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Preschool Teachers’ Assessment of the Integrative Approach to Environmental Education²

Extended summary

Preschool children perceive the world around them as a whole and do not segment it into independent components. An integrated educational activity in the preschool context is a system whereby the components from various subject areas operate as a single unit. Contemporary theories of learning and child development recommend that children should not learn from separate scientific fields, as they do later, in the primary and secondary school contexts, because this form of learning can result in the development of isolated skills. This paper examines the results of the research on the impact of preschool teachers’ professional experience on their assessment of the need for the integration of the Environmental Education content with the contents of other subject areas at preschool level. The sample consisted of 148 respondents: 73 pre-service preschool teachers, students of the Teacher Education Faculty, and 75 in-service preschool teachers. The entire sample consisted primarily of younger persons (over 80% of the respondents were under the age of 35), while among the in-service preschool teachers, over 70% of the respondents had up to 10 years of work experience. A five-point Likert scale (five items) was used for analyzing the respondents’ assessment of this integration. The reliability of the applied measure (Cronbach’s alpha) was 0.86. The research was based on the testing of the following research hypotheses: (1) the comparison of the assessment of the in-service and pre-

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service preschool teachers does not a statistically significant difference in their assessed need for integrating the environmental education with other subject areas at preschool level; (2) there is no statistically significant correlation between the teachers' years of work experience and their evaluation of the need for such integration. After the results had been obtained, only the first hypothesis was rejected. Namely, the results revealed the following facts: (1) compared to the in-service preschool teachers, the pre-service preschool teachers demonstrated a statistically much lower assessment of the need for the content integration (the mean values on the 1-5 scale were as follows: 3.18 versus 3.71; $t=-3.538$, $df=146$, $p=0.001$). That there was indeed the need for integrating the content of the Environmental Education with the content of at least two other subject areas is evidenced by the fact that nearly 75% of the respondents selected "agree" or "strongly agree" when expressing their agreement with the statements regarding the need for the integration with at least two other subject areas (66% – pre-service preschool teachers; 85% – in-service preschool teachers; $\chi^2=7.705$, $df=1$, $p=0.006$). The identified differences may be the consequence of the pre-service teachers' lack of experience in implementing the integrative approach; (2) A statistically significant linear correlation between the in-service preschool teachers' years of work experience and their assessment of the need for such integration was not identified (Pearson's correlation was -0.10 ; Spearman's correlation was -0.10 ; $df=73$, $p=0.409$), and a statistically significant correlation according to the most frequently used non-linear correlation models was not identified either. The reason for this result should be sought in the limited range of the analyzed data, given that only 12% of the in-service teachers had more than 15 years of work experience. The obtained results are the basis for formulating the appropriate methodological recommendations. The most important recommendation is that the study program Environmental Education should be innovated. Within this program, additional attention should be given not only to the explanation of the advantages of the integrative approach, but also to a more thorough implementation of this approach during the pre-service teachers' practise in kindergartens by using the positive experience of the in-service teachers who, compared to pre-service preschool teachers, more often assess the need for integrating several subject areas.

Keywords: Environmental Education, in-service preschool teachers, integrative approach, preschool children, pre-service preschool teachers.

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