categories, they had differentiated them by using expressions such as “the first,” “the first four,” “the others,” and “the last [ones].”

Generally, it seemed that the sample experienced the AAs as “aesthetic teaching” situations much more than they did the MAs. One is led to this conclusion by

comparing the totals of the indicators for the presence and absence of aesthetic teaching in the MAs (Tables 1 and 2) and AAs (Tables 3 and 4). There is slightly more evidence for the presence than the absence of aesthetic teaching in the MAs, while for the AAs the total evidence for aesthetic teaching is almost four times greater than the evidence for the absence. It is interesting that the difference between indicators of the presence and indicators of the absence of aesthetic teaching for each activity resulted in the following classifications: numbers exhibition (319 more indicators of presence than absence), favorite numbers (+292), sound recipes (+292), disappearance of numbers (+282), number sculptures (+94), number rhythms (+12), numbers volleyball (-34) and touching numbers (-66). It is clear that all of the AAs exhibit greater evidence of the presence of aesthetic teaching than the MAs. Teaching through the arts using MAs seems to elicit in educators experiences that are of a questionably aesthetic nature. This finding reinforces the reservations of critics of teaching through the arts with regard to its tenuous focus on the arts (Abbs 1994; Eisner 1999; Gardner 2000; Johnson 2007; Smith and Simpson 1991; Winner and Hetland 2000). It is also clear that when AAs are used after MAs, the teachers are influenced by the AAs and experience a situation that is more aesthetically oriented and more related to the traits that theory ascribes to “aesthetic teaching” (Pike 2004; Granger 2006, Macintyre Latta 2004; Macintyre Latta 2008).

Focusing more on this influence, the findings reveal some of the characteristics that the teachers ascribed to the MAs and the AAs. It seems that among the indicators of the presence of aesthetic teaching, the MAs were most likely to cause active engagement and flow in the children (+182) and to be multimodal and related to the various fields of art (+180). At the antipodes of aesthetic teaching, MAs were deemed to be teaching situations with a mainly cognitive orientation (+243) and with a predetermined development (+174). Thus, according to the educators, the MAs have some virtues, such as attracting children to activities that serve the academic aims of teaching, but it is not certain that they create an aesthetic teaching environment.

With similarly high scores, the sample ascribed six characteristics to AAs, namely, that they cause active engagement and flow in children (+245), trigger creative types of behavior (+242), are multimodal and related to the various fields of the arts (+237), have to do with holistic development (+237), function as an emergent practice according to the children’s interests (+235), and develop through the children’s control (+232). The score for most indicators of the absence of aesthetic teaching

was very low for the AAs, except for the indicator of their cognitive orientation (+149).

References to the sample’s participation in all eight of the teaching sessions made it clear that the educators believed the activities were attractive, aesthetic, playful, and multifaceted. Furthermore, approximately half the teachers referred to the benefits this study had on themselves in terms of their training, their confidence, their innovation skills, and their professional interest. The sample’s references to the four MAs also reveal that these activities were considered to be attractive, useful for the curriculum, cross-curricular, and simpler than the AAs. On the other hand, the AAs were seen as more interesting than the MAs, given that the comments they inspired were longer and more emotionally laden than those elicited by the MAs. The most frequent characterizations of the AAs were “innovative,” “creative,” and “nonspecific.” The educators reported that the AAs gave rise to original, imaginative, and authentic works that were meaningful on a personal level. They also noted the holistic nature of the pedagogical aims and outcomes of the AAs. Directly or indirectly, little more than one-half of the educators felt that the AAs were aesthetically oriented, that is, that they were opportunities for children to develop their expressive skills, perceive aesthetic qualities, and create and appreciate aesthetic works. Furthermore, over one-third of the sample referred to the “difficulties” they encountered with the AAs, thus confirming that their own arts education was not adequate for the implementation of such activities (Alter, Hays, and O’Hara 2009; Bamford 2006; Hudson and Hudson 2007). The sample attributed the difficulties they faced in using the AAs to the fact that these activities did not have predictable development. Another important element mentioned by one in five educators was that they had revised their beliefs about the skills and abilities (mainly creative) of their pupils (Ingram and Riedel 2003). This seems to indicate that when arts activities that are designed as a teaching medium for a taught subject (MAs) are followed by arts activities designed as teaching approaches to the subject (AAs), educators attribute a wide variety of benefits to the teaching situation to which the literature ascribes a high level of art integration (Bresler 2007; Burnaford et al. 2007; Cornett 2011; Deasy 2002; Dickinson 2002; Efland 2002; Fiske 1999; Richmond 2009; Robinson 2013; Rooney 2004).

Changes in arts education policy

Two important facets of existing arts education policy are put in doubt by the evidence of this study. The first has to do with the design of arts education curricula, and the other with the arts education of generalist teachers.

It became clear from this study that the instrumental use of art in teaching is not wrong; rather, it is wrong if it is used independently. It seems that when the educational role ascribed to the arts is exclusively that of a teaching medium, the aesthetic level of arts programs is low. It was clear in this study that when MAs are supplemented by AAs, the process approaches aesthetic teaching. In the second stage of the implementations, children seemed to translate their understanding and feelings into an art form, to perceive and judge the aesthetic qualities of their environment, and to function in a more active and creative multifaceted way with regard to what they were learning (Eisner 2002). On the other hand, although I did not investigate this in the present study, I doubt whether the results of the AAs would have been as positive if they had been used independently. Indeed, it could be considered that besides their importance on an academic level, the MAs functioned as a warm-up for children's performance in the AAs. In practice, the fact that the two kinds of activities were carried out in sequence was dictated by what the activities focused on: in the MAs, the children were taught objective, social, and denotative concepts related to the subject. These provided a foundation so that during the AAs, the children could ask themselves, "What does this mean to me?" and thus function subjectively and connotatively. MAs gave children opportunities to examine the taught subject through the arts, and then the AAs allowed them to translate that subject into art. It would be interesting to examine in a future study a sequence in which the AAs were implemented before the MAs, or the AAs were interspersed with the MAs. In any case, the study of the MA-AA sequence indicates that teaching through the arts is a journey that, when it begins by using the arts as a medium, should continue to use them as a way in which to approach a taught subject. It seems necessary to emphasize both processes (Harland et al. 2000). Both of the complementary visions of education—the formal and the romantic, as Eisner defined them (2006)—must be covered: one to master the prescribed knowledge and the other to innovate and produce new knowledge. Those who design curricula must not underestimate situations in which the arts function as a means to serve the objectives of the curriculum, and must also not neglect situations in which the arts make it possible to transcend the curriculum and produce aesthetic knowledge.

The education of the individuals who are called upon to do all this, generalist teachers (Ballantyne 2007; Eurydice 2009; KEA European Affairs 2009), is inevitably the next issue that arises. The findings of this study reveal a problematic aspect of these individuals' education. The educators in the sample commented on their weaknesses, which they mainly became aware of in using the AAs. Based on what they said, what caused difficulties was the

emergence of unexpected elements. It could be said that the educators did not have a satisfactory level of the necessary reflexes to use an AA. This is an important signal as to how educators' university arts education could be improved, as it is generally believed to be deficient (Alter, Hays, and O'Hara 2009; Ballantyne et al. 2009; Bamford 2006; Hudson and Hudson 2007). Their education must become more school-centered (Duncum 1999; Hudson and Hudson 2007) and aim to combine theory with practice. Educators must be made aware of the benefits associated with the arts when they are integrated into teaching and the various educational roles they can and must have. Educators must be made aware of the levels of arts integration and the various practices that correspond to them. A new arts education policy in university education is necessary to initiate teachers into how to handle aesthetic processes, not only those associated with prescribed aims, but also those that lead to the surprises that only art can lead to.

The findings of this study would seem to suggest broadly that there is a correlation between the educational role of the arts and the level of educators' aesthetic focus in applying arts integration. It seems that through a "medium activities and approach activities" teaching plan, the generalist teacher can translate into practice a large portion of the educational benefits that contemporary research ascribes to the arts, that is, the subject being taught can be processed through various modes of representation (Albers and Harste 2007; Anstey and Bull 2006); the cognitive dimension of imagination can be cultivated (Broudy 1994); children can be given the opportunity to express a variety of experiences (Eisner 2002; Eisner 2006); children can be led to multiple ways of thinking (Gardner 1993; Gardner 2003); the aesthetic, the ethical, and the good life can be connected (Eaton 2001); and children can be given space to undergo "an experience" (Dewey 1934). All of these aims have meaning if one remains loyal to the initial objective—to offer children experiences in the arts "so that they can approach the world as an artist would" (Hetland et al. 2013, 4).

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