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We wish to thank all those who contributed to the organisation and successful running of the European Conference 2016 and the colleagues who subsequently submitted or peer reviewed papers for the conference Proceedings. We also wish to express our gratitude to Ben Cornwell, Canterbury Christ Church University Graphic Designer and Web Developer (Faculty of Education), for creating and producing the Conference Proceedings document.

Sacha Powell and Liz Hryniewicz: Editors
Editorial

Sacha Powell (UK OMEP Committee) and Liz Hryniewicz (President, UK OMEP)

We are delighted to have the opportunity to draw together a series of diverse articles under the auspices of the (OMEP) World Organisation for Early Childhood Education’s European Conference Proceedings 2016. The articles in this collection were initially presented at the European conference, which was held in Canterbury, England from 5 to 7 May 2016. Just as that conference was attended by delegates from many countries, so too these Proceedings reflect the international nature of OMEP as an organisation, with contributions from authors who are based in Greece, Switzerland, the Republic of Ireland and Great Britain.

The authors of the articles published here also reflect OMEP’s inclusivity as an organisation, representing academics, qualified and experienced practitioners and students of Early Childhood Education and associated disciplines.

Despite this diversity, the European conference and the articles gathered within this collection portray a common theme: a commitment to young children’s rights and their entitlement to encounter high quality experiences in early learning contexts. These contexts vary from kindergartens to school classrooms, museums, monuments, homes and outdoor spaces demonstrating that young children are not only ready to learn, but are learning anywhere and everywhere with adults who perform a multitude of roles: as onlookers, observers, facilitators, mediators, companions, co-learners, co-constructors, counsellors, teachers, managers, carers and parents.

They have in common their dedication to learning about, through and with young children by engaging in research in its assorted forms; and the authors in this collection are no exception to this as they share their insights here as they did at the European conference.

Collectively, their reports describe qualitative, quantitative and mixed method enquiries that are driven by a quest for better understanding and a passion for improving or enhancing policies, services and practices in Early Childhood Education.

The title of the 2016 European Conference was, ‘The Place of the Child in the 21st Century’. This collection of papers demonstrates that when Early Childhood Educators come together to discuss and debate themes that may seem to be universally important or applicable, they do so with their experiences of individual children whose characters, capacities and reservoirs of cultural tools are enormously varied and unique.

We are grateful for their contributions.
The attitudes of primary school teachers about the learning motivation of students with disabilities

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ABSTRACT

There is a prevailing concern over the low levels of participation of students with disabilities in the learning process (Schunk, Pintrich & Meece, 2010). As previous studies at this field have mainly focused on the motivation of students without disabilities, in general education, in this study we examine the attitudes of teachers about learning motivation of students with disabilities in general primary school. The sample consisted of 15 teachers, who were working with students with disabilities. To collect data, a semi-structured interview method, was used, based on contemporary theoretical backgrounds for learning motivation and inclusive education. Data were analyzed by the method of content analysis. The results showed that teachers lacked knowledge on how to create or strengthen the motivation of both students with and those without disabilities. Moreover, diversity was treated clinically by the professionals involved in education, overlooking a social approach. This results, possibly, from isolation of students with disabilities, the utilization of simplified educational practices in order to strengthen motivation of students and, finally, exclusion from general education (Kearney, 2011). The findings of this research indicate that there is a need to emphasize development of motivation for students with disabilities, so as to promote their inclusion. It is necessary to prevent or remove the isolation and marginalization of disabled students from the earliest years of school. Strategies which are included in Educational Psychology could possibly promote inclusive education, as they consist of methods for amplification the will of all students to take part in the learning process (Soulis, 2002).

Key words: Motivation. Inclusion, Disability, Special Education.
INTRODUCTION

Everyday educational practice has shown that many students with disabilities, even though they are present at mainstream schools, do not participate actively in the learning process. According to the European Agency for Development in Special Needs Education (2011), the lack of motivation of disabled students is a real and pressing problem. Therefore, the need to prevent and remove the marginalization of students with disabilities becomes evident. In particular, there is a need to focus on improvement programs, aimed at increasing the motivation of students with disabilities in the learning process (Soulis, 2002). Knowledge and implication of practices that enhance motivation could increase the chances for the school to be ready to respond to the diversity of the student population and, in particular, to the needs of students with disabilities. Furthermore, this implies the adoption of an inclusive perspective, free from prejudices (Androussou, 2007).

Motivation is a particularly important aspect of human behavior that runs through all aspects of learning and teaching (Schunk, Pintrich & Meece, 2010). This is a field of particular interest in educational psychology, which proposes methods that enhance students’ motivation. However, previous studies in this area have mainly focused on the motivation of students without disabilities in mainstream schools (Chang & Burns, 2005; Gilmore, 2003), so concern still exists regarding low levels of participation of students with disabilities in the learning process (Androussou, 2007).

The main theoretical approaches to disability fall into two basic categories: the medical and the social model of disability. The medical model addresses disability based on diagnostic criteria and the problems of the disabled are considered to be more the result of a person’s impairment than the failure of society to meet their needs, in terms of adequate assistance and accessibility, as the social model supports. Within this medical approach, people seek treatment or disability management. In addition, the “problem” belongs only to the person, and authority is given to a group of specialists, to determine the needs of other people (Barton, 1997). On the other hand, according to the social model, disability consists of restrictive factors that are imposed in social life including those that result in the denial of the rights of people with disabilities (Finkelstein, 1993; Oliver, 1996).

Disability policy has a direct and pervasive influence on education. Discrimination in education against disabled students is the main way that social marginalization is perpetuated. To meet the various and diverse needs of all students and to create a school for all, an inclusive school is needed which recognizes and respects different cultural groups as valid alternatives and not as marginalized substrates (Corbett, 1999).
The motivation of students, whether supported or undermined, greatly depends upon the beliefs and expectations of teachers. Teachers are identified as the main founders of educational reform and they are also the key to change and progress in education (Carrington, 1999). They have frequent interaction with students with disabilities and they try to include isolated students in the classroom. When teachers possess rigid beliefs, prejudices, stereotypical attitudes, or unrealistic expectations for their students, the result is an undermining of motivation. This may marginalize different students (Blumenfeld, Soloway, Marx, Krajcik, Guzdial & Palincsar, 2000). Instead, realistic expectations for the students with disabilities must be free of prejudice and stereotypical attitudes. So, the role of teachers is crucial in order to enhance or undermine the motivation of students in schools (Gilmore, Campbell, Cuskelly, 2003).

Additionally, when teachers’ approach to disability is based on the medical model, they are likely to equate disability with damage and failure, thus undermining the motivation of students in various ways (Kearney, 2011). Teachers with this viewpoint tend to provide external rewards, regroup students in designated groups, engaged in social comparisons, and give emphasis on performance targets, all leading to stress and negative emotions. There is an insufficiency in the teachers themselves to meet the needs of students with disabilities (Dweck, 1999). Considering that teachers’ perceptions, attitudes, actions, and decisions can affect the motivation of students (Schunk, Pintrich & Meece, 2010), in this study, we examine those perceptions about motivation that pertain to students with disabilities in mainstream elementary schools. Exploring the beliefs of teachers and their expectations of students with disabilities, and the impact of these beliefs on students’ motivation, is an important issue related to inclusion practices, which has not been investigated extensively.

**METHODOLOGY**

**PURPOSE**

Taking into consideration the above, the purpose of this pilot study was to investigate the attitudes of teachers in primary education with regard to the learning motivation of students with disabilities, and how they perceive their own role. The main research questions that formed this research were:

1. What are the perceptions of teachers in mainstream schools regarding the concept of “learning motivation”? Specifically, we examined, what teachers know about motives and how they determine them in the learning process, the factors which are associated with learning motivation, and the practices that teachers adopt in order to enhance motivation

2. What are the perceptions of teachers regarding disability? We studied how teachers approach disability and from which perspective, the medical or the social model of disability.
3. What are the perceptions of teachers about the motives of students with disabilities? This thematic area was related to how close teachers are to the disabled students, and what engagement of students with disabilities in the learning process entails.

4. What are the practices of teachers related to the learning motivation of students with disabilities?

**SAMPLE**

The sample of this qualitative research comprised 25 teachers (7 men, 18 women) aged 26 to 53 years. They were working in elementary schools in Athens, Greece. All of them were holders of university degrees, while 11 had a postgraduate degree. One was a PhD candidate. 18 of them were employed in public schools and 7 in private schools. The premise was that teachers who work in preschool or Elementary education have in their classroom at least one student with disability. In order to find the sample, we approached eight teachers, who brought us in contact with the remaining sample. This method is known as ‘avalanche’ or ‘snowball’ sampling and is used extensively in qualitative research (Bryman, 2004).

**MEANS OF COLLECTING AND ANALYZING DATA**

Data were collected through semi-structured interviews, based on contemporary theoretical background for learning motivation. These data were analyzed by the method of content analysis.

The themes used to classify and analyze the research data were:

A. Perceptions of teachers about motivation in education
B. Perceptions of teachers regarding disability
C. Perceptions of teachers regarding motivation of students with disabilities
D. The role of the teachers in creating a motivational learning environment for disabled students

**RESULTS AND DISCUSSION**

1st thematic area: Teachers’ perceptions about motivation in education

Teachers seemed to perceive the important features of motivation regarding the causation of behavior. However, although they showed an intention to develop motivation they used mainly extrinsic rewards. They ignored intrinsic motivation practices. They appear to have adopted a stance that represents the principles of behaviorism, which has accepted great criticism from subsequent approaches to motivation because the student is viewed as a passive recipient of information. Indicatively, teachers reported that
“there is a reward table in class with all the students’ names, in which we measure and reward them using stickers for their right behavior or candies when completing the exercises correctly”. This lack of knowledge of theory and motivational practices, possibly decreases the chances for the students with disability to be included in mainstream schools (European Agency, 2011).

2nd thematic area: Perceptions of teachers regarding disability

Teachers seemed to categorize pupils with disabilities using medical terminology and they emphasized to the diagnosis students had from medical institutions. For example, they reported: “Disabled children have serious disabilities, mental or psychological problems” or “It is some kind of disease which hinders the student from engaging in certain activities”. These answers seem to link disability with impairment and disease, a connection which is likely to undermine the motivation of students in various ways (Keaney, 2011). As with the interpretation of the medical model, where a disability is caused by a particular impairment and the person is a victim of their diagnosed condition (Finkelstein, 1993; Oliver, 1996), teachers seemed to treat their students with disabilities as a special category of “patients”, attributing the difficulties they face as simple consequences of their own individual operating restrictions. This stance shows a lack of knowledge and training in the field of inclusive education and severely limits the inclusion of students with disabilities in mainstream school (Androussou, 2007) thus optimal conditions for the motivation of students are not created.

3rd thematic area: Perceptions of teachers regarding motivation of students with disabilities

In this thematic area, participants were asked to describe the behavior of their students with disabilities in relation to their motivation to learn. The majority argued that students with disabilities have poor performance because of their disabilities. Teachers reported that this characteristic prevents students from participating more actively in the learning process. Some respondents submitted the following: “… They are reluctant to participate in the learning process, since they are convinced they will fail”; “It takes twice as long than the other students”; “They are more isolated from the rest. They do not seek to participate in this course.”; “He looks indifferent”; and even “He makes a fuss and bothers others. In the public schools, they do not accept them; rather they have to go to a special school”. Furthermore, an attempt was made to investigate the way in which participants perceived the successes of students with disabilities. Teachers reported that students are more motivated and they note success in group activities and in some curriculum areas, such as using technology, arts and sports, because they feel equal and adequate to respond to this type of activities. Regarding the failures, teachers reported that students with disabilities have difficulty in understanding texts and reproducing their content. They have also difficulties in writing and mathematics. However, it is worth mentioning that the same students perform better when working in small groups consisting of two or three classmates. The failures were attributed principally to
student weaknesses, intelligence and disability. From the above, it comes out that the participants were more optimistic and showed higher expectations in specific domains, and this often results increased motivation for students (Blumenfeld et. al., 2000; Gilmore, Campbell & Cuskelly, 2003).

4th thematic area: The teachers’ role in creating a motivational learning environment for disabled students

The fourth thematic area focused on the expectations and practices adopted by teachers when motivating their students, as their role is crucial (Carrington, 1999, Shunk, Pintrich, Meece, 2010). Some of their answers were:

“My expectations are lower for these students. I can’t demand the same performance from students with autism or other disabilities with the rest of the students”; or “I prefer to see them sitting quietly and not destroying the lesson”. Their answers seemed to nourish low expectations, which often lead to marginalization of disabled students (Blumenfeld et. al., 2000; Gilmore, Campbell & Cuskelly, 2003). As for the actions and the means used for the creation and strengthening of motivation of students with disabilities, it was reported that they implemented many of the practices they use for students without disabilities (e.g. rewards and prizes), but the requirements for students with disabilities were reduced because they thought they would be pressing them. Instead, they offered different material and lowered their objectives, creating a dividing line between students with and without disabilities, thus confirming the prevalence of deficit model (Corbett, 1999). In addition, teachers mentioned some of the factors that cause them difficulty in developing motivation, such as the lack of resources, material, and time. Teachers said that they should be constantly searching for new methods, spending more time preparing the material. Finally, they stated that students with disabilities are in a difficult situation, and thus their role is limited by their disability.

CONCLUSION

The results of this study confirm the dominance of the medical model in shaping perceptions of teachers. This leads to an undermining of learning motivation for students with disabilities. The motivation of students with disabilities appeared to differ from students without disability. From the descriptions of the participants, we identified a perception that many students with disabilities are not willing to participate. Some teachers describe hesitation in participation and low performance. Moreover, there was a clear lack of scientific training and knowledge of the social approach towards disability, which makes teachers vulnerable to dominant social prejudices. This also entails the application of simplified educational practices for motivation of students with disabilities and creates obstacles in their inclusion into mainstream schools. The results of this research indicate the need to emphasize the motivational
development of students with disabilities in order to promote inclusion. Because of the methodological approach followed, and the sample size, the results cannot be generalized. Nevertheless, this research fills a gap in the literature and also presents important and interesting data, which may form the basis for further in-depth analysis.

REFERENCES


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ABSTRACT

This study aims to contribute to a better understanding of the causes, impacts and coping strategies used by headteachers in managing pressures arising through school leadership in the 21st Century. Drawing upon qualitative data gathered from twelve interviews with special school leaders, interpretations suggest that an understanding of stress within education cannot be explained by incidence alone and at a personal level, the nature of stress revolves around perceptions of stress and individual reactions to pressures. Causes of stress within education leadership are dependent upon individual perceptions of pressures associated with arenas of headship; self, pupils, school, community, and government. Pressures arising in these arenas can be interpreted as both opportunities and challenges. It is the connections school leaders have with the objects in their world and the interpretations they give to these connections, which determines the impacts of pressures. School leaders across all settings recognise that they have opportunities to create change, be creative with teaching and learning, and develop teams to lead initiatives aiming to meet the changing and seemingly increasingly complex needs of children in the 21st Century. In certain situations, pressures can exceed abilities to cope and have the potential of leading to stress or burnout. Finding solutions is dependent upon a range of coping strategies. This study recognises that when coping with the impact of major events, strategies, which are intrinsic to one’s inner theatre, seem most significant in coping.

Key words; Leadership, stress, coping, special education needs, identity.
“You know, I want to live. I want a bit of a life. I work really hard. I work hard at home you know, I do work really hard. And it’s not just the physical work, it’s thinking about it. You are always thinking of how you can make things better. “Oh, what shall we do about that?” ... Always, always thinking about it”, says Martha (A special school headteacher for 18 years).

In sharing her experiences of special school headship, Martha relates one example of how leadership had professional and personal impacts. Her experiences of balancing time and different demands of leadership whilst pursuing her commitment to achieving the best possible outcomes for children resonated with experiences of other headteachers participating in this study. In certain circumstances, impacts of pressures experienced in headship lead to “emotional exhaustion, depersonalization, and a diminishing sense of personal accomplishment” (Wisniewski and Gargiulo, 1997, 329), and without the right coping strategies, pressures can lead to stress and burnout (Suh, 2008). This study interprets experiences of coping with pressures in leadership drawing upon interviews with 12 special school headteachers. Follow on in-depth conversations with four leaders from early years and primary schools suggest that findings from this study are comparable with experiences of coping with pressures, and potentially stress, in other education settings.

Whilst there is general acceptance that stress is part of most 21st century lifestyles (Malec, Hiebert, Young et al., 2000), a lack of consensus in locating one definition has proven problematic in research. “Stress has usually been defined as a variety of negative feelings and reactions that accompany threatening or challenging situations” (Cordon, 1997:1) used interchangeably to describe both source and effects of the process. Cox (1978) defines stress as a perceptual phenomenon arising from comparison between the demands on the person and the importance of his or her ability to cope. Stress has also been described as “a stimulus; a normal physical reaction to events which unbalance one’s normal life pattern; as an interaction or “a reality like love or electricity – unmistakable in experience but hard to define” (Teasdale and McHugh, 1994, 137). As a consequence of differing definitions, identifying and agreeing upon a set of criteria to determine presence, intensity and duration of stress has been impossible (Kasl, 1987).

Despite a lack of consensus in respect of a shared meaning, increasing recognition is given to stress as a major cause of attrition from the education profession. The teaching profession is among the most studied in occupational stress and burnout literature (McCormick and Barnett, 2011). Occupational stress is often associated with being a teacher and, with those who are also managers, middle aged, educated to degree level and earning over £20,000 (Health & Safety Executive [HSE], 2010). The HSE estimated the prevalence of self-reported illness within the teaching profession as 36,000 absences in 2012/13; illnesses
caused or made worse by the current or most recent occupation and attributed to stress or anxiety. Stress is a predominant feature that education leaders have to cope with in both professional and personal contexts (National Association of Headteachers [NAHT], 2008; HSE, 2011; McCormick and Barnett, 2011; NAHT, 2013) with a comparable incidence of stress-related absence amongst leaders to that of teachers (National Union of Teachers [NUT], 2005).

Practitioners at every level of school practice are encouraged to show pedagogical leadership (Nutbrown, 2012) recognising that ‘it is leaders and managers who create an environment where learning flourishes’ (Ofsted, 2015, 11). Exploration of leadership theories, espoused as effective for supporting school success, have arisen through transposing differing business or organisational management models to the public sector (Handy, 1984; Johnson and Fauske, 2005). With limited evidence of any one model being most effective, this practice, combined with processes of adopting new public management policies in England since the 1980s, has created challenges for headteachers (Gunter, 2001). Leadership has moved from a minor role to one that is regarded as crucial and central to school improvement and pupil achievement, with crisis management in many settings, becoming the norm (Bottery, 1992). An approach to school leadership which supports and drives forward models of excellence, within the fast changing technological and economic society of the 21st century, is a requirement for economic survival in a competitive global market (Glatter, 2009). However, without sympathetic adaptation to learning contexts, the danger arises of a system of education based only on production and outcomes. This poses additional challenges for school leaders, to match externally determined achievement driven expectations whilst including and meeting the individual needs of all pupils (Powers, Rayner and Gunter, 2001). Inclusion and the rights of all children to learn and participate in mainstream education are secured in the Children and Families Act 2014, the Equality Act 2010, however experiences of children, and their families are determined by the people with responsibilities towards them across all settings (Council for Disabled Children, 2015). Consequently, a market-led approach may conflict with a values-led approach developing structures of political control focusing upon leadership and organisations in terms of “a technical matter of delivery rather than probing the question of what is delivered and why?” (Grey, 2005, 105). Such conflict creates pressures and potential stress for headteachers in balancing external demands with their own leadership aspirations.

Discussions presented in this study focus on the challenges education leaders face in developing and leading initiatives to meet the changing and increasingly complex needs of children in the 21st Century. Of particular interest in this discourse, identified in this study, is the way in which school leaders negotiate their role when restricted by external impositions. An essential component of this process is the ability to maintain a sense of identity, where personal and professional values facilitate change and coping. An
overview of the causes of pressures is provided, followed by an exploration of the impact of pressures and coping strategies adopted. It is interspersed with excerpts from unstructured interviews with special school headteachers.

CAUSES OF PRESSURES

Stress is presented as a major factor in people’s life, identifying that common triggers relate to major life change, financial problems, and occupations. Given that most people spend around half their waking lives at work, then it is more likely that causes of stress are work related (Cooper, 2004). Research has repeatedly recognised that a predominant cause of work related stress is the unrealistic expectations placed upon an individual to meet demands (Dohrenwend and Dohrenwend, 1974; Ivancevich, 1979; Cox, 1993) which lead to pressures. Pressures for special school leaders are identified in relation to five arenas of headship: self, pupils, school, community, and government.

Causes of pressures were attributed to arenas that are increasingly distant from self: self-perceived inadequacy; pupil behaviours; the school (staff and administration), community (parents and support), and external domain (local and government). Emotional demands and pressures placed upon special school headteachers are increased where pupils’ needs are intense (Lawson, 2008; Zembylas, 2010). In addition, special school headteachers identified socio-environmental changes in school contexts including rising pupil numbers and increasing complexity of pupils’ needs as both professionally, and personally demanding. However, in contrast to a predominance of research identifying that the most salient factor in teachers’ stress relates to pupil behaviour the most frequently cited pressures in this study related to pressures from government. Constant, often uncontested expectations from macro-level to implement change at micro-level, many of which were not comprehensive to SEND practices, caused the most pressure. Whilst there is a degree of resignation that reform is intrinsic to their role, headteachers felt disempowered when external change conflicted with personal and organisational goals. Experiences of dissonance in progressing personally meaningful goals arose through cognitive and physiological reactions to the socio-environment in which they are working. Weigert (2010) asserts that the contribution made by the social conditions in which one finds oneself is meaningful in how we define ourselves.
For special school headteachers, the central importance of these conditions is in accepting differences, and foregrounding issues of equity and diversity in leading schools (Niesche and Haase, 2012). When conflict arises across arenas of headship and opportunities to address such issues are compromised, headteachers’ feelings of stress increase. This study identified that individual perception and personal values in relation to the specific context of leadership are what define the causes of pressures.

**IMPACTS OF PRESSURES**

Where demands and indicators of working under stress are ignored, deterioration in physical or psychological well-being can result (Selye, 1982; Lazarus, 1993; Blackmore and Sachs, 1998; Hayes, 2006; Bristow, Ireson and Coleman, 2007). One in three headteachers are regularly absent for differing periods because of work-related stress (NAHT, 2008). Impacts of pressures upon special school headteachers are dependent upon individual interpretation with the potential to be either opportunities that enhance leadership performance, or a series of challenges, which accumulate into stress.

Special school headteachers work hard to create opportunities that facilitate achieving consonance across arenas of headship. They juggle demands to maintain consonance in their role through appraisal and fulfilment of goals associated with both external and internal pressures determining whether these are opportunities or challenges. Impacts of coping with anticipated pressures can be motivational, contributing to a sense of consonance and wellbeing. When consonance is achieved, goal fulfilment is high and rewards of headship are greatest; risks are low and negative impacts reduced. Conversely, unanticipated pressures perceived as challenges, have the greatest impact upon achieving consonance. When special school headteachers are distracted from their goals dissonance occurs, and pressures start to have negative professional and personal impacts. Without the right coping strategies, pressures can lead to stress and potentially burnout.

**COPING WITH PRESSURES**

Coping is understood to mean actions that leaders have taken to avoid being harmed by pressures of their role. “At the very heart of this concept is the fundamental assumption that people are actively responsive to forces that impinge upon them” (Pearlin and Schooler, 1978, 2). School leaders cope through a subjective experience of controlling, preventing or avoiding emotional upset or situational discord, in response to the impacts of opportunities and challenges. Special school headteachers’ abilities to cope are demonstrated through their conative behaviour, mostly automatic in both action and emotional response. Predominant coping strategies employed by headteachers fall into one of three categories; problem focused coping, emotion focused coping (Lazarus and Folkman, 1984; Karasek, 2011) and situation focused coping (Pearlin and Schooler, 1978) as presented in figure 2 below.
Special school headteachers coping skills, choosing and using certain resources to determine particular courses of action, are developed over time. Developing a repertoire of skills is dependent upon previous interactions and responses to social-psychological resources used. These resources become embedded in their lives shaping their understanding of self and their identity. Being a special school headteacher is significant in relation to meanings given to pressures and abilities to cope. Coping becomes natural self-expression, intrinsic to being a special school headteacher. “By natural self-expression we mean a way of being and acting in any leadership situation that is a spontaneous and intuitive effective response to what one is dealing with” (Erhard et al 2012, 3). Leaders’ lived experiences suggest that for them being a special school headteacher is natural self-expression: ‘…your incentive, your drive for pupils to do well is in situ just because that’s the kind of person that you are. That’s what makes you tick’ (Dean, a special school headteacher for 9 years). It is this sense of being a special school headteacher that facilitates coping particularly when dissonance occurs and unanticipated pressures have a major impact. At such times finding solutions is dependent upon finding alternative coping strategies centred on held values, ethics, and virtues that are intrinsic to one’s inner theatre (Kets de Vries, 1989), that which shapes how we interpret the world and behave accordingly. The ability to cope is located in the special school headteachers’ inner theatre, their values, beliefs, and attitudes. This is what guides their behaviour; it is ‘what makes them tick’ (Kets de Vries, 2004, 475).

**CONCLUSION**

It is the connections special school leaders have with the objects in their world and the interpretations they give to these connections, which determine what is pressure, stress or burnout. There are times when the environment is such that avoiding or controlling interactions is problematic. During these times, pressures become stressful and interpretations come not only from cognitive or physiological responses
but also through the filtering of meaning through one’s senses. Experiences of coping with challenges and particularly major events, whilst traumatic at the time, can be transformational. Impacts are not just changes in coping but can be more profound in changing how special school leaders see and experience themselves as a special school headteacher. Coping requires re-appraisal of cognitive, affective and conative (purposeful) behaviours; learning from previous pressures and new situations, directing and re-focusing actions towards outcomes which are rewarding. Conative behaviours of coping are developed through experience contributing to being rather than knowing how to be a special school headteacher. This research has identified that coping with pressures is more than demonstrating confidence in professional knowledge and leadership skills but that special school leaders cope by mastering disorienting dilemmas through applying transformational and reflexive (cognitive, affective and conative) behaviour to develop praxis. Values-led headship is concerned with processes of translating situational demands of the special school context into an equitable learning ethos, addressing pressures which adherence to held values brings.

Socio-environmental pressures arising through the ‘modernisation’ of learning and changing patterns of organisational life can at times present limitations to leaders’ sense of agency (Kets de Vries, 2001) and control. Coping strategies need to be responsive to these new external agendas and special school leaders become skilled in differentiation and integration of their role, fulfilling both social demands and expectations of being a special school headteacher. These processes are facilitated through mechanisms of special school headship enabling leaders to be aware of shifts in a locus of control (Gallagher, 2000) a determinant in applying situational coping responses. Coping strategies used by special school leaders are dependent on available resources ranging between personal, interpersonal, organisational and community. Where stress-related research literature identifies that the predominant model of coping draws upon an emotional psychological framework with change and self-management being the answer this study identifies that special school leaders’ coping strategies are shaped through personal history and meanings derived from social interactions. Leaders adapt and adopt strategies, which reflect held values and ethics. This understanding of ‘what works best for me’ arises from interpretations of their situated selves and identity. This sense of identity is what facilitates coping where special school leaders recognise that they have opportunities to create change, be creative in leading teaching and learning, and develop teams to lead initiatives, which meet the changing and seemingly increasingly complex needs of children in the 21st Century.
REFERENCES


Quality versus quantity policies in Swiss professional education for child care professionals

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ABSTRACT

Despite having more than 50% of children cared for at least several days a week by caretakers other than their own parents, Switzerland struggles to achieve a high level of quality child care and early-child development for pre-school-age children. This paper shows the recent developments in the Swiss childcare provisions. In 2005 Switzerland revamped its professional education system for child-care workers for all age groups, introducing an upper-secondary-level training program. Graduates from these programs, who are themselves between 18 – 20 years of age, largely represent the professional staff of child-care institutions throughout the German part of Switzerland. In the French part of Switzerland, however, there has always been a very strong college level education for child-care and education professionals, which to this day still covers most positions in the corresponding institutions. In the German part of Switzerland, an identical degree program was introduced in 2010, but it is struggling to establish its presence in the job market. Despite their location in four major cities in German-speaking Switzerland, these programs have trouble recruiting enough students from the pool of upper-secondary-level learners. Even though the programs are accredited and federally funded, participants have difficulty finding a field position for the required on-the-job training. The paper shows the financial, pedagogical and ethical dilemmas the Swiss childcare educations system faces and answers a series of hypotheses to this topic with reference to scientific studies and other publications in the field.
INTRODUCTION

In my 15 years of experience designing and administering educational programs for social and child development workers plus another 10 years of post-graduate experience in social work in the U.S. and Switzerland I have made many observations and analyses about quality commitment in the service provision. Whereas my observations have been mostly directly as a provider of social services (including social welfare, housing, case management and child care), my analyses have been primarily been drawn from my thesis on the difficult task of integrating people while executing a high level of social control over them through the public welfare system in Switzerland (Roth, Soziale Arbeit im Spannungsfeld zwischen Integration und sozialer Kontrolle am Beispiel des öffentlichen Integrationsauftrages der öffentlichen Sozialdienste, 2008). In 2010, the BFF College of Higher Education in Bern, Switzerland, where I have served as a dean since 2001, have started a tertiary-level degree program in the field of early childhood development after several years of preparation and accreditation. This was a big step toward professionalizing the field of child development. Before this was no such program of higher education in all of the German-speaking portion of Switzerland. In its first six years of existence this new tertiary-level program has been facing unexpected obstacles in the field, which led me to analyze the situation and develop the thesis that currently policies among child care providers are foremost quantitative only and prevent the qualitative effects of standards promoted by research, schools, NGOs and overseeing agencies. Instead of improving the quality of services provided to the children, the focus lies almost entirely on expanding the scope of services in numbers of children served and hours covered (even up to 24 hours a day!).

QUALITY OF CARE

Despite having more than 50% of children cared for at least several days a week by caretakers other than their own parents, Switzerland struggles to achieve a high level of quality child care and early-child development for pre-school-age children. This conclusion has already been drawn by the report of the Swiss UNESCO commission in 2012. Based on a qualitative, thesis-based survey of policy-makers, experts and analysts this same finding has been confirmed in a comprehensive publication by the renowned Marie Meierhofer Institute for the Child (MMI) in 2015 (Natsch, 2015). The Swiss Child Care Network published a national appeal in 2016 which started out with a comparative conclusion: Whereas the neighboring countries finance approximately 75% of the whole expenditures for child care, Switzerland only finances between 33 und 62 percent, strongly depending on the region where the child lives.

1 Concurrently with our school, a second school in the central-eastern part of Switzerland began offering classes as well. For information on that school see www.hfkindererziehung.ch
TRIPOLAR FRAMEWORK

My understanding of quality is based on the tripolar framework of quality dimensions in the educational field as first outlined by Tietze in 1998 (Tietze, Wie gut sind unsere Kindergärten?, 1998). He distinguishes between the quality of the process, structural quality (including the size of the group, the caretaker-child ratio, the infrastructure and the education/professional experience of the caretaker) as well as the quality of pedagogical orientation (Orientierungsqualität) shown in the attitude, ideas and the “view of the child” of the individual caretaker. In a later publication (Tietze, Ein System der Evaluation, Verbesserung und Zertifizierung pädagogischer Qualität von Kindertageseinrichtungen in Deutschland, 2009) he stresses the importance of qualitatively high frameworks (Rahmenbedingungen) for the level of pedagogical quality in the outcome. In the forementioned MMI publication, Hellmann (Hellmann, 2015) draws the conclusion, that such a pedagogical approach demands a “co-constructive approach to education” which allows the caretakers to fully embed themselves among the children and co-construct with them common meanings.

Based on these deliberations it is obvious that quality of child-care provision (or “child development work”, as the caretaking notion no longer suffices the modern scientifically-based approach to child development outside of the core family) is dependent on different factors of which the level of education of the professional is only one aspect. However, the increased focus on the child and the new findings in research point to the importance of a higher level of education needed. This also corresponds with the educational policies in the child development field adopted by most highly industrialized countries focusing on the tertiary-level, mostly universities, for forming the new generation of early childhood experts. Germany, among other countries, decided already 10 years ago to focus on new early childhood programs at the level of Universities of Applied Sciences (Fachhochschulen) in addition to the traditional Fachakademien (which places somewhere between upper-secondary and tertiary levels but does not belong to the University system). Over the last decade, more than 40 Bachelor-level programs were founded throughout Germany.

THE SWISS CONTEXT

But let us first have a look back at the recent developments in the Swiss child care education system: In 2005 Switzerland revamped its professional education system for child-care workers for all age groups (since school teachers are only responsible for lessons taught, child-care workers provide services for the school-aged as well as kindergarten and preschool children), introducing an upper-secondary-level
training program (MMI, 2015). Graduates from these programs, who are themselves between 18 – 20 years of age, largely represent the professional staff of child-care institutions throughout the German part of Switzerland. In the French part of Switzerland, however, there has always been a very strong college level education for child-care and education professionals, which to this day still covers most positions in the corresponding institutions. In the German part of Switzerland, an identical degree program was introduced in 2010, but it is struggling to establish its presence in the job market. Despite their location in four major cities in German-speaking Switzerland, these programs have trouble recruiting enough students from the pool of upper-secondary-level learners. Even though the programs are accredited and federally funded, participants have difficulty finding a field position for the required on-the-job training. Therefore, only about 200 students are currently being trained at these schools (not counting the 750 in the French part) out of more than 10’000 students currently enrolled in child care at the upper-secondary level (BFS, 2015)

This situation has recently led the forementioned MMI to submit a series of theses to experts in research, in the field and in policy-making. The 4 main theses were as follows:

1. The interests of children – their needs and rights – no longer have priority
2. Swiss society is facing an ongoing government-based deregulation at the expense of the quality of child care
3. Working conditions for the – mostly female – child care professionals are precarious
4. The educational situation for child care workers is confusing and opens very few professional avenues

As dean of one of the four mentioned higher-education institutions, I have worked many years to convince Swiss field institutions and policymakers to move toward a grade mix in their institutions (VPOD, 2015 & MMI publication “und Kinder 95” 7/2015). My paper highlights how the realization of such a “grade mix” could help institutions handle the increasing challenges of a more culturally diverse population, increased migration and the more demanding working hours and conditions of parents. The paper calls for a shift in the professional education policy to sharply increase the number and percentage of tertiary-level trained professionals in the child care field. It is based on the critical review of the results of comparative studies within Switzerland and Europe and enriched by new findings in early-childhood-development research that point to a higher level of expertise being necessary for understanding the needs of children.
CHILDREN CARING FOR CHILDREN

One ethical problem with the Swiss system lies in the danger of “children caring for children”, considering the very low age of the majority of the care providers in Switzerland. A scientific study in the city of Zurich – which is known for having one of the highest level of professional qualifications in the German part of Switzerland – showed that 70 percent of the professionals in training are below 20 years of age, whereas among the trained professionals 2/3 are between 21 and 30 years of age (Universität_Zürich, 2014). But these numbers only show the “tip of the iceberg”, since adolescents without prior training or preparation are in charge of many functions in child-care services based on the widespread tradition of a 1 or even 2-year practicum after 9th grade before they can even start an upper-secondary education in the field. These “children” are often the only employees in the institution who work full-time due to the part-time culture common in this field. Because they have not received any pedagogical training, they usually get assigned to take care of the smallest children, i.e. newborns and babies. Different surveys show that these (extremely low paid) practicums are common in almost all institutions and often are a prerequisite for obtaining simply the chance to do the desired training. The aforementioned survey also showed that 45 percent of all employees at the Zurich institutions even had to spend more than one year in such a practicum (ibid, p. 10).

The problem of such “initiation” procedures are not only in the negative effects on salaries and working conditions but foremost on the effects on the children cared for without proper preparation. And even if that is handled properly through supervision and permanent presence of trained co-workers – luckily there have not been any reports lately of child neglect or abuse based on lack of preparation –, it does have an intermediate effect on the career of all childcare professionals in Switzerland trained that way: Having invested one, two or even three years of practicum work before entering the desired upper-secondary level training, these young people (more than 95% of them women) are discouraged from seeking higher education afterwards. This even in an educational environment in Switzerland which focuses more than ever on achieving higher education (currently 35% of 30 years old have obtained a tertiary-level degree) and no other field knows this practice of having to earn your apprenticeship by first serving as an intern for up to three years.

CONCLUSIONS

Coming back to the initial theses, I can answer them in a somewhat differentiated way (compare my own contribution to the mentioned publication (Roth, Qualität in Kitas - Hypothesen und Antworten, p. 44/45, 2015):
1. The interests of children – their needs and rights – no longer have priority
   Neglecting the interests of children at the expense of an expansion of the number of children served is a major threat for the professionalization of the field. Most professionals keep the interest of the children always as their first and most pertinent task. But there is an inherent danger that quantitative policies (like funding purely based on number of children served and only attached to a minimal set of standards) eventually overlay the qualitative approach and lead to poorly financed, large-scale facilities with no clear educational and developmental focus.

2. Swiss society is facing an ongoing deregulation of state services at the expense of the quality of child care
   Neoliberal tendencies in the political process are also common in Switzerland. It has become increasingly difficult to keep and to secure funding for comprehensive approaches to solving or at least addressing social problems. But the new tertiary-level training programs have been officially accredited and have received sufficient funding based on the number of students enrolled. However, with fewer than expected students, the overall cost over the mid- and long-term is too high for the schools. Therefore, in spite of a comfortable basic funding provision, the new tertiary-level programs are fighting for their survival. If they disappear again, the quality of child care will suffer or at least stay frozen at a relatively low level.

3. Working conditions of the – mostly female – child care professionals are precarious
   Even though there is little indication that this may change in the near future, the experience in the French part of Switzerland shows, that this can be changed and salaries can be competitive with the rest of the (highly paid) Swiss job market.

4. The educational situation for child care workers is confusing and opens only few professional avenues
   The two training levels as outlined in this paper (there are also 2 Masters-level programs in the German part of Switzerland, which are conceived as joint programs with German universities and have a clearly academic orientation) make sense and give ample professional perspectives, if the agencies support a consistent policy toward achieving a healthy mix of qualification levels (e.g. 2/3 lower and 1/3 higher level).

Even though the publication of the theses is the expression of some desperation on the part of our leading thinkers in the child-care research, I do not think that there is reason to despair. As the president of our UNESCO commission expressed to me a few months ago: “The implementation of a new child-centered approach will take time and we will need much more patience than we ever dreamed – but we will prevail!”
REFERENCES


Parents’ beliefs about the importance of play in relation to school readiness

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ABSTRACT

Children living in areas of socio-economic disadvantage are at an educational disadvantage (Shonkoff and Phillips, 2000). Play is widely accepted to be a mediating factor (Melhuish et al., 2008), with parents’ beliefs affecting the provision that they make for play (Weigel et al., 2006). This research investigates parents’ beliefs about the importance of play in relation to school readiness, in order to better support this group of parents and stimulate reflection by other practitioners working with similar groups. A progressive qualitative methodology was used during focus groups and parents’ suggestions for data gathering were incorporated into the method.

Parents were aware of the importance of play and were able to relate this to school readiness. They recognised the value of having a range of play experiences and mentioned many aspects of play and school readiness that are acknowledged in the literature, such as the socio-emotional aspect of school readiness, learning dispositions and basic knowledge. These parents displayed an understanding of play that is not predicted by the literature.

The study highlighted that the parents do have an understanding of the importance of play in relation to school readiness. An ‘active process of reflection’ will allow the results to be considered by others (Greenwood and Levin, 2000, p.98) promoting future work with parents that operates from an awareness of this strength. The progressive methodology, in particular the diamond ranking exercise, could be explored for use in research where a flexible means of generating and recording discussion are required.

KEY WORDS: Parents, play, school readiness, disadvantage, parent and toddler group

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INTRODUCTION

This research investigated parents’ beliefs about the importance of play in relation to school readiness. Children living in areas of socio-economic disadvantage are at an educational disadvantage, simply by virtue of their neighbourhood residence (Cassen and Kingdon, 2007; Shonkoff and Phillips, 2000), however, there are a number of mediating variables for the neighbourhood effects. Play is widely accepted to be one of these mediating factors (Melhuish et al., 2008; Sylva et al., 2003) with parents’ beliefs affecting the provision that they make for play (Weigel et al., 2006). The sample for this study was a small group of parents with toddlers attending a parent and toddler group, in an early years centre situated in an area of socio-economic disadvantage. The study used a progressive methodology to explore parents’ beliefs about play, especially in relation to school readiness. Parents’ conceptualisations of school readiness and how they believe play is a factor in facilitating their child’s transition to school were explored.

LITERATURE REVIEW

Generally, it is acknowledged that what parents do in the home environment has a very significant effect on children’s early academic skills and on their emotional and social skills, which are important aspects of school readiness (Melhuish et al., 2008; Murphy, 2001; Waldfogel, 2004). Although neighbourhood environment is an important factor in educational outcomes, factors within the family may have a stronger effect (Leventhal and Brooks-Gunn, 2000). Research provides evidence that the preschool home learning environment is a more important contributory factor to children’s educational outcomes than either poverty or maternal education (Melhuish et al., 2008; Sylva et al., 2003).

Children’s early play has been likened to ‘scientific enquiry’ in its logic processes (Schulz and Bonawitz, 2007, p.1049), yet its importance is not always full recognised. Parental understanding of the importance of play and parents’ ability to support their children’s learning has a significant influence on children’s early classroom behaviour, including their independence and curiosity (Parker et al., 1999).

Parents’ beliefs affect the learning environment that they provide in the home, including the provision for play, their interactions with their children and the activities that they provide for their children (Weigel et al., 2006). Parents’ differing beliefs about play are often considered to vary by parents’ socio-economic status or education (Weigel et al., 2006).

School readiness is defined in varying ways, with value placed on various aspects of these multiple conceptualisations (La Paro and Pianta, 2000; Snow, 2006). The majority of the definitions focus on aptitudes and skills within the child, which are influenced by factors within the home, community and culture (Ladd et al., 2006; La Paro and Pianta, 2000; Mashburn and Pianta, 2006). McWayne et al., (2004)
investigated the various aspects of school readiness and found that ‘specific approaches to learning’ and ‘general classroom behaviour’ had the strongest association with children’s early success in school.

Parents’ beliefs are widely recognised to contribute to school readiness: a study by Sy and Schulenberg (2005) showed that these beliefs indirectly predict children’s achievements in their early school years, as parents’ beliefs affect their involvement in their children’s early education. The role of parents has been identified as a crucial factor in the promotion of school readiness of children starting schools (Kiernan et al., 2008).

**METHODOLOGY**

The research question was explored using focus groups, as focus groups are recognised to lead to ‘empowerment of participants’ and spawn enthusiasm for the subject matter (Madriz, 2000, p.848) and both of these factors were important to the researcher.

Seven mothers and one grandparent attending a parent and toddler group situated in an urban area, categorised as extremely disadvantaged (Haase and Pratsche, 2008) participated in the focus group. The term parent is used to describe the parents and grandmother in this study. School completion rates in the area are low with 36% of the local population having only primary level education, compared to 22.6% nationally (Central Statistics Office Ireland, 2006). Over half of the over fifteens in the area ceased their education at sixteen years or less (Edwards and Linehan, 2005). College attendance from area is extremely low, with only 9.6% attending any kind of third level education or training, compared with 25.4% nationally (CSO, 2006) and only one per cent going on to higher level education (Edwards and Linehan, 2005).

The parent and toddler group used the PEEP (Peers Early Education Partnership) Learning Together Curriculum\(^2\), which aims to improve the educational accomplishment of children, especially those living in disadvantaged areas, by working to improve parental awareness of their children’s learning and development (PEEP 2009; Street, 2009).

Although all aspects of the parent and toddler group session build on the ‘Learning Together’ curriculum, Talk Time is the chief means of direct delivery. Group discussion is facilitated using simple techniques and peer sharing of knowledge and skills is enhanced by practitioner input. Talk Time is flexible and can be adapted to meet the needs of the particular group (PEEP, 2009) and thus presented an ideal opportunity to use focus groups for this research.

\(^2\) PEEP (Peers Early Education Partnership) Learning Together Curriculum is now Peep Learning Together Curriculum: one of several programmes from Peeple
Participatory methods were used to explore parents’ beliefs about the importance of play using progressive data collection from focus group discussion during a weekly parent and toddler group meetings. The research used a progressive methodology, adopting new strategies and focus questions to initiate and support discussion as the research progressed (Atkinson and Delamont, 2008).

Data was recorded by capturing parents’ statements and discussion themes in the parents’ presence; inviting parents to contribute to the notes, which they did verbally; photographing the final position of the responses on the diamond ranking exercise; sound recording and field notes. At the suggestion of one of the participants, the parents were also invited to write down what they thought was important about play and this was returned in an unmarked envelope to help keep their responses anonymous and to be less threatening to complete. Open-ended questions and simple activities were used to generate discussion and content analysis was used to categorise the data.

**WEEKLY PROGRESSION OF DATA COLLECTION**

The first and second sessions were planned in advance of commencing the research, but using an iterative approach and self-reflexivity meant that the research focus for following sessions and methods used to generate discussion were decided, with input from the participants, as the research progressed (Atkinson and Delamont, 2008).

At the first focus group, paper plates were used to capture the responses to the question ‘What is play?’ with the researcher writing the participants responses in large writing on the plates. The purpose of this was to clarify what the participants understood to be play and to gain as much of a shared understanding of the meaning of play as possible (Fontana and Frey, 2008, p.139). Forty responses were captured and many of these labelled benefits of play with some responses requiring further clarification as to what the participant meant.

During the second session the paper plate responses created previously were used in a modified diamond ranking exercise (PEEP, 2009, p18). This exercise used a diamond base to rank the responses on the paper plates from ‘Very Important’ at one point of the diamond, through ‘Quite Important’ in the wide, central section and to ‘Not Important’ at the opposite point of the diamond. Participants discussed where the paper plates should be positioned and this sometimes involved moving plates so that their relationship to one another was representative of the participants’ decision. Photographs were taken of the paper plates positioned on the diamond and an audio recording was made.

For week three, a photograph, showing the ‘very important’ pinnacle from the diamond ranking exercise performed the previous week was shown and participants were asked what it was about these features of play that placed them at the ‘very important’ end.
At this session participants were invited to suggest further ways that the researcher could gain a deeper understanding about what they think is important about play and two of their suggestions were utilised the following week. Participants and researcher sat on comfortable seating facing the children’s play. They were invited to point out anything that they saw the children doing while they were playing that would be really important.

At the end of this session, research participants’ second suggestion was implemented and the participants were invited to write about why they thought play was important. Four participants chose to return a written response.

For week five, the photograph of the top end of the diamond was displayed and the researcher stated that learning, which was on the top of the diamond made her think of school and asked if the participants thought that children’s play now had any relevance for school later. The fact that ‘learning’ was placed at the top of the diamond, but intellectual was not was also explored and the different constructions of intellectual clarified.

In the final focus group, the question ‘What is school readiness?’ was asked and the answers captured on cards. Then the participants were asked ‘How can play influence these things?’

**FINDINGS AND DISCUSSION**

The parents were mothers whose children, were aged between fourteen and twenty-three months, at the start of the focus groups. All the parents also had older children aged between three and fifteen years. The grandmother who attended the two ultimate groups had grown up children of her own, as well as grandchildren aged up to eight years. Four parents had completed school and taken the Leaving Certificate. Many had undertaken courses after leaving school and these were mainly practical subjects at European Qualifications Framework (EQF) Level 4.

Play is widely acknowledged to be difficult to define (Fisher, 2008); and the parents’ broad range of responses to the question ‘what is play?’ demonstrate that while defining play was not simple, the parents were aware of many aspects of it: features, descriptions, types and benefits.

These parents concurred with Ginsburg (2007) in their belief that play, whether alone or with peers, siblings or adults is important. The socio-emotional aspect of play experiences was acknowledged to be important and were specifically linked to preparation for school. There is a growing body of literature suggesting that socio-emotional competencies are of particular importance at the transition to school (Bustin, 2007; Fantuzzo, et al., 2007; Ladd et al., 2006; Webster-Stratton and Reid, 2004) and the parents’ responses reflected a similar view. The benefits of being able to share, take turns and interact were
recognised as important facets of school readiness, which is also the stance of Fantuzzo and McWayne, (2002) and Webster-Stratton and Reid (2004). Interestingly, while the literature frequently points to socio-dramatic play as an important vehicle for developing important social skills (Ladd et al., 2006; Mendez and Fogle, 2002), parents placed role play, including doctor and home play, towards the bottom of the diamond, ranking it as not that important. Fantuzzo and McWayne (2002) found interactive peer play including children directing the play activity, was linked to positive approaches to learning and other factors important during the transition into school. ‘Giving orders’ and ‘taking orders off each other’ describe aspects of directing play, and were rated as not important. These findings suggest that although parents in this study were aware of the importance of the social benefits of play, the mechanisms by which these benefits were gained was not always apparent to them.

The parents identified some learning dispositions, saying that the children encouraged themselves, explored (curiosity) and concentrated in play. Parents stated that being able to concentrate was important in school. Play’s role in feelings of self-mastery was noted in a written response when it was described as making children ‘feel more confident in themselves’.

Structured play was not explicit in any of the parents’ responses in our first session, where we explored features of play, but was discussed in later sessions, prompted by watching children play with a shape sorter and by a scenario offered by the researcher. Fisher et al., (2008) suggests that parents are more likely than experts to label structured, goal orientated activities like shape sorters as play. In this study parents only spoke about structured activities when prompted to do so, or in a less positive way, such as when they were explaining how they conceptualised the difference between learning and intellectual or when they rejected spelling games and learning games as not as important. These parents were broadly in agreement with the mothers that Fisher et al., (2008) described as ‘traditional mothers’, who saw structured activities as less playful and who credited both structured and unstructured activities with learning value. Structured play activities were noted by Melhuish et al., (2008) to be important factors in school readiness. Similarly, rhyming and phonic games were identified by Williams and Rask (2003) as important for success in literacy. This would suggest more emphasis should be placed on structured play, in contrast to the unstructured peer play activities suggested by Fantuzzo and McWayne (2002). The conflicting messages in the literature are aptly dealt with by the parents’ suggestion that children should have opportunities for ‘Different [types of play]. They need to try everything out…’ and ‘All different types of playing are good for kids’.

These parents, while stating that ‘Learn[ing] the basics before they do start school’, was important, also felt that they ‘Don’t want to know too much- might get bored’. The parents’ role was seen to contribute to bonding and interactions and to a different type of play to that with their siblings or alone. Parents scaffolding their child’s play by instruction was mentioned and the fact that their presence would make
the child feel secure, which would facilitate their play. Englund et al., (2004) found that children, who had parents that are involved in their activities and scaffold their challenges, had enhanced learning skills in later years.

The individual socio-economic circumstances of the parents in this study were only captured by their educational attainment. This does not give the full picture, but has been shown to be a factor in children’s school readiness and educational achievement (Bradley and Corwyn, 2005; Melhuish et al., 2008). They were living in an area designated as disadvantaged, which is also a risk factor for school readiness and academic success (Cassen and Kingdon, 2007; Leventhal and Brooks-Gunn, 2003; Shonkoff and Phillips, 2000). In contrast to Holloway et al (1995), these parents did see play as learning. This may be explained partially by the fact that the intervening sixteen years since that study have allowed parents more access to experts via the internet and, as Holloway and her colleagues noted, parents are receptive to experts’ transmission of knowledge. The parents’ beliefs may have been influenced by their involvement with an early education setting that places high value on play as a learning medium and engages well with parents; this was a possibility also considered by Fogle and Mendez (2006). According to Melhuish et al., (2008), families in Sure Start Local Programmes provided a better home learning environment than those living in similarly disadvantaged areas where Sure Start had not yet been introduced. Similarly, Ayoub et al., (2009) researched the Early Head Start Programme in the USA and found the successful enhancement of the intellectual development of children living in poverty was found where programmes addressed parents’ interactions with their children and their provision of a home environment which stimulates language and learning. The majority of the parents in the current study had been attending the PEEP parent and toddler group for five months or more and two of the parents had also been involved with the setting through older children. Themes from the PEEP Talk Time discussions or activities within the session are also possible influences on some of the responses.

**SUMMARY AND CONCLUSION**

This study examined parental beliefs about the importance of play in relation to school readiness using a progressive methodology. The participants helped to guide the methods of data collection and were given the opportunity to read the transcripts and field notes, description of data collection and findings, before the final dissertation was submitted.

The parents in this study recognised the overall importance of play in their children’s progress towards being ready for school. They showed an awareness of play, its features and benefits. They did not always show an appreciation of the depth of learning from unstructured play such as socio-dramatic play or exploration, but nonetheless they did recognise that both structured and unstructured play is important for children. There is debate within the literature regarding the relative importance of structured versus
unstructured play and these parents’ assertion that children should experience a wide variety of play activities, should ensure that they are able to maximise the benefits of their play. Parents mentioned many aspects of school readiness, which are acknowledged in the literature such as the socio-emotional aspect of readiness, learning dispositions and basic knowledge.

These parents’ responses were more in line with the academic literature on play than with the literature that suggests that living in disadvantage negatively influences parents’ perceptions of and provision for play (Bradley and Corwyn, 2005). In relation to school readiness, again parents were in line with the published literature, which acknowledges the positive benefits of both socio-emotional competencies and academic competencies in school readiness.

**RECOMMENDATIONS**

This study has highlighted that the parents do have an understanding of the importance of play in relation to school readiness. Future work with parents should seek to operate from an awareness of this strength.

These parents were living in a socio-economically disadvantaged area and did not have higher level education. However, their responses indicated a good grasp of the importance of play. One possible explanation for this is that their involvement with the early years centre has increased their awareness of play and its role in preparation for school and thus this provision, with strong parental involvement, should continue.

The progressive methodology allowed aspects to be returned to and explored more deeply. In particular, the diamond ranking was a useful tool, not only through its prompting of discussion, but also as a means of recording responses, without the negative effects of writing notes during interviews (Cohen and Manion, 1994). It was also less formal than discussion alone and was suitable for use in a group where children were present. The diamond ranking tool could be explored for use in further research where a flexible means of generating and recording discussion are required.

The findings give an increased understanding into this group of parents’ beliefs and provide stimulus for further research into what shapes parents beliefs about play and school readiness and how to maximise the powerful home learning environment and play to maximise children’s educational outcomes.
REFERENCES


Parents’ beliefs about the importance of play in relation to school readiness


Teacher-parent communication meetings: A factor in strengthening parents’ participation and cooperation in Greek kindergartens.

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ABSTRACT

Research concerning the impact of parents’ participation in Early Childhood Education and Care programs, confirms the importance of parental involvement as a major significance factor for positive outcomes, not only for children but also for their parents (Sakellariou, 2008). However, in Greece, little effort has been made to train the educators in the field of family-school cooperating and, as shown by research conducted by Sakellariou – Renzou, (Sakellariou, 2008). There is an absence of communication models between parents and educators and in no case there is any implementation of models-typologies dealing with parental participation such as those applied elsewhere.

This present study aims at exploring a) the importance the meetings between the parents and the kindergarten teachers have for the parents themselves and b) to what extent these meetings constitute a motivational force impelling parents to ask for further communication and cooperation with the teachers.

The research sample comprised 117 parents of preschool children attending Greek state schools in urban and sub urban areas (Athens – Preveza) during the 2015-16 school year. The research tool was a closed-type questionnaire. The quantitative analysis that followed reflected: a) the parents’ views concerning the kind and form of the meetings with the teachers they wish, b) the parents’ expectations relating to their role in the context of kindergarten-family cooperation.

Keywords: kindergarten teachers, parents, cooperation, Greek kindergarten
INTRODUCTION

Nowadays, it is recognized that school and family share the responsibility for the education and socialization of the child. Their roles become supplementary and bidirectional (Rodd, 2006 in Ward 2013; Georgiou, 2000).

The universal recognition of family participation in educational projects creates opportunities for new standards that strengthen the “family-kindergarten” cooperation. In many countries, the relationships mentioned constitute a qualitative criterion of performance based on laws and the “parents” parameter has been included in their legislation. Training the educators has been adapted to the new facts, using numerous tools that support this cooperation (Bosse – Platiere, 2008).

BASIC THEORETICAL PRINCIPLES FOR FAMILY-SCHOOL COOPERATION AND BARRIERS

The value of involving parents in the educational work and process of the kindergarten has been revealed through the international literature. The benefits of school - family cooperation are various and related primarily to children, hence to parents, teachers and the quality of education provided, as well. (Paramythiotou, 2011: 74; Alevriadou et al., 2008; Matsagouras, 2008; Brouzos, 1998). In brief, the positive outcomes that have been scientifically documented are summarised as follows:


b. Improvement of the parent-child communication, strengthening the relationships between them (Konzal, 2001; Epstein, 1992).

c. Linguistic, social (Grawford & Zygonris-Coc, 2006) and emotional (Dodge & Colker, 1998) development of children, as well as parents’.

d. Clearer perception and understanding, on behalf of parents, both of the Kindergarten role as of the problems and difficulties faced by teachers, so as to show a greater willingness to support them and stand by them in their work (Epstein & Dauber, 1991; Symeou, 2002; Ward, 2013; Curriculum Kindergarten, Part 1, 2011).

A successful family-school collaboration and communication mainly depends on: the interest and availability (willingness and time) on behalf of both parts, the recognition of rights, the mutual respect, trust and acceptance, the flexibility of the teacher in the different ways of communicating with parents.
applying the appropriate techniques and practices (regular evening meetings, organized social events, language courses for foreign parents, arrangement of the school space in order to be more convenient for welcoming parents, establishment of Parents’ Association, etc), joint decision making, parental involvement in the educational process (Georgiou, 2000. Epstein, 1996; N.2661/98, ar. 2, par. 1). Differences in the way perceiving the two sides of the role of kindergarten can affect the effectiveness of family-school cooperation. (Papandreou et al, 2009). A specific design on Family-School cooperative efforts (objectives-achievement factors - barriers) is needed (Sakellariou, 2008).

The most widespread methods/ways for school-family communication referred in the literature, among others are:

- Exchange of information between family and school (communication by letters, e-mails, notes, calendar - visits, information evenings, speeches).
- Parental involvement in education.
- Voluntary contribution of parents at school and/or assistance of school at home.
- Parents’ participation (informal or formal) in the Parents’ Association activities and in management issues (Tomlinson, 1991; Epstein, 1995, in Georgiou, 2000).
- Relationship development between school and family.

According to Patrikakou & Weissberg (1998), the above statements are based on seven parameters, that design a context for the development of relations between school and family:

1. The cooperation as a priority.
2. Planned/scheduled efforts.
3. Regular and ongoing communication.
4. Positive atmosphere.
5. Personal character of cooperation and communication.
6. Practical suggestions.
7. Monitoring of the cooperation program.

On the contrary, several barriers to collaboration have been reported regarding both parts, such as differences in expectations of parents and teachers and handover the responsibilities from one side to the other (Goria, 2004). From parents’ perspective, mainly these barriers are attributed to the lack of time
due to their professional commitments. Parents distrust teachers’ work or they lack of interest in school activities due to personal, socio-cultural factors and/or prejudices (Saiti, 2009).

Additionally, parental involvement is discouraged by teachers themselves, either because they perceive it as a threat to their professional status (Crozier, 1999), or because they have stereotypes or resist to innovations. Teachers’ inadequate education and training to aid their techniques of involving parents is the main reason for the above statement. (Papagiannidou, 1999; Georgiou, 2000; Dragona, 2004; Brouzos; Rekalidou, 2006; Parent Guide, 2008; Alevriadou et al, 2008).

**GREEK REALITY: CURRICULUM/ LEGISLATIVE FRAMEWORK AND SCHOOL-PARENT COOPERATION**

In Greece, parents’ contribution in the school’s operational matters was institutionalized 18 years ago, while their involvement in the educational process is now required by the new curriculum.

In the current Greek Kindergarten curriculum, emphasis is laid to strengthening the cooperation with parents and generally to opening the Kindergarten in the wider society, through an atmosphere of mutual respect and trust, suggesting good practices of involving parents in the development of educational activities (parents in kindergarten), as well as broadening cooperation at home, in order to promote learning for children outside school (Dafermou et al, 2006; D.E.P.P.S., 2002). In the New Curriculum concrete ideas and instructions on how to expand learning of their children at home are given to parents. “In this context, the role of parents is to acquire strategies with which they can “listen to” their children, watch their progress, chat with them about what they are learning and encourage the search for knowledge “(D.E.P.P.S., 2002; Dafermou et al, 2006; Curriculum Kindergarten, Part 1, 2011).

In accordance with the Presidential Decree 200/1998, which defines the function of Greek kindergarten, the basic context of teacher-parent cooperation is set, as follows: “1. It is organized outside teaching hours, following an invitation by the kindergarten teacher that is scheduled in a way to complement parents program thus the greater participation will be achieved. 2. the information is collectively between general issues, kindergarten’s operational and personal issues. 3. the teacher sets once a month or more frequently, a day of collaboration/cooperation with the parents, which is scheduled outside school hours, decided by the teaching staff, indicated in the Minute book and parents are invited. Teachers accept and occasionally set collaboration/communication meeting with parents facing serious problems. 4. In order to address children’s experiencing particular difficulties, kindergarten teacher may collaborate even in the context of the classroom with the parents of these children or they can offer special assistance when the consultant of early childhood education deems necessary.”
However, even though an increasing interest in the subject of parents’ participation has been noticed in Greek preprimary education, little effort has been made to train the teachers in the field of family-school partnership. Research findings have showed that: school-family cooperation exists only in traditional contexts, parents’ role is “peripheral-conventional”, resulting in losing any real two-way communication between school and parents (Sakellariou & Rentzou, 2007, 33-40) and in general, there is an inconsistency in relation to their positive views and attitude (Sakellariou 2007; Sakellariou, 2008). The sole responsibility of the educators seems to remain the pedagogical design process, there is an absence of communication models between them and parents and in no case there is any implementation of models-typologies dealing with parental participation such as those applied elsewhere. Only in less than half of the kindergartens has been reported formation of parent associations. When referring to parental involvement in early childhood education and training, researches are mainly related to the parents’ views (Papagiannidou, 1999; Ntoliopoulou-Kontogianni, 2003; Rekalidou, 2006; Sakellariou, Rentzou, 2007; Sakellariou, 2008).

**RESEARCH**

**Methodology**

In international literature, while parents express their interest and support to the importance of their cooperation with the school, practice shows their inability to demonstrate actually this interest and ultimately to engage substantially in such a process (Elliot, 2005; Foot et al., 2002; Keyes, 2002; Sakellariou, 2008; Swick, 2004; Bhering, 2002).

The current study aims to examine the perceptions of parents in Greece, whose children attend public kindergartens, with reference to the informative/communication meetings between teachers and parents (organized by teachers, outside school hours) and to what extent these meetings motivate and encourage parents to a deeper communication and cooperation with teachers. There were three main research issues raised: a. the views of parents, on how they evaluate the significance of the informative meetings, b. the ways that parents choose to be informed and communicate with the kindergarten teachers, c. the views of parents on which extra topics they would be interested in, including in the informative meetings.

The research took place in February 2016. The sample comprised of 117 parents of preschool children attending Greek state schools in urban and sub urban areas (Athens – Preveza). Due to financial restrictions, the sample of the research was selected from two areas in Greece, Athens and Preveza. As a data collection method a closed format questionnaire was used and a quantitative analysis followed. The license was granted on the condition of parents’ consent.
SOCIOLOGICAL – DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Initially, the questionnaire was delivered from teachers of the kindergartens to 127 parents, but 117 of them returned it well completed. It is worth saying that the questionnaire was given randomly in one of the two parents.

The vast majority of the sample (63%) that chose to participate in the survey, corresponds to mothers, by 15% the questionnaire was completed by both parents and 10% of the questionnaires was completed by fathers. The majority of parents who completed the questionnaire, are Greek (88% of the fathers and 85% of the mothers). Only 10% of the sample of fathers and 14% of mothers declared other nationalities (mainly Albanian) and half of them stated that they do not understand and do not speak the Greek language.

The age distribution of the parents in the sample is between 30-40 years, specifically 50% of the men and 61% of the women. Men between 40-50 years is 37%, and 21% of women respectively, while only 4% of the sample of the men and 15% of the women sample belongs in the age scale of 20 to 30 years. This result is contrary to earlier surveys, in which the percentage of parents of preschool children in Greece were much higher at the age scale 20-30 years and lower at ages 30 and over. We consider that due to the economic crisis, Greece is facing the last years, Greeks demur at having children in young age. Additionally, some of the parents, that belong to the higher age scales, have already elder children.

The educational level among fathers and mothers is outlined among the following percentages, as shown in table 1: the majority of fathers, 51%, have completed the Secondary education and 32% for mothers whereas Bachelor studies has the 18% of fathers and 34% of mothers.

Table 1.

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Fathers</th>
<th>Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary education</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Secondary education</td>
<td>51%</td>
<td>32%</td>
</tr>
<tr>
<td>Technical training</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>Bachelor studies</td>
<td>18%</td>
<td>34%</td>
</tr>
<tr>
<td>Master – PhD studies</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>No answer</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
DISCUSSION OF RESULTS

In this paper, we’ll present the results from the next issues that have been studied concerning the Kindergarten's-parents meetings:

**Which way parents choose to contact the kindergarten teacher and get informed about issues or activities concerning the kindergarten.**

The presence of both parents in daily arrival or departure of their child from kindergarten is extra important if combined with the second graph showing the ways that parents choose to communicate and be informed on issues or actions of the Kindergarten. The majority of both parents (62%) choose the daily communication with the kindergarten teachers in order to be informed on matters regarding the daily activities of the kindergarten. According to the Sakellariou & Rentzou’s (2007) research in Greek preschool settings “parents and teachers communicate mainly through informal types of cooperation, for example when they take their child to the kindergarten and at the time of departure or during kindergarten’s events”.

A group of parents (37%) gets informed about issues of kindergarten life during informative/communication meetings. Some parents choose the kindergarten’s notice board (8%) and the notes that teachers give (7%). Only 3% of parents prefer the phone and almost none choose indirect information through other parents or the web site/blog of kindergarten school. This case may refer to schools in suburban regions or small cities, where parents and teachers are able to have direct and closer communication, than in big urban cities.

**In how many kindergarten informative/communication meetings parents have participated in.**

In the third graph it is obvious that mothers are more actively engaged, compared to other members of the family, to the group meetings organized by teachers, outside school hours. Specifically, 12% of the mothers, have taken part in one (1) informative/communication meeting, 29% of them have taken part in two (2) meetings, while 24% of them in three (3) meetings that were held up until February of the current school year 2015-16, and 10% participated in 4 or 5 meetings.

Respectively, the percentages of fathers appears to be much lower since, only 12% of them have taken part in one meeting and 3% in two or three meetings.

However, in the third column of the graph referring to the question “In how many informative/communication meetings did both parents attend”, the percentage of 11% is very encouraging for the participation of the father since it is an additional percentage in the paternal involvement.
Especially if we compare it with the previous question that parents prefer to be informed on issues of Kindergarten mostly during informative/communication meeting.

Finally, it is clear in the fourth column that parents prefer to participate they themselves at the informative/communication meetings and not be represented by other relatives such as grandfather – grandmother or other persons.

These results follow the same direction with similar research abroad and in Greece as well. Specifically, the research of Roopnarine et al. (2006), refers to the higher levels of mothers’ involvement at school than fathers’ involvement.
Additionally, in one of her researches, Sakellariou observed variation regarding the sex, specifically mothers clearly were more willing to cooperate than the fathers (Sakellariou 2008).

**Figure 2: As parents or guardians, how many communication meetings have you been able to attend so far in kindergarten this school year?**

<table>
<thead>
<tr>
<th></th>
<th>Mother by herself</th>
<th>Father by himself</th>
<th>Both parents together</th>
<th>Grandmother-father/other</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>11</td>
<td>80</td>
<td>80</td>
<td>97</td>
</tr>
<tr>
<td>Five and more</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Five</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Four</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Three</td>
<td>24</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Two</td>
<td>29</td>
<td>3</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>One</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

Which are the reasons, that occasionally parents are not able to participate in communication/information meetings?

Parents doesn’t seem to pretend obstacles but they actually want to attend the meetings. In cases they are
not attending the meetings, the main reasons are the followings: at 16%, lack of time and 32% due to work commitments. There is also a link, by 9%, to the confidence they have in teachers and in their educational work and eventually they don’t prefer to engage in the educational process of the Kindergarten. As Rekalidou (2006) and Ntoliopoulou-Kontogianni (2003) observe in their research, the active involvement of parents in educational programs inside and outside the school context or their involvement in planning, implementing and evaluating kindergartens programs, is far from being feasible. Kindergarten teachers do not seem to accept joint planning and decision making while parents prefer to have a more auxiliary role.
The importance of the informative/communication meetings for parents.

The three most dominant choices for half and more of the parents for the meaning of the informative/communication meetings are: a. get informed about their child’s progress (56%) b. understand better the pedagogical and other issues of pre-school education (51%) and c. the teachers inform them in more detail (50%). Last but not least are the three other choices, as 43% of parents prefer to take decisions about matters related to the kindergarten life, 41% want to get informed about kindergarten holidays-events and 38% believe in this way in the communication between parents and teachers is getting better. A smaller group of parents lean towards to get to know the needs of the kindergarten and voluntarily offer their help (33%) or believe this is an opportunity for them to meet other parents and communicate with each other.
The topics that parents are more interested to discuss during the kindergarten teachers and parents meetings

The topics parents are most interested in, seem to be linked to their child progress 60% and its behavior 74%. The above preferences could probably be connected with the socio-economic level of parents, since parents that have completed bachelor studies, are more interested in their child’s education and development (Gowen, et al. 1993; Sakellariou, 2006). However, regardless the family level, parents express their interest to know above all, issues concerning their own child and secondary, issues such as: operational issues of the Kindergarten (38%), discussion with experts (38%) and parent’s involvement in class (23%).
It is being observed that the topics of the meetings between parents and teachers are diverse (subjects: pedagogy, kindergarten’s operation, holidays, etc.) Parents seem to respond positively to each of them, they express their views and ultimately are available and open to communication with school. Of course, the communication in order to be effective and long lasting requires constructive dialogue on both sides combined with positive interaction (Gotovos, 1990).

**CONCLUSIONS**

It seems that mothers –traditionally- compared to the fathers, prevail regarding their disposal for cooperation and communication with the teachers (Sakellariou, 2008).

In terms of the current growing interest in the paternal participation in the school life there is an urgent need for kindergarten teachers to strengthen the relationship between father - kindergarten, since the empirical literature has documented this relationship as a key factor to the quality of early childhood education (Sakellariou, 2008).

There is an apparent willingness on behalf of parents to know more regarding the function of the Kindergarten, to offer their help and finally to cooperate in various ways. However, it seems that they are reluctant to engage in the educational process and prefer their involvement as supporters or partners in activities that Kindergarten organizes, e.g. as chaperones on a field trip.

In order to shape and strengthen learning, it is necessary for both kindergarten and families to adopt a common approach and their roles to complement each other for the benefit of all parts, the community included. The school has to convince parents for the above statement since it is proven both scientifically and practically. According to Ward (2013) “it is essential to create the right environment and ethos in which positive relations can flourish”.

Educators who seek cooperation with parents should recognize that parents are the first teachers of their children, and they should be flexible and innovative in their efforts to reach a diverse society (Sakellariou, 2008, p.52; Ward, 2013).

**REFERENCES**


Ministry of Interior and Ministry of Education. N.2661/98, ar. 2 par 1, OG 136. (In Greek).


Embedding the EYFS into the Eco-schools Programme; Visualising the journey

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ABSTRACT

Eco-Schools is an initiative which encourages children and young people to engage in their environment by allowing them the opportunity to actively protect it. Eco-schools are advocates for Education for Sustainable Development (ESD) and the guidance within the Eco-Schools handbook mentions the necessity for an ‘investigation of links with the National Curriculum’ (2015/6: 5). As an English statutory framework, the EYFS (DfE, 2014) has been adapted, with notable revisions since 2007, however, the constructivist premise of this developmental framework means that there is a plethora of opportunities for young children to become aware of aspects related to the three traditional key pillars of sustainable development: environment, society-culture and economy (Brundtland, 1987). This project is in an embryonic state, with the initial phase aiming to embed the EYFS within the Eco-Schools framework. Although the seven areas of learning and development are considered, the emphasis has been on exploring how young children learn (characteristics of effective learning) and on making connections to education for sustainability. In this direction, emerging challenges and opportunities are discussed. At a later stage, phase two of the project supports the development of communities of practice (Lave and Wenger, 1991); with early years providers coming together to support each other with principles, pedagogy and practice. This paper concludes with considerations about the importance of encouraging children from an early age to explore, create meanings, develop skills, attitudes and understandings, on aspects of ecology, economy and equity as future citizens.

Key words: Sustainability; Eco Schools; EYFS; Pedagogy; ECEfS; Curriculum; Early Childhood
SETTING THE SCENE: SUSTAINABILITY, ECO-SCHOOLS AND CHILDREN’S RIGHTS

Sustainability is defined in the Brundtland report - Our Common Future (1987: 41) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” At the Johannesburg World Summit on Sustainable Development (2002: 6) there was a “collective determination” to highlight not only environmental concerns but wider issues that had previously been neglected. Davies (2015: 10) reminds us of the “linkage and interdependencies of the social, political, environmental and economic dimensions of human capabilities.” These interdependencies were recognised in the Earth Charter Initiative (2012) that promoted the four dimensions of respect and care for the community of life; ecological integrity; social and economic justice and democracy, nonviolence and peace.

The Brundtland report (1987: 9) also recognised that all “citizen groups” should and must play an “indispensable role in the creation of public awareness” around sustainable development. 1987 was also the European Year of the Environment, which coincided with the development of the European Blue Flag scheme for beaches. This blue flag idea was later adopted by the Foundation for Environmental Education (FEE) which developed the International Eco-School Programme to support the implementation of the key aims and objectives of the Earth Summit 1992. The Earth Summit recognised the need for all to recognise “new forms of participation” especially in regard to decision making “which potentially affect the communities in which they live” (1992: 270). Additionally, in 1991 most countries of the World signed the United Nations Convention on the Rights of the Child, which established children as participants in decision making.

However, Hart (1997: 3) stresses that it is only through direct participation that children will gain “a sense of their own competence and responsibility to participate.” Shier (2001) developed this notion of participation further and in line with the UN Convention on the Rights of the Child. He stressed if children are actively part of the decision making within the school or setting, this is only the minimum requirement to endorse the rights of the child. He articulates the need for children to “share power and responsibility for decision making” (2001: 111). The International Eco School Programme offers a platform for schools and settings to provide children with opportunities to not only voice their opinions in matters that affect them, their families and communities but to act upon them and to develop a sense of agency.

The International Eco -School programme is now operating in over sixty countries worldwide adopting the green flag as a symbol of a sustainable school/setting. Its aim is to support both children and staff to organise a strategic plan of action, “action learning” or “learning by doing” (Eco-School handbook
Responsive and co-constructing relationships between the child and adult are a crucial aspect of embedding this ESD approach into settings. This co-construction resonates with the Reggio philosophy that is situated in a socio-cultural context with an emphasis on interrelationships. Dahlberg and Moss (2006: 6) describe this as knowledge that is constructed through “a process of meaning making in continuous encounters with others and the world”. Nevertheless, adopting the Education for Sustainability approach (ESD) is dependent not only upon the leadership and ethos of the school/setting but also upon the broader expectations and priorities set by national curricula, policy-makers’ agendas and demands.

The Eco-Schools handbook underlines the necessity for an ‘investigation of links with the National Curriculum to increase the quality and quantity of learning for sustainability in England’ (2015/6: 5). Thus, the aim of this project is to explore how the English statutory framework for the Early Years Foundation Stage (EYFS) (DfE, 2014) can be embedded in the Eco-schools programme, through a sustainability lens, at both a theoretical and practical level. However, the scope and remit of the project is considerably wider than what the nomenclature ‘early years’ denotes.

**EYFS AND ECO-SCHOOLS: CHALLENGES AND OPPORTUNITIES**

The EYFS (DfE, 2014) sets the standards for learning, development and care for children from birth to five in England. It is based on constructivist pedagogical principles but can also be read as a prescriptive, goal orientated framework. The English Early Years framework provides opportunities for playing and exploring, active learning and creating and thinking critically (DfE, 2014). It also sets three prime areas of learning and development (communication and language, physical development and personal, social and emotional development) and four specific areas of learning and development (literacy, mathematics, understanding the world and expressive arts and design).

Ang (2014:16) notes the unintended consequences of an over prescriptive curriculum may be to ‘silence’ the child and this also resonates with Malaguzzi’s idea of a prophetic curriculum (Cagliari et al 2016); a curriculum that predicts what will happen even though the future is based on uncertainty, variability and change. On another note, the discourse of the Early Years Foundation Stage (DfE, 2014) reflects school readiness. This has developed with the increase in early intervention strategies, in alternative ‘stories’, in the ‘game of assessment’ (Basford & Bath, 2014), thus, contesting the narratives related to the purpose of early childhood education (Moss, 2014). Furthermore, there are discussions on whether, and to what degree, the EYFS considers children’s point of view and how the framework supports young children to develop their own ‘human sense’ (Donaldson, 1978) of the world around them. For example, within the prime area, Communication and Language, children are encouraged to ‘listen attentively’, ‘respond appropriately’ and ‘follow instructions’, followed by a technical approach related to speaking, with
references to “accurate form” (DfE, 2014:8); It could be argued that if the context is not meaningful to the child, this technical approach could hinder, rather than support the development of meaningful dialogic learning.

In contrast to the regulatory EYFS framework, the Eco-Schools handbook offers an invitational response, a voluntary framework and refers to ‘friends of Eco-Schools England’ (2015/16:9). Thus, embedding the EYFS (DfE, 2014) into the Eco-School highlights the juxtaposition of statutory and voluntary guidance with opportunities to view the learning and development requirements using alternative lenses. However, the Brundtland report (1987:17) suggests that adopting an education for sustainability approach rests solely on “political will” and there is an acknowledgement of Governments’ “reluctance to recognize sufficiently the need to change themselves,” as realistically “it makes long-term economic sense to pursue environmentally sound policies” (1987: 275).

The Eco Schools lens, may support an interpretation of the curriculum where children are trusted to make decisions and engage in some complex issues surrounding an ‘Understanding of [their] world’ (DfE, 2014). ESD supports a counter argument to the preparation for school debate with the possibility of ‘preparation for life’ (Korzak 2002: 97 cited in Davies & Elliot, 2014: 48), where children are supported to ‘recognise a lie’. Davies (2015:16) suggests it is a mistake to think of young children as passive “victims” but through a change of mindset they should be seen as “extraordinarily resilient and positive about their world” and they need to play an active and responsive role in “shaping it”. However, the theoretical elements of democratic agonism (Mouffe 2000) highlight that there is not only a place for, but the importance of contesting and challenging critical issues in early childhood. This is underlined by Rinaldi (2006:156) when she states that in early childhood there must be an acceptance of “conflict as part of dialogue” when considering critical and ethical tensions and issues.

“What kind of preparation for life is it to tell children that everything is just, fair, sensible, well-motivated and unchangeable? In our agenda for upbringing, we have forgotten to insert the idea that the child needs to learn not only to love the truth, but also to recognize a lie, not only to love but also to hate, not only to respect but also to reject, not only to overlook, but also to be indignant, not only to adapt but also to revolt”. Korczak (2002:97 cited in Davies & Elliot, 2014:48)

EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY (ECEfS)

ECEfS is an emergent field, internationally, aiming to translate the relationships of the co-evolution of social and biophysical systems into early childhood educational praxis (Davies and Elliott, 2014). It is not only a content area that traditionally is linked to environmental education but also a way of working with children (Pramling Samuelsson, 2011; Davis and Elliott, 2014), addressing aspects from the three key
pillars of sustainable development: environmental and ecological concerns, social and cultural implications and economic aspects (Brundtland, 1987). According to UNESCO, the purpose of ESD in EC is fundamentally about values, with respect at the centre: respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit.

An early childhood education curriculum reflecting aspects like sensitive and culturally relevant contexts, contents that foster caring attitudes and empathy for the natural environment and people, respect for diversity, consideration of gender issues and equal rights, learning of basic life skills, learning for life and enhancement of activities built around the seven Rs: reduce, reuse, repair, recycle, respect, reflect and refuse (Pramling Samuelsson and Kaga, 2008) encompasses the perspective of a sustainable world. As Inoue (2014:88) states, ECEfS should not be seen as a ‘new’ educational issue, added successively to the existing curricula but should be advanced through an integrated and transformative approach.

Whilst learning in and about the environment is embedded into early childhood education, learning for the environment helps to lay the foundations for sustainability and to encourage children to explore human/environment interactions as causal in sustainability problems and aspects (Davis, 2009). Very young children have been found capable of sophisticated thinking in relation to socio-economic aspects and the earlier ESD ideas are introduced, the greater their impact and influence can be (Siraj-Blatchford, Smith, & Pramling, Samuelsson, 2010). The nine themes that underpin the Eco-schools program are: Energy, Waste, Water, Litter, School Grounds, Transport, Healthy Living, Global Perspective, Biodiversity. In addition, the more directly and explicitly linked area of Learning and Development in the EYFS (DfE, 2014) is ‘Understanding the World’. Education for sustainability provides opportunities for transformative, participatory and empowering education around global issues (Davies, 2014).

OUTLINE OF THE PROJECT

Given the increasing need to support children in becoming responsible decision-makers of and for a sustainable future, this project aims to develop a shared understanding of ECEfS within multiple communities of practice.

PHASE 1

The first phase was based on open informal conversations among practitioners, academics and representatives from Eco Schools England. The project is currently emerging within a rhizomatic model, where collaborations are not being driven by predefined outcomes, with the EYFS (DfE, 2014) embedded into the handbook by experts. Rather, the table below offers an initial frame for discussion with the group collaborations noted in phase 2.
Table 1 (below) shows how early years providers, adhering to the statutory framework (EYFS, DfE, 2014) could (and many already are) deliver education for sustainability with very clear links to the Eco-Schools topics. This table is intended as a guide to help demonstrate how providers can link their activities with ECEfS and Eco-Schools topics. This will help ensure that Education for sustainability is embedded throughout their provision by enabling children to learn through engagement with their world.

**PHASE 2**

Louv (2010) notes how research by Chawla (2006) and Wells and Lekies (2006) highlighted the importance of sharing in direct experiential and sensorial opportunities in nature. Settings must embed a culture of sustainability to ensure that children develop a lifelong disposition for their world, however, this lifelong disposition requires the sophisticated support of caring and knowledgeable ‘others’ (Vygotsky, 1978).

Ethical considerations have been embedded holistically within phase 2 of the project with the completion of a formal ethical approval process within Liverpool John Moores University. Cluster groups from Saint Helens, Liverpool, Dorset, Hertfordshire, Hampshire and the Midlands have been formed with lead practitioners to guide and facilitate the process. Each cluster group has opted to collaborate with practitioners who work within the early childhood education sector to discuss the table and provide constructive suggestions related to its suitability. This phase is characterised by (re)construction and negotiation and there is an anticipatory hopefulness that the cluster group collaborations will ultimately have their own ‘lines of flight’ (Deleuze & Guatarri, 1987) resulting in valuable conversations for a shared ownership of the project. This participatory project approach resonates with the 1992 Earth Summit, Empowering communities (3.7) where Sustainable development must be achieved at every level of society. People, organisations, women’s groups and non-governmental organisations are important sources of innovation and action at the local level and have a strong interest and proven ability to promote sustainable livelihoods (1992:15).

In the collaborative discussions the cluster groups each had a copy of the draft table (Table 1) to consider both the negative or positive practical implications of implementing it within their early years context. The contexts are varied both geographically and with a disparate range of early years provision, including childminders, Children’s Centres and nurseries. Additionally, they had access to the self-reflective tool (Siraj-Blatchford and Mogharreban 2016) that highlighted the three pillars of ESD, again in a practical context. The feedback from these discussions will be themed and documented to develop phase three of the pilot project.
<table>
<thead>
<tr>
<th>EYFS</th>
<th>Aspect</th>
<th>Eco-Schools topics</th>
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<tr>
<td>Prime areas of learning and development</td>
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<td>Personal, Social and Emotional Development</td>
<td>Making relationships</td>
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<td>Self-confidence and self-awareness</td>
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<td>Managing feelings and behaviour</td>
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<td>Physical Development</td>
<td>Moving and handling</td>
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<td>Understanding Speaking</td>
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<td>Specific areas of learning and development</td>
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<td></td>
<td>Literacy</td>
<td>Reading Writing</td>
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<tr>
<td></td>
<td></td>
<td>Shape, space and measure</td>
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</tbody>
</table>
CONCLUSIONS

With a developing research profile, ESD is becoming more visible within early childhood communities and this project aims to support the transition of ESD from the fringes to legitimate participation. It is noted that governments should, in cooperation with appropriate International/National and non-governmental organisations such as Eco -School England, support a community-driven approach to sustainability. This project provides the opportunity for transformative participation with all policy makers, leaders, practitioners, children and communities being involved. Ironically, the current political climate resonates with the “reluctance” noted in 1987 and is characterised in some of the passive and ambiguous responses from the Department of Education (2016) where ‘diary overloads’ framed an inability to commit to engagement with the project. As the first years of every human being’s life are the most favourable ones for developing attitudes and values it is important to support children during these years in appreciating and advocating for a world that is diverse, fair/unfair, just/unjust, with careful use of resources and concern for the well-being of the people and the planet. As Davis and Elliott underline (2014) future research is needed to depict the connections between theoretical frameworks and evidence-based practices, in providing a deeper understanding and re-conceptualisation of ECEfS as an important contributor to global sustainability.

REFERENCES


The impact of financial crisis in bullying and violence phenomena at Greek mainstream and special schools

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ABSTRACT

Incidents of school violence and bullying have always existed in the school community. Although, in recent years, there has been more awareness and attention on the role of teachers and parents in the prevention of such phenomena. Due to the fact that there are only few studies about how the financial crisis is related to violence at schools, we conducted this research using qualitative methodology. The results show that the current conditions in Greece, where insecurity, unemployment and poverty exist, have negatively affected a large part of the school population, in various ways. Bullying has been an alarmingly growing phenomenon with steadily increasing rates. Moreover, violent incidents appear more often in children with special educational needs and the perspective of an inclusive education cannot be implemented in the daily educational practice. To conclude, in this diverse socio-economic destabilization scene, school should play a highly influential role in the prevention of bullying and other violent behaviors.

Keywords: Financial crisis, school violence, disability, inclusive education, bullying.
INTRODUCTION

Regarding Greece, and its relation to crisis in education, poverty, unemployment, growing deprivation of income, and overall socio-economic regression have clearly affected the structural features of educational mechanisms and exacerbated rapidly social inequalities in education (Fotopoulos, 2011). Moreover, media reports show that students faint because of starvation while stressful situations have contributed to the emergence of various psychosomatic symptoms. One incident that was presented on BBC television, revealed that some students with special educational needs are kept in wooden cages because of a lack of staff. Apparently, declarations for an equal and democratic participation of socially-excluded people are only theoretical and have only little practical application. These incidents are extremely important because they show that a European country in crisis looks like a developing country after war. Taking Greece as an example, Europe has a responsibility to protect students because they form the next generation.

Inclusion is also particularly important since its objectives are to address the differences between the students and the exploited in an appropriate manner, while considering creative possibilities for them. A prerequisite for this, as underlined by Barton (2004), is the acceptance of the view that no child is unfit for education and that disabled children are not lesser beings. In addition, the disability of a person must not exercise any kind of influence on the right to freedom, dignity and justice (Oliver, 2009).

Inspired by the above facts, the present study was designed to investigate the effects of the financial crisis in Europe on increasing school violence including children with disabilities.

METHOD

The research is based on qualitative methodology which contributes to the development of more complex and detailed description of data. The choice of qualitative approach arose from the need to explore in depth, the experience of teachers.

The purpose of the study was to investigate the impact of the financial crisis on increasing school violence both on mainstream and special education students in kindergarten and primary schools, in Greece. More specifically, it investigates the reasons for the phenomenon of school violence that has reached such alarming levels in the last five years. Furthermore, it investigates the identity of the perpetrators, the victims and the involvement of the social environment.

Finally, it is studied whether people with disabilities are involved in violence and how their characteristics affect how they are engaged, in an era where inclusive education is trying to make noticeable progress.

It was assumed that the dire economic situation of recent years is directly related to the increase in
violence and bullying in schools. In the beginning of this project we anticipated that the results would be very predictable but after the collection of data we realized that teachers’ experiences are varied and so interesting.

The sample in this study consisted of 28 primary school teachers within the prefecture of Attica (Center of Athens) who have worked with children with disabilities in mainstream education. More specifically, 4 are teachers in the integrated education section, 10 of them have worked as parallel support teachers, and the remaining 7 are general classroom teachers who have been trained in special education (postgraduate degree holders). The research tool we used, was the semi-structured interview, whereby the interviewer can, to some extent, be guided by the answers of the respondent and also the content of the order and wording of questions, depending entirely upon the researcher (Cohen, Manion & Morrison, 2007).

An interview guide was constructed for the needs of this research, consisting of eleven open questions. A pilot study was conducted and, after the corrections and changes, we were able to have the final tool for implementation.

The researchers followed everything needed for ensuring the ethics, validity and reliability of the research effort.

RESULTS

From the 28 teachers, 18 were women and 10 men, with a mean age of 35 years, all working in Attica, Athens and 12 of them had graduate degrees. 4 teachers taught in the affluent district of Athens and the rest in city centre schools.

Questions Asked:

Teachers were asked if they had observed differences in the classroom compared to the pre-crisis era (we wanted to give them the opportunity to express the types of differences they had noticed without telling them about violence, yet).

The second question was about whether the teachers have been noticing exacerbation of the phenomenon of school violence and bullying.

The third question that was asked to teachers was to determine the identity of the perpetrators and the victims in incidents of violence (e.g. student to student, parent to student, or teacher to student).

Another question was if, at the same time with the financial crisis, there had been in recent years, an extensive informing of society about violence.
We also asked, what are the most common forms of violence in schools that have been observed between students?

Whether in instances of violence, teachers have noticed the active participation of the social environment (i.e. if there was a complaint of the incident).

The seventh question was about whether there are recorded differences in aggressive behavior depending on the gender of the students.

We then asked whether we can talk about violence among students with disabilities

The ninth question was related to the obstacles of inclusion achievement in education

One more question for the teachers, was intended to present their views on whether students with disabilities are more easily targeted because of cultural diversity.

Finally, in the last question, the teachers were asked to indicate their views, giving details, on the economic situation of students and the outbreak of violent phenomena.

From the teachers’ responses it became immediately apparent that the economy is directly related to performance. This also echoes Polychronopoulou (2003), who states that, due to the unfavorable economic situation and the country’s obligations under international treaties that had been systematically neglected, the needs of students with special educational needs were ignored.

However, crisis is also reflected in psycho-emotional states, as stated by one of the respondents: “Recently, children look more gloomy. Less are involved in school trips and even fewer do their shopping from the school canteen. They are also more aggressive and closed-in on themselves. “

Indeed, middle childhood is a critical period for the development of social and emotional capacities and any shock can affect social, emotional and behavioral development and can lead to future difficulties (Cole & Cole, 2001).

The influence of the economy on the psycho-emotional state of students is recorded by Lundberg & Wuermli (2012), who emphasize that instead of the sounds of cheerful and carefree children’s voices, we see sad, distressed children’s faces denoting a decline in confidence, self-esteem and self-respect.

Answers that were given by some of the teachers focus on the fact that violence is a function of reaction to the game of power. Petropoulos and Papastylianou (2001), emphasize that the more severe the disorder of a child, the more often violent phenomena are shown. The personal reference of a teacher in an incident that a student with autism was involved showed that people in this condition often exhibit aggressive behaviors that are dangerous both for themselves and for others, as mentioned in Gardner
& Cole (1990). Similar is the view of another teacher who emphasized: “I’ve seen students with special educational needs to use violence to their peers, but these children are not smoothly developed and many times are not fully aware of their acts nor aware of their power.” Lovaas (2003) also, notes that children with autism have problems in the social and communication skills and are more at risk of developing behavioral problems, such as aggression.

CONCLUSION

The content analysis of responses received, leads to the conclusion that there is hardly a distinguishable identification of violence for students with disabilities, depending on the type of disability. However, there was observed aggression in students who had mild mental disability as compared to their peers. It was also found that there was a significant difference between students who live in affluent areas of Athens compared with the average socio-economic class students, thus confirming that the economy clearly affects behavior.

The present research was undertaken to study the degree of impact of the financial crisis on the growth of school violence and bullying in a period of intense dialogue. An attempt was made to present the perspective of teachers on whether they had noticed a surge in incidents, compared to the past, and if there might be a connection with the dire economic situation that had overtaken to the country.

The results show that the greater part of the teachers admits that in recent years there has been an exacerbation of the phenomenon in direct interaction with the financial crisis that has hit the country during the last few years. The adverse living conditions of students and families encourages the development of such phenomena while the structural features of the educational mechanisms appear to have been influenced by the broader destabilizing climate.

At this point, it is worth focusing on the finding that for teachers, in recent years, there has been more extensive information on the part of society about school violence and bullying. While practical, there is scope for further work. One can observe that, lately, there have been various efforts made to interpret the phenomenon on the part of the educational community (through updates, activities, seminars and workshops on the prevention of bullying), and also the media (through advertisements and information programs). Once more, we can talk about a social phenomenon that is becoming more alarming by the day.

Undoubtedly “bullying” needs to be addressed; but the obstacles encountered are many, and there needs to be an effective approach to the phenomenon of problem behaviors as one of the main priorities of educational policy.
Recounting their experiences with the bullying of students, teachers identify the perpetrators with the victims’ profiles. Abusers are presented as children with aggressive behavior for their victims, and the victims are mostly children with low self-esteem characterized by silence and social isolation. Additionally, teachers observe that boys express more aggressive behavior than girls and physical violence mainly to their victims, while girls perform more psychological and verbal violence. The phenomenon of cyber bullying in recent years seems to exhibit expansionary tendencies in our country.

Teachers referring to school victimization incidents are experienced, and they point out that there is often no complaint of certain facts and that silence covers such phenomena. The stakeholders (family, school, society) cannot take responsibility for their fair share, as a large amount of in-school violence remains unidentified, because stigmatization of perpetrators or victims affects the prestige of the school. Children, however, are in need of a climate of emotional security and confidence, fostered by teachers, who should strengthen the resilience of their students by all available means.

The survey mentioned reveals the existence of violence among students with disabilities. Violence dovetails with the form of disability: the more severe, the greater the risk of developing behavioral problems in the form of aggression. On the other hand, people with disabilities because of their cultural diversity are more easily targets of bullying since some students fail to understand the nature of the disability. Finally, at a time when inclusive education is at the heart of discussions, teachers recognize achievement hurdles including inter alia changes in the curriculum studied, the methods and means teaching, the services provided, the mentality that has developed towards disability issues, education teacher training, the allocation of resources, and the infrastructure.

The idea that education is a commodity that must be offered to all is now firmly established worldwide. To provide equal educational opportunities in a “school for all,” regardless of any special need or characteristics, involves taking into account all of the above parameters to formulate a new education policy focusing on the key issue of inclusion. Moreover, the dominant position in a democratic inclusive school must hold the perception that there is no child who cannot be taught, and that the effectiveness of inclusion of children with or without disabilities should be seen as a priority of the school itself.
REFERENCES


The effect of professional education on quality of practice: An Irish perspective

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ABSTRACT

Practitioners who are qualified in ECEC and receive in-service training, provide better learning supports for children. Conversely, continued professional development (CPD) is not mandatory in Ireland. Any fees incurred, in regards to CPD, is the sole responsibility of the practitioner or service owner (Oberhuemer et al., 2010). Importantly, in 2013, the competency of Irish ECEC practitioners was brought to the forefront of quality discourse. The RTE Prime Time report, ‘A breach of Trust’, exposed the mistreatment of young children in a number of Irish ECEC centres, where the minimum requirement to work with young children was and still is, a one-year certificate in ‘childcare’. However, how can a practitioner be expected to engage with children in a developmentally appropriate way if he/she has not been aptly trained in child development theory or the organisation of the learning environment? Generally, the effect of professional education and learning on quality instruction, have been the subject of intense debate within the field of ECEC, owing to a mixed range of findings (OECD, 2012) and differences in methodology (Kelley et al., 2007). It is as a result of mixed findings, that there needs to be more research undertaken into the effect of professional education on quality ECEC practice. Consequently, the aim of this position paper is to explore the links between professional learning, education and quality ECEC. Interestingly, the question of professional learning as an indicator of quality ECEC, arose from an on-going review of the literature, as part of a study on the components of quality ECEC. This study seeks to explore stakeholder’s views on quality ECEC, with a strong emphasis on professional learning and education. In this context, stakeholders are ECEC practitioners, parents of children in ECEC settings, child advocates, policy makers and ECEC personnel in general. Specifically, semi-structured interviews and questionnaires will be utilized to gather data. Ethical considerations will include obtaining informed consent, giving participants the chance to withdraw at any time, empowerment of the participants and building rapport in order to gain trust and co-construct knowledge. The position taken is that, the quality of staff, that is their professional education, learning and development, is what drives and informs quality ECEC practice (European Commission, 2011). Therefore, the CPD of all ECEC practitioners should be prioritised by policy officials in the quest for quality ECEC.
INTRODUCTION

“Developing the workforce in preschool services has long been identified as central to the delivery of quality experiences and environments for young children” (NEYAI, 2014: 10). In other words, practitioners who are qualified in ECEC and supported in continued professional development (CPD) provide better learning supports for children. Contrariwise, CPD is not mandatory for practitioners in Ireland and any fees incurred are normally paid by the practitioner or ECEC setting (Oberhuemer et al., 2010). In addition to this, the effect of professional education and learning on quality instruction have been the subject of intense debate within the field of ECEC, owing to a mixed range of findings (OECD, 2012). It is as a result of mixed findings that there needs to be more research undertaken into the effect of professional education on quality ECEC practice.

In the Republic of Ireland, ECEC practitioners’ capability was brought to the forefront of quality discourse in 2013. The RTE Prime Time report, ‘A Breach of Trust’, exposed the mistreatment of young children in a number of Early Learning Centres. Noteworthy is that the minimum requirement to work as an Early Years Educator is a one-year certificate (FETAC Level 5) in ‘childcare’ (DCYA, 2015b). However, how can an educator be expected to engage with children in a developmentally appropriate way, if he/she has not been aptly trained in child development theory or the organisation of the learning environment? Can a FETAC Level 5 certificate enable practitioners to provide enriching learning experiences?

The question of professional learning as an indicator of quality ECEC arose from an on-going review of the literature, as part of a study on what practitioners and parents value in regards to the care and education of their child and the challenges they face. Rather than focusing on quality in ECEC, the study seeks to explore parental and practitioners’ values and principles, with strong emphasis on professional learning and education. Semi-structured interviews and questionnaires will be utilized to gather these perspectives. A trend which has emerged from the literature is that training and education informs practice.

PROFESSIONALISM AND QUALITY EARLY CHILDHOOD EDUCATION AND CARE

A recent study on children participating in ‘Head Start’ classrooms, by Son et al. (2013: 543), provides the basis for the hypothesis that training and education has a profound impact on practice. This research indicates that qualified practitioners who engaged in Continued Professional Development (CPD) provided better “socio-emotional practices”. Remarkably, children in these classrooms scored better on “social skills, learning behaviours and early math skills” (p. 543). Urban et al., (2011) agrees with this sentiment but argues that any CPD training must have certain characteristics to be effective. For instance,
Urban and colleagues argue that a minimum of 20 hours per year is needed, before an impact on the quality of instruction can be seen (IBID, 2011). The OECD (2012) shows the effect of a qualified and well-training workforce on quality ECEC (figure 2.1). However, CPD is not mandatory for practitioners in Ireland and any fees incurred are normally paid for by the practitioner or ECEC setting (Oberhuemer et al., 2010).

In Ireland the growth of ECEC has been supported by initiatives on professionalism and quality. Namely, Síolta (2006), Ireland’s National Quality Framework for ECEC, the Workforce Development Plan (2009) and the Better Start Mentoring Programme (2015). However, Moloney (2010) argues that in spite of developments like these, transformative change is yet to take place. To illustrate, Schonfeld (2006) disseminates that Síolta means seeds in English - its very meaning was meant to capture the possibilities for quality provision. However, as of 2013, out of 5,000 crèches in Ireland, only 100 had formally implemented Síolta (O’Sullivan, 2013). Formal implementation of Síolta, in this sense, related to the Síolta Quality Assurance Programme (QAP, 2009), which “comprised a series of clearly defined
steps including self-assessment, action planning, quality development and evidence collection, portfolio building and validation” (Early Years Policy Unit, 2013: 3). The aim of the Síolta (QAP) was to train practitioners in implementing quality services through the standards and goals of Síolta. Notably, the shortage of resources available to ECEC service owners played a part in the paucity of crèches who took part in the Síolta (QAP). For instance, during the nationwide consultation with the ECEC sector, the dearth of investment in ECEC was highlighted as a major challenge in the implementation of quality ECEC practices (Síolta, 2006). Additionally, the Síolta QAP Programme is a rigorous process, which takes almost 2 years to complete (McKeown et al., 2014). In light of this information, the need for early learning centres to be fully supported in their quest for quality provision and training becomes even more apparent.

THE EFFECT OF PROFESSIONAL EDUCATION AND LEARNING ON QUALITY INSTRUCTION

With regard to the effect of professional education and learning on quality instruction, older studies such as Kelley et al., (2007) and Early et al., (2007) showed that there were minimal to no effects on outcomes and the quality of the early childhood classroom, when the early years educator had a degree. Although there could be several reasons for these findings, such as poor quality training. Interestingly, three main themes have emerged from the literature on the professional education and training of practitioners: (1) the quality of early years’ education is dependent on the quality of the educator (2) the content of our training programmes must prepare graduates for entry into the workforce and (3) in order to produce and retain experienced and qualified practitioners, incentives must be in place.

THE QUALITY OF EARLY YEARS’ EDUCATION IS DEPENDENT ON THE QUALITY OF THE EDUCATOR

Regarding the professionalization of ECEC, Duffy (2011) posits that, ‘childcare’ is understood by many as a calling, which derives from natural ability, rather than a profession, which requires certain expertise and training. Similar observations have been made by the Productivity Commission (2014), which suggests that love and a devotion to children is what drives ‘Childcare workers’. They argue that ‘Early Childhood Educators’, as opposed to ‘Childcare workers’, are concerned with education and so, a degree in this respect is justified (Productivity Commission, 2014). Here, a distinction is clearly made between care and education. Reflecting on these remarks, Sims et al. (2015) proposes that it is this sort of thinking that is the dichotomy between care and education. In essence the view put forward here is that young children can be cared for by low-skilled staff because care work is not concerned with education.
Conversely, research findings from studies like the EPPE study (2003-2008) indicate that there is a strong correlation between the quality of provision and practitioners’ credentials. In particular, the greatest benefits were observed when the Pre-School Leader was well-trained and had been teaching the same group of children for a substantial period (Siraj-Blatchford 2010). Surprisingly, a FETAC Level 5, a one-year certificate in ‘childcare’, is deemed sufficient to work as an early years’ educator in Ireland. How can educators be expected to engage in developmentally appropriate practice, understand child development theories and provide a curriculum which is reflective of the child’s interests and family background if they have not been trained to do so? Moreover, supporting practitioners in gaining higher level qualifications will contribute to the overall quality of their practice. On the other hand, we must also look at the content of our training programmes.

**DO OUR TRAINING PROGRAMMES PREPARE QUALITY GRADUATES?**

There are a manifold of ECEC degree programmes and further education courses available. These training programmes vary in numerous aspects, such as learning outcomes, modules and length. For instance, ECEC degrees (Level 7/8) can be obtained from 11 different institutions and universities in the Republic of Ireland (Oberhuemer et al., 2010). In addition to this, further education colleges also award FETAC Level 5/6 certificates in Childcare (DES, 2009). Greene and Hayes (2014) assert that FETAC Level 5 courses are “currently delivered by multiple providers, of varying quality and limited accountability, with some programmes solely online.” Some online programmes require no work experience and do not have an independent examinations assessor. As a result of this, Greene and Hayes (2014) argue that people can get a ‘childcare’ qualification without proper monitoring and evaluation of their practice. Meaning that it is possible to graduate with a childcare certificate in Ireland without ever having to interact with children or have your work independently assessed.

The literature consistently conveys the benefits of qualified and proficient staff on children’s developmental progress and learning experiences (Manning et al., 2015; OECD, 2015; OECD, 2012; Penn, 2011; Hayes, 2007; Fükink et al., 2007). Regrettably, in Ireland many practitioners may be discouraged from obtaining higher level qualifications. Madden (2012) posits that those who obtain an ECEC degree do not get much more in return than those with no training. However, the need for increased teacher education and Continued Professional Development (CPD) has been recognized as important to children, society and the economy, both in Ireland (DCYA, 2015a; Madden, 2012; Moloney, 2011; Síolta, 2006) and internationally (Whitebook et al., 2014; Urban et al., 2011; Hanushek, 2011). It is as a result of findings like these that the DES (2010) established the Workforce Development Plan (WDP) for the ECEC sector in Ireland.
Findings from the (WDP) indicated that retention of graduates in ECEC was dismal, citing low social standing and remuneration as the principal cause. For instance, even with a degree practitioners may be paid just over the minimum wage of €8.65 p/h. Drawing from this, perhaps the first step in the development of a workforce in Ireland is not through increasing qualification levels but by removing disincentives to the retention of skilled staff. Nonetheless, the opposite approach has been taken - qualification requirements have risen while wages for practitioners remain low. The ECEC Programme (2010) is a perfect example of this. This scheme provided 3 hours of free pre-school to children of a certain age and raised the qualification level needed to work as a pre-school leader, under contractual agreement. However, funding directly related towards increasing staff wages was not evident. Although settings were paid at a higher capitation rate if they hired a graduate, it was at the discretion of the setting to choose how the money was spent (DCYA, 2015c).

In conclusion, developing the early years workforce must be at the top of the agenda for early years policy officials. Although, quality early years education has been portrayed as the key to labour activation for women and for the future of society, we must also look at those who deliver these services. The key question here is: without skilled and experienced early years practitioners who are supported in their role, can we expect quality practice? It is clear that practitioners need upskilling and ongoing professional development opportunities. Nevertheless, we must also look at how we prepare our graduates and the pre-service experiences which are afforded to practitioners. In addition to, how relevant and beneficial these experiences are for graduates when they enter the early years workforce.

REFERENCES


What effect does multi-sensory working have on children’s engagement in storytelling?

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ABSTRACT

Storytelling has always been an integral, natural and stimulating part of my nursery’s day. Children are encouraged to be authors of their own stories and partake in group storytelling sessions. Importantly, most children have never been afraid to take part. The purpose of this research was to explore and identify the relationship between storytelling and multi-sensory stimulation to enhance children’s engagement. Arguably, children use storytelling to act out their own lives, merging the fictional world with the real world, using imagination to create social and cognitive opportunities. Children can relive their own experiences, reflect on and explore alternative scenarios in a safe environment, visibly revealing to us what is in their own minds (Grainger, 1997; Gussin Paley, 2007; Goouch, 2008). By combining multi-sensory abilities, sight, sound, touch, smell and taste, we can make better sense of the world around us, helping to produce holistic images (Hayhoe, 2013; Spence, 2014). Working with children aged three to four years, eight themes encapsulated the research findings: Involving families in storytelling; Gender reflected in storytelling; Exploring the theory that storytelling does not come naturally; Dealing with feelings; Children as collaborators using humour and audience awareness; Links between storytelling and writing; How home backgrounds influence language development; How children demonstrate their engagement. The research highlights insights into children’s language development and narrowing the gap between low and high income families. It shows how nursery teachers and practitioners would benefit by considering using storytelling with multi-sensory activities to engage children in their learning.

Keywords: Storytelling, multi-sensory, early years, children, engagement, language development, imagination
INTRODUCTION

I decided to use storytelling as a basis for my Masters research in Early Years Education, as it is something I am passionate about. I was confident that I could marry multi-sensory work with story making to create a format to aid my research. I became, as Thomas (2013) suggests, a participant in my research, understanding issues and ideas from the inside rather than just observing from the outside. I chose to do research that I believed would benefit the children that I worked with at the time. I wanted to achieve an enhancement in the children’s learning and problem solving skills by introducing multi-sensory stimulation into storytelling experiences. I also wanted to understand how they viewed their situations and how I could deepen this involvement. By introducing a multi-sensory element to storytelling, I could assess its impact on the children’s engagement.

RESEARCH DESIGN

In this research the children were aged between three years and one month, and three years and eight months. Some children had only joined nursery recently while others were beginning their second nursery year. The abilities and experience of the children were all quite multifarious as is typical of this age range. The setting of the nursery was in the grounds of an Infant school, situated on a busy, urban high street. The nursery building was a purpose built establishment constructed in 2006. The nursery was spacious and arranged imaginatively to cater for all needs and abilities. The research took place from the middle of October 2014 to the following April 2015.

As I was conducting the research in the nursery where I worked, it was important for me to behave ethically. At the start of my research, I followed the ethical procedures as laid down by Canterbury Christ Church University. I completed and submitted an Ethics Review which was agreed and signed by my supervisor at the University. To embed my knowledge further, I also referred to “The British Educational Research Association” who lay out specific guidelines for educational researchers. This document sets out supportive guidelines that informed me as to my own researcher’s duties (BERA 2011). The research was designed to meet these guidelines and responsibilities. I ensured I conducted myself in an ethical manner throughout my research (Burton et al, 2008, p.50). This helped me to be mindful of what Martin Denscombe calls “rules of conduct”, and to think ethically when approaching my research (Denscombe, 2002, p 175). All participants’ names have been changed to ensure anonymity.

The children in my nursery class were familiar with storytelling sessions that I had introduced at the beginning of the school year. The children would sit in a circle and I would mark out a large area, sticking masking tape to the floor to provide an open space (or stage) in the centre of their circle. This format
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is also known in the drama profession as “Theatre in the Round”. It lends itself nicely to multi-sensory work as the audience are situated all around the action, creating the feeling of engagement and intimacy. It allegedly lends to increased rapport between the audience and the actors (The Theatre Design Website, accessed 6 January 2015). Next, I would tell the children a simple story and, afterwards, I would go round the group inviting children to enter the centre of the circle to act out the story as I told it again (Lee, 2002). The stories were of a simple format. I would usually choose themes that I had seen them playing in their imaginative play around the nursery so that they were familiar with the ideas. By choosing themes this way the children not only could identify with them but, as Gooouch (2010) suggests, give “value and status” to their ideas and “legitimise...intentions and activities” (p. 63). The stories included characters as well as props such as trees or castles, that the children could equally improvise shapes to.

The next stage of my research was to go round the children individually during their child initiated play time and ask them if they had a story to tell me. I would then scribe for them and we would read, listen and act out the story later in the session during a more structured group time. However, quite unexpectedly before my first structured group time, Edward announced, during a snack session, that he had a story for me! This was unexpected but I leapt at the opportunity and, tablet to hand, recorded his story as he told it to me; favouring this as to scribe during snack time would have been a bit messy, as the children were chopping fruit and pouring milk! By recording the story I knew I would be able to transcribe it later. As I was using the video setting, I was able to capture facial expressions alongside voice intonation to help me gather rich or thick descriptions (Cohen et all, 2011, p.465; Thomas, 2013 p. 188). Later, I transcribed Edward’s story ready to share with the rest of the class.

The following week I was going to ask the children to tell me their stories so I could scribe them into my notepad, but I decided to use the lure of the tablet instead. I positioned myself in a central place in the nursery during child initiated play time. I sat with the tablet in my hands. This proved successful as one child, Rachel, came up to me and said she had a story for me. I used the video setting on the tablet so she could see herself as she was being recorded. This seemed to keep her attention and may have even extended the length of her story as she enjoyed looking at herself! After Rachel had finished her telling, I played back her story to her and asked if she was happy with it or wanted to add anything. She made some comments and was generally happy with it. I was able to use this as a triangulation approach to add rigour to my research as I was able to involve the children in assessing and participating with the data through their conversations (Clark and Moss, 2001; Gray and Winter, 2011, cited in Harcourt; Thomas, 2013). During the re-listening, one of Rachel’s friends joined us and said he had a story to tell. Again, I recorded the story using the video setting and then we played it back and discussed its content. During this time, more children crowded around and told me their stories. These became the sample for my research which
consisted of nine children in a friendship group creating seven stories.

The following week I decided to group these children together to talk about their stories and to see how enhancing the stories with multi-sensory ideas might work. I invited the sample to come into the quiet office area and I explained I wanted to talk about their stories. I read out one child’s transcribed story and asked if we could make it more interesting by adding things to enhance our senses. I introduced the ideas of smells, sounds, touch and tastes by asking questions like: “So, when you were hiding in the cupboard, what did it feel like? How did you feel? Can you remember what it smelt like?” The children came up with some good examples, especially for things that they thought smelt bad and how we could replicate these in our storytelling sessions! I recorded the children’s conversations on the tablet and kept notes of their suggestions and involvement in the session. I decided to just look at one story at a time and work with the story teller to gather all the multi-sensory artefacts for their particular story. I organised cooking sessions so the children could join if they wanted to create the smell and texture that would accompany their stories. Once everything was collected, we would arrange a storytelling session with the whole nursery class. These story sessions were recorded on the tablet and transcribed.

**ANALYSIS**

To make sense of my data, I approached it by reading and re-reading all transcribed material. This enabled me to draw out themes from the data (Thomas, 2013). I split my research into major themes that frequently emerged from an inductive analysis that were highlighted in my literature review. Eight themes encapsulated the research findings. They were: ‘Involving families in storytelling’, ‘Gender reflected in storytelling’, ‘Exploring the theory that storytelling does not come naturally’, ‘Dealing with feelings’, ‘Children as collaborators using humour and audience awareness’, ‘Links between storytelling and writing’, ‘How home backgrounds influence language development’ and ‘How children demonstrate their engagement’. Seven stories were created for the research. I include Oscar’s in this paper as an example of the theme “Exploring the theory that storytelling does not come naturally”.

Oscar tells me his short and compact story: “The slime gets into your body and then you die.”

To make it multi-sensory, Oscar helped mix cornflour and water to create “slime”, boil eggs and listen and choose music to accompany his story. Hence, what could have been a short, possibly uninteresting story became, I would suggest, a diverse, complex narrative, full of engaging properties.

The multi-sensory aspect lends itself to what Duffy (2006) suggests “Using an unlikely medium to represent an image or idea...challenges children’s thinking and skills”. Oscar’s story resembles how Whitehead (2011) views play. She intimates that play “flows in unpredictable directions” (p. 85). Introducing the multi-sensory angle expanded Oscar’s ideas to a whole new level. Oscar was vocal during
the planning session and actively engaged in the making of smells, sounds and tastes. An unexpected result of my data analysis was seeing Oscar, the somewhat reluctant storyteller, grow in confidence and character, “practising and polishing” his ideas (Grugeon and Gardner 2000).

**REFLECTING ON THE RESEARCH PROCESS**

I was a participant observer in the research, actively involved with activities as well as recording data, and able to “understand it as an insider” (Thomas 2013, p. 75). To avoid observer bias, which means recording only what I wanted to see or expected to see, I discussed my observations with my work colleagues to verify what actually happened (Bell, 2010). I was clearly placed at the heart of this research, using my own knowledge and interests. I wanted to find out how children show us their view of the world through their actions and ideas (Thomas, 2013) which also identifies my research with the interpretivist paradigm.

I used unstructured interviewing techniques, a personal journal, home-link books and videoing real-life experiences to gain my data. I found interviewing a valuable technique to use with parents. I could adapt my questions to suit the particular children I needed to talk about. I was able to probe for more in-depth information (Bell, 2010) and begin to link what I had observed about the children with what the parents knew. Using a personal journal enabled me to make quick notes about anything that occurred in my nursery setting that might be relevant to my research. Many different insights into the research were collected through this method. It allowed me to adapt and gather information that I could use for interviewing and generally extending my research (Freeman and Mathison, 2009). The home-link books, which were blank books the children took home on a Friday for them and their parents to write, draw and decorate about their weekend activities, worked in the same way as my journal. I found them useful in giving an insight into what the children enjoyed doing with their families outside nursery. The advantage of videoing the storytelling sessions enabled me to concentrate on the activity and then to spend time later analysing the results by examining and transcribing the footage. Although time consuming, videoing offered extra value to my data. I was able to notice expressions, gestures, activities and language that I had previously missed while engaged in running the storytelling activities (Thomas, 2013). By looking at my own performance on the video data, I was able to reflect on my questioning techniques with the children. It reminded me to use open-ended questioning techniques as Young (2009) reiterates “open-ended, genuinely enquiring questions foster creative thinking” (p. 114). In the video data, I also noticed myself repeating the children’s suggestions. Young calls this pedagogical strategy “re-voicing” and that it enables the child to feel its contributions have been listened to and valued. It enables the adult to connect with the ideas portrayed or to add something new (2009, p. 1114). The EPPE (Effective Provision of Preschool Education) Project (Sylva et al, 2004), a large scale, long term research project on what makes early years education effective, call this “thematic conversations”. They suggest it contributes to “cognitive
challenge”, whereby the child reflects on its own learning and progress. I was also able to discuss the videos and transcripts with my work colleagues, as well as watch the videos with the children, to share thoughts and insights that I could draw on in my analysis. As Bitou and Waller (2011) endorse, “It is the shared construction of knowledge around conversations with children...that can enable children’s meaning to prevail” (p.64). Discussing transcripts and video with the children enabled them to be participants in my research (Clark and Moss, 2001). I worked closely with the children, listening to and recording their ideas. To engage them in the research, I encouraged the children to be my experts, demonstrating their own skills and knowledge (Dockett, et al 2011). I instigated informal conversations, using semi-structured questions, with the children’s parents and looked at written and photographic evidence in home-school link books. By looking at multiple perspectives or different strategies of data collection, such as observations, videos, and interviews, I was able to get a full and accurate a picture as possible. This provided me with a number of different viewpoints and responses to support my research with triangulation (Richardson, 2000; Robert-Holmes, 2011 p.72). For qualitative purposes, this helped to make the findings valid and more realistic, as well as adding rigour (Mukherji and Albon, 2009, cited in Robert-Holmes, 2011, p.72).

CONCLUSIONS

My researched shows that it is beneficial to consider using storytelling with multi-sensory activities to engage children in their learning. It was apparent from the research that the children were having lots of fun and were engaged in the experiences. The multi-sensory aspect was enjoyable for the children and the staff, demonstrating how linking memorable experiences through our senses generates creative ideas with endless possibilities. I would not profess that all the nursery children engaged in every activity directly. Nevertheless, the participation level was impressive with each child finding their own level of involvement. This was evident by the children being enticed to the activity by the prospect of having their feet taped to the floor when making the ‘stage’ or to creating textures and smells in the nursery kitchen inspired by their own previous experiences. The children engaged with sizeable intensity and purpose. As Hall and Robinson (2004) advocate, children “learn more efficiently, with greater intensity and more purpose when learning is fun” (p.124).

Throughout the course of this research the children demonstrated tremendous engagement. The lure of the masking tape stage assembly encouraged them to sit, while transcript evidence shows children quietening to listen for the next idea or instruction. By collaborating in the stories devised by their peers, the children exhibit their ability to decentre, empathise and work with others their own age. By telling me their stories, all the children demonstrated the ability to converse in sentences.
By working closely with the children I was able to repeat their words to model correct sentence formation to further support this learning. The children created their own stories demonstrating their knowledge about literature.

**IMPLICATIONS**

I believe there are implications for further research in this area as the study raised questions about how we notice and comment on children’s activity. Further consideration needs to be made with following up and utilising the children’s musical ideas in storytelling sessions. The research offered insights into children’s language development and narrowing the gap between low and high income families. Focussing on a broader population sample, by including participants that reflect these groups, may be beneficial in future research.

The outcomes of this research indicate that when given the opportunity to link multi-sensory activities with storytelling, children do demonstrate engagement. When we are involved in a multi-sensory encounter we generate, it would appear, a more memorable experience. As Lowenfeld and Lambert Brittain advocated back in the seventies and, I would argue, is still relevant today, “every individual has a potential that is greater than what is realised” (1975, p.413). I certainly witnessed this during my research.

**REFERENCES**


What effect does multi-sensory working have on children’s engagement in storytelling?


ABSTRACT

This paper reports on a pilot research study of preschool children and 3rd graders about their ability to understand the concept of biodiversity. The aim of this study is to investigate what ideas and perceptions children have about this concept. For this purpose, a teaching process was conducted which included mapping and observing their schoolyard. The sample of the study consists of 23 preschoolers and 23 3rd graders. Data were collected through recording their conversations. This procedure allowed them to recognize and catalogue trees, shrubs, flowers and a few different kinds of animals. This featured and led to a series of ideas about the existence of species.

Keywords: biodiversity, ecosystem, plant, animal, environmental education, outdoor education pedagogy, experiential and interactive process
INTRODUCTION

Education for sustainable development aims to promote scientific and ecological literacy and allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future (UNESCO, 2005). Biodiversity is a key issue in the international standards for sustainability (Michaels, Shouse & Schweingruber, 2008). By itself, biodiversity could be viewed from any one or all of these scientific perspectives: genetic diversity, species diversity, ecosystem diversity. The question that faces a school community is which aspects of biodiversity and in what context should be stressed at every level of schooling (Lindemann-Matthis et al., 2009; Nisiforou & Charalambides, 2012). What are effective pedagogies for biodiversity education at every stage of the continuum? Environmental education has to reveal the normative character of biodiversity and make it explicit (Weelie & Wals, 2002).

Biodiversity is the variety of life but in terms of fully understanding it a citizen of the world should acknowledge the existence of millions of species (Fen Yen, Yao & Mintzes, 2007). He also has to deal with an ecological argument of understanding visible and invisible relationships, functions and (global) interdependencies. Recognizing species may be a simple way to understand biodiversity, as a factor and a process. Observing a local ecosystem can be a useful way to begin to understand biodiversity (Riess & Mischo, 2010).

Educators have a challenge in supporting children to attach personal meaning to biodiversity. If children engage experientially in studying aspects of biodiversity in the school curriculum, they can learn to criticize and evaluate their world in an existential way (Wals et al. 1999). Teaching biodiversity requires participatory methods that motivate and empower learners to change their behavior and take action for sustainable development (Ulbrich, Settele & Benedict, 2010). Connecting with nature through discovery and sensitization, and experiencing biodiversity creates personal meaning. It promotes competencies like critical questions and critical thinking, dealing with controversial issues, making choices, developing action competence, imagining future scenarios and making decisions in a collaborative way (Gayford, 2000).

Biodiversity is important to the commonwealth. Gaining an understanding of biodiversity from a young age in the schoolyard gives a perspective for our urban landscapes to be with the proper ecosystem. Moreover, children can learn actively from, and express their values through our landscapes (Kermath, 2007).
METHOD

The project forms part of a larger study about biodiversity in environmental education and it is considered part of the pilot research.

The process was applied to 23 pre-school infants and 23 3rd grade students. The main teaching approach during the procedure was collaborative learning in groups. The children’s ideas were collected throughout the program. December was the first month of the program in winter and March was the second one, in spring.

Although the concept of biodiversity is related to many others main concepts i.e., biodiversity reduction, habitat, ecosystem, conservation, and ecology we simplified what was expected of the children: As it is a study about how preschoolers and 3rd grade students recognize biodiversity in a limited space, we focused only on the ecosystem that was near to school. Mapping was a procedure that attributed limits and actual meaning to the observed ecosystem. We wanted to supervise the children’s specific actions and collect their ideas about biodiversity during the applied teaching program (Papp & Thompson, 2003).

The program was selected to allow parameters to be detected and give quality data. The ecosystem in the schoolyard can be mainly characterized by: a) species (components) b) relationships (limits) c) human intervention.

Key questions were:

1. What species of biodiversity do infants recognize while exploring their schoolyard?
2. How this particular teaching process contributes to the development of awareness?

The process begun in both classes in the following order:

A. Brainstorming
B. Discussing how many species might live outside, how to note them down and catalogue
C. Mapping the schoolyard
D. During the first observation of the yard in winter, cataloguing the species, putting findings on the map and discussion.
E. During the second observation of the yard in spring, cataloguing the species, put findings on the map and discussion.
RESULTS AND DISCUSSION

Brainstorming in the preschool class indicated that the five-year-old recognized the concept of biodiversity. They did not respond to the actual word; they seemed to have been exposed to it for the first time as part of the program. The educator tried to discuss the two component words, bio and diversity. They also found it difficult to recall any other word that could explain what these two words meant. So the educators decided to continue the program and introduce and discuss the definition further afterwards.

Brainstorming in the 3rd grade showed us something different. In their descriptions, children used these words: life-biodiversity, variety, many people living together and surviving, a biotope with large variety of animal and plants, biology, biotope, survive, biologist, living, biography and experience. Although they were only three years older than the preschoolers they had heard about biodiversity and they had begun to use appropriate related vocabulary, due to the curricula.

Discussing how many species were supposed to live outside, how to note them down and catalogue

Both classes speculated about: nonliving things including sand, playground slide, seats, toys, chairs, pipes, shells, woods, bricks, stones, pots, nests, faucets, water wells; plants including trees, flowers, grass, rose, apple tree, strawberries, cherry tree, quince tree, apricot tree and animals including dogs, cat, bees, flies, ants, spiders, seagulls, hedgehogs. They also suggested animals from tropical and savannah habitats, such as elephants, lions, cobras, tarantulas. This information probably came from previous mixed knowledge of what they had experienced via electronic media as well as during play, in stories and in non-fiction literature. However, scientific knowledge in the Greek school texts does not include tropic habitats in a Greek Mediterranean habitat.

The preschoolers proposed that their teacher should write down their speculations and the actual findings. They also proposed that they should group what they had found into two sets: animals and plants. The 3rd graders proposed that one student in each group should write down their speculations and the actual findings. They also proposed to group what they found in two sets: animals and plants. Neither group could describe a way to catalogue the findings. They described grouping and cataloguing as the same thing.

Mapping the schoolyard in preschool class

The preschoolers were divided into four groups. The first step of the teaching course was to depict in a map what is leaving in our schoolyard in December. The students used an actual architectural map of their school. They drew on the map what they thought that lives in the yard. They mainly use pencils- grey color to draw the map. They put on it the nonliving things as well as leafless trees. The second step was to draw again a spring map in March. The drawing was different.
They chose colors instead grey and confirmed their speculations.

**Final map used for the program in preschool.** At this point of the teaching course we insert the exact photos they took of the yard in the map. This new map became a food of thought to discuss the reason we found each species in every place.

**Mapping the schoolyard using Google Earth maps in the 3rd grade.** The students used Google Earth maps. They found their school in the town on Google maps and studied all the details of the limits around their school. Every group copied the map on a large piece of white paper. They were ready to observe and put their findings on the map they made.

**First observation of the yard in winter.** Cataloguing the species, putting findings on the map and discussion.

**Preschool class:** The children went outside and with a camera took pictures of the yard. They decided that most things they found were nonliving but they noticed a passing cat and some birds (sparrows) on the tree. In the class they discussed the findings. Their list of nonliving things included sand, playground slide, woods, bricks, stones, pots, nests, faucets, water wells. Their list of plants included trees, cherry tree, quince tree, apricot tree. Their list of animals included cat, seagulls. They suggested that it was too cold for the animals to be outside. They catalogued the findings into two groups: “things” and “trees”. We inserted the findings listed above into the final map. The arguments the children used about the small number of animal and plant findings were “it is too cold”, “they do not have proper clothes”, “and the plants are underground”, “are hidden”.

**3rd grade class:** The children went outside and with a camera and took pictures of the yard. They decided that most things they found were nonliving. They noticed two dogs and some seagulls. In the class, they discussed the findings. Their list of non-living things included playground, woods, bricks, stones, pots, nests. Their list of plants like pine trees, olive trees, almond trees and their list of animals like dog, seagulls. They also suggested that it was too cold for the animals to be outside, saying “it is winter”. They catalogued the findings into three groups: non-living things, animals and plants.

**Second observation of the yard in spring.** Cataloguing the species, putting findings on the map and discussion.

**Findings in preschool class:** The children went outside again with a camera and took pictures of the yard. This time the findings were different as we had an early hot spring in Greece. They noticed and took photos of non-living things including sand, playground slide, seats, toys, chairs, pipes, shells, woods, bricks, stones, pots, nests, faucets, water wells. They noted and took photos of plants including trees, flowers, grass, rose, apple tree, strawberries, cherry tree, quince tree, apricot tree; and they noted and took photos of animals including dogs cat, bees, flies, ants, spiders, seagulls. They did not find animals from tropical and savannah
habitats like elephants, lions, cobras and tarantulas. The children kept asking if tarantulas really did not live in the schoolyard. They suggested finding information about this on the internet and one child suggested Facebook as well. Smaller children had a difficulty with identifying categories for animals, especially with insects, snails and worms. They were unaware of the definitions of vertebrates and invertebrates. The next step was for the educators to introduce catalogues of animals and plants as no one was informed about catalogues of this kind. We studied these catalogues and also identified species we did not find in the schoolyard.

Findings in 3rd grade class: The 3rd grade children also went outside again with a camera and took pictures of the yard. This time the findings were different as they found part of their schoolyard full of species they have not noticed before. They noticed and took photos of nonliving things including stones and soil. They also noticed and took photos of plants including trees, flowers, grass, rose, pine tree, olive trees, almond tree, shrubs and a great variety of grass and animals including dogs, cat, bees, flies, ladybugs ants, spiders, seagulls. The children catalogued the findings into three groups: non-living, animals and plants. They made groups of the plants: trees, shrubs and grass. All the students tried to identify the species they found. A cognitive conflict occurred when they did not know the actual name and they could not find it in any way. The 3rd grade students had the same difficulty with snails and worms. They knew about vertebrates and invertebrates but they struggled to apply them easily or find similarities and differences. They questioned two kinds of bees and spiders, which had different characteristics but the same name. The children did not yet understand enough about genetic biodiversity to classify specific animals.

They suggested finding information on the internet, in special books, in the local Natural History Museum and finally asking their parents. The same situation arose in regard to the plants. They recognized trees and flowers but not shrubs and grass. For each species they asked their parents and in groups they studied books about Greek insects and plants in order to put each finding in a category. They concluded that classifying species is a very difficult task. Some plants still remained unknown to the class. Finally, they put the findings on the map and discussed the reasons for their existence. This discussion included arguments like food chains, food webs, “they are the food for insects”, solar energy “the sun grows them” and human intervention, “man cannot eat them” or “man eats them all”.

CONCLUSIONS

The species of biodiversity that infants recognized while exploring their schoolyard were many. They found plants and animals. They generally assumed the existence of animals, especially large animals. They discovered series of unknown insects-bugs which were difficult to identify.
Teachers need to be well prepared to answer questions regarding species, their interactions with the environment, and biodiversity conservation because biodiversity education is gradually becoming more and more important, in schools. Beside all the difficulties, biodiversity seemed to be a very interesting topic for students because they discovered an outdoor learning environment with hidden life, in places they had not previously imagined. From their anthropocentric view, they wondered if this was important. They answered questions about life and how man and climate are involved. Finally, they recognized and classified only a few species of plants and animals, mainly trees and mammals. The project gave the children the opportunity to discover a new world with many challenges for themselves. All the data were significant for the main research study.

Following the 2nd observation, teachers noticed that the children continued to declare new findings, to propose questions about them and find answers. They feed back the whole procedure clearing up biodiversity.

REFERENCES


Relationships between the child, the space and the natural environment

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ABSTRACT

This paper explores the theme ‘The environment as the third teacher’ with examples of positive possibilities to reinforce the explicit curriculum and transform the implicit curriculum towards teaching for sustainability. The argument here is that learning is embodied through children’s minds, bodies, senses and feelings (Clark 2012). The places where children learn are not detached from this but part of the learning process that may stay with them for life. How children interconnect, interact and respect nature and the environment is influenced by the experiences and opportunities given to them in early childhood. This paper links the three core pillars of sustainable development (economic, social/cultural and environmental) with three positive possibilities for children’s learning. The first is the learning space, (the economic child), with the example of an architecture student’s work incorporating trees into the design of an educational building (in this case Kew Gardens London), offering a positive possibility for a future with nature and the environment at the heart of school design. The project incorporates and balances the tree as the central focus of the design; the setting is a place of learning and promotes the development of an educated economically sustainable child along with the values of respect and awareness for their environment. The tree is not quite in its natural habitat but socially constructed as part of a human environment. This leads to the second example, two outdoor nature learning facilities (the social/cultural child); a woodland where environmental learning and forest school takes place. The tree in this context is in its natural habitat and the child enters the tree’s environment, in a continuation of a child-led approach to fostering well-being has been recognised since the first Forest School opened in 1904 in Charlottenburh, Germany (Waldschul). The integration of the ‘seven Rs’ of Early Childhood Education for Sustainable Development (Pramling-Samuelsson and Kaga, 2010) into Forest School helps develop the values and attitudes needed for putting ESD into practice. Finally, the third positive possibility is Eco-schools (the environmental child) and the implementation of the nine Eco-school goals into EYFS framework. The positive possibility in this case is raising awareness from an early age to promote ‘sustainable consumption’ (Siraj-Blatchford, Smith and Pramling-Samuelsson 2010) values, technology, energy saving and environmental protection.

Keywords: sustainability, environment, learning spaces, Eco-schools, curriculum
INTRODUCTION

Since the dawn of the Open-air school movement with Waldschul (Forest School) at the beginning of the century and starting in Europe primarily for the health, well-being, freedom and moral values of children with tuberculosis, it has been recognised that the impact of the outdoors, nature and the environment on children’s learning is a fundamental and well established principle for maintaining children’s health and learning psychologically, emotionally and physically. The first open-air school in Birmingham, England was a co-educational school ‘Uffculme’, which opened in September 1911. This building opened itself to the elements on three sides (Chatelet cited in Clark 2012). Therefore, the creation of learning spaces using the outdoor environment is not new but becoming increasingly concerning that it is becoming more difficult for children to go outdoors to play, run and feel the sensation of being without pressure from adult led structures of learning and the modern constraints of educational targets and risk management. Increasingly worrying research on the wellbeing of developed world children is increasing and there has never been a more important time to seek alternative possibilities to counteract this growing phenomenon. Researchers in Education for Sustainable Development (ESD) in Early Years are focussing on the interconnectivity between the wellbeing of children and the environment. Alice and Paul Warwick created 6 dimensions of the ESD butterfly model, the biosphere, spatial, temporal, critical, creative and active learning dimensions. Each of these dimensions prioritises the holistic learning opportunities and the interconnectivity of sustainability through experiential learning bringing with it the core values and compassion needed for children to learn the important lessons of respect and compassion towards themselves, each other and the wider world (Warwick and Warwick 2015). With this in mind, the first possibility I would like to present is the support of student architects in aiding their understanding of the importance of the interaction of children to their learning spaces with ESD in mind. Patryk Kubica a student at Westminster University London began his dissertation with the focus on design, the Cappadocian Maple Tree and visiting children at Kew Gardens London. At Kew he studied the interaction of children in that outdoor space to design an educational facility.

POSITIVE POSSIBILITIES AND ECOLOGICAL ARCHITECTURE

Architecture can play an important factor in our lives, influencing our moods and behaviour. We become accustomed to building box spaces without any conscience of how the future users will be affected. From a young age we develop and learn in enclosed spaces with a detachment from the outside world. In the UK, learning spaces have a sense of isolation being fed by artificial ventilation and light. Spaces such as these prevent children from exploring the natural environment and create a sense of separation between their environment and themselves but there has been developments in Scandinavian and Asian countries to build schools that bring the conventional learning environment closer to nature. This project was called the ‘Tree House’ it has allowed me to explore the relationship between children and nature.
The brief of the project was to design a structure with direct relationship with a tree of my choice in Kew Gardens. Cappadocian Maple Tree was the centre of the project. In Autumn, the trees leaves are bright yellow and it stood out from the surroundings where the trees were still green. Children on many occasions walked towards that specific tree to play with leaves by collecting them or throwing them up in the air. The project focused on how to enhance the child experience around the tree and create a learning space for children to offer a new programme in Kew. To achieve this I had to find a fine balance between the ecology of the tree, the structure of the building and the interaction of the child.

To create an effective learning space then it needed to focus on the primary user. How do children behave, learn and play are all relevant questions which the design had to respond to? The precedents for the project were the Scandinavian model of Forest Schools, the structure of teaching and activities through experiential learning and learning from doing, the design allows the children to explore their natural environment whilst they learn and develop. At the first stage of the design process I was to specify the programs the structure would have, in this case there was a learning space both indoors and outdoors with a viewing platform, a basement and an exhibition space to show children’s artwork to parents. The spaces were created to provide comfort to the children but avoid isolation. The panoramic views had to be preserved and the elevation facing the tree with a transparent wall. The whole structure is designed with the negative space beneath the tree with pathways undisturbed. The pavilion is made out of timber layers with glass in between each layer to allow a child of any height to see out at the panoramic view. The glass panels can slide to allow natural ventilation inside the buildings. The layered walls turn into furniture wherever the walls that are used in school/educational buildings. The layered walls also turn into furniture wherever the wall tilts for children to climb or sit outside or inside the building. The elevation facing the Cappadocian Maple Tree is made out of four glass panels that can be opened up or closed. A vista splits the pavilion into two structures each providing a different program. The main structure is the learning space created for a (in this case) a group of 10 children and two teachers. Both of the structures include an outdoor stairs and viewing platforms connected by a timber bridge. The platform elevates children into the branches to touch them and examine the leaves. This space is used as a playground or relaxation area for the children beneath the canopy of the tree. The basement is connected to the learning space and it allows children to see a live structural root that penetrates the space.

This example of an architectural project sets a positive possibility for the development of nursery, preschool and educational settings that incorporate both the natural world and a learning environment. Giving rise to the future possibilities of encouraging many architectural students to incorporate children into their designs as actors in their own right to help create interconnectivity with nature as they learn.
POSITIVE POSSIBILITIES AND OUTDOOR EDUCATION FACILITIES AND FOREST SCHOOL

Continuing the implementation of trees and the environment into the lives of children then a second possibility is the increasing number of outdoor facilities for the interaction of children into wild places and spaces to counteract the diminishing connection to nature. One example is a new venture www.evergreen-education.co.uk set up on a Forestry Commission site in order to encourage children, schools, parents and visitors to the site but also in respect of the educational facility to implement the missing link that our modern life is taking away from young children. Here the children are entering a natural environment for the ‘tree’ unlike the first positive possibility of the tree within the child’s environment. The need for children to slow down and learn not only literacy, numeracy and science but also resilience, team work, compassion, respect and sustainability with an awareness of their surroundings. When a child learns to help another it automatically helps builds self-esteem and confidence. We believe children learn to be immobilized passive observers of life from the constant striving of modern life. Children naturally strive for the freedom to play against the constant watchful eye of ever fearful adults. This particular facility is not necessarily focussing on any particular ‘outdoor ethos’ but is free to follow the wishes of the child or group, it aims to avoid ‘concerted cultivation’ in other words every interaction becoming a learning opportunity (Lareau 2002) but attempts to focus on the opportunity to learn to learn. Every child will be respected as an individual in their own right but also there is a need to enhance community and team work, not just the individual. We believe that outdoor and environmental mindful learning can enhance the four pillars of learning for fundamental practice (UNESCO 2016)

• **Learning to know:** to provide the cognitive tools required to better comprehend the world and its complexities and to provide an appropriate and adequate foundation for future learning.

• **Learning to do:** to provide the skills that would enable individuals to effectively participate in the global economy and society.

• **Learning to learn:** to provide self-analytical and social skills to enable individuals to develop to their fullest potential psycho-socially, affectively as well as physically, for an all-round ‘complete person’.

• **Learning to live together:** to expose individuals to the values implicit within human rights, democratic principles, intercultural understanding and respect and peace at all levels of society and human relationships to enable individuals and societies to live in peace and harmony.

Using this framework Evergreen Education has devised a way to fit the Early Years Foundation Stage and Key Stage 1 into the activities and child led woodland interaction and holistic learning. Free play is used as a strategy to developing trust, respect and guidance by adults to help develop positive relationships and
enabling environments encouraging the relaxed state of mind for free flow. The outdoors and woodland environment is an excellent base for physical development exploring moving and handling activities. Communication and Language are conveyed through stories, boundaries, instructions and learning by listening and creating sounds of nature. Literacy is being developed through reading in a woodland literacy corner and writing by using natural inks and using woodland materials. Experiential learning is encouraged to enhance the child’s ability to think critically. Mathematics can be found in every corner of a woodland from counting games to organising groups of wild berries and sticks to measuring the age of trees and making woodland abacuses. Shapes, Space and Measures are all found in great abundance in every woodland with the guidance of some imagination. Understanding the world through learning about ‘rights respecting’ and the importance of intergenerational equity and impacts of an action today on the generations of the future. Teaching children on the consequences of their actions through the critical thinking processes that outdoor and environmental learning can bring is a fundamental key to a sustainable future. Expressive arts, design and technology are shown through both woodland art and crafts but technology is encouraged not discouraged as an important tool for the future for the protection, conservation and mitigation of future environmental and species degradation. The boundaries of social/cultural and environmental learning within an outdoor setting are interconnected and make a good foundation for Education for Sustainable Development in early childhood education.

POSITIVE POSSIBILITIES AND ECO-SCHOOL FOR PRE-SCHOOLS

This positive possibility for the introduction of eco-schools to early years is being highlighted at greater length by conference colleagues at Liverpool John Moores and Liverpool Hope Universities. One initial example of an eco-school assessment was a visit to a primary school in Southampton called St Johns who had their own mission statement of Saving water, Trailblazing, Joining together, Outdoor learning, Helping the environment, Never wasting resources and Sensitive to nature cleverly spelling out their name. The nine topics of Energy, School Grounds, Litter, Water, Healthy Living, Waste, Biodiversity, Transport and Global Citizenship were all covered and with the example of water, the clever use of getting the children (on an eco-school committee) to link up with Southern Water and Water-wise with activity packs to highlight both Global Citizenship and Water poverty. They installed water meters and involved the parents with shower meters for their own home had the children read and recorded the results. All in aid of helping the children think about water and its use in a country where water security is not framed as scarce. In another case study long term sessions on Water education using ‘rights respecting’ in conjunction with the world water days was implemented by Cranborne pre-school in Dorset. The children were asked to involve their family and friends to collect samples of water. The water had to come from as many sources as they could find. They collected sea, toilet, tap, spring, river and puddle.
The children were asked to choose which water they thought was safe to drink by just looking at it in the bottle, they chose the clearest but that included toilet. They were told about how visible and invisible germs and bacteria get into water that could make them poorly. They experimented further with adding lots of different substances such as soil, flour, salt and sugar to see ‘what happened’, what dissolved and what didn’t, asking questions repeatedly as to what they predicted would happen. When they had finished they were asked would they still like to drink it. The answer was a resounding NO! The children were read a story called the ‘The Drop Goes Plop’ by Sam Goodwin repeatedly at school about the travels of a little water drop through the water cycle to give the children the idea that water doesn’t ‘just happen’. The interaction of water resources and the hydrological cycle taught as a social construction and as part of human management within the context of global awareness was the key to this session. For our children in the UK it is hard to imagine that water is a scarce resource around the world, which is made scarcer by the lack of adequate infrastructures through the complexities of equitable, political, social and economic discourse and the difficulties of landlocked developing countries access to water through transboundary issues and local governance. The children in the UK were introduced to a very simple but very effective global resource the ‘Tippy Tap’. This brilliant device is used in many developing countries and a Tippy Tap was erected in the grounds of Cranborne pre-school for two main purposes, one was the usefulness of it to ensure that at playtimes the children could learn to wash their hands regularly (and it was fun!!) and to show how creative but simple solutions are found elsewhere where there are no adequate water facilities. [www.tippytap.org/wp-content/uploads/2011/03/How-to-build-a-tippy-tapmanual.pdf](http://www.tippytap.org/wp-content/uploads/2011/03/How-to-build-a-tippy-tapmanual.pdf). Cranborne Pre-school are continuing to develop their ESD initiatives in very effective ways to introduce many lessons and pedagogies to their curriculum and EYFS framework. They are continuing this through ideas that OMEP UK are currently developing with Eco-schools and the possibility of the implementation of the 9 goals into early years settings to further their environmental awareness work through experiential learning and play.

**SUMMARY**

This paper has highlighted a variety of case studies to introduce the implementation of the positive possibilities for Education for Sustainable Development into early years learning using nature and the environment. Each and every possibility is interchangeable and the core strategy of Economic, Social/Cultural and Environmental education is taught in a holistic and interdependent way for the development of the ‘whole child’. “A healthy society gives equal attention to ecological sustainability, economic development and social justice because they are mutually reinforcing”. Where better to start than with the youngest of our society.
REFERENCES


Teaching language through “aesthetic flow activities”. Levels of satisfaction in learning

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ABSTRACT

Taking into consideration the need to optimize the learning environment and to increase students’ positivity towards the teaching process, we designed activities, which arose from two theoretical underpinnings, ‘flow theory’ (Csikszentmihalyi, 1991) and the field of ‘arts integration’ (Deasy, 2003). We named these “aesthetic flow activities” (Sotiropoulou – Zormpala & Argyriadi, 2015). Afterwards, we integrated them into the Modern Greek course for the first grade, in order to examine how those activities influence the engagement of children in the learning process. In this study, we present the results relating to one indicator of children’s engagement in the learning process, namely children’s satisfaction during each activity. The sample comprised of 220 children in the first grade of primary school, divided into control and experimental groups. The curriculum and the experimental activities were matched one-to-one in terms of both academic goals and duration. We used a five-scale smileyometer (Read, MacFarlane & Casey, 2002) for the collection of data. The children filled in the five-scale smileyometer so that they could register their level of satisfaction in participating in each activity. Based on the findings, there is evidence that the learning environment improved and the children in the experimental groups were significantly more satisfied when occupied with the “aesthetic flow activities”, than the children in the control groups. The results of this study are encouraging for the possibility of building an innovative and more ambitious type of schooling.

Keywords: student engagement, flow experience, arts integration, first grade, language arts teaching, student satisfaction
INTRODUCTION

Research over the last two decades has shown that frequently students’ level of pleasure/satisfaction from learning is low, and in many cases they feel passive (Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Suttie, 2012; Whitson & Consoli, 2009). The issue is important as students’ satisfaction has been linked to engagement and achievement in the learning process (Appleton, Christenson, Kim & Reschly, 2006; Korobova, 2012). Studies suggest that alternative approaches are needed to provide deeper motivation and enjoyment in the learning process (Marks, 2000; Shernoff & Anderson, 2014; Shernoff & Csikszentmihalyi, 2009; Whitson & Consoli, 2009), and indeed among children younger than teens (McCabe, Bray, Kehle, Theodore & Gelbar, 2011). In response to this need, this study presents findings from the implementation of an innovative teaching practice consisting of activities with particular specifications so as to promote satisfaction and, more broadly, engagement among children in the first grade during a language arts lesson.

We sought the theoretical basis of this endeavour in two approaches. The first approach is the theory of experiencing “flow” (Csikszentmihalyi, 1990), which holds that it is a situation in which the individual feels complete immersion in an activity, so that worries, the sense of time, and self-consciousness seem to disappear. Research on flow experiences in educational settings has shown that it brings happiness, empowerment, internal drive, optimism and self-confidence (Csikszentmihalyi, Rathunde & Whalen, 1993; Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Shernoff, Schneider & Csikszentmihalyi, 2001). The second theoretical approach comes from the field of ‘arts integration’, whose focus is the educational value of the arts when they are integrated in the entire curriculum as a way in which children can approach any subject being taught (Deasy, 2003; Winner, Goldstein & Vincent-Lancrin, 2013). Studies have shown that when children are taught non-arts subjects through various modes of representation their engagement, self-confidence and satisfaction increases (Catterall, 1998; Cho & Vitale, 2014; Eisner, 2002; Smithrim & Upitis, 2005; Upitis, 2011). Based on these theoretical foundations, we designed activities which we call “aesthetic flow activities” (Sotiropoulou-Zormpala & Argyriadi, 2015) which: prompt students to use alternatives to language (sound, theatre, art, mobility etc.) to understand taught subjects; are experienced by students as playful situations; are developmentally appropriate and often challenging for students’ skill level; and are largely controlled by the students, both in how they develop and in their results.
PURPOSE

The “aesthetic flow activities” were implemented to examine how they influence first graders’ engagement in the language arts learning process. The purpose of this study is to present the results of one indicator of children’s engagement in the learning process, namely their satisfaction during each activity.

SAMPLE

The sample comprised 220 children (123 girls and 97 boys) aged from 6.2 to 7.1 years (M=6.65) in ten first-grade classrooms, in two public elementary schools in middle to lower-middle income areas of Athens, Greece. Five classes functioned as the experimental groups and five as the control groups. Children in the control groups were taught using activities traditionally found in the curriculum. Children in the experimental groups were taught using the proposed “aesthetic flow activities”.

DESCRIPTION OF INDICATIVE ACTIVITIES

The Institute of Educational Policy and the Elementary School Directorate of the Ministry of Education, Research and Religious Affairs gave permission to conduct the study, and then consent was given by the school consultants, headmasters and parents after they were assured of the anonymity of the respondents.

Following are descriptions of 18 indicative activities, integrated in the modern Greek language lesson, in the unit on the digraphs of the Greek language (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003). Of these, nine were the curriculum activities used in the control groups and were codified with the number 1 (A1, B1, C1, D1, E1, F1, G1, H1 and I1). The other nine were aesthetic flow activities used in place of the curriculum activities, in the experimental groups and were codified with the number 2 (A2, B2, C2, D2, E2, F2, G2, H2 and I2). These activities were designed to conform to the same academic/language goals provided for in the curriculum activities for language (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012) and had approximately the same duration.

The goal of activities A1 and A2 was to have children “recount the contents of the taught text and express views on it” (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, p. 3753). During A1 teachers read the text and asked the children comprehension questions. In experimental activity (A2), the text was read twice by the researcher, each time with background music in a different mood (Broken hearts, Ortega, 2002; Instrumental march of Smyrna, Dalaras, 2004). Pupils were asked to choose which music, in their view, suited the text best and to explain why.

The goals of the following activities (B1 and B2) were to recall and write words that contain the digraphs that had been taught (/ts/, /st/ and /gg/ and /gk/) (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, pp. 20-24). In B1, children had to fill in the appropriate digraphs in words, or fill in words in sentences from
a choice of words. In the aesthetic flow activity (B2), children were asked to draw and write “objects that begin with or contain one of the taught digraphs and were to be products to be sold in an imaginary market”. Each pupil was also asked to create a ‘pitch’ or argument to promote his/her product.

The specific goal of activities C1 and C2 was to enunciate and properly pronounce the taught digraphs and words which contain these digraphs. In C1 the teachers wrote words containing the digraphs on the board and asked the children to categorize them based on which digraph was used and to read them aloud. Then, pupils had to fill in the missing digraph and accent in a list of words, and were asked to read the words aloud. In C2 children participated in a theatrical event in which they played the role of market vendors. From the previous activity (B2) they had their drawing of the products they would sell and their pitches to sell them. The “customers” (pupils from another class) were instructed to make decisions to buy based on how persuasive the vendors were (drawings, pitches, theatricality).

The language objective of D1 and D2 was writing, recognising and thoughtfully processing digraphs (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In D1 the pupils highlighted words in the text containing the digraphs /ts/ and /st/ and said them in class. Pupils were then asked to come up with words that begin with or contain the taught digraphs, and the teacher wrote them on the blackboard. In D2 the children stood in an open circle. One child held an imaginary ball which he/she then threw to another child, calling a word that began with or contained the taught digraphs. The throws had to be as quick as possible. Afterwards, the children wrote the words they liked among those called out, and read them out to the class.

The objective of E1 and E2 was to note and produce compound words (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In E1 children were asked to describe a snowman depicted in the book and to think of why he was called a “snowdragon” in the text. The manner in which compound words are formed was explained, and the pupils were asked to repeat compound words in which the first part was the word snow. In activity E2 pupils were asked to draw a snowperson and dress him up however they wanted. They were asked to give it a compound name, beginning with “snow”. Each child was then asked to say his/her snowperson’s name and explain it based on its appearance.

Activities F1 and F2 aimed to have children “understand the connection and differences between written and spoken language” (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, v. B’, 3746). These were used in teaching the digraph “eu” which is pronounced at times as /ef/ and others as /ev/. In F1 the pupils had to fill in the /eu/ digraph in a text and read it. In F2 the children had to choose, without telling anyone, if they wanted “to be citizens of country Ev or country Ef”. They then scattered in the classroom, walked around slowly and repeated the digraph of their country. When they heard someone else saying the same digraph, they continued together seeking other
“compatriots”. Two groups were then formed: the citizens of “country Ef” and “country Ev”. Each group wrote down words that “could be used by the citizens of their country”.

The purpose of G1 and G2 was to seek, understand and use information in a text (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, p. 3753). In G1 the teacher asked children questions on the text (“what might the key in the text open?”). In G2 children sketched objects that the key could open. Then, one by one, they were asked to act out their idea while the other children tried to guess the object, and when the group guessed correctly, the sketch was shown to confirm it was the right word.

Activities H1 and H2 aimed to familiarise the children with the language used in classified advertisements (ads) (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In H1, pupils read classified ads and were asked to write one about a lost dog. In H2 pupils were asked to write multimodal classified ads on the computer about whatever they wanted and to choose special fonts, drawings relevant to the text, sounds, photos, collages and extracts from web pages.

The purpose of activities I1 and I2 was to thoughtfully process the digraphs that sound the same, but are written differently (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In I1 pupils filled in the digraphs /gg/ and /gk/ in the blanks of words they were given and they circled them in the text they were taught. In I2, pupils were asked to walk in the rhythm of a piece of music and the researcher read words aloud every fourth step that sometimes contained the taught digraph /gg/. If they heard a word containing the digraph they had to clap.

MEANS OF COLLECTING AND ANALYSING DATA

To collect quantitative data, the smileyometer instrument (Read, MacFarlane & Casey, 2002) was used to measure the satisfaction of the pupils in the control and experimental groups. This tool is designed based on a 1 to 5 Likert scale, where pictorial representations of different kinds of faces are used to depict five levels, from great dissatisfaction to great satisfaction. Children were asked to choose one of five faces to represent the level of satisfaction they experienced while participating in each of the activities. When participants are young, this instrument has been shown to have two weaknesses (Van der Sluis, Van Dijk & Perloy, 2012). First, there is a tendency for children to choose the extremes of the scale. Secondly an experimenter effect has been observed: that is answers reflect the researcher’s expectations, rather than the beliefs of the subjects. Despite these weaknesses, it was considered that using this instrument with children could provide interesting comparisons among the responses of the control and experimental groups.

In addition, to collect the qualitative data for the study, children’s spontaneous comments as they were
filling in the smileyometer were recorded and transcribed. Subjects were counted who made one or more comments on satisfaction during an activity, and the comments were classified into three categories. The first contained comments that showed dissatisfaction, the second contained neutral comments, and the third had comments that revealed feelings of satisfaction.

**RESULTS AND DISCUSSION**

The manner in which the children filled in the smileyometer to express their level of satisfaction in the learning process can be seen in Table 1:

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>A1 N</td>
<td>(3.7) 0</td>
<td>(27.5) 2</td>
</tr>
<tr>
<td>A2 N</td>
<td>(45.7) 0</td>
<td>(0.2)</td>
</tr>
<tr>
<td>B1 N</td>
<td>(31.5) 1</td>
<td></td>
</tr>
<tr>
<td>B2 N</td>
<td>(21.6) 0</td>
<td></td>
</tr>
<tr>
<td>C1 N</td>
<td>(0.3) (18)</td>
<td></td>
</tr>
<tr>
<td>C2 N</td>
<td>(12.5) (0)</td>
<td></td>
</tr>
<tr>
<td>D1 N</td>
<td>(24.8) (76.1)</td>
<td></td>
</tr>
<tr>
<td>D2 N</td>
<td>(0) (12.3)</td>
<td></td>
</tr>
<tr>
<td>E1 N</td>
<td>(0) (0)</td>
<td></td>
</tr>
<tr>
<td>E2 N</td>
<td>(0) (0)</td>
<td></td>
</tr>
<tr>
<td>F1 N</td>
<td>(61) (1)</td>
<td></td>
</tr>
<tr>
<td>F2 N</td>
<td>(12.3) (0)</td>
<td></td>
</tr>
<tr>
<td>G1 N</td>
<td>(0) (1)</td>
<td></td>
</tr>
<tr>
<td>G2 N</td>
<td>(0) (1)</td>
<td></td>
</tr>
<tr>
<td>H1 N</td>
<td>(0.5) (3.8)</td>
<td></td>
</tr>
<tr>
<td>H2 N</td>
<td>(0.5) (3.8)</td>
<td></td>
</tr>
<tr>
<td>I1 N</td>
<td>(0) (1)</td>
<td></td>
</tr>
<tr>
<td>I2 N</td>
<td>(1) (0)</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Descriptive statistics of satisfaction (sample size A1 = 109, A2 = 108, B1 = 105, B2 = 111, C1 = 108, C2 = 103, D1 = 102, D2 = 111, E1 = 100, E2 = 105, F1 = 104, F2 = 107, G1 = 101, G2 = 107, H1 = 109, H2 = 104, I1 = 106, I2 = 111).

In the aggregate 27.5% of pupils in the control groups and 0.2% of pupils in the experimental groups indicated that they experienced great dissatisfaction, while the respective percentages for dissatisfaction were 3.9% and 0.5%, 42.9% and 1.2%, were neutral, 11.2% and 1.7% experienced satisfaction and 14.4% and 96.4% experienced great satisfaction.

More analytically, it seems that their participation in activities A1, F1 and I1 left pupils feeling neutral, while B1 and H1 created feelings of great dissatisfaction. There were few pupils who expressed great
satisfaction or satisfaction, confirming the studies that note such problems in implementing current curricula (Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Suttie, 2012; Whitson & Consoli, 2009). The great difference in the satisfaction experienced by children who were taught using the aesthetic flow activities reveals the educational benefits of activities that aim to create flow experiences (Csikszentmihalyi, Rathunde & Whalen, 1993; Shernoff, Knauth & Makris, 2000; Shernoff, Schneider & Csikszentmihalyi, 2001) and to employ arts integration (Catterall, 1998; Deasy, 2003; Cho & Vitale, 2014; Eisner, 2002; Smithrim & Upitis, 2005; Upitis, 2011; Winner, Goldstein & Vincent-Lancrin, 2013).

The findings of this study do not confirm the view that young children tend to choose the extreme answers on the smileyometer (Van der Sluis, Van Dijk & Perloy, 2012) as, among the control group, the percentages of children who expressed satisfaction or great satisfaction was similar. It should also be noted that in the results of the experimental group there were very few children who chose the great dissatisfaction face, while there were very many who chose the great satisfaction face.

Diagram 1. Levels of satisfaction based on comments
The transcript of the recordings showed that 54 of the 220 children (24.5%) commented while they were filling out the smileyometer (Diagram 1). Among the control group 53% made comments on their dissatisfaction at taking part in the activities (B1: “We filled in photocopies again”, “I’m bored – every day the same thing”), while the respective figure for the experimental groups was 2% (C2: “I’m tired of clapping all the time”). Thirty-nine per cent of the control group made neutral comments (C1: “I neither liked it nor disliked it”) and 6% of the experimental group (“I like everything the same in school”). The comments expressing satisfaction were 8% among the control groups (G1: “I liked it because I found what the key opens”) and 92% among the experimental groups (B2: “I liked it because I made 4 fireplaces”, D2: “I liked the ball because it was invisible”, D2 “Before you go, can we play ball again?”, F2: “I liked that we held hands”, all activities: “at school we don’t play but since you came we play, as well”).

What made an impression is the tendency of some children to focus on the aesthetic characteristics of the activities and not on the experience. For example, in A2 some pupils chose the smiley to express the pleasure they felt with the music and not the activity (Eisner, 2002). Generally, the findings in Diagram 1 confirm the findings of the smileyometer: very high levels of satisfaction among pupils participating in the experimental activities compared to pupils doing the curriculum activities. Also, in comparing the two instruments, it was seen that quite a few children in the control groups who chose the middle scale in the smileyometer made negative comments, revealing a harsher stance when commenting than when they graded their experience.

The results cannot be generalised because of the size of the sample and the number of activities. Despite this, there were indications that the “aesthetic flow activities” (Sotiropoulou – Zormpala & Argyriadi, 2015) had a positive impact on the emotional atmosphere of the classroom in teaching language arts to first graders. It seems necessary to continue the research among a broader sample and for a longer time, as it seems possible that it is important to systematically integrate activities especially designed to increase pupils’ satisfaction and more generally their engagement in the learning process in the curricula of the first grades of elementary school (Appelton, Christenson, Kim & Reschly, 2006; Korobova, 2012; Marks, 2000; McCabe, Bray, Kehle, Theodore & Gelbar, 2011; Shernoff & Anderson, 2014; Whitson & Consoli, 2009).

REFERENCES


**MUSIC RECORDINGS**


The challenging role of Early Childhood and Primary school teachers as counsellors: a literature review

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ABSTRACT

This paper provides insights into school counselling and professional development of Early Childhood and Primary school teachers. More specifically, teachers’ role as counsellors in Greek education system is receiving significant attention as teachers are characterised with a multidimensional activity within and outside the school context. School counselling constitutes a key-priority in the continuous professional development of teachers as the school environment has changed and teachers have to be prepared to deal with matters that arise in multicultural classrooms or classrooms with students with special educational needs. Through this paper, the authors attempt to define the role of a school counsellor and focus on school counselling as a part of their life-long development as teachers, to meet the needs of their students and the demands that education of the 21st century has.

Keywords: teacher’s role as counsellor, professional development, early childhood and primary education
INTRODUCTION

Early Childhood and Primary school teachers’ role as counsellors is becoming of great importance within the school context in Greece. In this literature review, the perceptions of Early Childhood and Primary school teachers of their role as counsellors are investigated. The basic mission of school is to contribute to a person’s social, psychological and academic development according to 1566/1985 Law in Greece (Ministry of Education, Research and Religious Affairs, 1985). Teachers’ basic roles include educating, evaluating and, in recent years, consulting children. Their new roles stem from society and cultural changes, such as the globalization, the financial and cultural crisis, the immigration and the arrival of refugees, the unemployment, the fear of the isolation, the variety of family forms (Pliogou, 2016), and the rapid advancement of technology (Sidelinger, 2008). Schools are now multicultural environments, which are regarded as an educational mosaic, with students’ emerging differentiated needs requiring teachers to become counsellors. Teachers need to be or become more open to innovation and more democratic and reflective professionals to be able to help and promote children’s emotional and intellectual development at school (Moss, 2008).

Hence, there is an increasingly important need for cooperation in the light of new cooperative education models aiming at integration, psychosocial adaptation and psychological support of all pupils by counsellors specializing in multicultural issues (Koulouris-Antonopoulos, 2009). The teacher has to face the shortcomings and problems in everyday school practice, which are increasing due to the current socio-economic crisis, to teach effectively and to assess the performance of his/her students but rather to create a qualitatively upgraded counselling relationship with the students that will lead to smoother psychosocial development of young citizens thus performing his/her counselling role (Krivas, 2008).

Although there is no state legislation of the role of the teachers as “counsellors”, thanks to their academic training but mainly because of their interest and their willingness to be fully supportive in the effort of their students to “balance” between their personal “wishes” and the social “must”, the teachers perform the role of the advisor (Brouzos, 2009).

COUNSELLING – A LITERATURE REVIEW

The aim of education is the formation of a conscious person with critical thinking, being able to cope with the ever changing world as well as the socialization of the child and its integration in the peers group that moves from the extended family, to the Kindergarten, to the Preschool Education and to the Primary school (UNESCO, 1996).

For this reason, the need for counselling and public school counselling is receiving special attention. As
“School Counselling” we define the sector through which the counselling at school is applied by a person specialised in the implementation of the school counselling in education, that is to say the counsellor or the specialised teacher, depending on the system. It is worth mentioning that the term usually refers to the application of Counselling in Primary and Secondary Education (Dimitropoulos, 1999).

Counselling is a continuous process to help people with emotional difficulties to cope with their problems, to adjust in a social environment, such as school, and to effectively deal with their psychological conflicts (Malikiosi-Loizos, 2011).

Nowadays, according to the European Network of Health Promoting Schools (IPC, 1999) teachers and students work together and take actions to benefit their physical, mental and social health. Teachers are often asked to consult on issues far and beyond the actual learning process. Their own perceptions of their roles affect both their attitudes towards counselling as well as students’ uptake of further counselling if needed (Joy, Hesson & Harris, 2011). Moreover, issues that a counsellor-teacher has to cope with are found in the areas of vocational guidance, family and community cooperation (Brouzos, 2009).

Every student expects from his/her teacher to satisfy their curiosity, to understand his/her worries and help him/her find the right answers. Being a teacher means undertaking a mission, a mission to daily monitor the child’s struggle for empowerment and completion. There are three key factors related to the performance of the teachers’ duties. More specifically, these are the personality, the theoretical background and the experiences they themselves had as students. However, an important parameter should be into consideration, which is that each student, as well as each teacher, is a unique personality when a teaching methodology proposal tends to gain universal validity (Daniels & Bizar, 2005).

The will, however, for continuous improvement and development should be the final aim if what the teacher wants to have in his/her class is active students. Should the teachers want his/her students to work with dedication and patience, they should be the first ones to express their passion for knowledge and learning as well as to work hard and systematically. Such a teacher is not limited in offering only knowledge, but he/she also shapes the students’ character and personality in a lasting struggle that does not stop at the confines of the classroom but it can arise in every opportunity out of it, affecting their choices (Nye, Konstantopoulos & Hedges, 2004).

A series of studies (examples include the: Skinner & Belmont, 1993; Hughes, Cavell & Jackson, 1999; Hughes, Cavell & Wilson, 2001) focused on the importance of the development of an emotional atmosphere at school, making it obvious that the relationship between teachers and students affect children’s attitudes toward school, their adaptation to it and their academic performance. Indeed, through imitation, an innate tendency of the child according to Bandura (1986), the teacher can constitute a role-
model, a mentor and a counsellor, when characterised by credibility and is an important figure.

An inspired teacher besides being aware of the teaching-learning subject and its curriculum, he/she should be characterised with the attempt to understand the behavior of his/her students, to solve their problems and to use teaching techniques that could lead to problem-solving techniques. Moreover, he/she should be characterized with his/her attempt to create a positive learning environment that enhances motivation, learning and its sharing in other activities both within and outside the classroom as well (Brophy, n.d.). Also, he/she should provide continuous feedback on the students’ efforts and performance, be fair and honest with his/her students, foster an authentic communication, praise every effort by respecting each student, enhance self-awareness and positive self-esteem, have a sense of humor, flexibility, self-control, increased empathy and carry out continuous self-assessment (Steele, 2009). In summary, however, the three fundamental requirements: a) empathy, b) appreciation and c) authenticity, i.e. the counsellor behavioral variables according to Rogers (Rogers, in Malikiosi-Loizos, 2001), are attitudes and actual lifestyles and not techniques. A person develops strength, which creates favorable prospects for individual and social change.

PROFESSIONAL DEVELOPMENT

Counselling is a fundamental educational aspect and integral element of every education system. Indeed, among the priorities and the target actions of each country are the professional development and continuous learning. Professional development is an on-going, complex and multidimensional process, which reinforces perception of professional self and contributes to the development of knowledge, skills and practice in a complex and continuously changing learning environment. In fact, teachers’ life is now characterised with their continuous professional development that is considered to be dynamic and constant. It is enhanced via experience and practice (Caena, 2011). It is, therefore, quite important to address both of these issues when investigating how teachers perceive their own role in the school framework.

Last years, Europe’s main educational policies have given emphasis on the lifelong development and training of Early Childhood and Primary Education educators (Guskey, 2003). Also, all this is connected to ongoing changes concerning the education system per se. Teachers should be able raise their awareness about and adjust to current pedagogical approaches by being developed professionally (Garet et al., 2001).

Early Childhood and Primary Education teachers need to define again their professionalism and professional development in order to be able to be efficient and sufficient at school (Caena, 2011). According to the evolution of Social Sciences and Humanities, particular emphasis has been placed on the fact that appropriate support services are required in order for children to be able to communicate
and express their feelings towards others who share common experiences (Ifanti and Fotopoulou, 2011). It is important teachers be well educated, participating in lifelong learning programs and attend training programs in new technologies while they should also become familiar with new counselling trends in the education environment. Professional development according to Fullan (1995) is the outcome of formal and informal learning acquired by the teachers in a complex and continuously changing learning environment. Moreover, teachers in Greece have an integrated view of professional development and professionalism, both adding up to their need to gain more knowledge, more skills and be more involved in their everyday practice. For example, Early Childhood and Primary Education teachers are not only concerned with teaching but they feel that they have to serve as counselors to both students and parents (Pliogou, 2015).

In addition to, positive correlations between teacher quality and student achievement are very important factors within the framework of school explaining the academic performance. Studies have demonstrated the importance of teacher’s professional development and its correlation to students’ achievement (Desimone et al., 2002). For instance, fostering an active learning environment with plenty of opportunities by the teachers can serve beneficially to the development of students’ motivation that can result in students’ skills and achievements improvement. What is more, teachers at national and international level, find themselves unprepared teaching in classrooms with students with special educational needs or with students of different linguistic and cultural background. Therefore, it is vital they try to integrate students with special learning needs, both special difficulties and talents, in their classes. Further, the effective use of technology and communication can engage teachers in framework planning and in encouraging parents be engaged in school activities too. Taken all the above into consideration, it is obvious that only high qualified professionals can deal with the various needs of the diverse populations, involve parents and focus on their continuous professional development (Schleicher, 2012).

Furthermore, professional development is strongly correlated to the meaning of professional learning and professional growth (Fraser, Kennedy, Reid and Mckinney, 2007). Reflecting and focusing on the teaching approaches and methods and evaluating their own skills and knowledge are very crucial processes when teachers prepare and plan for the classroom while developing their decision-making skills and fostering a culture of collaboration within schools are another two proposed key factors (Hatzidimou, 2008). Early Childhood and Primary Education teachers acknowledge the importance of professionalism and professional development since their efficacy is significantly connected to their professional learning opportunities that can offer mastery and vicarious experiences resulting in teachers’ personal development (Caena, 2011). As they state in relevant studies, they are basically concerned with their students’ progress
while they realise that fostering collaboration and being engaged in the learning process to a great extent are more than necessary. It is also worth mentioning that research findings have indicated that mainly Early Childhood teachers tend to adopt democratic and holistic approaches and principles to enhance their professionalism (Fotopoulou, 2013).

Obtaining research, reflective and cooperative skills from teachers is a basic consideration and pursuit of teacher’s educators, during the study of Early Childhood and Primary School teachers (Papandreou, Gregoriadis, Birbili, 2013).

According to the reflective practice, the aim of teacher education is: a) to equip them with the necessary theoretical background to understand and analyse the educational process data, to engage them in professional activities that help them develop, b) to cultivate their reflection crisis, their inquiry skills, the ability to converse, synthesize, to cooperate, to become aware and to participate in joint activities. The reflective analysis of the education practice allows the teachers to correlate the educational process with both the theoretical knowledge and the wider socio-political and cultural context. The sociocultural framework helps teachers to recognize the political dimension of education as an institution and the educational process itself (Pantazis, Sakellariou & Bakas, 2011). The purpose of the “practicum” is to gain a practical experience of the workplace, the obtaining and use of theoretical, research and thinking skills, to help them become familiar with a critical approach to both personal education practices, and working methods of other teachers (Androusou & Avgitidou, 2013).

Taking everything into account, the aim of teacher education today is to create reflective professionals who will strive daily to improve education practices with the aim of equal development of all students. It is important inspired teachers be trained so that they will constitute mentors of their students thanks to their attitude.

REFERENCES


Emotional intelligence and interaction between teacher and students: a case study of a student with Asperger’s Syndrome

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ABSTRACT

Emotional intelligence includes abilities and skills that allow people to recognize, understand and manage both their own feelings as well as others’ (Matthews, Zeidner and Roberts, 2002). Research shows that children with autism and children with Asperger’s syndrome (highly functional autism) have not acquired social and communication skills according to what is expected for children of their age. Emotional intelligence skills that are not fully acquired may lead to difficulties in nonverbal communication, especially eye contact and understanding nonverbal signals and messages (Gena, 2007). This is a case study of a student with Asperger’s syndrome. His main problem is his inability to understand and apply social rules to his everyday communication. In this case study the main goal was to teach this student how to recognize feelings and intentions. The intervention was designed to use comic strip conversations, using mainly comic books. Comic strip conversations were developed by Carol Gray to help people with autism to develop social understanding. Comic strip conversations facilitate visual representations of abstract aspects of social communication by visually representing different levels of communication with symbols, drawings and colors. This way all abstract aspects of communication become concrete and, thus, easier to understand and use. By the end of the intervention the student was able to identify feelings and understand abstract concepts, such as sarcasm (Gray, 1994).

Keywords: Emotional intelligence, Case study, Comic Strip Conversations, Asperger’s Syndrome, Models
INTRODUCTION

Emotional intelligence defines as a combination of abilities and skills that enable a person to manage his/her own feelings as well as others’ feelings. Emotional intelligence cannot be understood without clarifying concepts such as general (cognitive) intelligence and personality. These Terms are often misused and misunderstood (Goleman, 1995). According to Platsidou (2010) there are three basic models, the ability model according to which emotional intelligence meets certain correlational criteria of intelligence (model of emotional intelligence of Salovey, Mayer and Caruso), models based on personality in which emotional intelligence is the sum of adjustment abilities, mood features. The basic model is the Bar-On model and finally Performance models in which emotional intelligence can predict someone’s performance and efficiency in any activity (Model of EQ by Goleman).

Mayer, Salovey and Caruso (2000) are American psychologists who begun studying emotional intelligence in the 90s. They constructed psychometric tools and their theoretical background was Gardner’s multiple intelligence theory. The definition according to this model is the ability to apprehend and recognize feelings in the way of thinking, apprehension and control of his/hers and other’s feelings. For Mayer, Salovey and Caruso (2000) the emotional intelligence is the ability to perceive emotion, to understand why you or the others feel like that way, to use this feeling for practical thinking and to manage your own or other’s feelings for an effective living. This model was criticized because firstly the existence of a new type of intelligence raised questions and doubts and secondly emphasizes on theoretical framework and has no clinical data. In summary, according to this model, an emotionally intelligent person recognizes feelings very easily and accurately, he uses them in order to facilitate thought, to understand and manage them more easily. Moreover, it is very likely that this is a very social and outgoing person who is oriented more to the professions related to teaching and counseling (Mayer, Salovey, and Caruso, 2000).

The Bar On model was influenced by Darwin who theorizes the theory of biological necessity for the existence of feelings and by Thorndike according to whom the social intelligence plays a special role in human performance. He wants to answer to the following question why do some people succeed better in life than others? According to this model EQ has five dimensions: personal abilities (The personal skills include: self-esteem, emotional self-awareness, the assertiveness, dependency and self-realization), interpersonal abilities Interpersonal skills include empathy, ability to create interpersonal relations and social responsibility, ability to adjust is the solution to problems, flexibility and control of reality and to manage stress inherent tolerance of stress and control impulses, stress management inherent tolerance of stress and control impulses and finally the general mood which the ingredients are happiness and optimism (Bar-On, 2000). So an emotionally intelligent person has the ability to understand both himself
and others, to adapt to any changes with ease and have optimism in order to achieve the above. The criticism has received is due to the fact that implicates many personality dimensions (Bar-On, 2006).

Goleman's Model of Emotional Intelligence has a great impact to the public. He claims that emotional intelligence is not inherent but can be taught (through exercise). A definition is that emotional intelligence is a wide sum of abilities and skills. The way a person recognizes, expresses and manages emotional information so that he/she can have the best outcome. So Goleman claims that emotional intelligence can be improved in the course of life and the higher human possibilities for this type of cognition consistent with maturity. It is not an inherent feature of the “elite” but can be developed in any person who sets a target of a cultivating effective communication in a social and professional level. There are two basic dimensions of EI: Internal – personal operations known as myself and on the other hand Social operations or briefly (others). At the level of “myself” Goleman talks about two key emotional skills: (a) the self-awareness which includes emotional awareness, the ability of someone to recognize emotions and their effects, the exact self-assessment, knowing that one of the possibilities and limitations of, and confidence, a strong sense of self-worth and potential and (b) the self-management which includes self-control, reliability and degree of integrity, conscientiousness, adaptability, motivation, success and initiative. At the level of “others” also separates two abilities: (a) social awareness that includes empathy, that is the ability of someone to see things from the perspective of others and feel like they feel it, and orientation services i.e. the capacity of some to recognize and satisfy the needs of customers, and organizational awareness, that one can understand the dominant emotions of a group and the power relations that dominate it and (b) relationship management which includes the interest of developing the others, influence, communication, handling conflicts, visionary leadership, the ability to mobilize people towards a common vision, existence as a catalyst for change, i.e. to one lead and effectively handle the change, build relationships, teamwork and cooperation. Goleman model has been criticized because of the definition width, Similarities with personality theories and finally has validity issues and no clinical data (Goleman, 1995).

In the 1980’s, studies focused on the impact of interpersonal relationships between students and teachers on the students’ learning outcomes. It is well known that the co-existence of teachers and students in the classroom leads to the development of such relationships. While at the same time Interpersonal relationships between teachers and students tend to have an impact on the development of their personality. Behaviors used in the school environment are directly linked to student’s psychosocial health. There are three Interpersonal Relationship models, Pianta’s Model, Dubow’s and Ullman’s Model and Model of Interpersonal Teacher Behaviours” by Wubbels, Creton and Hoomayers (Anagnostopoulou, 2005). Especially Pianta’s Model Based on Bowlby’s attachment theory and describes 3 dimensions that
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Outline the relationship between teachers and students of preschool age, addiction, impact, familiarity. The positive correlation can be performed when presented low levels of dependence (attachment), low levels of conflict (hostility and interpersonal problems) and high levels of familiarity (sincerity and warmth) (Pianta, 1991). Following, the next model is the model of Dubow and Ullman named Perceived Teacher’s support which Based on Cobb’s theory and Barrea’s theory. There are three dimensions, feeling of care, feeling of essential relationships between Teacher –Students and apprehension of students of the emotional and academic support from their teachers. Dubow and Ullman considered that the most important for the interpretation of their inter relationships is to take into account the perception of students. This seems perfectly logical if interpersonal relationships are two-way direction (Dubow and Ullman, 1989). Finally, the Model of Interpersonal Teacher Behaviours by Wubbels, Creton and Hoomayers, which based on Leary’s behavioral measurement theory. According to this model there are two dimensions: influence which, describes who is the dominant part of the relationship and Involvement which describes the level of cooperation between teachers and students. In essence the model describes behaviors of teachers so as perceived by students by the interaction and communication in the classroom (Anagnostopoulou, 2005).

The school’s climate is a multi-factorial concept. For that reason there are many names such as Social climate”, “teaching climate”, “school climate”, and “psychological climate”. We adapt the term classroom’s psychological climate according to which the emotional way that students experience and understand the psychological and sociological relations which develop in the classroom (Lessote, 1991). Classroom’s psychological climate is construed by: (a) emotions such as coherence, student’s dissatisfaction experienced by interpersonal relationships and the satisfaction or indifference that causes the student work (b) Social organization such as democracy, competitiveness, serendipity governing relations between the members of the class and the diversity of the composition of the class (c) Work, in this area belongs the target’s determination, the physical infrastructure, the establishment of operating rules, the difficulty of the work, the working speed and disorganization. The first model is the school’s social climate by Moos and Tricket which constituted by 3 categories: relations such as student’s participation in teaching, psychological bonding, teacher’s help and support, personal development and goal setting such as lesson’s task orientation and competition and maintenance and structural changes like classroom, organization, innovation, clarity of regulations and teacher’s control. Fraser, Anderson, and Walberg, based on the model of Anderson ‘social productive climate” focused their efforts in recording the specific characteristics of the class atmosphere, resulting in 15 dimensions which outline the model of” learning environment “. 
These dimensions are described below:

- Connectivity: refers to cordiality, mutual help and student’s knowing one another.
- Discrimination: refers to students’ different interests and their level of satisfaction regarding the way of teaching.
- Propriety: refers to rules of conduct and their implementation in class.
- Velocity: describes the teaching rhythm.
- Materials and technical infrastructure: describing the areas and means that students use during the lesson.
- Controversy: describes the arguments and controversies developed between students.
- Intention: clarifies the learning outcomes.
- Favoritism: describes the teacher’s attitude to their favorite group of students.
- Difficulty: describes the level of difficulty which students have to deal with.
- Detachment: describes the indifference and lack of students’ involvement with learning tasks.
- Democracy: refers to the students’ ability to decide what happens in class.
- Factionalism: refers to the students’ reluctance to get involved with other classmates.
- Satisfaction: refers to the students’ satisfaction with the learning process.
- Disarrangement: refers to confused and unplanned activities in classroom.
- Competition: refers to students’ level of competitiveness. (Anagnostopoulou, 2005).

It is generally accepted by almost all the educational community that the subject of learning in today’s school is not only the curriculum, which through teaching passed as knowledge to the student by the teacher but also social skills (Matsaggouras, 2003). It has been found from research that children who have autism, and even in those that the autism can be characterized with high functionality (Asperger’s syndrome), social and communication skills are not sufficiently developed. Although limitations and deficiencies in cognitive mechanisms can give explanation for the differences between these children and in typically developing children, however not completely explained the variety of social skills and behaviors which these children have (Atwood, 2006). This Case study refers to a twelve years old boy, student in the 6th grade of Primary School with Asperger's Syndrome. His Intelligent Quotient is above
the average but he has inability in understanding others’ emotions and he is insufficient in empathy abilities and also he has a difficulty in understanding abstract concepts and mathematical concepts. Except from the above he is not concentrated in class and has no participation during the lesson, he does not make friends easily (difficulty in socialization) and he does not know how to approach his classmates to participate in a game and usually ends up interrupting it. The main goal of the intervention in this case study was to teach the student how to recognize his feelings and intentions, in terms of both behavioral/physical reactions and as mental representations.

But the question is what the consequences of deviant emotional intelligence skills are in everyday life?

- Difficulties in understanding “hidden” messages (subcontext)
- Tends to literal interpret of everything.
- Seems rude. Says whatever comes to mind (honesty).
- Paranoid thinking.
- Difficulty to understand that someone wants to and knows how to help.
- Underdeveloped abilities of persuasion, compromise and conflict resolution.
- Different way of self-understanding and awareness.
- Cannot understand what causes awkwardness to others.
- High level of stress.
- Longer processing time of social information – uses intelligence rather than intuition.
- Physical and emotional exhaustion. (Atwood, 2006)

The intervention was designed to use comic strip conversations, using mainly comic books for which the boy had a special interest. He actually owned lots of them, which was very helpful during the intervention. Comic strip conversations were developed by Carol Gray to help people with autism to develop social understanding. Comic strip conversations facilitate visual representations of abstract aspects of social communication by visually representing different levels of communication with symbols, drawings and colors. This way all abstract aspects of communication become concrete and, thus, easier to understand and use. Specifically, we chose different color in order to determine the emotional tone/motive and correlate every color with a feeling. The advantage of this intervention was the Mutual discovery and the understanding figures of speech (Gray, 1994). By the end of the intervention the student was able to identify feelings and understand abstract concepts, such as sarcasm.
REFERENCES


Learning Culture at the Monuments with Kindergarten Children: The case of the unique Mycenaean Monument in Attica, Greece

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ABSTRACT

In this paper, in the context of applied pedagogy, we will present an educational programme aimed at children 4-6 years old at the unique Vaulted Tomb in Acharnes and in the Acharnes Archaeological Museum, which was carried out during the school year 2013-14. The central philosophy of the program is based on the belief that real objects, direct experiences and entertainment support and enhance the learning process. Once the history of the monument has been presented, we examine the possibilities and the limitations in connection to the educational aspect and we note suggestions for educational activities pertaining to Gardner’s theory of multiple intelligences (1993). The project’s main aim is to bring students into contact with the ancient Greek civilization, through a pleasant educational experience and procedure tailored to their needs and capabilities, as well as to the objectives of the curriculum, while, at the same time, developing those skills that, according to Gardner, are associated with the eight intelligences. The results from the implementation of the programme mentioned here, have shown: the acquisition of learning through an enjoyable experiential process both in the physical space of the Mycenaean Monument and the Museum and in the kindergarten classroom, the teaching of skills and that linking activities to the eight types of intelligence of Gardner is feasible.

Keywords: Educational program, kindergarten, culture, Museum, Gardner’s multiple intelligence theory.
INTRODUCTION

According to the American Museum Association, the basic mission of museums is the educational purpose which should be included in every activity, highlighting the museum as a place of education and culture offering a unique learning experience different from that of schools. By implementing educational programmes, “the perception of a museum being an inaccessible and unattractive place is reversed and its real character emerges as an open space, pleasant and creative.” (Alkistis, 1996 p.22).

The International Council of Museums (ICOM) considers that, among other things, monuments, as well as natural landscapes, archaeological, ethnographic and historic monuments have a museum-related aspect and implement similar activities, such as the enrichment of collections, their conservation, education, and communication (Mouratian, 2006). Chatzinikolaou Teti (1985) suggests that

“The term ‘cultural heritage’... includes monuments of architecture, art and history, historical and archaeological sites, manuscripts, books, scientific collections, archives, and also the buildings that have been chosen to receive and exhibit everything that has been mentioned before.”

HISTORICAL DATA: THE MYCENAEAN VAULTED TOMB

The Mycenaean civilization, one of the brightest prehistoric civilizations, was developed in the Aegean and the Mediterranean Basin during the Late Bronze Age from 1600 to 1100 BC, with its memory preserved through myths. It took its name from the most important center, the “Rich Mycenae”, and was discovered through the excavations of the German Heinrich Schliemann in 1876.

Among others, the royal and funerary architecture of Mycenaean civilization are quite impressive. The Mycenaean heritage constitutes the foundation of the archaic and classical period and Greek culture appears as the most advanced civilization in Europe. Athens was one of the centres of the Mycenaean world, but due to continuous and intense building activity in later years, only traces survive from those times.

In the Mycenaean Post-Helladic era, three types of graves were used for the dead: the pit (individual), the chambered (family) and the vaulted (1600 BC). The latter are either above the ground or underground (hypogeum). The tomb is covered with soil and stones, creating an artificial hill. After finishing the burial and honorary events, the tomb was closed with drystone and the road with soil. At the top of the tomb, a headstone was placed as a sign (Gkadolou & Koundouri). The vaulted tombs are distinguished for their craftsmanship and advanced knowledge of masonry. They have royal status and show the prominent position held by the owners.
The most imposing and best preserved **Mycenaean vaulted tomb of Attica**, the Vaulted tomb of Acharnes (14th-13th c. BC) was excavated in 1879 by members of the German Archaeological Institute of Athens, on the side of an artificial hill. This is the tomb of a person who was highly ranked in the social hierarchy in the area, as is shown by the kind of the tomb and the numerous jewellery of excellent artistic quality that was discovered and is exhibited in the Archaeological Museum of Athens. It is an underground tomb with the classic architecture that characterizes this kind of tomb and seems to have been particularly rich, although plundered. It contained clay and stone pots, bronze weapons, ivory objects, jewellery of gold, silver, copper, glass paste and faience. Among the most important findings are the fragments of two ivory lyres and an ivory cylindrical jewellery box with a lid.

**SELECTION OF THE MONUMENT – STRENGTHS AND LIMITATIONS**

The specific monument was chosen by the teachers of the 4th Kindergarten of Acharnes, Attica, in order to implement a cultural educational programme for children aged 4-6, during the school year 2013-14 for two reasons: firstly, because it is an important monument of cultural heritage for the area of Acharnes, the Municipality and its citizens and secondly because of the proximity to the school. In addition, educational visits to museums and monuments are included in the Greek kindergarten curriculum. The site of the monument is easily accessible, and allows symbolic and dramatic play to be developed; while being the only Mycenaean monument in Athens, there exists a restriction that students are not able to come into face to face contact with other Mycenaean monuments, in order to make comparisons. This could be carried out only if students of this age were allowed to travel at a long distance which is prohibited by Greek legislation (PD 200/1998).

**EDUCATIONAL PROGRAMME – THEORETICAL BACKGROUND**

“The museum is addressed to the visitor connecting at the same time three environments: the personal (experience, knowledge, what each visitor is), the social (relationship with others) and the natural (the museum itself and the atmosphere exuded)” (Kakouris - Chronis, 2006 in Angelopoulos, 2010).
The design of the programme that we implemented was based on the principles of modern museology and material culture theory, as well as on the findings of modern pedagogy. According to these principles:

- The museum and cultural heritage monuments constitute spaces of informal education, special areas for learning and perception of reality through objects, seeking to link learning with entertainment, through the active participation of the senses.

- “The museum has the ability to negotiate cultural boundaries and create new contact zones” (Hooper-Greenhill, 1999, in Angelopoulos, 2010).

- “The reaction to the object is caused by the fruitful dialogue both between the whole and the part, past and present” (Kakouris - Chronis, 2006, in Angelopoulos, 2010).

- Active learning methods (observation, discovery, problem solving) contribute to self-learning and can therefore educate people to be efficient and active.

- The theory of the psychologist Howard Gardner regarding the multiple intelligences which he proposes everyone possesses (linguistic, logical-mathematical, musical, spatial, kinaesthetic, interpersonal, intrapersonal, naturalistic) argues that all intelligence types can be developed both at school and in the museum, that school could operate multi-thematically, experientially, with concrete experiences (hands on experience), such as a children’s museum, linking the experiential knowledge in the museum with the scientific knowledge produced in school, that intelligence is the possibility of solving a problem and that there is nothing that can be taught in only one way. Where you can use the knowledge, then it is useful (Gardner, 1983, 1993, 1998).

Great educators like Dewey, Piaget, Vygotsky, argue that “learning is achieved only through active participation and experience and is an integral part of knowledge, not provided by the textbook, but is acquired due to the child’s communication with people and things” (Kakouris - Chronis, 2006: 52).

AIM AND OBJECTIVES

The main aim of the programme was to bring students into contact with the ancient Greek civilization.

Specifically, the cultural programme aimed to:

- Familiarize students with the area of the monument and the cultural heritage.
  Make the visit to the Monument and Museum a pleasant experience tailored to the interests and abilities of the young students.

- Develop children’s skills of observation, comparison, investigation, discovery and understanding of
spatial objects.

• Provide students with ways of connecting to the exhibits (communication) for independent study and observation on future visits.

• Trigger comparisons, judgments and forming of opinions, attitudes and values, aesthetic and cultural.

• Connect the exhibits and objects with the Greek kindergarten curriculum.

EDUCATIONAL ACTIVITIES

In the context of the development of an educational programme in the Mycenaean Vaulted Tomb in Acharnes, the connection with the activities related to Gardner’s eight types of intelligence proved to be feasible. The program was developed in four distinct phases, both inside school and outdoors, as shown below. Each phase included a variety of activities, in order to achieve the objectives set in the initial design.

Phase 1: In the classroom, before the visit

• Preparing the students to get acquainted with the area, using teaching aids and ICT.

• Setting rules concerning children’s behaviour and movement inside the museum and the archaeological site.

• Giving information and historical data about what children will see, tailored to their level of intelligence, such as a) The Mycenaean were very strong people who used golden objects to show their power b) The Mycenaean were building walls with very large stones that they believed the Gods or the Cyclopes had placed, called Cyclopean walls.

• Enabling imagination and curiosity before visiting.

• Drama-playing using fabrics, objects and waste materials.

• Cards, depicting the tomb’s grave goods, created by the teachers, are scattered on the floor and the children go in groups to observe them and discover these objects. Once they find one, they describe it and are asked to keep it in mind until they go to the museum. During the visit at the museum, each group, holding its card, has to search for the corresponding object.
Phase 2: Visit to the Archaeological Museum Acharnae

1. At the entrance, the teachers remind children of the rules, asking the students to ‘close (store)’ their voices in an amphora that teachers have made before. Information given: The amphorae were used to store goods, liquids and solids (cereals, oil, legumes, wine, water, etc.).

2. Entering the museum, the teachers take a couple of minutes to show the children once again the cards with the objects they had seen at school, just to help them to remember them and they ask the children to search for them. The children explore and as they find one, they stand in front of the showcase, try to observe and describe it, answering either open or closed questions of the teacher.

3. In the next hall, children are welcomed by the archaeologist in charge and they have the opportunity to experience the ancient world through visual teaching aids such as maps, timelines, photographs of ancient findings, slides and videos. These give the children an opportunity to understand the world through visual and space orientation. In this way, children cultivate their spatial intelligence.

4. The children listen to a story specially constructed for young children called “Like a Fairytale: The Time of the Mycenaeans in Acharnes”, curated by the archaeologist Elena Kassotaki in collaboration with kindergarten teachers in the region. In a particularly vivid way children are given information concerning the time of the Mycenaean Ages and the “residents” of the vaulted tomb. Children play
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5. Children cultivate their music intelligence by getting acquainted with the two lyres found in the Vaulted Tomb and perform a scene from the story they have listened to, “the nights of the noble family which lived in the region where the vaulted tomb was found”. A paper lyre with eight strings is part of the performance, while the children and their teacher recite verses from Homer’s “Odyssey”.

Games with the lyre: Linguistic, Kinaesthetic intelligence

• Guessing:

Children are asked to guess what that object is. Teachers listen to all their answers. If they do not find the answer, the teacher gives some helpful information concerning Greek mythology, which is very popular and valued from children of this age e.g. The god Mercury created an .... and gave it to Apollo who enjoyed playing it.
• **Questions:**
With various questions teachers attempt to pose certain issues to children, to make them observe, think and extract an answer from them as far as the holes that exist in Lyres are concerned, such as: What is it? Why are there holes on it? What is this gap for? etc. We ask them to name musical instruments that have strings (guitar, violin).

• **Perform/amusement:**
How did ancient people play the lyre? As a miming game, for e.g. some children pretend to play the lyre while others listen.

**Ivory ‘Pixis’: Psychomotor and Guessing game**

*Information: The pyxis is the jewel case of the ancients.*

- Children observe the horses carved on the jewel case, they exchange thoughts and ideas and in the end they start galloping in a circular orbit neighing. When the teacher pretends to close the lid, they are supposed to stop and when she pretends to open it they start again.

- The teacher engages in mime, pretending to take jewellery off the “pyxis” (jewellery box) one at a time and put it on herself. Children try to guess each time what kind of jewellery it was.

6. Then the children sit on the carpet and on pieces of wood (plywood) they choose, either draw one of the ancient findings, or make some of the ancient jewellery from pasta, or make the thumbnail Vaulted Tomb with clay or cut into thin cork sheet vessels and paint them according to the Mycenaean drawings they saw during their tour in the museum, or even try to make arches with wooden rods and rope, cultivating their **kinaesthetic intelligence**.

7. The children focus with great interest at the point of the story that refers to the flora and fauna of that time. Emphasizing the “hunt in Parnitha” (nearest mountain), taking a joint decision, they create a model of the forest at Parnitha mountain, in a piece of felizol adding plasticine, cultivating thereby their **naturalistic intelligence**.
8. The involvement of children through drama, where they got dressed as the heroes of the story they experienced in narrative, fosters their **interpersonal intelligence**. Their improvisation was really impressive.

9. Finally, before leaving the Museum, children take a piece of paper and draw, using oil pastel, pen or pencils, what mostly impressed them. They write their names on it and offer these little “masterpieces” to the archaeologist, as a small gift of gratitude for this unique experience, fostering in this way their **intrapersonal intelligence**.
Phase 3: Visit to the Mycenaean Monument: Vaulted tomb in Acharnes

A) Activation

Children enter the tomb of the lord passing under coloured tulle. This creates a sense of mystery, in order to be motivated to discover the grave gifts, namely the personal belongings of the lord. Note: In ancient times the dead were accompanied by personal items, because they believed that there is life in the ‘underworld’ (life after death).

B) Dramatic play in the Vaulted Tomb

Children, still dressed in characters’ costumes, place the grave presents, which they had previously created at the museum and at school, paying respect to the “dead”, while taking concrete steps towards him from their position and indicating, when they return, the number of steps made, cultivating this way their logical-mathematical intelligence.
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Phase 4: Next day in class, after the visit
Art – Painting - Handicraft:

• With various painting materials, children illustrate anything that impressed them, or scenes of the story to which they listened in order to create a makeshift book.

• They work with the museum leaflets, colouring objects, circling the correct answer, etc. (p.9).

• Children make a lyre using cardboard and thread or fishing line. At the bottom of the lyra, they stick designs they created with plasticine. The perception of relief is created this way (sensory exercises).

Photo 8: Dramatic play

Photo 9: Museum leaflets
Linguistic games:

• Teachers show pictures of the exhibits and the children say the correct word which they have learned at the museum.

• Play with words and concepts. Children are asked to repeat the word ‘pointed amphorae’. The word is explained. Children create their own compound words.

Knowledge game:

• Questions about the way the Mycenaean used to transfer the clay pots in ships.

Orientation exercise:

• Children cut the contour of a paper amphorae and then are supposed to place the paper amphorae on the floor in the way Mycenaean placed them on board. Linguistic, logical-mathematical, as well as spatial intelligence, are developed). (p.10).

Photo 10: Storing of clay pots in the ships

Taking a brief look at the activities, we observe that the intelligences engage each other. For example, regarding music intelligence the logical-mathematical intelligence is involved as well, when using the lyre with eight strings.
RESULTS - EVALUATION

The evaluation during the project was constantly evolving, that is, formative evaluation (Vergidis & Karalis, 1999). Using the tool of systematic observation, needs and potentials were identified; methods were tested, as well as procedures and education-teaching material, thereby making the necessary improvements, changes and feedback within the teaching practice progress.

The final evaluation was conducted by discussing with children, where, interest, active participation and gaining experience from the world of adults emerged. Children posed their proposals in reply to questions such as: what they liked most, what it was that they did not like, what we could change if we did it again and how we could present it to the community.

CONCLUSIONS

It is therefore important to implement educational programmes in kindergarten, based on contemporary scientific learning theories, which contribute to the preservation and enhancement of cultural heritage, through both the transmission of knowledge to children and the cultivation of skills, as well as the acquisition of respect for the past and their awareness as tomorrow’s adult citizens invited to play an active role in protecting culture.

REFERENCES


http://www.acharnes.gr/el/content/section-282, Website of the Municipality of Acharnes, The vaulted tomb.


Museum of Natural History: An opportunity for families to enhance learning and improve practice.

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ABSTRACT

The nature of scientific research goes beyond the learning of concepts and basic manipulation to the key factors of engaging families in identifying relevant evidence and reflecting on their interpretation. School is not the only source for science learning (Bell et al., 2009). A visit to a Natural History museum and the conversations that take place are social but also include learning conversations. The learning conversations that take place at the museum consist of formal and informal learning (Lucas, et al., 1986). Visiting a museum of Natural History is an educational experience, which offers families experiences that cannot be obtained within the formal education environment. Tunnicliffe (2000) and Ash (2003) found that museums are excellent sources of cognitive experiences. When families visit informal setting such as natural history museums, the occasion provides the members of the family with the opportunity to expand their own and their community’s existing knowledge or possibly to construct new knowledge. This paper draws upon a pilot study which focused on aspects of the opportunities of learning by families who observe natural history dioramas. In order to reassure the quality of the study and the observation of families’ interactions in the Natural History museum, the researchers take into consideration and apply the Ethical guidelines for Educational Research (BERA, 2011). This study explores the opportunities which a natural history museum provides families by identify various aspects of biological and physical science captured in the moment of time portrayed in a given diorama.

Key words: Natural history museum, dioramas, families, learning opportunity
INTRODUCTION

Museums are important social contexts where the visitors interact with people and materials (Callanan, 2012). Visitors to museums have been found to start their visit with an agenda. They have one or several identities when they make visits (Gkouskou & Tunnicliffe, in press). Families come to a natural history museum with their individual understanding and mental models of animals. In viewing a natural history diorama, visitors can identify what is already familiar to them and in a naturalistic setting. Such contexts allow them to make links to their previous knowledge and they recognize relationships which exist in the living world. Families visiting museums usually engage with activities which are more open ended, flexible and driven by their own interests. Developmental research on how children learn through family conversation has yielded essential new information (Callanan & Jipson, 2008). Csibra and Gergely’s (2009) notion of ‘natural pedagogy’ argues that children are biased to learn quickly and generalize broadly when learning from an adult. As Haden (2010) has argued, museums provide unique settings to observe spontaneous family conversation and activity, potentially changing our view of learning. Also, research shows that children develop an understanding of science through family conversation (Crowley, Callanan, Tenenbaum & Allen, 2001; Eberbach & Crowley, 2009). Fender & Crowley (2007) shows that children who engage in explanatory talk with parents at exhibits are likely to explore more deeply and gain better conceptual understanding of relevant concepts. Callanan (2012) states that studying how families talk about particular domains supports analysis of diversity in children's thinking and family reasoning. Knuston and Crowley (2005a, 2005b) refer to museums as ‘leaning laboratories’ where research typically conducted in university labs can take place in museum context, allowing access to research to families who might not usually be involved. Families who attend museums are self-selected and potentially biased toward certain communities (Allen, 2007; Stein, Garibay & Wilson, 2008) however, the museum is a place for families to participate in and learn.

FAMILIES VISITING NATURAL HISTORY MUSEUMS

The natural history museum is a place that visitors easily become familiar in and feel confidence to share their knowledge (Ames, 1988). Bell et al. (2009) have suggested that natural history museums offer scope for their visitors to experience enthusiastic and emotionally positive reactions. Moreover, there are clear indications that participants are concerned with both the content of science and their own thinking about what is science (Gkouskou & Tunnicliffe, in press). Allen (2004) argues that in environments such as museums of natural history, cognitive, emotional progress and learning become a pleasure for visitors of different ages.
Responses from visitors as to why they visited a museum vary as stated by Falk (2009). Visiting a museum of Natural History is an experience of having both an educational and leisure aspect (Donald, 1991; Patrick & Tunnicliffe, 2013). This experience offers visitors unique opportunities that cannot be obtained within similar environments such as zoos (Falk & Dierking, 2000; Piscitelli & Anderson, 2001; Schmitt-Scheersoi et al., 2002; Dewitt & Hohenstein, 2010) and found that museums are excellent sources of cognitive experiences that complement and/or enrich the agenda of each visitor (Kelly & Fitzgerald, 2011).

Mousouri (1997) identifies five factors that determine the family museum agenda. These are: the family profile, the socio-cultural patterns (which refer to the functions a particular museum is perceived to serve in the social life of the families), the personal context of the visit, the social context and finally the exhibitions and the subjected presented. Mousouri (1997, p. 19) states that ‘the interaction of these factors creates the agenda for a museum visit but also influences the way the visit is perceived and experienced’.

The experience of visiting Natural History museums provides both adults and children who visit with the opportunity to become more observant and develop their curiosity. Visitors testify that natural history museums have helped them to observe things in the outer world that previously ignored (Griffin, 2004; Patrick & Tunnicliffe, 2013).

‘Children, we now know, need to talk, and to experience a rich diet of spoken language in order to think and learn. Reading, writing and number may be acknowledged as curriculum ‘basics’ but talk is the true foundation for teaching’ (Alexander, 2008 p. 9). Archer et al., (2012) suggest that parents [family members] can play an important in the development of children’s engagement and learning in science through visiting natural history dioramas. Also Jones et al. (2010) state that encouraging family/guardian visits to museums promotes children’s science engagement.

**METHODOLOGY**

The methods of data collection that the researchers used were observation and audio recording by using a voice recorder. Permission to record and observe had either been obtained prior to the visit, if the families booked a visit or/and on their arrival to the museum, where we confirmed or requested permission. The researchers decided to elicit families’ conversations in animals at a natural history museum in the south of England which focuses on African and Indian dioramas. The transcripts were collected and analysed through a read re-read iterative process, in which categories of comments emerged. The researchers take into consideration and apply the Ethical guidelines for Educational Research (BERA, 2011).
THE RESEARCH VENUE- THE GALLERIES OF POWELL COTTON MUSEUM

In the study reported here we were interested in the response of visitors who came to the Powell Cotton Museums at Quex Park in Kent, England. (http://www.quexpark.co.uk/museum/quex-house/).

The natural history museum, the Powell-Cotton Museum, whose strap line is: “Where the past meets the present to change the future” (http://www.quexpark.co.uk/museum/) was built by Major Percy Powell Cotton “a pioneer in the use of the diorama to display mounted animals against backdrops of their natural habitats”.

Compared with the subdued hues found in the colours of local endemic wildlife, these exotic and colorful animals, particularly the giraffe, lions and zebra were a wondrous invasion of colour to the locals who lined the streets to witness the arrival of the latest animals (Personal communication, Johnson 2015). The Natural History museum has 3 galleries including a variety of species.

Gallery 1 displays the animals of North and West Africa and India. Today, this is the first gallery visitors see on entering the museum but it was actually the last gallery built by Percy Powell-Cotton himself, being competed in 1939, the year before his death. The large diorama to the left is known as ‘The Watering Hole’ (see fig. 1) and represents many species from across northern Nigeria and Chad. The central diorama showcases the amazing diversity of Africa’s primates and the different landscapes they live in (see

Figure 1: Gallery 1 Copyright Nikhilesh Havel. Reproduced courtesy of the Trustees of the Powell-Cotton Museum.
fig. 1). The diorama to the back right of the gallery depicts animals from the Indian state of Madya Pradesh (which translates as ‘Central Province’, see fig. 1). The final diorama, to the right of the gallery, incorporates a variety of landscapes and animal habitats. The far left represents the more lush woodlands around the Mkuze River, in northern KwaZulu-Natal, South Africa (see fig. 1). The central part of the diorama, formed of a high rocky crag, represents the Ethiopian Highlands, an area where land levels rarely fall below 1500 meters. The mountain nyala displayed here are only found in this region and have become a rare and endangered species. Finally, the desert habitat at the front of the case showcases the diversity of species found in the Sahara desert (Powell-Cotton Museum Gallery 1, 2015).

Gallery 2, called ‘The Pavilion’, was the first gallery designed and built by Percy Powell-Cotton and was the starting point for his relationship with the taxidermist Rowland Ward, who helped build and design the museum’s famous natural history dioramas. The gallery was completed in 1905 and the large Himalayan diorama is now considered the oldest untouched diorama of its type in any museum around the world. The diorama depicts the Himalayan landscape at dawn. The painted scenery looks down on the Baltoro Glacier, which is found today in the Gilgit-Baltistan region of Pakistan. Dioramas such as this were a new and innovative way of displaying natural history in the late nineteenth and early twentieth centuries and very few dioramas of this quality or age are still standing in museums worldwide. (Powell-Cotton Museum Gallery 2, 2015).

Figure 2: Gallery 2 ‘The Pavilion’. Copyright Nikhilesh Havel. Reproduced courtesy of the Trustees of the Powell-Cotton Museum.
Gallery 3 was the second gallery to be built, added on to the ‘Pavilion’ in 1909. The dioramas in this gallery focus on species from equatorial Africa and the plains at the edge of these forested areas. The central diorama represents a lion and a buffalo, locked in battle. The large diorama of animals from equatorial Africa include one of the most impressive specimens - the large bull elephant to the left of the case. In the same case is a truly rare sight – a group of Northern White rhino (Ceratotherium simum cottoni). (Powell-Cotton Museum Gallery 3, 2015).

FINDINGS

Conversations may develop in the company of other people or overhearing a comment from another group or even a trigger from an interactive ‘label’. Bruner et al. (1956) and Bruner (1990) identified that constructing meaning is a social event and occurs between at least two people. The visitors’ dialogues, generated and stimulated by the diorama, form a part of the visitor’s voice and are informed by their fund of knowledge, mental models and experiences (Gkouskou & Tunnicliffe, in press). Such dialogue can further develop inquiry and understanding through conversational interaction.

Ash (2003) refers to this phenomenon as dialogic inquiry and points out that there is a thematic content
inherent in the dialogue generated about the diorama or it may develop with the use of inquiry process skills to structure the conversations. This situation of support is what Vygotsky (1962) referred to as the Zone of Potential Development where comments and open questions in particular, can lead to concept expansion by the learner (of whatever age).

Developing a dialogue from the direct observations and other comments triggered by the observations of the diorama by learners may lead to learning of fresh information and comprehension.

**A mother and her two daughters (Gallery 1)**

M: What is this?

G1: Tiger. We saw two of them on the zoo.

G2: Look this is so scary. It is like real.

M: Actually, this is a real animal where the people of the museum place it as an exhibit.

G2: Woolly!

M: Do you remember reading the book about the museum and its treasures.

Of course, the culture from which this learning audience comes is important. Learners must have the confidence and expectation that they may ask questions and not be inhibited in giving their response, such as justification of their naming of a biological organism (Gkouskou & Tunnicliffe, in press; Tunnicliffe et al., in press). However, the adults with children need to allow the learner to inquire and not receive information in a declarative style, as with this mother who informed them and closed any dialogue that might be developing.

Many adults apparently see their role as disseminator of information, transmitting such rather than encouraging the learner to think thus extending their repertoire of understanding (Tunnicliffe et al., in press). It is now acknowledged that the construction of knowledge is not solely a solitary individual affair but is influenced by the dialogue of others around the individual. In a group one individual’s comment cues in that from another individual and together the group build a consensus learning. Teachers and other educators can play a vital role in facilitating such dialogues when developing dialogic talk (Alexander, 2008).

**A family (mother (M), father (F), boy (B1), boy (B2), girl (G1)) observe the dioramas in Gallery 1**

B2: Everything is there (pointing the dioramas at Gallery 1).

G1: Look there is a tiger and is big with huge teeth.
F: It’s very nice, there are so many animals.

B2: There is a bear at the corner, it is very nice.

M: Look the animals here (pointing the ‘Primates Diorama) are all monkeys?

B1: Yes there are all the same.

G1: Look dad this is look like a dear. I saw them at the web site.

F: I think there are antelopes, but we can check the labels to make sure.

B2: I spot an antelope as well. It is so small.

**A family (Father (F), Mother (M) and Boy (B)) at the Casmir Diorama (Gallery 2)**

F: I was looking for this exhibit.

M: This is the first diorama created. It is very nice. Look how the animals feel of the rock.

B1: I cannot read the labels. Can you help me dad?

F: Of course, let see what the museum labels say.

The social context in which a visit is undertaken is important. Visitors’ reasons for visiting museums, including social and educational reasons, lead to the creation of their personal agenda. Tunnicliffe (1995) found that the content of conversations at animals in museums varied according to the composition of the viewing groups. Furthermore, the age and gender of the visitors also affects dialogue content and focus (Tunnicliffe 2000).

**CONCLUSION**

The results of this study show us that cross over learning in informal settings, such as museums, can both link to educational contexts and also engage learning in families. Authentic experiences such as museum visits, and the interaction with the dioramas promote the families’ links with the formal curriculum. The study of informal education is seen as particularly critical because all the members of the families seem to build much of their knowledge about the world around them using natural history dioramas as resources.

Collecting and the subsequent analysis of spontaneous group conversations generated at museum exhibits, in this case natural history dioramas, can seem to us to be the most effective means of understanding these visitors’ interpretation of the representation of the exotic natural world.

We acknowledge the assistance of the education officer of Powell Cotton Museum, Rebecca Gazey in this work.
REFERENCES


Gkouskou, E. & Tunnicliffe, S. D. (in press). Leisure Visitor’s responses to Natural History dioramas


The contribution of an interventional program of psychokinetic education to the development and maintenance of the young children’s environmental sensitivity: The case of Ioannina

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ABSTRACT

The purpose of this research was the implementation of an intervention program of psychomotor therapy in infants, with the aim of developing and maintaining the understanding and application of environmental concepts, such as cleaning an area, picking waste materials (paper, plastic, aluminum) for recycling, tidying objects in the classroom, flower watering, protection of fauna and flora. The program was implemented for three months in 2015, with a frequency of three times a week, in three public kindergartens of Ioannina. The sample consisted of 84 infants (49 boys, 34 girls, aged 65 ± 7 months). For the needs of the research the sample was divided into two groups, the experimental one in which it was implemented the program and the control one in which it was implemented the program for standard kindergartens. Before the implementation of the program parents and the authorities of the primary education had been informed and they had given their consent. Both at the beginning and end of the intervention, in both groups there were applied screening tests for evaluating if the children knew, understood and implemented all the above environmental concepts according to the model of «Bloom’s cognitive taxonomy». In the experimental group there were made maintenance tests, three months after the intervention. For the statistical analysis of the results frequency tables and percentages were made and a non-parametric statistical analysis «Friedman test». The internal validity index a- Cronbach was 0.78, a fact that indicates that the ten games used in all assays were reliable. The results showed that in the initial tests there were no differences between the two groups. However in the final tests, the experimental team manages significantly higher levels and it seems that it maintains these rates in the understanding and application of the above environmental terms. Knowledge, application and understanding of environmental concepts - which was achieved with the contribution of playful and teamkinetic activities - contribute to the children’s development and maintenance of environmental awareness.

Key-words: environmental sensitivity, young children, psychokinetic education, project
INTRODUCTION

Environmental protection is a difficult and complex process of embracing values. This situation according to Pyrgiotakis (2009, 423) becomes more difficult in our country, because the indifference and neglect lead rather to arbitrariness than to respect to nature and man. According to (Kalaitzidou & Ouzounis, 2000 · Flogaiti, 1998) the request to confront the environmental crisis through education is displayed more and more intensely, and therefore the Environmental education should start from pre-school age. The program described throughout this text has been implemented in three kindergartens in the city of Ioannina and its issue is the lake of Ioannina “Pamvotis”. The lake in our country is a source of life, entertainment, sports and generally of manufacture. However, directly responsible agents of the fluid environment of the lake are sounding the alarm about problems like coastal erosion from the concretion and improperly designed coastal projects, as well as other man-made pollution, etc. Taking therefore these upcoming risks into account, we wanted to sensitize children on the theme of “Lake Environment” to know, to love and to pay attention so they can always enjoy it. The necessity of the program resulted from the position of the kindergarten, near the lake, and the fact that some of the parents and children were involved in sports, the lakeside walking, playing in playgrounds next to the lake, and fishing, events that often come for discussion in the kindergarten and stir the children’s interest. Therefore, the research team felt a duty to directly sensitize children through playful teamkinetic activities to respect and maintain this property as a source of wealth and beauty for the place helping children to learn, understand and implement environmental concepts.

The constructivism can provide the theoretical basis for integrated learning environment that mainly through the active participation and cooperation of children in physical education activities gives the chance to children to build the knowledge with activities focused on real situations that lead to discovery and dialogue. Modern social constructivist theories consider the learning activity as a basic building block of learning associated with daily problems that affects the child’s interests and aims effective learning concepts (Yugotsky, 1978). The sociocultural constructivism (Yugotsky, 1978), emphasizes the role of the support frame and the mediation of adults (kindergarten teacher) in the learning process. Based on the theory of activity, the collaboration and the used “tool” means (excursion, body - movement, kinesthetic) as well as the division of labor contribute significantly to the process of knowledge – building. The playful activities of physical education actively involve the young child in interactions described by a wealth of new terms such as self-discovery, dialogue, multiple representations, metacognition, reflection, teaching communities, and cooperation.

The basic concepts of learning theory of social constructivism are the reality, knowledge and learning.
The reality is constructed through human activity. The team members of a community invent together the properties of the world in which they live. The reality does not exist before the discovery of the team members. Individuals create their understandings through their interactions with others and with the environment in which they live. Learning is not only accomplished by one person but arises through his involvement with social activities. According to Gilbertson, Bates, McLaughlin and Ewert (2011), for children’s learning to be essential and according to the principles of constructivism these principles should apply: a) the issue of bias, b) the kindergarten teacher should make the issue relevant to children, c) teaching concepts rather than facts, d) create challenges, and e) direct experience. On the subject of preconceptions the teacher observes the ideas and perceptions of children on the subject before starting the program. They know the preconceptions of these children about what children know, what they will encounter, what they expect, what they are afraid of.

The kindergarten teacher uses examples to which children may be linked, so that they can understand the meaning of the subject with their own terms. An example of correlation appears in the activity of cleaning the yard that we will lift and throw a piece of paper from the ground. After explaining the teacher how to bend the knees, to twist, to lower and lift the paper in their hands from the courtyard she/he can use the idea of bending the knees and turning the cap showing the bottle of water we open to drink, to describe the meaning of the movement by turning and bending the knees. Then the kindergarten teacher can say: “As we open the bottle of water we can apply this movement in our body to lift objects that are lying around in the yard.” This directive of the kindergarten becomes relevant for children because they can visualize the rotation of the cap and apply it to their body.

The nursery school teacher shows concepts, such as the example above of body rotation and bending the knees to lift an object from the ground which is useful for proper posture and avoidance of adopting application of error position and injuries that may result from this. Then the kindergarten teacher will provide a solid and supportive set of steps to guide the children in fulfilling the activity. For example, planting trees involves a series of actions such as the continuous raising and lowering of body weight and keeping it at a low level, object handling and weight and the watering actions, which perhaps for the children is a tiring activity. The continuous feedback of knowledge from the teacher regarding both the technique of planting and the avoidance of posture error, fatigue, and anxiety if he did well or not, together with the other children, peers, provides a supportive social learning environment. This learning environment includes safe procedures, enhances learning, discourage “derision” and failure, and children confront more easily a challenge because of the support they receive Gilbertson, Bates, McLaughlin and Ewert, 2011: 46).
Table 1: theory of Kolb (1984) for the reconstruction of thought

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<td>Remarks and reasoning</td>
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<tr>
<td>Configuration of new perceptions and concepts apprehension</td>
</tr>
<tr>
<td>Implementation of new perceptions and concepts</td>
</tr>
<tr>
<td>Control of these new concepts</td>
</tr>
</tbody>
</table>

Adapted from the Gilbertson, Bates, McLaughlin and Ewert, 2011: 46

The provision of new experiences to their children allows them to apply the new knowledge and skills to previous knowledge. This helps in creating a restructuring of thought in a new mind set, in other words, the learning. Kolb (1984) describes this learning process through five stages on the basis of which a child-centered learning environment is formed, which builds on the previous knowledge to create new ones.

Vigkotski (1978) pointed out the convergence of social and practical elements of learning saying that the most important moment in the process of cognitive development occurs when speech and practical activity, two previously completely independent lines of development, converge. Through acting a child creates meanings in an intrapersonal level, while the speech connects this point with the interpersonal world shared by the child and its culture.

Social constructivism emphasizes not only the rebuilding of thinking but also the importance of the relationship between the child and the kindergarten teacher in the learning process. Children with different skills and backgrounds should cooperate in the work and discussions to reach a common understanding of the truth in a particular field (Duffy and Jonassen 1992). The social standards of constructivism emphasize the need for cooperation among children, students. An idea of Vigkotski which has important implications for peer collaboration is the zone of proximal development. It was defined as the distance between the current evolutionary stage, as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. Through a “scaffolding” process the child, the student can extend beyond the physical limitations of maturity to the extent that the development process delays the learning process.

Children should constantly be attracted to projects referring to skills and knowledge just beyond their current level of knowledge. This gives them motivation and builds on previous successes to improve the child’s trust. This is in line with the zone of proximal development of Vigkotski, which can be described as the distance between the current development level (as determined by independent problem solving) and the level of potential growth (as determined by solving the problem under adult supervision or in collaboration with more capable peers). Vigkotski (1978) further argued that teaching is good only when
it proceeds ahead of development. Then awakens and excites the life of a set of functions in the mature stage, located in the zone of proximal development. In this way the teaching plays a particularly important role in development. For a child to be completely attracted, work and learning environment should reflect the complexity of the environment in which the child should operate by the end of learning. Students should not only have active learning and the process of resolving the problems, but of the problem itself.

The pedagogical principles of psychomotor therapy according to Zimmer (2007), which were applied during the intervention, were:

- Relevance to daily life
- Action-oriented learning
- A variety of learning environments - Various sources Collection of data and information
- Cooperation - Teamwork
- A variety of teaching methods - strategies
- Analysis and environmental problem study
- Children are encouraged to participate in discussions where emerging conflict situations cultivate their concerns and strengthen them to seek our relationship with nature and our fellow human beings
- Project method
- Multifaceted skills

LITERATURE REVIEW

The contact of children with the natural environment, water, green spaces, plants, trees and shrubs according to Lester and Maudsley (2007), can help to create a more appealing game environment and with the coexistence of fish, birds, butterflies and other animals the space vivid more. The materials nature offers are some of the best a child can find to play. Soil and water are able to engage children for hours. The natural materials (stones, leaves, twigs, soil, water etc.) are ductile, easily transformed and can give endless combinations, as many as the ideas that a child’s imagination can generate. The game of children at the seaside, where all these natural materials are generously offered, takes hours and takes thousands of forms. The sand, water of the sea or stones and shells are converted to hands and children’s imagination in game items with excellent educational quality (Botsoglou, 2010). Direct contact of the child with the plants, birds, the soil, sand air, and the water is very important (Ryder-Richardson, 2006). The natural environment is an ideal setting in which children can develop creative play activities.
Fjortoft and Sageie (2000) found that when preschool children have daily contact with the natural environment present a better psychomotor development than those who do not. In the same direction Grahn et al. (1997) found that children daily regardless of weather, any time of the day were spending some time in an open area rich in vegetation and were enrolled in a kindergarten out of town, had better psychomotor development and a more developed capacity of attention than children that were attending a program of preschool education in the city, surrounded by tall buildings. Furthermore, according to Hines (2005) study, another advantage offered by natural environment in children’s play is that, affecting the behavior of children, it reduces the occurrence of aggressive behavior and accidents. Children tend to mitigate their differences in the physical environment more easily, and fights and accidents give way to creative play activities (Malone, Tranter, 2003 • Moore, Wong, 1997).

Sentimentally, contact with nature and its elements reduces stress, creates good mood and increases attention ability (Bohling-Phillippi, 2006 • Loun, 2006 • Wells, 2000 • Grahn, Martensson, Lindblad, Nilsson, & Ekman, 1997 • Taylor, Kuo, Sullivan, 2002).

Children, according to Greenman’s (2005) research, find outdoor play areas more attractive and prefer them. In research that examined the influence of the presence of natural elements in play areas, it was found that the children improve their social skills and physical elements lengthen the duration of the game activities (Herrington & Studmann, 1998).

In a survey (Hestenes, Shim, & DeBord, 2007) held on 41 outdoor-play areas in South Carolina it was found that in those ones that were more natural elements, children have developed more creative play activities.

When children are not familiar from a young age with nature and not gain positive experiences, they are likely to develop fears and prejudices towards it (Beach, 2003). The positive experiences of children in natural environments create the basis to develop as adults respect and love for nature (Chawla, 1988 • Wilson, 1993 • Sobel, 1996 • Wilson, 1997 • Kahn, 1999 • Kals, Schumacher, Montada, 1999 • Moore & Cosco, 2000 • Bixler, Floyd, Hammitt, 2002 • Sobel, 2002 • Kals & Ittner, 2003 • Schultz, Shriver, Tabanico, Khazian, 2004 • Sobel, 2004 • Wilson, 2008).

Children whose homes are close to nature are stronger in stressful situations. They exhibit less behavioral disorders, anxiety and depression and have higher self-esteem. The closer to nature the children are, the more benefits they have (Wells & Evans, 2003 • Kahn, 1999), they present increased concentration and self-control ability, get sick less and have a better physical condition (Grahn, Martensson, Lindblad, Nilsson, & Ekman, 1997 • Fjortoft & Sageie, 2001).

Children in the natural environment play more independently and the playful activities they develop are
more creative and encourage the development of language and collaborative skills (Moore & Wong, 1997 • Taylor, Wiley, Kuo, Sullivan, 1998 • Fjortoft, Sageie, 2000).

The contact of the children with the natural environment improves their cognitive development (Pyle, 2002) through problem-solving activities and observation (Crain, 2001). It also develops curiosity(Cobb, 1977 • Louv, 1991), which is considered one of the most important incentives to lifelong education (Wilson, 1997), encourages children’s social interaction (Bixler , Floyd, Hammitt, 2002) and helps develop more positive feelings to others (Moore, 1996).

Outdoor education is mixing two factors, adventure and environmental approach in a program of experience activities. Through exposure to outdoor conditions, children learn about the relationships between the various concepts of natural ecosystems, personal relationships with others and with themselves (Priest, 1986).

Many studies show that the nature of the experience and thereupon forming pedagogical strategies used are critical factors leading to the understanding of environmental issues (Lugg, 2007).

Research results (Lawrence, 2012), showed that even small contacts with outdoor places through a structured course can have positive environmental effects.

The research results showed that children in early childhood had outdoor experiences (many of which were recreational and they took place during leisure time), then they affected their views on the environment (Ewert, Place & Sibthorp, 2005).

From the above we are led to the fact that children, especially at a time when the nature and natural elements are usually known through the TV and the computer screen, rather than the personal contact, it is important to be able to combine it and expand the game activity with nature and its elements.

**CONCEPTUAL DEFINITIONS**

Environmental awareness: Environmental awareness: is the sensitization of humans to environmental issues manifested by: a) public concern about environmental problems, b) increase of «green” consumerism, c) the dissemination of ecological values, d) the legislative regulation of environmental issues (Strong, 1998).

Environmental knowledge: knowledge and understanding of the environment as a whole, the problems and the role of man in it, as well as the responsibility of his actions for this (Bia, 2008, 338).

Environmental attitude: social values, keen interest and willingness to actively participate in the protection and improvement of the environment (Bia, 2008, 338).
As outdoor motor activities are defined the activities conducted outdoors and their implementation involves some form of interaction between the participants and the surrounding area. Some of the outdoor motor activities are: accommodation and overnight in nature, outdoor kinetic games, hiking, bird watching, wildlife photography, climbing, and orientation (Kouthouris. 2009).

THE PURPOSE OF THE PROGRAM

The overall aim was to investigate the effect of a program of psychomotor activities on the development of skills, abilities and knowledge to teach children to respect the lake and to the environment as a source of life and wealth to man. In particular, the aim of this research was the implementation of an intervention program with emphasis on psychomotor education activities in infants, to develop and maintain the understanding and application of environmental concepts, such as cleaning an area, picking waste materials (paper, plastic, aluminum) for recycling, arranging objects in the classroom, flower watering, protection of fauna and flora.

Through the implementation of the program objectives were to promote their kinetic behavior, group dynamics, to teach children to work in groups and to develop good interpersonal relationships between team members to practice active listening and develop their critical thinking, develop love and respect for the environment, discover as little explorers the richness of the lake to appreciate the beauty of their land and be motivated to preserve them in the future, to enjoy them as well as the future generations will.

METHODOLOGY

The program was implemented for three months in 2015, with a frequency of three times a week, in three public kindergartens of Ioannina. The sample consisted of 84 infants (49 boys, 34 girls, aged 65 ± 7 months). For the needs of the research, the sample was divided into two groups, the experimental one in which the program was implemented and the control one in which the standard program of kindergartens was implemented. Before implementing the program parents and the authorities of the primary education were informed and they had given their consent.
Table 2: Sample of Research (N = 84, 100,00%)

<table>
<thead>
<tr>
<th>GENDER</th>
<th>TEAM</th>
<th>f</th>
<th>%</th>
<th>Total</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Experiment</td>
<td>25</td>
<td>29,80</td>
<td>49</td>
<td>54,00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>24</td>
<td>28,60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>Experiment</td>
<td>20</td>
<td>23,80</td>
<td>35</td>
<td>46,00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15</td>
<td>17,90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Experiment</td>
<td>45</td>
<td>53,60</td>
<td>84</td>
<td>100,00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>39</td>
<td>46,40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We applied experiential - communicative teaching (with emphasis on teamkinetic playful activities), which gives priority to the active involvement of all team members, to kinetic behavior and it is characterized by freedom of action, the immediacy in relation to everyday life, the connection with the social environment and strengthening creative thinking. For the realization of the purpose and objectives of the program it was placed particular emphasis on motor activities psychomotor treatment and the approach was interdisciplinary, comprehensive, fact-finding and required creative imagination by children.

For the designation of the program it was preceded a discussion with the children, in order to explore the views, experiences, proposals on the subject (Table 3) and then there was link to the various cognitive fields of Analytical kindergarten Timetable (Table 4).

Table 3: Children’s suggestions

| Fishing, fishermen, | Water-waves | Fish |
| Small boats | The Lake «Pamvotida» | Birds, storks |
| Island, reeds | Water snakes, ducks | Frogs |
Table 4: Cognitive fields concerning the proposals of children

<table>
<thead>
<tr>
<th>Language</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Lake «Pamvotida»</td>
<td></td>
</tr>
<tr>
<td>Environmental studies</td>
<td>Create &amp; Expression Physical education</td>
</tr>
<tr>
<td>Natural environment</td>
<td>Drama</td>
</tr>
<tr>
<td>Anthropogenic environment</td>
<td>Art</td>
</tr>
<tr>
<td></td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td>Computer science</td>
</tr>
</tbody>
</table>

Data collection process

Before the initiation of the investigation, permission was secured from the Department of Primary Education of Ioannina and consent of the Directors of the involved kindergartens; whereas the infant participation was voluntary.

Topic selection criterion

The children’s interest to experience the Lake of Ioannina, the lake of the living area.

PROCEDURE FOR THE INVESTIGATION AND CLASSIFICATION OF RESULTS IN BLOOM

The main axes of this research as part of the kindergarten is the outdoor program implementation mostly of activities (project) with emphasis on psychomotor and on environmental education (independent variable), and the development and maintenance of knowledge and the implementation of environmental concepts in preschool children (dependent variable). This research is focused on the development of environmental knowledge through vocabulary (general language) and action - behavior as part of the kindergarten.

In the present study the experimental research method was applied by taking measurements before and after the intervention method. Through the experimental method they are expressed and checked clear relationship of cause between the parameters of a phenomenon or a procedure. The experimenter is trying to control and keep constant if possible, all derivatives except the one which is considered to exert crucial influence on the appearance and dynamics of a phenomenon.
The agent, who is configured under the control of the experimenter, is called the independent variable and serving the position of the cause able to challenge a phenomenon. The induced effect (the dependent variable is studied through the behavior (in the broad sense) of the subjects in the experimental process.

Before starting the program, and at the end of its application, the groups of children (experimental and control ones) are involved in: a) a semi-structured interview, which data allows correlations with the dependent variables of development and maintaining of knowledge about environmental concepts from children (words and phrases related to the environmental concepts) between the two groups (experimental and control) to inspect statistical changes, and b) in playful environmental actions within a predetermined environment (courtyard with useless objects, such as papers, plastic bottles), behavioral responses of children (cleaning and sorting of materials, etc.) without the urging of kindergarten teachers were the data which allow correlations regarding the dependent variables of development and maintaining these environmental knowledge and application. The survey used qualitative measurements. Specifically, for the control of knowledge and understanding of various environmental concepts (recycling, tree planting, cleaning, self-cleaning, air protection without throwing garbage but to rearrange, sort waste materials), it is done essentially a control of the vocabulary, while it's used a test in the form of sheet Protocol of semi-structured interview. The formulation of the questions are based on the following: (1) analysis by Dewey of ‘understanding’ as’ meaningless concept, which consists in finding the means to objects or phenomena, and finding relationships with other objects, events or conditions, and (2) the positions of Nelson and Anglin, who support that one way of assessing the changing structure of the vocabulary of children is to ask them to tell what or what words came to them spontaneously to mind in response to a word or words or a question.

The interview questions on the concepts, “man”, “nature”, “lake”, “cleaning”, “bank” concern in

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particular: (a) the substance of the concept, “what kind / what sort of thing” is (each sense) and its relationship with a wider totality (environment), (b) the characteristics and attributes of the concept (shape, color, content, quality), (c) relationship (concept) to humans and other beings and the environment, d) expression of emotions.

The pattern of control questions is aimed at obtaining answers that will demonstrate the children’s acquisition or not in terms of environmental conceptual meanings of respondent’s words, the kind of proposals that they use to express themselves, the amount and the quality of which, determines the level of development of the vocabulary and structure of the language used. There are defined four levels (lower the 1° and higher the 4°), in which children are classified according to the degree that the vocabulary and the behavioral action shows that these children have created a coherent conceptual system for each environmental word, eg:

1st level (score = 0): the child does not know, doesn’t answer nor verbal or behaviorally, in an environmental sense,

2nd level (score = 1): the child knows, may respond verbally from one to three words at most for environmental purposes, and does not respond behaviorally to the game for environmental purposes (not voluntarily participate in cleaning the banks of the lake during the game)

3rd level (score = 2): the child knows, may respond verbally with more than three words at most for environmental purposes, and does not respond behaviorally to the game for environmental purposes (not voluntarily participate in cleaning the banks of the lake during the game), and

4th level (score = 4): the child knows, may respond verbally with more than three words at most on environmental sense and responds behaviorally to the game for environmental purposes (child voluntarily participate in cleaning the banks of the lake during the game) Children’s classification criteria to the four levels are quantitatively and qualitatively. The quantitative indicator is used to measure the quantity of words used to respond to each question. The qualitative indicator correspondingly refers to the way they use the words and the quality of sentences used in order to express more comprehensible forms what they have heard and learned in reply to each question with correlations, paraphrases, explanations, definitions, reports, generalizations using accurate vocabulary. These levels and classification criteria were formulated by Bloom’s cognitive taxonomy and Krathwohl”.

Objectives in Education Act according to is the partial expression of the general and specific objectives of education, the definition of what should be provided and carried out in the classroom, guidance on a consistent basis and best serve educational purposes. They are proposals that accurately and clearly define the “what” students will be able to do as a result of an instruction. The taxonomy of Bloom, ranks the teaching objectives in three areas: a) in the cognitive domain, which classified the objectives related to the acquisition of knowledge and the development of mental skills and abilities, b) the emotional field, where they have been included the objectives referred to feelings, attitudes, beliefs and c) the psychomotor domain, in which they have been incorporated those targets that aim in developing physical skills, i.e. the implementation and coordination of various body movements.

The cognitive area, which relates to the evaluation of our research data, includes the following categories of targets:

Knowledge stage: the child remembers what he has learned, outlines, reproduces, recognizes says what, where, when, how, what.

Understanding Stage: the child describes in his own words, he tells emotions, explain concepts, compare, relate.

Implementation stage: the child says how he would use something, where he’s lead, how he uses it to solve problems, exposes.

Stage Analysis: What are the parts of the series, the causes of an event, problems, solutions, and consequences?

Stage Composition: How would it be otherwise, how else, what would happen if, progress, improvement, progress, creativity in his own way.

Evaluation Stage: How to hold, whether achieved or not, if was successful, what would prefer, why he thinks so.

The kindergarten children, because of their developmental characteristics, usually reach the level of “Understanding” and rarely in the ‘Application level. «At the level of “knowledge”, the child learns and is able to recall the memory of information and knowledge, to name things, terms, facts, concepts, etc.

Μέξη, Ευγενία. (2013). Οι καλλιτεχνικές μορφές ως θεμελιακά στοιχεία της επικοινωνίας και μαθησιακής διαδικασίας στο χώρο του νηπιαγωγείου. Διδακτορική Διατριβή, Παιδαγωγικό Τμήμα Νηπιαγωγών Πανεπιστημίου Ιωαννίνων. «The artistic forms as fundamentals details of communication learning process as the kindergarten» Εθνικό Αρχείο Διδακτορικών Διατριβών Ε.Κ.Τ.(www.ekt.gr) http://hdl.handle.net/10442/hedi/29032

At the level of “Understanding”, the child has realized the data memorized in the previous level and is able to convey this in more intelligible verbal forms, such as to define, explain, to paraphrase (say in his own words what he heard or saw), to generalize and extend the knowledge it holds. The use of Bloom’s taxonomy was necessary for the descriptive analysis of research data. The above technique is selected because it: a) is a standard reliable driver that is used in combination with other tests and it also gives descriptive information which can help the teacher to the student’s classification in one of the stages and evaluate the reasoning ability of critical thinking and maturity of the student, b) Bloom’s taxonomy provides no specific age at which the child has to achieve at some stage so as to be considered competent. The student is guided to learn how to express his thoughts around a theme spoken (and written) by the simplest means of expression which is the stage of Knowledge according to Bloom up to the most complex and of critical ability stage, which is the evaluation stage.

In this research, in each question the corresponding statement is considered: does not know when the child does not use any word, which is a true characteristic of the environmental concept of the word, and ranked in the 1st level, Incomplete, when the child uses by any to one word, a true characteristic of the concept of the word, and ranked 2nd level, Partial, when using or associating two to three words, and ranked at 3rd level, correct / complete when he uses four words and more and can report, paraphrase (say in his own words what he heard or saw), define, explain, generalize, using accurate vocabulary, therefore, in this case, is ranked at 4th level

No word: DO NOT KNOW (1st level)

One word: KNOWLEDGE (2nd level)

2-3 words: UNDERSTANDING (3rd level)

4 - And the following words into practice corresponding action: APPLICATION (fourth level)

1st The children level of children’s classification contains: definitions, reports, declarations (0). 2nd level of children’s classification may include: definitions, references, declarations (0-1 words). 3rd The classification level may include: explanations, correlations, paraphrases, findings, comparisons (2-3

9 Matzangoúras, H., (2002), Στρατηγικές Διδασκαλίας: Η Κριτική Σκέψη στη Διδακτική Πράξη, Αθήνα, σ. 220 - 224
11 Μέξη, Ευγενία. (2013). Οι καλλιτεχνικές μορφές ως θεμελιακά στοιχεία της επικοινωνίας και μαθησιακής διαδικασίας στο χώρο του νηπιαγωγείου. Διδακτορική Διατριβή, Παιδαγωγικό Τμήμα Νηπιαγωγείων Πανεπιστημίου Ιωαννίνων. «The artistic forms as fundamentals details of communication learning process as the kindergarten» Εθνικό Αρχείο Διδακτορικών Διατριβών Ε.Κ.Τ.(www.ekt.gr) http://hdl.handle.net/10442/hedi/29032
words). 4th The classification level may include: generalizations, projections (4 and more words), but also corresponding action by the semantic content of the survey.

The lower level designations, e.g. reference can be given with more words, since this function to show the quality of the meaning of words. And the level classification is the quantitative indicator. The quantitative indicator used to measure the quantity of proposals before and after the program implementation.

The interview and the game environment led to the collection of research data

Based on their experience, knowledge and knowledge of the field of preschool and language skills of these children, was designed to release the semi-structured interview, with the help of which we seek to give answers to our research questions, gathering, evaluating through this growth figures phrases words (language) of children associated with environmental concepts. The interview is perhaps the most widely used quality material pumping method and information in the social sciences\textsuperscript{12}. In this investigation, the semi-structured interview is used, that is characterized by a set of predetermined questions, but presents much more flexibility as to the number of questions, as to the modification of the content questions with the interviewee and to add or remove questions and topics and was judged as more appropriate for the age of children addressed.

The questions (target: vocabulary, understanding environmental concepts, semantic analysis) indicative are as follows:

• How would you describe a lake?
• How many different things can you do in a lake?
• How many different things can you do on the banks of the lake?
• What comes to your mind when you hear the word “tree”?
• What comes to your mind when you hear the word “grebes”?
• Can you name the movements you do when you play in the water?
• Can you name the movements you do when planted a flower or a small tree?
• How do you feel when you play with your friends in the lake?
• How do you feel when you play with your friends in the forest?

• How would you feel if your friends are not playing?
• In what ways can you show that you are happy / that?
• Do you know what “recycling”? Imagine how many things you can gather in a yard?
• What are thinking of when you hear the word “garden”?
• When you hear the word “lake” which things come to your mind?
• When our kindergarten teacher said: “observe the courtyard,” what should we do?
• What are some things you can understand, if you see, or if you touch them?
• How do you imagine a different court?

Control activities (target: application of environmental actions target), are indicated as follows:
• Cleaning of the yard, by objects found by chance one morning thrown in the yard of the kindergarten and the children cleaned the yard voluntarily and not as a recommendation of the kindergarten.
• Cleaning of courtyard, various objects and fit into special containers made of plastic, aluminum and paper materials found completely randomly thrown in the kindergarten yard and prevented sports activities of children. Children first cleaned the yard, then arranged the materials in the respective bins and then conducted sports activities which were planned.
• The same activity was also done in the playground located on the lake shore with kids helping the teacher in the cleaning of both the beginning and end of the visit after the game.
• Children participated in planting flowers and small trees in a defined area on the edge of the lake.
• After visits to coastal areas of the lake and games and sports activities had taken place, the children were arranging cleaned and discarded objects according to their type (paper, plastic, aluminum).

The Determination of correct answers and the restrictions on questions of child interview

The interview questions regarding the concepts of ‘lake, nature, object recycle, man, planting trees. «They are referred, first, to the deepest meaning of these concepts and their relationships with a broader totality (environment). In the second level the physical characteristics and properties of each concept (form, shape, and state) are sought and in the final level the importance of each concept separately, as well as its relations with other concepts. In this way, the answers to both questions of the interview and the activities are defined as correct or incorrect, when proven or not, the essential fining in objects or phenomena or in the identification in the properties and relationships between objects or phenomena from the student.
Specifically mentioned:

Question: 1, description of Lake.

Taken as correct and measurable answers all words related to Lake properties (live fish, livestock, birds have water, there are boats) size properties (great depth, water color), emotional descriptions (useful, the fish love it and birds etc.), activities (feeding humans fish, winter swells and angry. They are not counted as correct, words on the repetition of the question (lake).

Activities

The criterion was to maintain the children’s interest for energetic, enthusiastic participation and that was what determined the choice of activities. The per field goals made and the implemented activities are presented below.

In the field of Creation and Expression: Physical education

Objectives:

• The development of motor behavior through the development of physical activity,
• The acceptance and compliance with the rules,
• The appropriate use of educational materials and the development of positive attitudes for collaboration, mutual acceptance and support.

Activities:

They played chase in the courtyard as carps and Tsims (large and small fish) Carp was chasing the Tsim and when caught they were bringing them to their nest. In order to free them, the remaining fish had to make them laugh with funny faces.

They danced with ribbons, in a circle or in pairs, dances and each of them they improvised as they wanted.

They swam in the pool.

They created small potholes in a specially designed area by digging a small plastic shovel and then they filled them with water, forming small ponds.

They played in the backyard versions of traditional games “blind man’s bluff” and “pass the bee goes,” and they were called to choose between the stork and eel.

They attributed music kinetic songs.
They built boats in the yard with plastic bricks and using sticks of psychomotor domain they played the game “sailors and captain.” A child was the captain and when giving the slogan ‘the oars, “the sailors ran to their boat and began rowing while when they gave the slogan “in the land “ they went out of their boat and whoever came out last became the captain.

In pairs they played the game “ship and passenger”: every couple was holding a ribbon and the child who was “ship” was leading child-passenger, by pulling the ribbon. Then they changed roles, while a variation of the game the passenger had closed his eyes with a cloth.

During the intervention, the children are shown purification and separation techniques of materials, planting techniques. The cleaning was combined before and after the games and sports activities. It was used the participant observation to collect data. For recording data during the intervention they were used observation notes, and tasks of children.

In the field of Creation and Expression: Art

Objectives:

• Development of imagination and creativity,

• growing of visual perception,

• Observation, experimentation, research and use of experience as elements of artistic creation and expression,

• Training in the use of materials and various techniques for acquiring skills and fostering the produced projects

• Understanding of art as a medium of expression and communication.

Activities:

We made a model of the seabed, using fine sand and pebbles, Styrofoam, light blue crepe paper and plasticize in different colors for fish, crayfish etc.

We constructed pencil holders with roll paper, tempera, atlakol and shells.

We painted ships with markers and oil pastel and waves with water colors.

We made in teams a landscape of the lake using prints of apples, carrots and onions.

We made mirrors and decorate their outline with materials that had been gathered on the beach: reeds, pines (shells of lake) fine gravel. We manufactured fish with clay and, when dried, we painted them with
the markers. We split children into two groups: we gave each team a large circle of white cardboard Kansas.

We painted on stones that we had brought from the banks of the lake, using tempera and sticks and we made landscapes with lakes. We built boats using cardboard, clay and toothpicks.

With the technique of collage, we created a mosaic on the fish.

A group of children painted the boat and cut them, the second made fish, birds, frogs with plasticize and the third one painted with tempera, Kansas cardboard, mountains, sun, birds and at the end all groups created a synthesis on the subject of lake.

*In the field of creation and expression: Drama*

**Objectives:**

- To express themselves through dramatic play and imitation
- To practice their linguistic and expressive capacity through the processing of literature texts
- To cooperate and create together
- To chose and use creatively various materials useful in dramatic art.
- To cultivate aesthetic expression and their creation.

**Activities:**

We dramatized excerpts from fairytales and stories that were used in the program. The scenes were chosen by children: from the t.v. child series “SpongeBob” it was chosen to dramatize the scene with the big fish chasing Bob the sponge and his friends, catches him but in the end the cooperation of Bob the Sponge’s friends and their cleverness saves them from the adventure. Children built their heroes in paperdolls form Kansas cardboard, they got it firm with plastic or wooden skewers and played them in Puppet Theater.

With paper dolls they also played Shadow Theater.

They played Pantomime on “island trip”: they were divided into groups and children-boat whistled or made boat maneuvers on the waves while travelers children imitated how people make when they enter the ship, when they come, in during the journey, when they are dizzy, other children made the island and its inhabitants, etc. They played in pantomime the movement of various fish and birds of the lake, the fishermen who fish with net or fishing rod and the waves.
Children lying were dreaming of travelling and ships, they recounted their dream, voted the best and then they dramatized it. In spontaneous activities affected by the program, they were playing role-playing games related to the lake, animals, fish, and birds of the lake.

The children built boats with materials of the psychokinetic field and disguise, handed out the same roles and traveled in stormy lake with monsters and witches they became pirates, they discovered the paradise island with treasure, became sailors made who helped people on the boat.

We defined a blue sail area as the bottom of the lake and the children were asked to get into it a part of the animal kingdom of the seabed. One was lobster, another carp, eel, grebes, frog, turtle, etc. They took the position they wanted, improvised on the movement and recited humorous verses that we have helped them to make. For example, carp said: “I’m the carp, silver and blocky, and I clean the Lake and the reeds I vanish.”

In the field of Creation and Expression: Music

Objectives:

• Develop skills to playing various musical instruments and singing, performing their own compositions
• To respond to symbols, slogans and instructions
• To show their performances
• To improvise and express themselves through simple musical
• Be familiar with different types of music, for example, traditional, artistic, classical.

Activities:

We heard music and songs told relative to water and fish (It was a small boat, the boat comes out, the little sailor), while in some of them they used movements too.

Divided into groups of ducks, storks, eels and frogs they made an orchestra with the carp as a conductor. Each team picked up from the musical instruments those ones that would represent it: the ducks chose the tambourines, maracas the storks, frogs the bells and eels the scraper. The conductor appointed who will play first, who second, and when to play together.

Children accompanied by music and holding sails, moved themselves pretending waves. Also they dressed with sounds relative fairy tales like, like Trigonopsarouli using musical instruments of the kindergarten or other materials that were in the corner of greengrocery or kitchen.
Divided into two groups, large and small fish, and with the soundtrack of classical music they reproduced with movement the intensity and tempo of audio: When the sound was slow they were moving the small fish improvising, and when it became loud and fast they were moving respondingly the big ones.

Children reproduced vocal sounds that are heard in the port when ships are loading or when sailing.

_In the field of Language_

**Objectives:**

- Encouragement for children’s narration, explanation, interpretation of personal experiences or literary texts (Ali Pasha Efrosini dame, the island of Ioannina, local historic people of the town)
- Participate in discussions regarding the compliance to rules.
- Development of basic argument of the children to justify their views
- Awareness of the spoken-written language relationship and enrichment of the spoken word with the use of accurate, relevant words, phrases, etc.

**Activities:**

We read relevant fairy children to children, poems, stories turning the book toward them, to realize that what is read is the text, not the image.

We had questions about the plot and comprehension of the story.

From the tale that we read, the children distinguished words that they liked and built with these sentences, which they read loudly and then we wrote them in reference table.

They even tried to copy words they liked about the story.

Regarding writing, during the visit on the shores of the lake, the children wrote letters and words they knew in the sand with sticks they found.

In their visit to the lake environmental park they wrote on the guest notebook their name.

The children brought home stories, proverbs relating to the matter. We wrote and read them.

Language and writing were cultivated through also the activities of all program fields.
**In the field of Mathematics**

**Objectives:**

Perception capacity development of some properties, relationships and combination of information from the surrounding world

Compare and transformation relations and procedures with test and control

Implement relevant math structures to new situations

Expansion of early mathematical knowledge of children through experiential situations.

**Activities:**

We gave the children frogs, ducks, fish, in Kansas cardboard in various sizes (large, small, wide, narrow), which they classified and set in order from higher to lower and vice versa.

We played the team game “the fisherman and the fish”: we distributed the tags with fish in various sizes to children. Children were running freely in space and when the fisherman shouted, for example, “I have caught small fish” all children with a tag with small fish ran close to him.

They made fish with plasticine, made classifications by color, measured and placed the number tab.

They made rankings along with reeds gathered from the shores of the lake.

They painted boats in various sizes, cut them and had classifications of color, size and relative quantity of card-number.

**In the field of Environmental Studies: Natural Environment**

**Objectives:**

- To broaden their knowledge of the natural environment (flora, fauna)
- To broaden their knowledge of animal organisms living in the lake (fish, amphibians, birds, insects, invertebrates)
- To broaden their knowledge of plant organisms that live in the lake (aquatic plants, reeds, trees on the banks, flowers)
- Experiment on the properties of water, color, taste, the concepts of immersed - floats and the phenomenon of buoyancy
- To broaden their knowledge on the air-water relationship - earth-man.
**Activities:**

We gave books to the children about life in the lake and then a discussion followed and they painted what they liked.

They were viewed DVD on the lake, its history, its geographical location, the fish of the lake, the bottom of the lake, and discussion was followed. We visited the beach where children collected reeds, seaweed or anything else relevant has been carried away by the wave.

When we got back to kindergarten, they noticed the reeds and sorted them out by size, and they tried to make baskets with them.

In a plastic bowl, we put water and immersed objects, eg, stones, rods, sheets, plastic toys, wood, pencils, eraser, paper, a metal spoon and plasticine. Children foresaw the result, and then determined whether their prediction was correct. Through the process of object immersion we also had the opportunity to talk about the buoyancy. The children experimented on the water color with tempera, predicting the outcome.

They got transparent bottles and glasses in different shapes, put water and made their observations. With closed eyes, smelled vinegar, cologne, and water and made their observations and led to conclusions.

We saw images with stormy lake and waves of various sizes, in other images we saw the frozen lake and discussed, while children showed great interest.

While walking on the lake shores in day storm, children observed the waves, the foam of the waves and made their conclusions.

*In the field of Environmental Studies: Human Environment*

**Objectives:**

- Children to broaden their social surrounding, while developing their self-esteem and critical thinking at the same time.
- Develop cooperation abilities
- To understand the interaction in relationship of nature and man.

**Activities:**

We visited the lake, the environmental park of the lake, the lakeside road, playground just next to the shores of the lake, the boats of the lake, the island of Ioannina and we used these visits as a field of action and observation.
Children looked for materials from nature, but also elements of human presence. They found reeds, wood, water plants and several empty packaging (plastic bottles, paper). A discussion followed on the pollution of the environment and the lake, and then the kids decided to set up traps in the sand, with the wood and the stones were for those who pollute beaches and lake. The children even painted inspired by the environment, played in the sand with their shovels and also played the game of the lost treasure. Children painted the lake on cardboard in teams and with the help of kindergarten teachers wrote their message “lake, the lovely lady that always gives.” Their work came in a glass bottle to travel to other nursery schools on the island and the opposite shore of the lake.

We conducted a study visit to the Public Library “Zosimaia” in Ioannina, where the children attended educational programs of knowing the Library and the lake. They saw the books on the lake, fish, aquatic mammals, birds of the lake and the boats and then they painted. By their work we made a book to remember the visit to the public library.

Also, we visited the Municipal Enterprise of Ioannina Lake. The children were guided by the director to the newborn fish incubation spaces in basins with different kinds of fish, and their parents.

We also went to the harbor, where the fishermen earn their living with fish, and boat tour around the lake and visits to the island of Ioannina.

The kids went to small fishing boats and stared at the oars, nets, anchor, saw the machine in some of them and one of their fisherman explained how he manages the boat, how he casts nets, how deep is the lake and answered in any query the children had.

Another fisherman had in his boat a bunch of dried reeds that he cut through the lake and showed the children the way how they wove baskets in the old days and sold them in the market and it was a profession that was extinguished with time.

We asked the children to bring information from home about pond fish, we achieved the emergence of folk element after the information about the customs and traditions of other littoral and coastal areas of Greece had been emerged. This helped the children to understand in a better way that the lake is a human bridge. They were also asked to bring photos of Ioannina, old and recent ones.

We were concerned together with the children what could be done by young and older people to maintain the beauty of the place. Moreover, we conducted a series of activities on the World Environmental Day. The children were divided into three groups; they made an artistic creation on the lake. Then cleaned a part of the shore of the lake near our kindergarten and played with their buckets, making constructions in the sand.
The dissemination of our environmental program in the wider local community was the final celebration and exhibition of constructions made by children during the program.

*In the field of Information Technology*

**Goal:**
- To perceive the computer as a machine that helps humans to work
- To recognize the main units (keyboard, working screen, mouse) and the computer as a single system
- Develop activities under a variety of group and composite assignment
- The children to understand the impact of new technologies in the various fields of human activity.

**Activities:**

The children watched a CD-ROM relating to the lake and the life within it. Then there was a discussion about what they liked and what impressed them.

Then the children, painted like that from what they saw.

Also, we created together a story on the lake and then the children painted scenes from history using tools freehand (pencil, brush, spray, etc.) and finished geometric shapes, with the help and support of teacher.

**THE RESULTS OF THE RESEARCH**

For the collection of the research results they took place:

- Non-parametric statistical analysis
- Frequency Tables and respective rates
- Chi - squaire
- Friedman test
- a - Cronbach = 0.78

The internal validity index a- Cronbach was 0.78 indicating that the ten games used in measurement (initial, final, retention) was reliable.

**Initial measurement**

In the results of the initial measurements we see that in the first game 57 (67.9%) of 84 children from the experimental and control teams were not aware of environmental concepts, unlike 14 children (17.00%)
knew and 13 children (15.90%) were applying knowledge of environmental protection on the game. In the second game 59 (70.20%) of 84 children from both the experimental and control teams were not aware of the concept of environmental protection and participation in it, 20 children (24.00%) knew and 5 children (6.00%) applied their knowledge about the environmental sensitivity on the game.

In their entirety for all ten control games for all the children in the sample, we observe that there are 651 (77.50%) observations according to which the children were not aware of environmental concepts, while in 140 children observations (16.70%) they seem to know, and in 49 ones (5.80%) to apply their knowledge to the knowledge requirements and game attitudes to environmental awareness.

<table>
<thead>
<tr>
<th>GAME</th>
<th>I don’t Know</th>
<th>I know</th>
<th>Understand</th>
<th>Apply</th>
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**Final measurement**

The results of the final measurement we see that in the first game 36 children in the control group (42.80%) of the 84 children of the total sample were not aware of environmental concepts, while 48 children (57.10%) applied knowledge on the protection of environment on the game. In the second game 35 children in the control group (42.00%) out of 84 of the total of the sample did not know the concept of environmental protection and participation in it, while 49 children (all children in the experimental
group, 58.00%) applied knowledge about the environmental sensitivity on the game.

In their entirety all ten control games for all the children in the sample, we observe that there are 356 (42.20%) observations in which children were not aware of environmental concepts, while in 484 children observations (57.60%) its seems to apply their knowledge on the knowledge requirements and game attitudes to environmental awareness.

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<thead>
<tr>
<th>GAME</th>
<th>I don’t Know</th>
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<td>42.40</td>
<td>484</td>
<td>57.60</td>
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</table>

Conservation measurement

In the results of the Conservation measuring three months after the final measurements, we see that in the first game 36 children in the control group (42.80%) of the 84 children of the total sample were not aware of environmental concepts, while 48 children (57.10%) were applying knowledge of environmental protection on the game. In the second game 35 children in the control group (42.00%) out of 84 of the total of the sample did not know the concept of environmental protection and participation in it, while 49 children (all children in the experimental group, 58.00%) applied knowledge about the environmental sensitivity on the game.
In their entirety all ten control games for all the children in the sample, we observe that there are 356 (42.20%) observations in which children were not aware of environmental concepts, while in 484 observations (57.60%) children seem to apply their knowledge on the knowledge requirements and game attitudes to environmental awareness.

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Table 9: Results of Non-parametric statistical analysis

<table>
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<th>Friedman Test Measurement</th>
<th>x²</th>
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<tr>
<td>Pre – test</td>
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<td>Post - test</td>
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<td>Maintenance</td>
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The results of the non parametric method of statistic analysis for the repetitive measures (Friedman Test) in the initial measurements of the two teams (experimental and control one) showed that there aren’t statistically important differences ($\chi^2=132.47$, df=19, pDOUBLE TAIL=0.13). On the contrary, there are statistically important differences ($\chi^2=57.132$, df=19, pDOUBLE TAIL = 0.001) in the final measurement of the scores that the two teams have with the experimental one succeeding better. In
the measurement of maintenance, we see indeed that the experimental team sustained and applied the meanings of diversion two months after the intervention while the differences between the experimental and control team remained almost the same with the final Measurements.

**CONCLUSIONS AND EVALUATION**

Jean Jacques Rousseau in his work “Emilios” describes how a little boy conquers knowledge through exploration of nature and not through books. He argued how children learn best from direct experiences offered by their living environment and firstly they learn from nature and the people who are around them. Friedrich Wilhelm Frobel understood the importance of the external environment for education, recognized the value of the game, and encouraged the children’s spontaneous activities as well as the exploration and experimentation with the outdoor natural environment. The choice of the specific matter is entirely successful and the objectives we set at the beginning of the program were achieved Cognitive ones: to know the ecosystem of the lake, to understand the relationships governing the lake ecosystem, to understand the ways in which man exploits the lake, to realize the ways in which human activities negatively affecting the ecosystem of the lake, to know the history of the lake region. Emotional ones: developing children’s critical thinking, developing interest in the environment and related problems, encouraging children to protect the environment, encourage children to adopt measures and decisions on tackling environmental problems. Psychomotor ones: observe (natural environment, flora and fauna), classify (animals, fish, birds, plants, objects different material such as paper, aluminum, plastic with various criteria), development and cultivation skills of information gathering and data, organization, recording and classification (field observation, paintings, meetings with relevant bodies), to carry out activities (representation lake with the body with another material, work in groups, present problems and solutions (degradation of the lake), what can we do to protect life in the lake). The children learned about the true condition of the lake ecosystem as that: the lake has a lot of oxygen (eutrophication), the fish are disappearing, being lost, the lake water near the city is not clean because it is polluted by human activities, the birds on their journey encounter many difficulties because there are illegal hunters.

They worked in groups inside and outside the classroom, they had the opportunity to broaden their social environment and develop excellent interpersonal relationships outside the kindergarten limits. Shy children, hyperactive, children who have not succeeded at the cognitive level, did their best in other sectors and thereby strengthened their self-esteem and their self-confidence. The interest of the children in the experimental group and their involvement with experiential exploration and experimentation activities remained until the end of the high-level program. Their physical and sports activities performed well, their work in art was qualitative and also showed great skill and talent in dramatizations and theatrical games. It was also shown by the retention measurements made three months after completion of the intervention,
that children in the experimental group maintained their environmental knowledge and applied them respectively in case. They cultivated their critical thinking and active listening, essential for the healthy socialization of the person. Additionally the parents had excellent cooperation: they helped implement the program both by their attendance, and their economic contribution and were involved in the investigation and information collection process, thus giving the best model for their children in this direction. The program even helped to highlight intercultural component acceptance and communication of children of different nationalities (Greeks, Albanians, and Pakistanis) through cultural customs. The team, as a leader, coordinator and facilitator of the children’s program noticing their gradual improvement and the development at all levels; we felt pleasure and satisfaction, but also the commitment to implement the same program to a greater number of kindergartens. In general, this program helped the children step ahead on the development of their personality and their integration in society.

The results of this research could be important for the kindergarten teachers who want to develop both outdoor physical and sports activities on environmental programs. Through the active participation of children in the outdoor motor activities and their awareness on environmental issues, they could achieve significant motor, social and emotional issues associated with both the personality of children and the wider society and community. Also, the findings of this research could be a stimulus for the future design of environmental educational programs from kindergarteners.

Βιβλιογραφία


Bloom & Krathwohl, (2000), Ταξινομία διδακτικών στόχων, τ. Α, Γνωστικός τομέας, μτφ. A. Λαμπράκη-Παγανού, εκδ. Κώδικας, Θεσσαλονίκη,


Brunner G., Horning E., Jönsson B., Malmberg C., Olsson A., Skoglund G., Strömberg S., Svedbom
The contribution of an interventional program of psychokinetic education to the development and maintenance of the young children’s environmental sensitivity: the case of Ioannina.


Recreation Network Education in the Outdoors. Sheffield: Countryside Recreation Network.


The contribution of an interventional program of psychokinetic education to the development and maintenance of the young children’s environmental sensitivity: the case of Ioannina.


Καμπάτης, Χ. (2004). Η έρευνα στις αθλητικές επιστήμες. Στατιστική ανάλυση αξιολόγηση. Αυτοέκδοση, Θεσσαλονίκη
Ματσαγγούρας, Η., (2002), Στρατηγικές Διδασκαλίας: Η Κριτική Σκέψη στη Διδακτική Πράξη, Αθήνα, σ. 255 - 290

Μέξη, Ευγενία. (2013). Οι καλλιτεχνικές μορφές ως θεμελιακά στοιχεία της επικοινωνίας και μαθησιακής διαδικασίας στο χώρο του νηπιαγωγείου. Διδακτορική Διατριβή, Παιδαγωγικό Τμήμα Νηπιαγωγών Πανεπιστημίου Ιωαννίνων. «The artistic forms as fundamentals details of communication learning process as the kindergarten» Εθνικό Αρχείο Διδακτορικών Διατριβών Ε.Κ.Τ.(www.ekt.gr) http://hdl.handle.net/10442/hedi/29032


ΥΠΕΠΘ/ΠΙ. (2002). Διαθεματικό Ενιαίο Πλαίσιο Προγραμμάτων Σπουδών για το Νηπιαγωγείο και Προγράμματα Σχεδιασμού και Ανάπτυξης Δραστηριοτήτων. Αθήνα: Υπουργείο Εθνικής Παιδείας και Θρησκευμάτων /Παιδαγωγικό Ινστιτούτο.


Enabling children to reach their full potential: An integrated approach for professionals in education

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ABSTRACT

Teaching teachers to teach effectively is a very challenging, complex and multidimensional process. Professional development reinforces perception of professional self and contributes to the development of knowledge, skills and practice in a complex and continuously changing learning environment. For this reason, when designing programs in Higher Education to facilitate teachers’ professional development, we need to consider the diversities and challenges set by societies nowadays. Teachers need to be well educated, engaged in lifelong learning processes, highly trained in new technologies and familiarized with new counselling trends in the educational environment. Combining research and education is a new challenging approach from which there are benefits for both teachers and students. Getting involved in a research project with your students will empower you, increase your knowledge, your teaching and your effective intervention where needed. Above all it will make your students understand the real meaning of research and the unique procedure from a question and a problem to the answers and the practical implications in a real classroom situation. The study explores the role of teacher as researcher and analyses the benefits for all the participants. Attitudes of in-training teachers and students participating in educational placements are also analysed. Findings indicated that when teachers are actively involved in research activities they are more motivated and more willing to gain specific skills and knowledge on the topic of their research interest. Focusing on the role of teacher as an expert in children’s behaviour and learning ideas to facilitate teaching procedure using research findings is discussed.

Key words: research, teaching, children, teachers, professional development
INTRODUCTION

Perception of professional self contributes to the development of knowledge, skills and practice. Teachers now days need to be well educated, engaged in lifelong learning processes, highly trained in new technologies and familiarized with new trends in the educational environment. This increasing demand results in an increasing pressure and working stress as many of the teachers in schools feel that they have to work many hours and in most cases they do not have the skills and the support they need. A recent study in UK, indicated that 43% of teachers in England plan to leave; 98% are under increasing pressure and 82% say their workload is unmanageable (Guardian Teacher Network, 2014). The 4,450 responses to the survey, shows many teachers across England are at crisis point. Almost all – 98% – say they are under increasing pressure and 82% describe their workload as “unmanageable” and only 12% say they have good work-life balance. In addition, they are feeling that they do not have the skills to support their SEN (Special Educational Needs) students and they are not motivated in their work.

Teacher research offers a powerful inquiry paradigm, one that can both complement traditional, outsider-driven social science research and check the possible errors and inequitable outcomes which result from educational policies strictly reliant on the large-scale quantitative research designs currently dominant. However, education lacks a strong infrastructure for connecting research with educational practice and policy and a fundamental infrastructure for connecting the work of researchers and practitioners. The need for this linkage grows as findings in cognitive science and biology become ever more relevant to education. We need to build an infrastructure that supports sustainable collaboration between researchers and teachers and creates a strong research foundation for education

The need for this kind of structure grows as research from biology and cognitive science becomes ever more relevant to education. Teachers often lack the background knowledge needed to interpret scientific results, whereas scientists often lack an understanding of pedagogical goals (Goswami, 2006; Pickering & Howard-Jones, 2007).

These new challenges augment the need to build an infrastructure that supports sustainable collaboration between researchers and teachers. Research schools will be living laboratories for field-testing new techniques, training teachers and researchers, and promoting dialogue between researchers and practitioners. They will improve pedagogy by grounding research in practice and practice in research. Schools also provide an appropriate setting for certain types of experiments. For some research questions (e.g., questions about how curricula affect learning), experimentation in school settings is the optimal methodological approach. Experiments conducted in schools include not only traditional, controlled experiments but also “design experiments” (Brown, 1992), which involve theoretically based interventions
implemented in natural settings (such as classrooms), using an engineering-style approach of design-
evaluate-redesign, typically without control or comparison groups. For both traditional and design
experiments, teachers are essential collaborators in the research process. For example, in a large-scale
study with 80 classrooms, Hygge (2003) investigated how different sources of noise (e.g., aircraft, traffic,
train, and verbal noise) affected children’s memory for texts. Aircraft and traffic noise were particularly
detrimental to children’s memory. Likewise, Church, Ayman-Nolley, and Mahootian (2004) examined the
role of gesture in communication for monolingual and bilingual children, using video lessons presented
in classroom settings. They found that gesture contributed significantly to learning for both groups of
children. These findings are particularly important when designing adaptations to teaching methods and
intervention programs for students.

Classroom research is sometimes part of a cycle that proceeds from laboratory to classroom and back
again. As one example, in a laboratory-based training study, Chen and Klahr (1999) developed a procedure
for instructing elementary-school children about the control-of-variables strategy, a fundamental aspect
of scientific reasoning. Based on this laboratory research, Toth, Klahr, and Chen (2000) designed a lesson
plan and tested it in classrooms. The results included some surprises that suggested new directions for
further lab-based and classroom research. Thus, basic research on cognition and development can inform
classroom practices, and research on classroom practices and their effectiveness can guide basic research
and theory.

The aim of this study was to explore and analyse teacher’s knowledge about research in teaching and their
attitudes about the benefits of participating in a research project with their students.

**METHOD**

In this study, data from 127 primary Greek teachers was collected and analysed. The participants were
selected from 32 primary Schools from Greece. The educators, mainly class teachers, had more than five
years working experience with primary students. Mean age for the participant group was MN=31, 2 years
(SD=3, 8) and 68% of the sample were female.

The participants completed a questionnaire containing 25 questions about their demographic
characteristics (part I), their knowledge about Research in Teaching (part II) and finally their attitudes
about possible benefits of participating in a research project with their students (Part III).

**RESULTS**

Analysis of the data indicated that the most of the participant teachers (75%) were more interested to
investigate through a research project issues that they are facing most often in their teaching practice
in schools connected with a) learning problems (24%), b) behaviour management, including bullying among students (58%) c) social interaction (18%), d) other problems. When were asked a possible way to structure their research plan in the beginning: a) 32% replied that they will review some reading material related to their research, b) 27% discuss ideas with teachers at same level from other schools, c) 13% identify other teachers with similar interests, and d) 21% begin researching options for action plan.

**Share information**

Often teams don’t make information available to the rest of the organization, and this knowledge ends up lost when certain individuals leave or when the team disbands. To avoid this, the information must be captured and institutionalized—a process that includes a range of activities to normalize, codify, and store knowledge. Analyzing the answers from the participants teachers about how they intent to share their research results we had the following responses: 23% replied that each teacher could share the results of their research in a digital format, b) 21% replied that digital reports can be put online where appropriate, c) 16% replied that they could think ahead to possible collaborations in the next year and finally d) 28% replied that the will have samples of actual work of children to share.

**Possible benefits for participants**

The last part of this questionnaire was referring to possible benefits for participating in a research project with their students. The participants had to choose one of the following answers or to write one of their own if not listed. Their replies were: a) evidence-based teaching that works (9%), b) psychology of learning and teaching 12%, c) opportunity to engage students (27%), d) opportunity to engage with colleagues in other institutions (11%), e) keeps you interested -teaching new things in new ways (14%) and finally f) publications -great conferences! –and raised profile (6%).

**DISCUSSION**

While teachers hold initial concerns about additional work involved in action research projects, these tend to dissolve as teachers realise the benefits these projects have on their practice and the enjoyment of their profession. Teachers indicated through their responses that when are actively involved in research activities are more motivated and more willing to gain specific skills and knowledge on the topic of their research interest. In addition, they replayed that they were more confident to design early intervention programs for students with Special Educational Needs and more confident to adapt teaching methods and their teaching style. Finally, they seem to be more confident when planning new programs and school policies, that they have the knowledge and the skills to provide the best solutions for all children to reach their full potentials.
Research schools can support sustainable collaboration between researchers and practitioners. Research schools partner with a university to build a research community in the school, train teachers, carry out research that is relevant to practice, shape research questions, and disseminate findings. Research schools provide a hands-on classroom for training teachers and researchers. Practitioners practice their teaching skills and learn strategies for collecting classroom data, including using journals and descriptive reviews (Hinton & Fischer, 2008). Teachers as researchers learn to work in schools as scholars-in-residence. The research school community promotes a school culture with research as a fundamental aspect of the school’s activity. Researchers and practitioners can collaborate in a cyclic process to integrate theory and practice. They develop theoretical models, implement practices based on these models, systematically track progress, and adjust models based on classroom results. Researchers and teachers can then continue this cyclic process for each theoretical model until it is aligned with classroom results.

Conducting research in schools presents both challenges and opportunities. Some research questions can only be addressed in school settings (e.g., questions about effects of instructional practices on development). Other research questions could be addressed in a range of settings, but there may be compelling reasons for addressing them in school settings (e.g., assuring a diverse sample). Regardless of the reasons for conducting research in school settings, one key to success is positive relationships with teachers and administrators. These individuals are essential partners and collaborators in research, and their contributions make it possible for research to cycle from laboratory to classroom and back again. This cycle has many benefits, both for theory and for application. Thus, it is essential for researchers to build and maintain these relationships.

Finally, it is important that researchers also give something back by sharing their knowledge and perspectives. Some of the things could help other educational professionals in many ways including: leading a semester-long professional development course for teachers, leading a professional development workshop on an in-service day, presenting findings at a staff meeting, serving on a district-wide task force about curricula, and serving on the district external research committee. These are some ways to give something in return for the time, energy, and accommodations that administrators and other participants offered.

**CONCLUSION**

Education needs analogous institutions —research schools — that join researchers and teachers in living, community-based schools. In these schools, practice shapes research as much as research informs practice. Research schools will provide a fundamental infrastructure for linking transdisciplinary research on learning with educational policy and practice. Education needs a strong infrastructure for grounding practice and policy in research as findings in cognitive science and biology become increasingly relevant.
to education. As living laboratories that connect the work of researchers and practitioners, research schools will support the bidirectional relationship between research and practice that is needed to ensure fruitful transdisciplinary work. Research schools will lay a fundamental infrastructure for connecting transdisciplinary research on learning and educational practice and policy. From a practical perspective, there are some guiding principles that can help school-based research proceed smoothly. Teachers participating in research activities with their students must emphasize the value of appropriate planning, the need for patience and flexibility, and the importance of consideration and respect for administrators, teachers, parents, and students. If researchers are mindful of these principles, schools will remain open to developmental research for many generations to come.

REFERENCES


An alternative practice for teaching informational texts in kindergarten

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ABSTRACT

The aim of the present study is to describe the steps for designing a new instructional practice to help kindergarteners comprehend non-fiction informational texts. The proposed practice includes activities which are based on principles of language and aesthetic literacies. The first one includes the skills of listening, speaking, reading, writing and critical thinking (Baynam, 2002). The latter’s theoretical underpinnings arose from the field of ‘arts integration’ according to which, when learners are taught through the arts, they are given opportunities to approach and translate what they learn into a variety of sign systems (Deasy, 2003). The proposed instructional practice adopts techniques embedded in the “Think Aloud” strategy and the “Questioning the Author” reading approach to help children develop comprehension skills. Specifically, children are encouraged to predict text information and activate background information before reading. Subsequently, during reading they are motivated to process text content, ask their own questions and complete a diagram with the teacher which presents the key words from the text. Having read the text, they summarize the key information by following the completed diagram. Throughout this process, arts activities are integrated to deepen children’s comprehension and help them interpret text information multimodally and creatively, using a variety of ways of expressing themselves, such as sounds, colours, shapes, movement, theatrical expression, and the expressive use of technology. To design the proposed practice, a non-fiction informational text was written on the subject of ancient Egypt. Indicative activities and indicators of learning outcomes are included in this paper.

Keywords: non-fiction informational texts, comprehension, language and aesthetic literacy, kindergarten
INTRODUCTION

In literature there is a fundamental distinction between two types of texts: narrative texts and informational texts. In preschool education children are usually taught narrative texts rather than informational texts (Pentimonti, Zucker, Justice, & Kaderavek, 2010), despite the fact that, in later schooling and as adults, people are mainly called upon to deal with the content of latter (Justice & Pence, 2005). Given this condition, the teaching of informational texts in preschool classes has not been studied in sufficient breadth or depth. There is a lack in the literature on teaching approaches that would enhance kindergarteners’ comprehension of informational texts.

The aim of the present study is to describe the steps for designing an instructional practice based on precise and innovative specifications, so as to help kindergarteners achieve a high level of comprehension of non-fiction informational texts. To begin with, the theoretical underpinning of the proposed teaching approach is analysed. A discrete view of the meaning of “comprehension” emerges and the objectives of the proposed practice are based on it. Following are model activities that arose from improvements made on preliminary-pilot implementations of the practice.

INFORMATIONAL TEXTS IN PRESCHOOL EDUCATION

Informational texts are non-fiction texts that aim to convey information about the natural and social world, using expository writing and structures different from narrative texts. Reading informational texts to kindergarteners helps them become familiar with complex concepts, specialized vocabulary and different text structures (Massey, 2014). In addition, exposing children to informational texts helps prepare them for the next stages of education, as these texts constitute the main reading material used by teachers in primary education (Kletzien & Dreher, 2004). It is likely that kindergarteners who have no significant exposure to informational texts will face difficulties in reading and comprehending them in primary education and present low literacy achievement (Chall, Jacobs, & Baldwin, 1990).

COMPREHENSION: AN INNOVATIVE APPROACH

In the design of the proposed instructional practice, “comprehension” is the target skill. We conceptualized this skill by combining principles from two theoretical approaches, those of language and aesthetic literacies. The idea of combining the two was based on the transactional theory of Rosenblatt (1986, 2004), according to which texts can be approached in two ways. In the first, called “efferent”, children focus on specific linguistic parameters (e.g. the formal and technical elements of the text or specific information contained in the text) which are taught based on the curriculum. The opposite of efferent is the “aesthetic” or “expressive” approach (Soter, Wilkinson, Connors, Murphy, & Shen, 2010),
in which every reader develops a personal relationship with the text. Readers have a qualitatively different response to the text and it is thus transformed into an intellectual, emotional, social and bodily experience according to the unique vision the individual has of the world (Narey, 2008). Recently, scholars (Swafford & Akrofi, 2005) have ascertained that the efferent approach is still the most widespread, although the best results arise from combining the efferent and aesthetic approaches in teaching.

With this in mind, elements of the literature on language literacy were explored according to which comprehension includes a variety of skills such as the readers’ or listeners’ ability to understand the meanings of the words and texts, as well as the meanings beyond the words of the texts. It seems that is essential that children become able to comprehend what they are hearing, seeing or reading, so they can evaluate, critique and apply the information presented in the texts in appropriate situations (Roche, 2015). More particularly, comprehension is best accomplished when the readers or the listeners activate background knowledge, predict and summarize key information in the text and ask questions in order to clarify and process the meaning (Duke & Pearson, 2008; Joseph, Alber-Morgan, Cullen, & Rouse, 2015).

The next step was to explore the aesthetic literacy approach (Albers, 2001) which holds that comprehension is the ability of a person to interpret and create meaning in multiple and non-linguistic manners of representation (Eisner, 2002; Lynch, 2007; Sanders & Albers, 2010), such as music, the visual arts, theatre and bodily expression and expressive use of technology. The objectives of aesthetic literacy have to do with people’s ability to recognise aesthetic characteristics, to respond critically and interpretatively and to derive aesthetic satisfaction from all kinds of stimuli (Parsons, 1990). Within the framework of aesthetic literacy as an educational goal, the arts are not just one more subject, but are seen as the basic building block of a new kind of learning environment in which children can experience the qualitative dimension of the knowledge they are taught (Green, 1981; Sykes, 1982).

**DESCRIPTION OF THE INSTRUCTIONAL PRACTICE**

The theoretical foundation presented above led to an initial design of the teaching practice which was then tested in preliminary implementations. The findings pointed to improvements and the final formulation of the activities to be used. From the view of language literacy, comprehension is accomplished when children process the main ideas of the text by predicting, asking their own questions, clarifying, activating background knowledge and summarizing key information. From the view of aesthetic literacy, indicators of comprehension are considered to be connecting the meanings in the text to personal experiences, being engaged in the process in a multimodal and multifaceted way and interpreting the information in the text. These elements are the objectives of the teaching practice being studied.

The activities included in the proposed instructional practice adopt techniques embedded in the “Think
“Think Aloud” strategy and in the “Questioning the Author” reading approach. “Think Aloud” is a cognitive strategy which readers apply to verbally express the mental processes they engage in when analysing and constructing text meaning (Afflerbach & Johnston, 1986). It is a strategy that can be used to help children develop comprehension skills and monitor their own comprehension difficulties while processing information (Baumann, Jones, & Seifert-Kessell, 1993; Pardo, 2004). The “Questioning the Author” strategy (Beck, McKeown, Sandora, Kucan, & Worthy, 1996) is an instructional approach suitable for tackling the difficulties children face in comprehending texts with a complex or less coherent structure, such as informational texts. This approach aims to help children comprehend a text by encouraging them to be actively involved in constructing its meaning and to explore the message the author wants to convey. While reading the text, the teacher asks questions to have children draw conclusions about the meaning the author is conveying in each part of the text. The activities included in the proposed practice also used the techniques of “aesthetic teaching” (Pike, 2004; Sotiropoulou-Zormpala, 2012) so that the children could make connections between the text and their personal, social and cultural environment, could become activated in a multifaceted/holistic way (Miller, 2007) and could give the information being taught multiple interpretations by creating their own meanings (Eisner, 2002). The activities used a variety of ways of expressing oneself, such as sounds, colours, shapes, movement, theatrical expression, and the expressive use of technology (Jonson, 2007; Sanders & Albers, 2010).

TEXTS

To design the proposed practice, we composed a non-fiction informational text on the subject of ancient Egypt. The text contained subsections on the Nile, clothing and appearance, religion and the afterlife, and the Pyramids. Appropriate visual material (pictures and photographs) was included in the text and then printed.

INSTRUCTIONAL PRACTICE: INDICATIVE ACTIVITIES

The activities included in the proposed instructional practice aim at helping kindergarten children develop the following comprehension skills: prediction, background knowledge activation, questioning, summarizing, connecting elements in the text with personal experiences, multifaceted engagement in the process and interpreting elements of the text. Indicative activities are presented to describe the techniques we used to develop comprehension skills.

PREDICTION

The teacher uses the “Think Aloud” and “Questioning the Author” techniques to cultivate children’s skills in predicting the subject of the text. The teacher might say: “I am holding a very interesting book
today, but I do not have the slightest idea about the subject. What can I do to guess the information that
the writer is presenting? I think that if I read the title and the subtitle of the book, and if I look at the
illustration on the front cover, I might be able to guess the main information that the writer conveys in the
text.” The teacher reads the title and the subtitle of the book and encourages children to observe the front
cover illustration in order to predict the subject of the book and its key information.

BACKGROUND KNOWLEDGE ACTIVATION

To activate background knowledge the teacher points at an illustration in the book and reads the caption:
“The ancient Egyptians believed in many gods. One of them was the god Anubis. He was half human
and half jackal and his duty was to prepare the dead for life after death.” The “Think Aloud” technique
is then used: “I am wondering whether in Greek mythology there is god who has common features with
the god Anubis. Think about what you already know about the gods in ancient Greece. Does the god
Anubis remind you of any of ancient Greek gods?” At the last step of this procedure the teacher provides
feedback to children’s answers and additional information so as to enhance their background knowledge:
“The ancient Greeks also believed in many gods, like Zeus, Ares, Athena, etc. Just as the ancient Egyptians
had the god Anubis, so the ancient Greeks had Pluto who was the god of the underworld; the place where
someone lived after his death.”

QUESTIONING

While reading the text the teacher uses “Think Aloud” prompts and “Questioning the Author” techniques
to encourage children to ask questions in order to:

a. *explain unknown vocabulary.* Indicative examples of what the teacher can say are: “The author states
that the ancient Egyptians had to keep the body of the deceased “unchanged”. This is important
information but I am not sure what the author means because I do not know what the word
unchanged means. What you would you like to ask the author about this?” The teacher encourages
children to form a question about the meaning of the word.

b. *clarify information.* The teacher can encourage the children to clarify information from the text as
follows: “Now that I know what the word unchanged means, it is easier for me to understand the
information presented by the author in this part of the text. But there is still something that troubles
me. I will read the text again and I want you to ask your own questions. This is an opportunity for
me to figure out if we have the same questions. I do not understand what the author means when
he writes: the body of the dead person was be the residence of his soul.” The teacher then tries to
encourage children to ask their own questions so they can get the clarification they need: “What
would you like to ask the author about this? If the ancient Egyptians did not look after the body of
the dead, what did they think could happen?”
c. *synthesize text key information*. Indicative prompts that the teacher can use to help children synthesize information are the following: “I wonder if the text provides some further significant information about the mummies. What might this be?” After the above prompt, the teacher provides feedback to children’s comments and guides them throughout this process by asking questions which help them elicit the necessary information: “What did they do to turn someone’s body into a mummy? What did they use?”

**SUMMARIZING**

While the text is being read, the teacher completes an appropriate graphical organizer with keywords and pictures displayed in the book to guide children in the summarizing process. After reading the teacher uses an appropriate “Think Aloud” prompt to help children summarize key information from the text cooperatively: “After finishing the text, it is useful to summarize, i.e. tell the basic information in a few words. This helps me remember the most significant information that the writer has presented in a book. The graphical organizer we completed during reading can help us in this.” The teacher uses the graphical organizer and points to the pictures and the corresponding keywords to help children summarize the information from the text.

**CONNECTING ELEMENTS OF THE TEXT WITH PERSONAL EXPERIENCES**

A theatre activity can be used to have children connect the information from the text with their personal experiences. The references to papyrus in the text can become the basis for a discussion on “how life would be without paper”. Divided into small groups, the children can then perform skits (e.g. a dialogue between a mother and child on how guests can be invited to a birthday party if there is no paper to write on).

**MULTIFACETED ENGAGEMENT IN THE PROCESS**

In order to engage the children bodily, intellectually, socially and emotionally with the information being taught, the teacher can provide them with opportunities to identify with situations and/or people mentioned in the text through art constructions or theatrical activation. Having on hand the appropriate
material, the teacher can help the children dress up as they want and discuss their choices, e.g. “Where are you from? Who are you? Are you a man? Woman? Slave? Pharaoh? Do you want to say something to us? How would you walk?” The costumed children would then be photographed by the teacher or classmates and at the end of the activity the photos would be shown on the board and the children would discuss their costumes.

**INTERPRETING ELEMENTS OF THE TEXT**

In order for the children to be given the opportunity to interpret and produce their own meanings on what they have been taught, the teacher can employ a musical activity. An extract on the afterlife can be read to the children two times, with two different types of accompanying music in a contrasting style (calm and march type music). In the following discussion, children are called upon to express an opinion on “which music was best” for the content of the text and “why”. It is made clear to the children that there is no right answer.

With the same goal in mind, children are asked to choose words in the text that made an impression on them and act the word out bodily as they wish. Each child’s presentation is discussed by the group, the word is found and the meaning the child has ascribed to it is discussed (how the child has understood it, how he/she feels about it).

**CONCLUSIONS. CRITERIA FOR ANALYSING EFFICACY**

This study presented the manner in which a teaching practice with particular specifications was designed so as to provide pre-schoolers with an opportunity to comprehend an informational text at a high level. What is innovative about this endeavour is combining the use of the principles of language and aesthetic literacy in order to analyse the meaning of comprehension. Based on this, it was observed that the range of goals for the proposed teaching practice expanded, and aimed to have the children approach the text both as a source of information and as a springboard for creating new knowledge based on the information. In particular, seven objectives were determined (prediction, background knowledge activation, questioning, summarizing, connecting elements of the text with personal experiences, multifaceted engagement in the process and interpreting elements of the text), which could be achieved in seven discrete stages, of which the first four arising from language literacy must precede the next three, which are based on aesthetic literacy. The existence of seven clear-cut stages could point the way to criteria which can be used to analyse the efficacy of this teaching practice which should be implemented repeatedly and improved.
REFERENCES


Proceedings of the
OMEP European Conference 2016
The Place of the Child in the 21st Century
Organised and hosted by UK OMEP

Held at
Canterbury Christ Church University, England
5-7 May 2016