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Curriculum design and content in Czech pre-primary education: approaches and experiences of student teachers

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ABSTRACT



The aim of the research was to investigate the methods used by preschool student teachers when developing their educational programmes at pre-primary level (ISCED 02). Data were collected between 2020 and 2021 using a questionnaire with 355 part-time students from nine universities across the Czech Republic. Most of the respondents were also working as preschool teachers while studying for a bachelor's or master's degree in preschool education. The research not only highlighted different approaches to curriculum planning but also that many of the respondents preferred an approach characterised by child-centredness and teacher autonomy. However, the research also found that many respondents still plan educational content a long time in advance of their teaching and without considering the current needs and interests of children. Curriculum design and content in Czech preschools is in a process of transformation and the authors discuss the need for a more principled and consistent approach in support of high-quality provision.


KEYWORDS

Early childhood education; curriculum design; child-centred education; planning approaches; curriculum quality

Introduction

High quality early childhood education (ECE) rests upon many factors including the quality of curriculum design and development at two levels; firstly, following guidelines set out by the preschool leadership and secondly in response to the groups of children taught by individual teachers (Bennett 2005; Hočevar, Kovač Šebart, and Štefanc 2013; Laevers 2005; OECD 2017, 2019; Sylva, Ereky-Stevens, and Aricescu 2015). Wood and Hedges (2016) identify current national policies and psychological discourse as the two greatest influences on the content of ECE curricula. Preschool teachers contribute in different ways to the planning of educational provision (Alakeson 2005; Bennett 2005; Farrington 2007; Graham and Smith 2008) while a country's cultural traditions as well as the preschool leadership and management culture also play a role in curriculum planning (Yang and Li 2018).

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This aspect of pre-primary education has not been the subject of extensive research in the last decade while only specific issues at the regional level have been examined so far (Branscombe et al. 2013; John et al. 2018; Kelting-Gibson 2013; McLachlan, Fleer, and Edwards 2013; Nailon 2013). A key factor in educational quality development is the pre-school teacher's approach to curriculum design (Munthe and Conway 2017; Oberhuemer and Schreyer 2018; Oberhuemer, Schreyer, and Neuman 2010; Potsi 2016; Weikart 2000). Therefore, knowledge about the approaches used by Czech preschool teachers will contribute to a greater understanding of current curriculum planning in this part of Europe and support further development in the professional training of teachers.

Theoretical insights into curriculum design

Within **curriculum design theory**, different approaches to curriculum planning are identifiable. Ornstein and Hunkins (2018) highlight six curriculum approaches (*behavioural, managerial, system, academic, humanist* and *postmodern*) that reflect the values and beliefs of educators, educational and social philosophy of educational organisations and systems (understanding of reality, knowledge, teacher's role or emphasis of learning). For our research, three basic types of curricula (*subject-centred designs, learner-centred designs* and *problem-centred designs*) identified by Ornstein and Hunkins (2018) are relevant, especially as Czech preschool curricula in the nineteenth and most of the twentieth century were based upon subject-centred designs (Opravilová 2007; Opravilová and Uhlířová 2017, 2021; Uhlířová 2007).

Within curriculum design theory relating to a preschool context, there are two main models based upon either a *social pedagogy approach* or a *pre-primary education approach* (Bennett 2005; Rinaldi 1998). The curriculum governed by *social pedagogy* is 'flexible enough to allow practitioners to experiment with different methodological and pedagogical approaches, and to adapt overall goals to special needs children, and to local needs and circumstances' (Bennett 2005, 11). The *pre-primary education approach* is often focussed on achieving educational goals through teaching activities which are predominantly teacher directed and linked to the primary school curriculum. These two approaches are the basis for the construction of our research design and its interpretation. They require the setting of goals according to children's needs and interests, but each approach does so from a different perspective and to a different extent (Saracho and Spodek 2002; Spencer et al. 2009). Different types of curricula within early childhood education often highlight a dichotomous division between *teacher-* and *child-centredness* (Schweinhart 2016), although in practice the curriculum usually falls between these two approaches. Today, European countries explicitly support a child-centred approach in pre-primary education and ECE settings (European Commission 2019a, 2019b). For several decades Central Eastern European preschool provision featured a *standardised curriculum* and a *subject-centred approach* that relied upon instruction and preparation for primary school (Bennett 2005; Schweinhart 2016; Schweinhart and Weikart 1998).

Conceptual basis of curriculum design and content in the Czech Republic

The Czech educational system claims to be based on *humanist* foundations which are reflected in the national ECE framework and the Framework Educational Program for

Preschool Education (FEP PE, last rev. 2021) states that development of educational content should be *child-centred* and *experience-centred*. The FEP PE is relatively non-prescriptive and allows for a balance between development towards an educational approach aimed at successful integration into primary school and a holistic approach focused on the child's developing needs (Taguma, Litjens, and Makowiecki 2012).

The FEP PE puts the responsibility for planning educational content specifically upon teachers so that Czech preschools design their own curriculum known as a 'school educational programme' (SEP) in which the educational content takes the form of thematic blocks named 'integrated educational blocks' (IBs). The term *integrated* means that each IB combines contents and learning goals from five educational areas defined by the FEP PE. The FEP PE does not specify how IBs should be designed but based on the preschool's SEP, teachers develop their own 'class educational programme' (CEP) for their group of children.

No national research has taken place in the Czech Republic to evaluate the methods used by preschools to design their curricula. A previous research study among student teachers ($n = 121$) at Charles University indicated that there were different approaches to the design of IBs within preschool CEPs. These were characterised by varying degrees of freedom to respect the needs and interests of children based upon a *flexible* or a *rigid concept* of IBs (Koželuhová, Loudová Stralczynská, and Lipnická 2020) and these findings became the impulse for the current research study.

Research aims

A revision of the FEP PE is currently underway and is addressing the need to define more precisely ways of designing the curriculum and developing the educational content in preschools. The aims of the research were to analyse the methods preschool teachers use when designing educational provision at the pre-primary level and also to consider how these contribute to high-quality learning experiences for young children. To achieve these aims the research questions from our previous study (Koželuhová, Loudová Stralczynská, and Lipnická 2020) were refocused and used as the basis for the following three research questions for this study.

Research questions

RQ1: What approaches are used by preschool teachers when designing curriculum content at the preschool organisation (SEP) and children's group (CEP) levels?

RQ2: What variables influence preschool teachers' approaches to curriculum design at the preschool organisation (SEP) and children's group (CEP) levels?

RQ3: What factors determine preschool teachers' approach to planning educational provision for children?

Participants

Data were collected during spring 2021 from all Czech universities preparing preschool teachers ($n = 9$). A total of 1001 respondents were contacted, and the return rate was 35.6% ($n = 355$; Mdn age = 30,1 years; overview of respondents' age; qualification level;

years of practice and study year, Table 1 in appendix). Incomplete responses were excluded from the data set.

The respondents were students studying part-time for a bachelor's and master's degree in preschool education (Table 1 below).

There was a balanced share of respondents from each of the nine faculties offering this type of study programme in the Czech Republic. Data from Group 1 ($n = 217$) was used to answer RQ1, as Group 2 respondents might not have relevant experience of curriculum planning in preschools. Within the statistical analysis, individual variables were monitored in relation to the differences in the responses of both Group 1 and Group 2.

In the Czech education system, there are three different levels of initial professional studies (IPS) available for preschool teachers; upper secondary vocational, tertiary professional and university degree (European Commission 2019b; Loudová Stralczyńska 2017). Czech preschools are able to employ unqualified teachers on the condition that the individual starts their IPS immediately after being appointed and in such cases the staff member is considered to be a qualified preschool teacher under employment law.

Data collection

Data were collected through a questionnaire which was piloted before being sent to leaders of each faculty study programme who then distributed it to the students. The questionnaire included nine background questions (study year, qualification level, place of study, years of practice etc.), eight closed questions (including the answer 'other' with the possibility to specify further details), four open questions and two sets of four-point Likert scale questions ranging from 1 (strongly disagree) to 4 (strongly agree). In the open questions, respondents wrote short statements to explain their answers. Likert-scale questions (19 total) were divided into two themes: (1) respondents' approaches to curriculum design at the preschool organisation level, e.g. 'I think that the focus of integrated blocks in the SEP should always reflect the course of the year', and (2) respondents' approaches to curriculum design at the individual teacher's level, e.g. 'Children should be involved in deciding what topic we will introduce' etc. Respondents expressed a degree of agreement/disagreement with the written statements.

Content and face validity of the questionnaire is further based on the authors' knowledge of the research context. The questionnaire was discussed and refined with colleagues from the participating faculties of education as well as within the target group of participants involved in the research. Validation was also carried out at conferences within the Czech professional community during the 2021/2022 academic year. The consistency of the whole attitude test batteries was tested using Cronbach's alpha, gaining a reliability score of 0.653 and reliability was also assessed for the child orientation index as this was the main source of data for the paper.

The items were designed on the basis of the authors knowledge of the research context and the theoretical concepts and results of the previous study (Koželuhová, Loudová Stralczyńska, and Lipnická 2020) were constructed differently for both Group 1 and Group 2. Individual items were asked of each group at corresponding stages of the questionnaire and within the four-point scales, 'strongly disagree' and 'partly disagree' responses were combined as were the 'strongly agree' and 'partly agree' responses.

The ethical dimension of the questionnaire design and data collection was covered under the Ethical codex of Charles University (2018). Participants were informed about the purpose of the research and participated voluntarily in the online questionnaire, confidentiality for respondents was assured and their answers were anonymised. The main limits of the research study are that the sample was related only to preschool teachers who were studying part-time at university and that there was a relatively low return of questionnaires from respondents in their last year of full-time (undergraduate) study.

Data analysis strategy

RQ1 focused on the approaches used by preschool teachers when designing integrated educational blocks (IBs) at the preschool organisation (SEP) level (ISCED 02) as well as the level of their own group of children. Quantitative analysis of closed questions using descriptive methods (descriptive statistics, frequencies, and cross tabulations), provided answers to RQ1. The MAXQDA programme was used to analyse open responses, which were openly coded ad-hoc and then analysed by thematic coding (Miles and Huberman 1994) and grouped according to selected criteria. The results of the qualitative analysis were used only to triangulate the interpretations of the quantitative analysis for RQ1 as their detailed presentation would be beyond the scope of the article.

RQ2 addressed the variables influencing preschool teachers' approaches to curriculum design at both the preschool organisation level as well as the level of their own group of children. The previous research (Koželuhová, Loudová Stralczyňská, and Lipnická 2020) indicated that respondents have different approaches to planning provision for children according to how orientated they are to the current interests and developing needs of the child. To answer RQ2, a summary variable, the *child-orientation index* was constructed consisting of 18 attitudinal questions so that for each item from the two attitude test batteries, where the respondent expressed the attitude representing child-orientation, the index was increased by 1 (moderate and strong positions were not treated differently). Item 9 was not included in the construction of the index, because it did not reflect child orientation accurately enough. The index takes theoretical values from 0 (weak child orientation) to 18 (strong child orientation). The number itself corresponds to the number of items where the respondent took a child-centred approach (Perren et al. 2017; Surgue 1997). The child-orientation index was constructed deductively based on a theoretical idea of the extent to which attitudes represent a positive view of the child's agency. The concept was further verified in an inductive manner, where the test battery questions were subjected to factor analysis (principal components analysis (PCA), maximum variance rotation – Varimax with Kaiser Normalisation) (Tables 2 and 3 in appendix). Factor analysis revealed similar phenomena in the approaches to planning the educational content of preschool teachers as were evident in the construction of the index (Loudová Stralczyňská, Koželuhová, and Syslová 2023), demonstrating the validity of the research instrument. The summary variable child orientation index was found to have an approximately normal distribution (controlled by Kolmogorov–Smirnov and Shapiro–Wilk tests at a *P*-value significance level of $< .05$). The normality test indicated only a small amount of variance (Table 2 in appendix). This result is influenced by the high number of respondents in the research sample. Based on the

visual inspection according to the histogram of distributed normality (see Table 2 in appendix), we can conclude that the deviations are very small.

The child-orientation index focused on monitoring the overall approach of the respondents to curriculum design at the SEP and CEP levels. The minimum value achieved was 3, the maximum value was 17 (scale 0 = minimum child orientation; 18 = maximum child orientation); the overall results are shown in the histogram of frequencies (Table 2 in appendix), where a deviation to higher values indicates a stronger child orientation ($\bar{x} = 10.77$; $SD = 2.818$; $N = 348$).

To answer RQ2, the values of the *child-orientation index* were examined and individual variables in different groups of respondents such as socio-demographic, educational and experiential characteristics of respondents. Differences between Group 1 and Group 2 were tested using analysis of variance, to compare variance within groups with variance between groups (Table 3–5 in appendix). For the data analysis, we preferred ANOVA over multilinear regression models, as linear models fail to capture some of the effects that are readily apparent from ANOVA. A two-sample Student's t-test was used (Levene's test for equality of variants was applied to the homoscedasticity test) to examine the differences between groups at the level of the individual items of the two scale batteries (Table 6 in appendix).

RQ3 focused on the factors which determine respondents' approaches to planning educational provision for their group of children. Principal components analysis (PCA) involving 19 items of both attitude scales into factors is shown in Table 7 (in appendix). All items of the two attitude test batteries were reduced to 4 variable factors. The fourth dimension is saturated with only one item, so it is not taken into account in the next interpretation. It should be noted that item 12 was not assigned to any of the factors due to factor loadings $< .50$. For item 19, the assignment to factor 2 (ranging .49) and 3 (ranging .43) could only be slightly considered. The four factor model accounts for the total of 53% variance. The model with only the first three factors accounts for 47% variance.

The rotation maximised the variance of the factors making it possible to find the location of the factors such that the individual items from the batteries ideally entered them either very strongly or rather weakly. Consecutively, the PCA on factor component scores further examined the differences between the various variables (Group 1 and Group 2, age, influence of upper secondary vocational school and study year). The PCA allowed an examination of whether the child-orientation index model is functional and not just a theoretical construct. It is important to note that the second factor in the items overlaps very strongly with the child orientation, which also indicates the functionality and validity of the child-orientation index model. Throughout the data analysis, P -values $< .05$ were considered statistically significant.

Results

The results describe the approaches used by preschool student teachers when planning curriculum content at both the preschool organisation level as well as the level of their own group of children and then present the different variables that influence these approaches. The last part deals with the factors that determine respondent approaches

to planning educational content for children. For specific details in support of the results, see the figures and tables in appendices A and B.

Approaches to curriculum design at the preschool organisation and children's group levels

The following data presentation compares the approaches to curriculum design used in each preschool with the approach the respondents would prefer if they had greater freedom to choose for themselves. The results show that in the real everyday practice of respondents' preschools, a more *rigid approach* to planning educational content within IBs, were most evident in SEPs. 63% of respondents stated that in their preschool, IBs are arranged chronologically and must be introduced in a predetermined order throughout the year and in 21% of the SEPs, there were as many as ten specified IBs. This approach reflects a *pre-primary approach* to curriculum design and significantly reduces the ability of respondents to adapt their provision to the current interests and developing needs of the child. Conversely, the results show that only a fifth of respondents work with the *flexible approach* which offers preschool teachers much greater flexibility to respond to children's interests and needs (Figure 1 in appendix).

On the other hand, the results show that 69.5% of respondents prefer a more flexible approach to curriculum design (Figure 1 in appendix) and justified their preference for the following reasons:

- (1) being able to take account of the interests and needs of the child,
- (2) having a basic planning framework but at the same time allowing autonomy for the respondents to respond to a source of inspiration when planning.

Children's educational programmes (CEPs)

Only half of the respondents create a CEP on a regular basis while the remainder prepare their CEP in advance, with 29.3% completing theirs at the beginning of the academic year. However, this approach neither reflects the current interests and developing needs of children nor allows children to be involved in planning (Figure 2 in appendix). 43.9% of respondents choose their topics independently and 31.3% choose their topics from the list suggested in the SEP and add their own. This compares with a quarter of the respondents (24.8%) who are required to introduce predetermined topics (6.1% must choose from the offer and 18.7% must introduce all the topics listed in the SEP) (Figure 3 in appendix). The most common length of a topic is one to two weeks (62%) due to either a decision of the preschool management or when the teacher chooses the topic length although 38% of respondents design CEP topics for longer than two weeks, or of different lengths. In some cases, topic length was based upon tradition within the preschool, however in most cases the choice of topic length was made by the preschool teacher (Figure 4 in appendix).

Respondents preferred planning topics of one week in length, citing reasons such as the needs of the preschool teacher (clarity, opportunity to plan ahead of time, simplicity), their perception of themselves as responsible for the child's education and the ability to plan a greater variety of topics. Respondents sometimes mentioned that weekly topics

provided greater opportunities for sharing the responsibility with their co-teacher as there are two preschool teachers working together with one children's group. This was considered to be helpful if each teacher had different approaches or there were difficulties in the relationship between them. These reasons are exemplified in statements made by the respondents such as 'many interesting topics, a few weeks a year', 'we give children the opportunity to learn a lot of new things that were within their capabilities', 'I like to change topics'. However, the choice and length of topics seem to be based upon the needs of the respondents rather than being determined by the needs of the children and their previous experiences. The results of the content analysis of open questions stimulated further interest in examining the overall perspective of the respondents which was captured by the *child-orientation index*.

Variables influencing respondent attitudes in curriculum design at the preschool organisation and children's group levels

The effects of various variables on respondent approaches to curriculum planning were examined and *the year of the respondent's university studies* (Table 3 in appendix) in relation to child orientation turned out to be statistically significant. The higher the respondent's year of study, the stronger their orientation towards the child (1st year: $\bar{x} = 9.94$; 2nd year: $\bar{x} = 10.56$; 3rd year: $\bar{x} = 10.91$; 4th year: $\bar{x} = 11.11$; 5th year: $\bar{x} = 12.65$) and the increase was almost linear although it declined slightly in the last year of study, although these respondents formed the least represented group in the research sample (only 10.6%).

The *age of the respondents* proved to be another statistically significant variable ($p = .035$) (Table 4 in appendix) in terms of their willingness to take account of the child in their approach, with the statements from respondents, under the age of 24 ($\bar{x} = 9.97$) (the youngest cohort) reflecting the needs and interests of the children least. The statements from the cohorts between the ages of 25 and 34 had a higher child orientation ($\bar{x} = 10.71$) and those between the ages of 35 and 44 the highest ($\bar{x} = 11.51$). However, in the cohort between 45 and 49 the index of child orientation decreased, so the development is not linear.

The influence of the respondent's age for the individual items of both attitude-scale-batteries was also examined by dividing the age categories into two groups (up to 29 years and 30 and over). Age proved to be a significant aspect in two items as respondents under the age of 29 need more support such as preferring topics to be suggested in the CEP ($p = .024$) and, to a greater extent than the older age group, they report that with two preschool teachers in the children's group it is difficult to plan longer-term topics ($p < .001$). This is as expected; age also proved to be significant in terms of respondent's confidence, which is consistent with the findings of the factor analysis (see below).

Another statistically significant aspect is *the respondent's suitable experience in a preschool* ($p = .006$) (Table 5 in appendix). Group 1 respondents with experience of this type of work are more child-orientated ($\bar{x} = 11.088$) than Group 2 respondents without such experience ($\bar{x} = 10.237$). Table 6 (in appendix) shows statistically significant differences for respondents with and without suitable preschool experience. For example, Group 2 respondents without suitable preschool experience consider predetermined topics in

the SEP to be important in curriculum planning and consider them a requirement for systematic and well-planned learning activities ($p < .001$).

If all children's groups in a preschool have the same topics ($p = .017$). Group 1 respondents with suitable preschool experience consider it more negatively than respondents without such experience. In contrast, Group 2 respondents without experience were more likely to say that they considered CEP topic planning several months in advance as a requirement for a well-planned sequence of topics ($p < .001$). They more often considered the planning of topics for the week to be advantageous ($p = .002$) and they considered regular planning more of an obstacle to systematic and well-planned education for young children ($p = .026$). Group 2 respondents without suitable experience welcomed the idea of predetermined topics in the CEP, because it allowed them to focus more on the preparation of specific educational activities ($p = .002$).

Differences between the groups in terms of the variable of *completed education at an upper secondary vocational school or tertiary professional school* proved to be statistically insignificant for child orientation. In addition, at the level of individual items, there were significant differences in respondents' approaches to curriculum development in three items ($p = .046$, $p < .001$, $p = .013$). Respondents with an upper secondary vocational school degree were in favour of a more flexible approach to the curriculum design than were respondents without an upper secondary vocational education.

The findings through ANOVA and t-tests led to taking a deeper look at the factors that affect respondents' answers.

Factors determining respondent approaches to planning educational content for children

The first factor, identified as *structure in planning* (eight items, Eigenvalue: 5.17, explained variance: 27.19%, ranging from .61 to .79), indicates the need for respondents to have a clear idea of what topics they will discuss with children, and they take it for granted that topics will reflect the course of the year. This clearly defined schedule is linked to their confidence that they will not forget anything during the academic year. This approach equates to a systematic and well-planned way of planning educational content and respondents whose thinking is dominated by this dimension do not involve children in the choice of educational topics.

The second factor, identified as *child orientation* (six items, Eigenvalue: 2.43, explained variance: 12.79%, ranging from .57 to .73) implies planning with respect for the interests and needs of children in planning topics at the levels of the preschool organisation (SEP) and children's group (CEP). Respondents find it advantageous when each children's group can plan their own topics according to the needs and interests of the children and therefore take the involvement of children in planning for granted. Respondents continuously adjust their provision according to the interests of children and do not consider this to be an obstacle to systematic and well-planned education for young children.

The third factor (two items, Eigenvalue: 1.37, explained variance: 7.22%, ranging .60 and .80) was marked *confidence in planning* and this is where respondents considered it difficult to plan and introduce larger topics. Also, if two preschool teachers in the children's group take turns, they stated that it is difficult for them to design their own topics.

In the factors, we also looked for the influence of variables (RQ2) i.e. the current study year, the age of the respondent, suitable preschool experience and completed education at an upper secondary vocational school or tertiary professional school. The first factor for which statistically significant differences were found is the current study year of the respondents (Table 8 in appendix), which also corresponds to the results of RQ2. A statistically significant relationship was shown for the *structure in planning* ($p < .001$) and *confidence in planning* factor ($p = .014$), and for a lower level of significance also for *the child-oriented* factor ($p = .091$). As expected, for the *structure in planning* factor, there is a significantly higher need for preparation and structure for first-year students ($\bar{x} = .285$) compared to later years, where its importance gradually decreases (except for $\bar{x} = -.611$ in the last year of master's study). On the other hand, *the child orientation* factor has a stronger child orientation in all later years (up to $\bar{x} = .268$) than it is with first-year students ($\bar{x} = -.247$). For the *confidence in planning* factor, there is more uncertainty in the third and later years.

Suitable preschool experience proved to be a statistically significant aspect for the *structure in planning* factor ($p = .001$) and the *confidence in planning* factor ($p = .003$) (Table 9). It is also to be expected that respondents without suitable *preschool experience* have a greater need to plan well and feel less confident in working within a flexible curriculum design preschool. For the *confidence in planning* factor, there is more uncertainty in the third and later years.

For all factors, there were no statistically significant differences in terms of the variable of completed education at an upper secondary vocational school or tertiary professional school.

Discussion and conclusion

This study looked at the approaches undergraduate and master's students use when designing curricula and content at two different levels in Czech preschools (ISCED 02). We were interested in whether there has been a move away from a strong focus on a *teacher-centred* and *pre-primary educational approach* (with characteristics of *subject-centred curriculum design*), towards supporting a *child-centred* and *social-pedagogical approach* when planning educational programmes (Saracho and Spodek 2002; Schweinhart 2016). Equally important in terms of examining the quality of preschool education were the results related to the variables that affect approaches to planning educational provision as well as the different views on planning approaches.

The results showed that although FEP PE (MŠMT 2021) presents a *child-centred curriculum* (Taguma, Litjens, and Makowiecki 2012), everyday practice in Czech preschools is too often dominated by *teacher-oriented approaches* which is characterised by the *rigid approach* to SEP design. This approach weakens the preschool teacher's ability to respond flexibly to the situations in children's lives and their developing needs, and to choose topics in accordance with children's interests and experiences, or to involve children in planning by considering their own suggestions.

These results correspond to the findings of the Czech School Inspectorate (ČŠI 2020, 27), which state that although designing curriculum content is apparently in line with the SEP, 'the real effectiveness was weak because preparation was in many cases intuitive, unsystematic and lacked a link to the specific conditions of the preschool, the group

and each child.’ The results further suggest that the continuing trend in rigid design approaches is related to the style of leadership and management in Czech preschools which is still characterised by a directive style (Bartošová and Hornáčková 2011).

On the contrary, the opinions on SEP and CEP designing and development in this research show a *tendency towards a child-centred orientation*. A stronger child orientation in the preferences of preschool teachers can be seen in the histogram (Table 2 in appendix). This result also corresponds to the stated preferences in closed and open questions in the first part of the questionnaire, where most respondents preferred a more flexible approach. However, the *rigid approach* represents methods more characteristic of a *pre-primary educational approach* and significantly limits the ability of respondents to adapt their provision to the current interests and developing needs of children. In addition to the significant influence of preschool leadership and management, a child-centred orientation is influenced by several other variables. The research shows that with increasing years of study, the focus on the child becomes more pronounced in teachers approaches to planning, and so highlights the importance and the quality of, initial professional studies (European Commission 2021; Hyson, Tomlinson, and Morris 2009; OECD 2020, 2021).

Although it was to be expected, another variable revealed that with age, the focus on the child becomes greater as the age of the respondents increased. For younger respondents (under the age of 29), it is possible to identify a greater need for predetermined and recommended topics. This may be related to the thinking of younger respondents that was characterised by *structure in planning* and professional *confidence in planning*. However, the variables of ‘study year’ and ‘age of respondents’ suggest that a university qualification, is a legitimate requirement to increase the quality of preschool education. Experts in the Czech Republic have been calling for such a requirement since the beginning of reform efforts over thirty years ago, and this view is confirmed by many other studies (e.g. Early et al. 2007; European Commission 2021; Kelley and Camilli 2007; Oberhuemer, Schreyer, and Neuman 2010).

Research also shows that focusing on the child affects professional self-confidence, even more so than preschool teachers’ attitudes (Fives and Buehl 2012). We agree with the recommendations of these authors to enhance teacher qualifications by focussing on improving self-reflection and strengthening teachers’ confidence in planning to focus on the child. We agree with Laevers (2005, 22) that it is necessary for a teacher to be able to actively listen to children, observe them, understand how children perceive the environment around them and use this information to effectively plan their provision.

In conclusion, the *pre-primary educational and teacher-centred approach* predominates in the approaches and thinking of some respondents. Under the political system before 1989, the centrally designed curriculum was very detailed and therefore very easy for preschool teachers although there was a limit on a preschool teacher’s creativity and their ability to respond to the interests and experiences of children. However, ‘the relationship between educator and child should not become an instrumental one, based predominantly on children attaining external targets’ (Bennett 2005, 17). Furthermore, such an approach may jeopardise the quality of preschool education (Laevers 2005).

A big challenge for a preschool teacher is to understand the importance of finding ways to involve children in planning to meet their educational needs. Progress in this important area lies in policy makers supporting higher preschool teacher qualification and a professional inspection service that will provide preschools with effective feedback on their child-centred approach. In addition, inspiring preschool teacher educators are necessary to enable future teachers to have a good understanding of young children's worlds and the development of each child's individuality.

Initial professional studies should therefore place more emphasis on the development of observational skills, including the ability to plan more in line with social pedagogy as some studies show that child-centred approaches can have a better impact on children's school performance and self-regulation (Hur, Buettner, and Jeon 2015). All this is important because, as Laevers (2005, 28) states, 'the quality of life of individuals and society – no more and no less – is the issue at stake!'

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