

# Candidate Preschool Teachers' Internship Program Focused on Value Clarification and Skill Development in the Context of Environmental Education: Education for Sustainable Development

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**Abstract:** The internship program of preschool candidate teacher sat the Faculty of Early Childhood Education of National & Kapodistrian University of Athens (NKUA/TEAPI) is oriented towards Environmental Education/Education for Sustainable Development (EE/ESD). It is focused on contemporary issues in relation to the environment, sustainability and their underlying values. Candidate teachers plan and apply educational interventions, working in small groups under the supervision of the Professor and two in-service preschool teachers. The main aims of this internship concern the development of communication, collaboration, critical and reflective thinking skills, through the negotiation of environmental issues and the clarification of associated values. Trainees learn how to work in a team and familiarize themselves with the concept of reflection through an exploratory and reflective process.

**Key words:** internship, candidate preschool teachers, environmental education/education for sustainable development, (self)reflection, (self)exploratory, value clarification, skill development

## 1. Introduction

The internship program of preschool candidate teachers is oriented towards EE/ESD. Its objective is to promote teaching and learning skills, through the investigation of crucial environmental and sustainability issues, along with the underlying values associated to them. In doing so, it responds to the social demands of modern times. It draws ideas from contemporary and progressive educational currents, such as education for sustainability. Since these issues are primarily social (Schnack, 1998), it is important for the trainees to conceive them as such, within a wider conceptual approach. This perspective enables them not only to build scientific knowledge, but also to develop important values, attitudes and behaviors related to them (Flogaiti, 2006).

The focus on value orientation constitutes a multidimensional process for ESD and it is a characteristic of the

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internship program of candidate teachers. One of the main targets of EE/ESD is to re-examine the modern development models which has led to the multidimensional crisis that humanity faces nowadays, as well as to recognize and reconsider the values related to them (Dimitriou, 2009; Flogaiti, 2006). Therefore, candidate preschool teachers learn how to explore and critically analyze controversial modern issues and their accompanying values. They also learn how to promote the values of sustainability, such as social and ecological justice, solidarity, empathy, respect for all beings and tolerance towards diversity (Kaga, 2008, Liarakou & Flogaiti, 2009). Consequently, trainees become able to critically clarify and revise their personal values (Flogaiti & Daskolia, 2004).

Moreover, the preschool trainees' internship program enhances their communication and teamwork skills, through the collaboration, negotiation and decision-making processes that it entails and through the communication with the supervising preschool class teachers. Developing these skills constitutes another main goal of the EE/ESD. It focuses on the transition from individual activation to the necessity of teamwork, in order to achieve strategic changes in education and society (Huckle, 2006).

For the above-mentioned reasons, we decide to plan a mixed model of the enquiry-based learning educational process, adopting the qualities of what Schön (1983) refers to as a "reflective practitioner". Through a self-reflective approach, candidate teachers are trained to systematically observe, study and reflect on their teaching practice so as to improve it continuously. As Schön points out: "The situation talks back, the practitioner listens, and as he appreciates what he hears, he reframes the situation once again ... In this reflective conversation the practitioner's effort to solve the reframed problem yields new discoveries which call for new reflection-in-action. The process spirals through stages of appreciation, action and reap appreciation. The unique and uncertain situation comes to be understood through the attempt to change it and changed through the attempt to understand" (Schön, 1983, p. 132). We strongly believe that this model empowers the trainees to learn how to review their teaching practice, analyze and reflect on their experiences and re-evaluate their educational interventions according to their reflections. So, they develop the ability to rethink and redesign their action and activities, whenever necessary, during the education process (Boud, Keogh & Walker, 1985).

To summarize, the candidate teachers' internship is oriented towards EE/ESD and aims at enabling candidate teachers to: a) connect EE/ESD theory with educational practice, by taking into consideration its principles and objectives, b) understand the context of the school environment and each class, by developing observation and analytical skills, c) become familiar with the enquiry-based learning educational process and the reflective practitioner approach, d) identify their educational theory and reform it through their reflections and teaching practice, e) collaborate with each other, exchange views, agree and disagree constructively in order to consent and make collective decisions, f) take team action and build knowledge open to negotiation, g) appreciate and critically analyze values, attitudes and behaviors, k) clarify their personal values and be open to reconsider them according to the goals and principles of sustainability.

The supervising Professor responsible for the trainees' internship program oriented towards EE/ESD, collaborates with PhD members of the EE/ESD Laboratory of NKUA/TEAPI. The members of the Laboratory also work as in-service preschool teachers. Therefore, a pedagogical team is formed, which meets on a weekly basis. Within the team, the preschool teachers undertake a two-fold role and responsibility. On the one hand, they cooperate with the Professor in order to develop the theoretical framework of the trainees' internship program. Moreover, they attend the first planning sessions of the trainees, which are held at the University. On the other hand, they make sure that they are welcomed in their classrooms and most importantly, they are expanding their

role as mere supervisors by mentoring the trainees throughout the internship procedure. In particular, in-service supervising preschool teachers acting as mentors, support the trainee teachers in order to implement their educational plans in the class and also coordinate their reflection process at the end of each day. Both in-service teachers and trainees reflect on the daily educational action which took place during the day. They also consider all associated values that emerged from learning process, in order to review and redesign next day's activities and incorporate revised actions in their educational plans. Thus, through this action model, a high level of support and supervision of the internship is achieved. This model manages to effectively bridge the educational theory and the teaching practice. At the same time, prospective teachers develop communication, collaboration and self-reflection skills. They learn to critically evaluate, not only their personal value system, but also values related to environmental and sustainability issues that emerge in the classroom through the reflective process.

## **2. Reflection as an Exploratory and Self-exploratory Process**

According to the above theoretical assumptions, the reflection process run through the entire educational procedure of trainees' internship program focused on EE/ESD, both in individual and collective level. Firstly, through the reflective process, candidate teachers detect and identify their previous experiences and personal theories (Cochran-Smith et al., 2008). In addition, trainees learn to be open to criticism and to reconstruct any form of knowledge (Schön, 1983). Through the systematic investigation of a situation, they realize their educational status quo and perceive the socio-political dimension of the institution of education itself (Zeichner & Liston, 1996).

Specifically, reflection enables trainees to identify their previous knowledge and their personal value system, in relation to the learning experiences they have gained from both compulsory and optional university courses of EE/ESD. In particular, at the beginning of their internship, they are asked to form small working groups consisting of five or six people of their choice and begin to explore and reflect on the Interdisciplinary National Curriculum for Kindergarten focused on the EE/ESD. At the same time, they pose questions and share their reflections on the curriculum in plenary sessions. In-service kindergarten teachers interact with them and stimulate their queries and reflections. Afterwards, the Professor clarifies the basic principles and the specific objectives of the EE/ESD, in order to set the conceptual framework that all groups should adhere to throughout their internship.

For the next two weeks, candidate teachers visit the supervising preschool teachers' schools. Throughout these weeks, they become acquainted with the classroom environment and the pupils with whom they will interact. During this initial phase of the internship, they function as observers, thus they do not interfere in classroom activities. They are asked to pay attention and examine the classroom context, according to a non-participatory form of observation (Schatz, 1997) in order to collect information about the socio-cultural framework and the educational process of the observed classroom (Androusou, Kortesi-Dafermou, Tsafos, 2016). At the next phase, they focus their observations on environmental issues that they detect in school context, which they believe that require educational intervention. Also, they begin to recognize the values that are associated with those issues, according to the vision of sustainability. Thus, while their observations remain open, trainees learn to focus on areas of the educational process related to environmental and sustainability issues (Adler & Adler, 1994).

After classroom observations are completed, trainees reflect on their results within working groups and plenary sessions. Through group reflections, they interact and collaborate not only with each other, but also with the supervising teachers and they exchange their observations views and opinions. During this process they are

encouraged to share their views, agreements and their disagreements in a constructive and productive way. They share their records regarding both the context of the classroom and the issues related to the environment and sustainability that may require intervention. After exchanging opinions and reflecting on matters highlighted by their observations, they decide to focus their educational intervention on one of the environmental issues detected. This takes place through democratic procedures. Each working group selects one environmental issue to work with each class (e.g., “drinking water”, “sustainable waste management”, “acceptance, respect, tolerance towards diversity”, etc.).

As the internship is progressing it becomes apparent that trainees' reflective thinking ability develops through the adoption of interactive, dialectical and reflective practices (Schön, 1983). Specifically, they pose critical questions to all members of their working groups, which help them think deeply about the environmental issue they decided to examine. Through the analysis and comprehension of these questions in relevance to theoretical and research literature, prospective teachers seek out the debate on the environmental issue. They also clarify the conceptual framework that will support their educational action plan. The identification and further critical analysis of hidden values related to the environmental issue is crucial for this debate, as well as for the deliberation procedures among the group members that will follow. Afterwards, trainees proceed to analyze the framework of the environmental issue. Thus, they practice their reflection skills along with the ability to clarify their personal and social values associated to these issues. Group data and recordings are discussed in plenary sessions, in order to investigate whether and to what extent the principles of ESD outline the debate of the examined issues. This is accomplished mainly through deliberation and exchange of views in deep discussions among trainees, the Professor and the supervising class teachers. All members of the pedagogical team act as facilitators throughout the internship, encouraging trainees to ask questions, to analyze their reflections, to relate their educational intervention with educational research, in other words, to perceive the educational act as a subject of research itself (Katsarou, 2016).

During the next phase of the internship, candidate teachers work in their groups and plan the activities and actions of their educational intervention. These initial plans are based on the conceptual framework of the selected environmental issue they have developed during group and plenary discussions. This framework regulates the specific objectives of the designed activities and all associated educational actions in general. At the same time, trainees continue to assess and reflect on the values they have incorporated in their original plans, in collaboration with the supervising teachers. In other words, they constantly (re)negotiate a common value system that corresponds to the vision of sustainability. During the following week, they implement in class the activities and actions they have designed during the initial planning. We adopt a model of mutual observation among the trainees in pairs or in small groups during their internship in the classes. Thus, they (ex)change roles between the student/teacher in practice and the student/observer of action, carrying out either participatory or non-participatory observations of their educational intervention.

At the end of each day, all group members and the supervising class teachers review the intervention that took place during a whole group reflection meeting. Trainees who undertook active role as classroom teachers exchange views of their experience to the rest of the group: they interpret, analyze and reflect not only on the educational intervention itself, but also on their interaction with the children. They also share their thoughts about their involvement in the class, as well as their engagement with the wider school environment and the local school community (self-exploratory process). On the other hand, trainees who participated as external observers during the intervention also reflect on the initial planning. In addition, they monitor the achievement of general aims and

specific objectives. Finally, they review the selection and implementation of the planned activities and all actions that took place in classrooms. Then, they focus on the pupils' response to the lesson and their participation during the activities. Their observation also leads them to develop questions about the values that emerged during the intervention. Therefore, they exchange views in order to seek possible answers to posed reflections. Finally, all trainees reflect on pupils' collaboration attitudes and they assess their own willingness to cooperate as a team within the working groups.

The two-facet observation (participatory and non-participatory) help trainees to understand the educational process by analyzing and utilizing the resulting data in a configurative way (MacBeath et al., 2005). More specifically, the initial plan of the intervention is reviewed daily through group reflection sessions that focus on the implementation of daily class activities. In this way, the results of this reflective process are accumulated in real time, facilitating the immersion of next day's revision of activities and so on. On the last day of the internship, the reflection focuses on the overall evaluation of the intervention, the trainees' team cooperation skills, as well as and their collaboration with the supervisor class kindergarten teachers.

Once one week of actual teaching is completed, trainees work collaboratively in order to record their internship data and produce deliverable work for the course's evaluation. First of all, they prepare a group assignment, in which they incorporate all initial plans of the educational intervention, together with their observation data. They also record their reflections and all the thoughts they shared during each teaching day, as well as the revised actions and activities. In addition, during the last meeting of whole group reflection, trainees are asked to complete a questionnaire with specific questions, with the aim to evaluate the internship program and the course. In addition, they have the opportunity to reflect on their internship as a whole procedure, from the first until the final day of the course sessions. The answers of the questionnaires are also included in their final assignment. All group assignments are presented during the final course session with the participation of all candidate teachers, the supervising teachers and the Professor. During those final presentations, each group of trainees share their experiences, discuss their strengths and weaknesses and are encouraged to respond to the audience's questions about the whole process. At the same time, the trainees are asked to complete a personal questionnaire with specific questions in their reflective diaries, recording their opinions and views of this internship. In other words, they are asked to describe the way they experienced their internship, the profits and assets they have gained from it, as well as all the difficulties and controversies they came across throughout the whole process. Finally, they are encouraged to share their opinions regarding anything they feel that the internship program lacked to be considered by the Professor and the supervising teachers for future improvement.

The trainees' personal reflective diary (Moghaddam et al., 2020; Bashan & Holsblat, 2017) which they keep throughout the semester is a valuable and critical aspect of their internship. According to the relevant theoretical background, systematic data recordings facilitate the reflective process, mainly because through them, future teachers tend to enhance their self-awareness, contributing to the investigation, understanding and improvement of their educational practice (Androusou & Avgitidou, 2013; Elliott, 2012). In particular, all of the thoughts, ideas, assessments, reflections that they record in their reflective diary constitute detailed and important information for the evaluation of the internship program. It is worth noting that candidate teachers are asked to fill in their reflective diaries at the end of each session, either at the university or/and right after their observations or/and activity implementation in school. The selection of the time that trainees' record their reflections is chosen intentionally right after finishing each task. This choice is based on the notion that there should be no delay in daily action recordings because the experience is still fresh and vivid. Thus, the potential of effective use of

reflective diaries is fully exploited (Schön, 1987).

Moreover, the supervising class teachers also keep their own reflective diaries and they participate in regular reflection meetings of the pedagogical group, which is supported by the scientific contribution of the Professor-in-charge. Through their own reflective diaries, they record observations regarding the trainees' working group framework. They focus and comment on the groups coherence and (co)operation as well as they identify and assess the development (or not) of collaborative relations between team members. Thus, according to the data they record daily on their dairies, they are able to review and shape the course objectives and redesign its context whenever necessary. The data is discussed in the pedagogical team meetings, in order to incorporate the conclusion into the internship's improvement plan.

Finally, the data taken from the trainees' diaries, in combination with the data derived from the supervising teachers' diaries and all meeting records of the pedagogical team, constitute the baseline for further investigation of all aspects of trainees' internship. In addition, the above-mentioned data support the final evaluation of the internship course itself, reinforcing theory building regarding the educational process. In other words, this new, research-based theory model is formulated through the collaboration of the university and schools, thus, reinforce a link between theory and practice in education.

### **3. Some Indicative Findings**

As shown above, data was collected from different sources during candidate teachers' internship: trainees' observations, their reflective diaries and recordings of group work, plenary discussions and reflections, the supervising teachers' classroom observations and diaries, minutes from the meetings and reflections of the pedagogical team. Data analysis showed that by the time they completed their internship, candidate teachers had realized that environmental and sustainability issues are in fact social issues. They also became aware that addressing core values is a fundamental dimension of Education for Sustainable Development. However, the process of this kind of internship along with the process of raising awareness and self-awareness is not always easy.

On the contrary, it requires ongoing interaction with deep conversations and deliberation practices among trainees and the members of the pedagogical team. It is important that trainees were not only able to identify environmental and sustainability issues that needed to be examined within classrooms, but also to discover the values that connect to them. Moreover, they analyzed those hidden values and incorporated them into their educational intervention plans. At the same time, during the (self)exploratory process they developed critical thinking skills and managed to identify and reflect on their personal values, as well as to reconsider and revise them, when needed. Some indicative examples of both trainees and supervising preschool teachers' recordings of their reflective diaries that illustrate the above-mentioned reflective process are shown below:

- This internship, including the group and plenary discussions and reflections, has helped me understand that the involvement with an environmental issue, which is related to the social dimension of sustainable development, has laid the "foundations" for an essential and effective environmental action. Drawing from this process, I strongly believe in the potential of transforming schools towards a more sustainable direction (trainee's diary, 03/06/2017).
- Through this internship, I realized that approaching environmental issues, I also handling with associated values. I found that extremely important and express me as a future kindergarten teacher (student's diary,

05/06/2018).

- We think that one of the advantages of our internship was that we had the opportunity to deal with an issue related to ESD. More specifically, we approached an issue raised by children's and the preschool teachers, namely the value of respect for diversity. Although at the beginning, it was difficult for us to plan our educational intervention, in the end with the help from our supervisors, we discovered the way that ESD deals with social issues (group assignment, 06/05/2018).

- Every year during trainees' internship, I am impressed, but also disappointed when realizing the catalytic effect of our previous experience and our resistance to change. The trainees are eager to work ... yet faced with the difficulty to approach environmental issues through the "eyes" of hidden values... constantly discussing and reflecting the whole semester... and yet their thinking is still quite immature... focusing on superficial educational interventions, such as recycling ... how can we blame those trainees when all their experiences regarding Environmental Education were limited on studying the physical environment, searching for information, only in relation to the acquisition of knowledge... how is it possible to change their way of thinking?... it takes time to do so... at least they were able to identify and clarify their personal value system ...it is extremely important ... perhaps the first big step towards any change ... (meeting of the pedagogical team, 30/03/2016).

It is noteworthy, that all candidate teachers point out that this (self)exploratory and reflective process has benefited them in many ways. They stress that they have learned how to observe and reflect on their practice systematically, not only in relation to the content and the objectives of the environmental educational intervention itself, but also concerning the educational process as a whole. They seemed to have realized the importance of both observing and gathering data on a specific educational context. They realized that being aware of the special circumstances of each class (for example the different group dynamics, the pupils' diverse backgrounds, experiences, needs and interests) is essential and need to be explored, comprehended and taken into account in educational planning. Trainees learned to take under consideration this kind of valuable evidence, regardless of the complexity or the nature of the specific issue that is highlighted in each classroom. They also underlined the usefulness of the continuous group and plenary reflections which facilitated the interaction and the development of communication not only between them, but also among their supervising teachers and the Professor-in-charge. They also highlighted the importance of this interaction and collaboration that broadened their reflective thinking skills and promoted their resourcefulness and creativity.

In addition, the exploratory nature of the internship program enhanced the development of trainees' cooperative skills, since the educational intervention that they planned and implemented was the result of collaboration. However, working together was not always an easy and painless process. Both disagreements and controversies were also recorded, mainly due to the formation of groups among people who were completely unknown to each other. During this process, they had to overcome serious obstacles that were emerging, which were caused mainly by the trainees' different personal beliefs and perceptions of the educational process. On some occasions, the trainees expressed contrasting attitudes towards the internship program itself, as well as the prospect of share a common educational approach. However, the reflective process, as well as the supervisors' participation and ongoing support, helped them overcome those obstacles. Specifically, in-service teachers constantly raised questions and encouraged the trainees to broaden their perspective through active participation in group discussions and reflections. Therefore, trainees gradually developed a reflective attitude towards their internship. This positive attitude reinforced them to be critical about their beliefs, teaching and educational approach in preschool education.

Furthermore, candidate teachers emphasized that directly writing their reflective diary after each lesson played an essential role in critically reviewing their perceptions. Although this was a rather tedious task, they all recognized its positive effect. The trainees stressed that through their recordings they had the opportunity to directly reflect on their personal contribution to teamwork and to internship program. Finally, they all agreed that this exploratory and self-exploratory process was often rather demanding and sometimes painful; for this reason, the trainees were looking for the support and guidance of their supervising teachers, whose assistance was described as “catalytic”. They indicated that this kind of support helped them “deepen their thoughts and reflection”, “think outside the box”, “leave their comfort zone”. It encouraged them to try different approaches and avoid using the most common and traditional didactic tools for their educational intervention. They also highlighted the value of this reflective process, stressing that through this “difficult path”, they realized the connection between academic theory and educational practice. Finally, they managed to improve their teaching practice and to achieve professional development as future preschool teachers. The examples that follow of both the trainees and the supervising teachers' recordings of their reflective diaries are indicative of the points stressed above:

- ...It was a nightmare! Only this word can describe it... What if I had planned everything ... my anxiety to elicit from children what I had in mind, in the end caused me to speak the whole time ...it was me who was in the center of the educational process, not the children. Fortunately, right after the intervention, I reflected on the activity and immediately expressed my thoughts and my evaluation to the group and recorded it in my diary, so I realized my mistakes. Thankfully, the whole team and the supervisor were there to comfort me (trainee's diary, 26/4/2013).

- I was glad to take part in this internship... because I did not just learn to plan and implement environmental interventions, but I also realized that I need take under consideration the whole school context when planning an educational intervention... I learnt how to detect issues that need intervention. However, this is not enough, it is important to keep wondering about everything and not be afraid to make changes as many times as needed ... (trainee's diary, 10/6/2014).

- ... we were constantly moving back and forth ... no matter how hard we struggled ... we really can't imagine what the internship would be like if the preschool teacher/supervisor was not by our side ... we think she has made the difference for us, her voice will sound in our ears every time we attempt educational interventions: “why, how, in what way, what would you change, what factors affect.. Try always to investigate, ask, search... try to listen more and talk less ...” (group assignment, 07/06/2015).

- The issue of collaboration is the “Achilles' heel”<sup>1</sup> for the trainees. But it is not the trainees' fault, when throughout their educational career they were taught to be competitive, to act individually, how will they suddenly cooperate with each other and with their future colleagues? I wonder: did we manage to make them realize, even a little bit, the beauty of collaboration? If so, for me all the goals of the internships were achieved (supervisor's diary, 5/6/2016).

#### **4. Summarizing**

The pedagogical team came to the conclusion that this open, exploratory process adopted during the proposed model of this internship, enables perspective teachers to reflect on environmental and sustainability

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<sup>1</sup> According to Greek mythology, this idiom refers to vulnerability or weakness.



issues they highlight in classroom context and to detect their social dimension. Nevertheless, the trainees point out that this reflective process is not always an easy task. This is mainly because they often find it rather difficult to escape from the stereotypes and beliefs that they have internalized. Continuous discussions are needed, both within working groups and during plenary sessions, along with the significant contribution of the whole pedagogical team, in order for the trainees to integrate a reflective approach that enables a critical attitude towards their educational interventions. Moreover, by cooperating effectively with each other, trainees managed to develop critical reflection skills and to clarify their personal values. The supervising teachers' role has proven to be extremely important. They not only monitor trainees' internship, but also support them in every step of the way. They operated as mentors and aimed to continuously help them improve within a supportive context of "open", honest communication, mutual respect, by dealing with challenges and making decisions that were compatible and related to their needs (Daloz, 1986).

Thus, they gradually built a trusting relationship with candidate teachers. They did so by taking part in the trainees' reflections and re-planning of actions, thus promoting their thinking skills and supporting them in real time. This constant support was applied not only within working groups, but also in personal level, for each trainee individually (Lindgren, 2005). At the same time, supervising teachers had the opportunity to reflect on their own professional beliefs and practices, by observing their classroom context through the eyes of the pupils (Hobson et al., 2009). Finally, it should be noted that the pedagogical team's reflections tend to improve the process of the internship itself, as it facilitates the adaptation of the program to the group dynamics of the working groups that are formulated each year.

In conclusion, we believe that internship has been improved during the past years, seeking always new ways to train candidate teachers to apply a reflective approach to their role as future preschool teachers and to be able to adopt the role of teacher as a researcher. At the same time, this internship aims to prepare prospective teachers in order to reflect on core personal and social values and promote skills' development according to the vision of sustainability and sustainable development.

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