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Didaktik in preschool – critical-democratic and play-oriented

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The paper presents a review process of Didaktik and curriculum theories, one that suggests that a German Bildung Didaktik approach seems to be suitable ground for the development of a critical-democratic Didaktik in preschool. The paper examines fundamental dimensions in Bildung Didaktik as point of departure for the modelling of a Didaktik in preschool. Among other things, a circular situation-oriented and dynamic didactical model is constructed. In order to take the preschool tradition into consideration, different forms of play-based learning are stated. These form an outline of a critical-democratic play Didaktik, including the concept playworld.

Keywords: Bildung, curriculum, Didaktik, playworld, preschool

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1. Introduction

The research area presented in this article is "Didaktik¹ in preschool", which means a goal-oriented practice (teaching) in order to contribute to children's learning. Didaktik is rooted in the ancient Greek word didáskein (διδάσκειν): "the art of teaching" and "learn, lecture, instruct and teach" in the understanding of showing something new (Riquarts & Hopmann, 1995). The concept Didaktik was introduced in European education by Comenius in 1657. In "Didactica Magna" (great Didactic), he presented "the didactical art", which deals with three elements: "omnes omminia docere", i.e., 'teaching everything to everyone', and how "children and youth can be awakened to intellectual activity and to love heavenly things" (Comenius, 1657, see Schaller, 1995). However, in his later writings, Comenius replaced "everything" with "very thing", which means an action-oriented knowledge in order "not to lose sight of the improvement of conditions, the proliferation of humanity" (Schaller, 1995, p. 67; Schnack, 1994). From this position, Didaktik has been developed both as a general Didaktik and as a subject matter didaktik (Fachdidaktik) in school, and to a lesser extent in preschool over the last 20 years.

Concepts like Didaktik, teaching and learning are not in accordance with early childhood education, which is historically rooted in a psychological tradition expressed by care, relation, activity, and development, and with a fundamental belief that a rich environment and children's self-governed activity provide the best opportunities for the comprehensive development of each child (Broström, 2012). Preschool education has not focused on the content (subject matter), which is at the heart of Didaktik, but on supporting the child's development (Kansanen, 2000). The development concept has dominated thinking in Western countries; and although this perspective has been debunked in a range of research and academic contexts for almost 50 years, changes to Didaktik "curriculum and other teaching support material have been somewhat slower to be realised" (Fleer, 2003, p. 56).

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¹ I use the German word Didaktik (with use of capital D), which is common in continental Europe and the Nordic countries, and not the Anglo-Saxon word didactics, which refers to a narrow way of teaching, that is, a "formalist educational practice that combine 'dogma' with 'dullness'" (Hamilton, 1999, p. 135). However, I do not elaborate this topic. I also refrain from the important discussion of the difference between Didaktik and curriculum (see Hopmann & Riquarts, 1995).

Up until the 1990s, Didaktik was only somewhat related to teacher education and teaching in school. Thus, preschool teachers held a distance both to teaching, learning and Didaktik (Siraj-Blatchford, 2009). However, the implementation of a curriculum in Nordic preschools (Norway 1995, Sweden 1996 and Denmark 2004) paved the way for a distinct Didaktik in preschool. This was pioneered in Norway by Gunnerstad (1985) and Lillemyr and Søbstad (1993); in Denmark by Broström (1998); and later in Sweden by Pramling and Pramling Samuelsson (2011) and Vallberg Roth (2011) and today supported by the concept teaching, which is implemented in the Swedish school law (SKOLFS 2018:50). Presently, Didaktik and learning are more or less integral parts of preschool, but not without uncertainty and criticism. In Denmark, as an example, the concept learning was introduced in 2004 as a part of the first national curriculum, which resulted in severe criticism from both preschool teachers and researchers (Broström, 2004; Kampmann, 2013). "Learning colonises our ways of understanding what quality in children's institutionalised everyday life is all about" (Kampmann, 2013, p. 3). At that time a national curriculum was seen as a tool "which adds predefined and foreign determined activities in children's daily life, which already is too stressed" (Kampmann, 2004, p. 28, author's translation). A learning and didactical approach leads to structures for comparison and assessment of performance and thus a form of schoolification, which can be a hinder for local democracy and emancipation (Dahlberg, Moss & Pence, 2007).

Because there is a strong focus on the curriculum and the embedded learning objectives and learning outcome plus a growing emphasis on accountability (Biesta, 2004), preschool teachers are forced to strengthen their orientation towards children's learning. Consequently, we can use the word learnification, and thus a loss of the teacher's authority and personal judgement, and with the long educational and democratic perspective as corrective (Biesta, 2014).

Although it has been common for several decades in the United States and most of the Commonwealth countries to define activities in preschool as teaching and learning, in addition to taking a didactical approach, the Nordic countries for many years have sustained their reference to development, play and children's self-governed activity. Notwithstanding that the didactical turn is a

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reality, Nordic researchers and preschool teachers refuse to accept or are cautious about the concept teaching. Moreover, investigations show that Norwegian and Swedish preschool teachers dissociate themselves from using the concept teaching, despite their practice comprising specific teaching characteristics (Hammer, 2012; Sæbbe & Pramling Samuelsson, 2017).

Because preschool teachers have to take a didactical approach due to a curriculum (Gundem, 1997, p. 247) and find an appropriate way to teach and support children's learning, the research topic concerns creating a didactical model that is in accordance and incorporable with a preschool tradition such as care, the child's perspective and play.

2. A brief description of State of the art

The intention of the article is to construct a Didaktik in preschool. There is a move from general Didaktik to Didaktik in preschool. General Didaktik deals with any form of teaching (Uljens, 1997, p. 184; Kansanen, 1997, p. 146) and includes both teaching and children's learning (Kansanen, 1997). Thus, Klafki defines Didaktik as "a comprehensive term for research in educational science, for the elaboration of theories and concepts with regards to all forms of intentional (directed), in any way reflected *teaching*, in the sense of reflected learning, and to the *learning* taking place in connecting with this teaching" (Klafki, 1995, p. 188). In 1958, Klafki focused on the content, the 'what' aspect, and makes a specific so-called "narrow" definition, namely "the theory about the content of Bildung, its structure and selection" (Klafki, 1983, author's translation). Because of this broadness, a didactical subset of Didaktik is introduced – the term school Didaktik and subject matter Didaktik (Kansanen, 1997, p. 150; Uljens, 1997). In addition to a school Didaktik, other subsets may be needed. As an example, Klafki (1984) refers to social and leisure time Didaktik, thereby in line with the notion that there is a need for a Didaktik in preschool (Gundem, 1997, p. 247).

A step closer to an appropriate Didaktik in preschool was realised via a systematic review process using different search strings like "Didaktik or didactics, or curriculum and preschool, or kindergarten or day care preschool". In addition to the Didaktik-curriculum interchange, many results were

unearthed using the search string Didaktik, but a dramatic decline appeared using the narrow searching on didaktik in preschool/preschool Didaktik (kindergarten didactics, preschool didactics, didactics in day care). Furthermore, most results dealt with subject matter Didaktik, typically focusing on mathematics, literacy, music, science, physics, etc. Although Klafki (2001, p. 107) argues that a subject matter Didaktik must follow all general didactical principles, many of the review articles were very much focused on the subject, e.g. mathematics, and with few reflections on general didactical theory and didactical analyses, among others with a clear focus on the three didactical questions: why, what and how. Furthermore, a significant number of articles focused on general themes, such as children's views on learning and their influence etc., and preschool teachers' views on Didaktik in preschool, teaching and children's learning. Though these themes are relevant, they are on the periphery of Didaktik in preschool. This indicates that an apparent Didaktik in preschool is still in its first phase and under development.

After a close study of an enormous amount of research articles and chapters referring to the above research topic, the following themes of importance became visible as possible elements/dimensions for an appropriate Nordic Didaktik in preschool. Instead of presenting a review of each article, the following will provide an account of central themes with clear reference to relevant studies.

2.1 Didaktik and curriculum

The review process resulted in a significant number of articles concerning the German notions of Didaktik compared with the Anglo-Saxon conceptions of curriculum. Most refer to the international dialogue named "Didaktik and/or curriculum" published in two books (Gundem & Hopmann, 1998; Hopmann & Riquarts, 1995) and in journals. The two words are both rooted in the early 1600 endeavours to improve the promotion of teaching (Hamilton & Gudmundsdottir, 1994), but over time have resulted in differences. Studies on Didaktik/curriculum uncover countless differences and some similarities (e.g. Doyle, 2017; Gundem & Hopmann, 1998; Hopmann, 2015; Hopmann & Riquarts, 1995; Kansanen, 1999; Schnack, 1994; Tahisylaj, Niebert & Duschl, 2015; Westbury, 1995). Both words deal with theories of teaching and planning of the teaching process. Thus, you might say

that "everything which has anything to do with instruction could be subsumed under both curriculum and Didaktik" (Hopmann & Riquarts, 1995, p. 20). In line with this, Klafki (1995, p. 187) does not see fundamental differences between the German concept Didaktik and the curriculum as it is used in the Anglo-American terminology. Actually, he claims, "it would often be most appropriate to speak about Didaktik/curriculum theory" (Klafki, 1995, p. 188). The two approaches deal with similar didactical questions, namely the learning goals, the educational content, teaching and learning methods, how to use media and evaluate the learning (Westbury, 233), through which are seen similar understandings of the development of learning situations (Frey, 1989, in Hopmann & Riquarts, 1995, p. 20). However, according to Manen, "a shared language does not necessarily produce shared understanding" (Hopmann & Riquarts, 1995, p. 24) because behind the words are different cultural traditions and understandings.

That said, publications from three international workshops held in first part of 1990 have clarified typical differences and similarities (Hamilton & Gudmundsdottir, 1994; Hopmann & Künzli, 1992). Firstly, German Didaktik is based on a philosophical foundation, a hermeneutic Geistwissenschaft, with a Bildung perspective on humanity and society.² This contributes to the "wholeness and complexity (...), that curriculum theory seems to lack" (Gundem, 1995, p. 52), since the focus deals with a more effective and technical planning of teaching in order to lead the child to learning the decided knowledge. In other words, Didaktik reflects the long perspective and raises general educational questions related to "what" and "why", while curriculum is more focused on planning and preparation of the specific teaching of the "how" question expressed in centralized made curricula, a core-curriculum (Lehrplan), which is learning-goal-oriented (Klafki, 1963; Hopmann, 2015, p. 17). Didaktik aims toward general Didaktik and argues, "Pedagogy comes first", while curriculum aims directly at subject matter (Hopmann & Riquarts, 1995). Didaktik focuses on the goal of democracy and Bildung defined as self-determination, co-determination and solidarity (Klafki, 1995, p. 191), while curriculum is oriented to complete the curriculum and 'best practice'.

² Bildung translated to English as education (Hopmann & Riquarts, 1995, p. 10) or general liberal education (Jarausch, 1990, p. 14)

Westbury (1995) sees a difference in the institutional context of curriculum theory and Didaktik. Curriculum theory is embedded in an institutional frame, a school system, which is the agent of education. Thus, the curriculum planning is in control of a school system that reduces the teacher's influence. The curriculum addresses the system, whereas Didaktik gives the individual teacher the autonomy to decide the best way to contribute to children's learning and character formation: Bildung. The teacher is the focal point, the "only possible agent as formation as he or she builds a teaching plan which is appropriate to his or her students" (Westbury, 1995, p. 252). Where Didaktik offers a complex didactical theory to the teacher, which the individual teacher has to transform to the classroom aimed towards children's Bildung, the curriculum system gives the teacher a teaching program, that is, a ready curriculum with content and objectives for children's learning. Didaktik acknowledges the teacher as an expert with her own voice (self-determination), while curriculum leans towards a bureaucratic form of systemic regulation.

The curriculum tradition is more engaged in a general specification of the school system and teaching programs, whereas Didaktik focuses on the teachers' criterions for choice of content in the planning phase (Schnack, 1994). Regarding the why-question, Didaktik makes reflections on the question 'What should the children become?'. Künzli maintains that "The didaktiker looks first for the point of prospective objects of learning in terms of education (Bildung), and then ask what it can and should signify to the student and how the students can themselves experience this significance" (Künzli, 1994 in Westbury, 1995, p. 248).

Didaktik is seen as theory of how to plan, where the didactical reflection and analysis is the most important tool to realize a curriculum. Against this curriculum is the planning itself, a pre-description of what is to happen in practice, thus "curriculum can be regarded as a pedagogical text" (Hamilton and Gudmundsdottir (1994) that predescribes "a sequence or *course* of learning" (Hamilton, 1990, p. 39), a running track with planned and expected possibilities for learning (Schnack, 2004).

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The dialog between Didaktik and curriculum has been constructive and has contributed to both traditions. Thus, Didaktik has influenced the curriculum tradition by given space to a content process rather than a control of the preplanned teaching program (Doyle, 2017). However, are curriculum and Didaktik two sides of the same coin? Westbury (1995) argues it is better to learn the differences in order to know instead of playing down the differences.

2.2 Bildung Didaktik

In the search for Didaktik in preschool, an enormous number of academic features came to the fore. Most of them reflected a general Didaktik and subject matter Didaktik, often without any direct relation to Didaktik in preschool. However, during the study a contour displays a general picture of a Didaktik understanding, one which could contribute to a Didaktik in preschool. The predominant results focus on German Bildung Didaktik. However, many other approaches were found, with variations from Paul Heimann's learn theoretical Didaktik (Reich, 1977) and different post-modern approaches (Jensen, 2013).

In addition to an historically account of Didaktik from Ancient Greece to the Renaissance, Ratke, Comenius and Herbart (Herbart, 1806; Jank & Meyer, 2006; Hamilton & Gudmundsdottir, 1994; Kansanen, 1999; and many others), countless studies of the German Didaktik appeared. The "German Bildung Didaktik" – established by Otto Willmann in 1882 and further developed by Eric Weniger, Thedor Litt, Wolfgang Klafki, Lothar Klingbeg, and many others – has had a major influence on our prevailing Nordic understanding of general Didaktik and subject matter Didaktik in school (Jank & Meyer, 2006). Therefore, it might be a suitable basis for constructing a Didaktik in preschool. In this review, however, the Anglo-Saxon contribution to Didaktik/teaching/curriculum in preschool is deselected as it presents a more school-like approach (Bennett, 2010; OECD, 2012; Åsen & Vallberg Roth, 2012). Nevertheless, the curriculum model has evolved since the Tyler rationale linear model (Tyler, 1949; Mager, 1962). Still, this does not fit with a Nordic understanding based on a philosophical and societal view like the German tradition, and is therefore omitted (Blankertz, 1986; Gundem, 1997; Vallenberg Roth, 2013).

A search on "general Didaktik, Bildung didaktik" opens for thousands of relevant articles and books dealing with didactical approaches with reference to Bildung Didaktik, which might frame a Nordic Didaktik in preschool. In addition to the above-mentioned researchers, one can point to other innovators such as Engelund, 1977; Gundem, 1975; Kron, 1993; Meyer & Rakhkochkine, 2018; Myhre, 1996; Nielsen, 1973; Nordenbo, 1983; Reich, 1977; Rucker, 2019; Ryen, 2020; Schnack, 2004; Sjöström, 2018; Uljens, 1997; Tahisylaj & Werler, 2021; Westbury, Hopmann & Riquarts (2000). Below, based on these researchers, is a short account of the fundamental dimensions of a (Klafki oriented) Bildung Didaktik, which might frame a Didaktik in preschool.

Bildung is related to the humanity-oriented Geistwissenschaft (human science) and refers to the overarching aim of schooling guided by reason and is seen as human being's self-development and spiritual formation – a process and expression characterized by a personal, masterful and responsible attitude to morals and values (Westbury, Hopmann & Riquarts, 2000, p. 24). This is crucial in an unknown future (Brante, 2016, p. 57). It paves the way for critical thinking that is "reflective and reasonable thinking that focused on deciding what to believe or do" (Ryen, 2020). Thus, Bildung includes the individual's will to use her knowledge and to act for democratic changes. Bildung is to gain insight and to undertake responsibility (Weniger, 1958), and to establish criteria for how to act (Nielsen, 1977) to realize an action competence (Schnack, 2003). Dimensions Klafki includes in a definition of Bildung are as follows: to achieve a historical communicated consciousness about central problems in our age and – so far it is predictable – in the future, to gain that insight all share the responsibility for the problems, and to achieve a willingness to participate in the solution of the problems (Klafki, 2001, p. 73, author's translation).

Hence, Bildung includes a critical-democratic dimension, which is visible in Klafki's approach: "critical-constructive Didaktik" (Klafki, 1995, 1996, 1998; Meyer, 2018; Broström, 2012). The critical part points to "the goal of guiding all children and adolescents to greater capacity for self-determination, co-determination and solidarity" (Klafki, 1995, p. 191), and the constructive means the teacher has to "suggest models for possible practice, to produce well-founded concepts for reformed or reforming

practice, for human, democratic school and instruction" (Klafki, 1995, p. 192). This involves three dimensions: children's own activity and equal dialogues with the teacher and between children; a feeling of obligation and commitment; and participation, action, and democracy (Broström, 2003; Broström, 2006 a, b), and taking the child's perspective into consideration (Broström, 2006a; Sommer, Pramling Samuelsson & Hundeide, 2010).

Bildung appears on three levels. Firstly the dimension is visible in the Bildung ideal, where the overall aims describe the future human in a future society reflecting dimensions like self-determination, codetermination and solidarity. Formulation of the overall aims takes precedence over all subsequent didactical decisions (Klafki, 2001, p. 137). Thus, the Bildung ideal serves as a guiding star (Sjöström, 2018). Secondly, Bildung is characterised by a formative content (Bildungsgehalt) which can relate to the Bildung ideal, in other words, a content with a democratic and liberating perspective. As an example, Klafki (1963) argues for a content that relates to children's own lives, is aimed towards the future, and suggests a categorical Bildung that dialectically combines the formal (subjective) and material (objective) dimensions (Klafki, 1983). In principle, any content – both the typical societal themes and the more narrow subject matter content – can have a 'double opening' in which the world will become available to the children and, at the same time, the children will become available to the world (Klafki, 1963, p. 43). Similar to Paulo Freire's (1972) theory of the concept of "themes of generative character", Klafki (1994) outlines a number of core problems or epoch-typical key problems: war and peace, the North-South conflict, nationalism, ecological problems and sustainability, social disparity and, finally, the dangers and possibilities of new management and communications media. Such a content can contribute to a humanisation and democratization of society. Nevertheless, there is a tendency in subject matter Didaktik to take a narrow focus on the core of the subject. However, a movement from disciplinary to thematic teaching might promote a critical-constructive approach (Meyer & Meyer, 2007). In addition, some subjects matter Didaktik - such as history, social science, natural science and sustainability - succeed in integrating Bildung to a greater extent (Sjöström et al., 2017; Vallberg Roth et al., 2021), and in bringing core elements in accordance with actual and future societal dimensions. Thirdly, Bildung is seen as process, namely when the content makes a "double opening" (Klafki, 1983, p. 61). However, in order to be formative [bildende], it requires an independently "active appropriation" [Aneignungsvorgang] (Klafki,

2007, p. 19). Although such qualities are less prioritized in general Didaktik (Rucker, 2019, p. 114), I suggest a teaching-learning process where the child is involved in social interaction and acts as an active participant in meaningful, productive, playful, and creative activities, often defined and elaborated using cultural-historical activity theory (Broström, 2016; Vygotsky, 1978; Leontjev, 1981).

The child's Bildung arises via the teaching-learning process, which the teacher has to plan and qualify. Here, Didaktik can be a tool helping the teacher to focus on the three didactical questions of 'what to learn', 'how to learn' and reflections on 'why this content and specific methods are of importance for the children' (Jank & Meyer, 2006; Klafki, 1963; Uljens, 1997). However, according to Hopmann, "Bildung cannot be achieved by Didaktik. The only thing Didaktik can do is restrain teaching in a way opening up for the individual growth of the student" (Hopmann, 2007, p. 115). For this purpose, the teacher can transform his/her didactical knowledge into a didactic model, which, among other things, forms an overview and reduces complexity, and is thus a tool for thinking and planning, thereby functioning as an educational compass (Jank & Meyer, 2006). A typical common occurrence within the didactical triangle with its roots in Comenius (1657, see Schaller, 1995) describes the three dimensions in teaching and the mutual relation: the teacher, the child, and the content (Blanketz, 1986; Künzli, 1994; 2000; Uljens, 1997, p. 176; Westbury, 1995; Ryen, 2020). Other models reflect more didactical categories, so-called relation model (Bjørndal & Lieberg, 1980) or cyclical model, which "begins with situational analysis and continues with aims, goals and objectives; content; learning activities; evaluations and then continuing to situation analysis again" (Broström, 2019; Nicholls & Nicholls, 1978; Print, 1993, p. 85). The situation analysis reflects children's backgrounds and all factors in the current situation, which influence the formulation of aims, goals, objectives, content etc. However, the overall aims are constant, while they, as mentioned, take precedence over all subsequent didactical decisions (Klafki, 2001, p. 137). Although the didactic model must be in accordance with the specific arena (e.g., school, preschool etc.), a didactic modelling is needed. Thus, we see new forms of models both directed towards general Didaktik and subject matter Didaktik (Palm et al., 2018; Lunde & Sjöström, 2020; Vallberg Roth, et al., 2019, 2021; Wickman, Hamza & Lundegård, 2018).

2.3 Didaktik in preschool

As mentioned in the introduction, education in preschool is rooted in development psychology and teaching, with Didaktik still seen as an unwelcome guest. However, we have seen a movement from the use of the term development to learning, not least learning via play; and from this position, a movement to teaching and Didaktik.

2.3.1 Learning via play

Learning in preschool is stablished through the approach *learning via play*, as expressed in endless numbers of research publications where play is seen on a continuum from "free play" to learning play. In play, children shift between being in the reality and speaking about everyday knowledge, "as is", and enter into a phantasy "as if" (Pramling & Wallerstedt, 2019). There has been a shift from free play, which contributes to children's general development (e.g., Bruce, 1991) and social and language learning (Corsaro & Eder, 1990), to a Vygotskian play of understanding. This is playful learning, characterised by teacher support and participation in play in order to enrich the play quality (Lindqvist, 1995; Broström, 1999; Hakkarainen et al., 2013; Vygotsky, 1978). Continuing to see play as an activity leads to learning, and then the use of concepts like learning play or pedagogy play (e.g., Brooker, Blaise & Edwards, 2014; Cutter-Mackenzie et al., 2014; Hirsh-Pasek et al., 2009; Johansson & Pramling Samuelsson, 2011; Lillemyr, Dockett & Perry, 2013; Singer & Singer, 2001). Then we have a shift to a more specific learning via play (Bodrova, 2008) with an intentional decision on the selection of the content of play (Fleer, 2011), and thus a focus on children's subject knowledge learning, e.g., literacy (Christie & Roskos, 2006), mathematics (Oers, 2011) and sustainability (Broström & Frøkjær, 2019; Edwards & Cutter-Mackenzie, 2013; Fleer, 2015).

Experience of teacher-guided play (Wood, 2014) and play-based learning has inspired the development of different types of play-oriented, or play-based, Didaktik. One way to combine play and learning is to organise a playworld, that is, to construct an imaginary play situation (Elkonin, 1980) where children can initiate a play theme, create a play, and transform reality with different roles and actions (Broström, 1999; Baumer et al., 2005; Hakkarainen et al., 2013; Lindqvist, 1995). Another play-learning approach

is play-responsive teaching (Pramling & Wallerstedt, 2019; Pramling et al., 2019). Instead of starting in children's play, teachers implement a shared interactive teaching on a theme or subject, and, related to this, children respond with play – a shift from "as is" to "as if". Thus, supported by play, teaching has entered preschool and opened the door to teaching and Didaktik.

2.3.2 Teaching

In recent years, teaching has been discussed, but not accepted, in preschool education in the Nordic countries (Hammer, 2012; Jansen, 2008); Rosenqvist, 2000; Sandberg, Lillvist & Ärlemalm-Hagsér, 2018; Sheridan & Williams, 2018; Sæbbe, & Pramling Samuelsson, 2017; Thulin & Jonsson, 2018). Nevertheless, leading researchers in the field have argued for teaching in theory and practice, and have illustrated a teaching characterised by dialogical relations, interaction, and communication, as well as children's participation and agency (Sheridan & Williams, 2018; Doverborg, Pramling & Pramling Samuelsson, 2011; Eidevald et al., 2018). Nielsen, Lecusay and Alnervik (2018) describe teaching in preschool as holistic and built on play and exploration. Thus, Didaktik has gradually gained a foothold in preschool research and practice. However, preschool teachers link their didactical reflections, e.g., selection of the content, to the actual situation: a so-called "Didaktik of the now" (Jonsson, 2011). Thus, the educational content and construction of practice are embedded in the daily routine. Therefore, Linell (2014, p. 186) uses the phrase "situation-transcending sociocultural practices" or embedded teaching" (Dahlgren, 2017), which is in accordance with play-responsive teaching (Pramling et al., 2019, p. 23).

2.3.3 Didaktik

Such tentative didactical openings lead to a secure Didaktik directed at preschool (Broström, 1998, 2012; Broström, 2019 a, b; Broström & Vejleskov; Broström, Lafton & Letnes, 2015; Gunnestad, 1983/2008; Håberg, 2015; Lillemyr & Søbstad, 1993; Pramling & Pramling Samuelsson, 2011; Vallberg Roth et al., 2019, 2020; Vallberg Roth & Holmberg, 2019). Over the last decade, several research projects on Didaktik have contributed to stabilising Didaktik in preschool.

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In addition to a general Didaktik in preschool, a large number of subject matter Didaktik reflect most of subjects from school, e.g. literacy (Jensen, 2012, 2013), mathematics (Palmer, 2011), music (Ferm, 2012; Holmberg, 2014; Wallerstedt, 2011), nature, environment and sustainable development (Broström & Frøkjær, 2021; Caiman & Halvars, 2020; Hedefalk, 2014; Jordt Jørgensen & Nielsen, 2019; Svedäng, Halvars, Elfström, & Unga, 2018; Thulin & Helldén, 2011). Further, the didactical research program *Multivocal didactic modelling* by Vallberg Roth and colleagues includes a significant amount of subject matter Didaktik in preschool and displays a possible didactical modelling (Vallberg Roth et al., 2019, 2020; Vallberg Roth & Holmberg, 2019).

2.3.4 Why the issue is problematic and significant

Teaching and Didaktik in preschool might be seen as schoolification (Kampmann 2013, 2004) and learnification (Biesta, 2014), which raises criticism and calls for action research projects where teachers and researchers jointly consruct new sustainable approaches (e.g. Broström, 2019; Vallberg Roth et al., 2019, 2020). Among other things needed is the inclusion of care, teaching and upbringing into an educare concept (Broström, 2006c), a dynamic teaching and learning concept (Broström, 2016) containing educational tact (Manen, 1991).

2.3.5 Statement of position

Didaktik in preschool must overcome a curriculum position and be based on Bildung Didaktik with a courageous Bildung ideal focusing on a future critical democratic citizen of the world and the construction of a didactical liberating approach including epoch-typical key problems. In addition, a requirement is the construction of a didactical cyclical model including a situation analysis with an opening to a play-based approach with the integration of playworlds.

3. A critical democratic Bildung Didaktik in preschool

Critical analysis of modern capitalism shows difficulties concerning the realisation of self-determination, co-determination, and solidarity (Klafki, 1995, p. 191). For that reason, there is a call for a global direct democracy with a political claim for the right to citizenship (Hardt & Negri, 2000),

thereby giving people responsibility to find solutions to local and global problems. A child characterised by Bildung uses his/her action competence (Schnack, 2003), which presupposes recognition in the forms of love from the private and educational sphere, universal rights from the sphere of legal relations, and solidarity from the sphere of community of values (Honneth, 1995). Preschool can be seen a democratic meeting place (Broström, 2012; Dahlberg, Moss & Pence, 2007; Giroux, 1997). Such a general democratic fundament and the previous German Bildung Didaktik form the ground for a transformed Didaktik in preschool.

Because of a national curriculum in preschool and the increasing view of preschool as an introduction to school, the importance of educational content has been strengthened. Consequently, there is no need to overcome the separation of a general Didaktik and subject matter Didaktik in preschool, but instead compose an integrative Didaktik (Sjöström, 2018, p. 34). However, a didactic modelling is essential. Based on Klafki (1997, p. 219; Print, 1993), I have constructed a cyclical model to reflect the most important didactical categories, namely a dynamic situation-orientated model, see Figure 1 below (Broström, 2019a, b).

3.1 Situation analysis

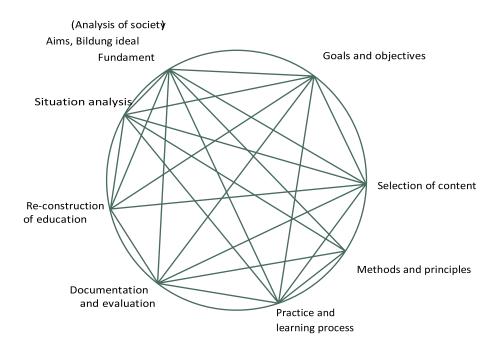


Figure 1. A dynamic, situation-oriented model (Broström, 2019b, p. 25).

The model serves to strengthen teachers' thinking and analyses of education, and planning of practice. However, the model is dynamic, although there is an interrelationship between the individual didactical categories, aims, goals and objectives, content, educational principles, learning activities, evaluations and re-construction of theory and practice. Moreover, in contrast to a "desk education", the model is situation oriented and contextual; it is a "nearness Didaktik" where the educational planning and practice raises from a dialectic between general didactical reflections and specific analyse of children's actual life, their interest, motivations, knowledge, problems, friendship etc., that is, a so-called situation analysis (Print, 1993), or with Freire (1972), a decoding. Based on the analysis, the teacher makes the educational planning. The situation analysis happens both prior to planning of practice and in the actual situation in the meeting with the children based on a child's perspective (Broström, 2006a;

Sommer, 2010) in the pedagogical "now" (Jonsson, 2011). The teacher interacts in the present and reflects to the child in the educational context with a 'situation consciousness' (Jensen, 2014). That is, to meet the child's gambit, or the "child's beginnings" (Arendt, 2005). Thus, according to Søren Kirkegaard, "life can only be understood backwards; but it must be lived forwards", as two types of educational planning can take place – 'backward planning' and 'forward planning' (Broström & Frøkjær, 2018).

3.2 Aims - Bildung ideal

As previously mentioned, the overall aims take precedence in relation to all other educational factors (Klafki, 2001, 289) and have to be complete in advance as a didactical bottom. The aims are grounded in a view based on society and a utopian society, that is, 'economic, political and cultural equality'. Further, they reflect philosophical concepts like freedom, equality, self-determination, codetermination, democracy and solidarity. This is a principle concerning equality expressed in children's everyday life Klafki (2004, p. 67):

Equal life and education opportunities and possibilities for self-determination for all citizens; all citizens have the possibility for co-determination over economic, social, political and cultural conditions and development; abolition of humans' hegemony over humans; liberty to state alternatives to given conditions, given to you not to violate the above principles (Klafki 2004, p. 67, author's translation).

In addition to critical democratic theories on society, the aims build on a view of humanity with the child as an active subject: as a participant and with communicative abilities. This demands an open and equal dialogue characterized by recognition, a dialogical relation, a communicative action plus an I-you relationship (Buber, 1958; Freire, 1971, 1972; Skjervheim, 1976; Dale, 1992; Habermas, 1984, 1987). Most of the Nordic countries include Bildung, solidarity and children as active democrats, and the idea that teachers themselves should create their own Bildung ideal. Such a process makes their wordings more understandable and binding. An example is the following:

We understand children as future citizens of the world who with a global responsibility respond to societal problems and challenges with an open-minded, exploring, creative and critical approach based on a holistic view, a critical-constructive awareness of the environment, acting for peace and a global sustainable development. Moreover, they apply a historical understanding with a utopian understanding of the good life. And they recognise their options in the specific situation they commit themselves to, and they are willing to use their action competence in interaction with others in order to improve their own and others' condition of life. (Broström, 2019b, p. 61, author's translation)

When a teacher colleague during a shared and binding process has put forward such an aim, the words are bound by professional competency and emotions. Thus, the aim can function as an educational guiding star.

Goals and objectives are teachers' notions of what they want the children to achieve (Jank & Meyer, 2006: 53) in relation to knowledge, skills, values, and personal development. Without goals and objectives, teachers are tied up in random happenings and children's immediate interests and impulses (Dewey, 1974). Goals direct the educational practice, but in a dynamic way as 'a goal is a goal- in sight' (Dewey, p. 74), which is in accordance with the Swedish phrase 'goals to strive for'. Goals and objectives must avoid hollow, high-flying hope formulations and instead be clear and exact, but without the character of behaviour objective (Schnack, 1994). Goals and objectives can be organised in a goal-hierarchy (Jank & Meyer 2006, p. 124), so the short-termed goals and objectives are a step towards the long-termed aims (Bruner, 1970); but as a rule, the goals and objectives must be in accordance with the overall aims (Hopmann & Riquarts, 1995, p. 27) and toward the content. However, in practice this can be a problem, as teachers are under pressure due to a political agenda with multiple learning objectives. However, from 2018, the legal requirements in Denmark have lightened the focus on learning objectives, and instead set goals for the learning environment, which is a starting point for the development of strong learning environments: the physical, the aesthetic, the mental and the didactical learning environments (Broström & Frøkjær, 2019).

The content describes the experiences children meet in forms of general themes and subjects, both in planned and spontaneous activities. In principle, the content should motivate and make the child happy, give an experience of meaningfulness and have a Bildung character. As mentioned earlier, and related to the category Bildung (Klafki, 1998), the content gives a 'double opening' and contains topics, problems and categories that give children the necessary knowledge and stimulation to learn how to handle everyday life here and now and society in the long term. The content must relate to the overall aims, the Bildung ideal, which expresses a future society, and thus an ideal content exceeds the existing society, which emphasises the introduction of epoch-typical key problems.

According to this approach, and in line with Klafki's (1983) definition of Didaktik, one might say that the content is the heart of Didaktik articulated in the didactical triangle, where the child, the teacher and the content enter into a mutual relationship (Künzli, 1994; 2000; Uljens, 1997, p. 176; Westbury, 1995). The content is at the top of the triangle and opens for the 'what' question. The relation 'teachercontent' represents the teacher's presentation of the content for the children, which occurs in the teaching when the teacher 'shows' the content. Westbury emphasises the teacher's importance with the following: the teacher is "the only possible agent of formation as he or she builds a teaching plan which is appropriate to his or her students" (Westbury, 1995, p. 252). The base of the triangle, 'teacherchild', reflects the emphatic relations between teacher and child and strives for intersubjectivity, a shared focus, a voluntary sharing of experiences, activities, and objects (Trevarten, 1980). This dimension is often called shared sustainable thinking (Siraj-Blatchford, Smith & Pramling Samuelsson, 2010) and is highly prioritized in preschool Didaktik, often defined by Stern (2000), who calls for a sensitive teacher who is able to harmonise his/her relation to the child and its emotional state. However, because children find other children as the most important element (Broström, 2015), the corner 'child' is extended to child-child, thereby transforming the triangle to a square (Broström, 2009).

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A critical-democratic education in preschool searches for political Bildung encompassing themes with a 'double opening' like epoch-typical key problems, which often appear in the everyday life of a preschool. For example, children play and ask questions based on watching television about nature and climate problems, war in Afghanistan, the Palestinian conflict, or a specific terrorism event, which influences their thinking and feelings. Thus, they need adults to help them to come to terms with these questions (Broström, 2012). As an example, in a Danish preschool some children stated that the drinking water was poisoned and thus dangerous to drink. The truth behind the story was that in the neighbouring municipality there had been problems with the drinking water, which led to educational activities focusing on pollution. In another preschool, two 5-year-old boys had a dialogue during lunch. When one, Oskar, started to eat his lunch of bread and sausage, a boy with an ethnic background other than Danish burst out, "Ugh this food is unclean, why do you eat such food? My father says this is really unappetising." Oskar replied quickly, "Don't speak about my food", and turned to a boy on his left side saying, "I like this, and me and my father eat this at home with roasted onion, uhm!" In this situation, the preschool teacher could *choose* to ask the boys not to speak badly about each other's food, and thereby avoid a possible conflict. However, she gave the boys the possibility of exploring each other's norms and values. In this way, the boys entered into the themes of nationalism, the East-West conflict of values, etc. Having their own experiences, the children's appropriation and construction of knowledge and norms were supported by the teacher in the days to come. These examples illustrate it is not difficult for preschool teachers to identify and to mobilise a number of epoch-typical core problems that can help children to deal with current and future problems through appropriate preschool activity.

Educational principles are fundamental guidelines decided in advance before the actual meeting with the children, where they then become more specific and transformed into methods. The principles incorporate core elements from the Bildung ideal and reflect the view of society and the view of humanity and society. The teachers formulate a number of educational principles, which they, in different forms, utilise in the educational meeting characterised by pedagogical tact (Manen, 1991). The following might serve to give a sense of understanding of the principles: 1) the child as subject; 2) a relation between teacher and children built on recognition; 3) to take the child's perspective; 4)

play as the child's way of existence; 5) learning happens via social interaction; 6) support children to express themselves and to think; 7) a balancing of challenges and safety, zone of proximal development; 8) to have an active place in children's community; 9) children's self-determination, codetermination; 10) to bring democracy and participation to the forefront in daily life (Broström, 2019).

3.3 Playworld

Based on a Bildung approach, Didaktik in preschool is obligated to direct children's attention, interest, curiosity, and wonder (Broström & Frøkjær, 2019, p. 481-483) towards a number of epoch-typical key problems. Because play is children's leading activity (Leontjev, 1981) and children want to play, it follows that one should construct play-based learning activities. Play is a voluntary (Fröbel, 1903), intrinsically motivated (Leontjey, 1978) and meaningful, and is characterised by fiction, imagination, and phantasy (Singer & Singer, 2001; Vygotsky, 1978), and by interactions and communications (Bateson, 1972; Swartsman, 1972). As already mentioned, it is possible to organize a playworld – an imaginary play situation (Elkonin, 1980). A playworld comprises long play sessions where children and teachers are based in a shared theme and together create long-term-play sessions. Lindqvist (1995) arranges aesthetic play with reference to children's literature, for example, the Moomins, Pippi Longstocking, and Alice in Wonderland. Similarly, Broström (1999) constructs a so-called frame-play where teachers and children based in shared experiences from society build a collective fantasy. In this guided-play (Hirsh-Pasek et al., 2009), teachers show respect for children's ideas and play initiatives. Further, they inspire and support children's play, and they also take play initiatives themselves. The imaginary play situation – the context, the frame, or with another name the playworld – must be visible for all children. According to Bateson (1972), the establishment of the context functions as a psychological frame to guide the participants to include certain messages and actions and to exclude others. Playworlds have a physical design and equipment that support children's shared imagination; and through this, the topic or theme is constructed. According to Hakkarainen (2010), all playworlds integrate some kind of psychological tools to support the transitions from reality (e.g., children's classroom) to an imaginary playworld. For example, in a frame play the children can transform a room into an emergency call centre and hospital where they play for days (Broström, 1999). In a play project

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in an American kindergarten, researchers, teachers, and children created a playworld based on C. S. Lewis's *The Lion, the Witch and the Wardrobe* (Baumer et al., 2005). Each Friday all participants walked through a wardrobe (the back of the wardrobe was removed) and entered a fictive world (the neighbouring classroom). This playworld had a clear learning dimension, namely reading and language acquisition.

In principle, any subject matter Didaktik can bring children's learning into a playworld, e.g., the theme science and sustainability (Fleer, 2017, 2019). Fleer built a scientific playworld with a focus on nature phenomenon, an example being a plastic bubble was used to represent a drop of water in which children could play inside. The children also constructed different cultural devices, playworlds: a fabric tunnel in which they imagined they were worms, caterpillars, and butterflies (Broström & Frøkjær, 2019). The more experience children have with the topic, the better they can imagine the situation and thus learn (Vygotsky, 2004).

Based on Fleer (2019), a model with five steps could support the teacher in the process of combining play with science and sustainability: 1) An introduction phase where children get fundamental knowledge on science and sustainability, e.g. make studies of a compost heap with the use of microscopes; 2) The teacher introduces the children to a narrative on sustainability to frame the following play. The story must contain a physical tool to help the children to move to a strange place; 3) The narrative transforms into a cultural device (cf. the water drop) in order to maintain the imagination; 4) Children and teachers start a play journey in the field of science and sustainability where they explore and create a narrative. Here, it is important to implement a tension and a plot to make the play advance; 5) For weeks they play both in small and big groups and create dramatizations comprised of knowledge and strong feelings (Broström & Frøkjær, 2019, 2021).

3.3.1 An example from a preschool

The teachers arranged a visit to a harbour to see a new work of art: a monster fish. Gradually, the children grasped the point: the fish was constructed of garbage material, mostly plastic. They were

excited to identify the different materials: a Christmas tree stand, a pair of skis, garden furniture, toys, etc. After a while, they started to ask questions: Who has made this art? Why is it built of plastic? The teacher pointed at an information board and said, "Maybe we can get the answer," and eagerly the children ask him to read the information on the piece of art: "The art the Giant fish 'The golden dream from Öresund' was created in 2014 by the Japanese art group 'The Japanese art unit Yodogawa Technique'. The fish is constructed from garbage collected by volunteers from Sweden and Denmark and tells us about what people throw away". The children ask lots of question, and the teachers maintain the dialogue, which resulted in children's stories about to "swimming in lots of disgusting waste". Other children uttered their knowledge about "enormous islands of plastic in the Pacific, the fish die". Based on this conversation, the children decided to hunt for plastic waste in order to build their own art made of plastic. They spent the next days at the beach until they had enough material to construct their plastic-monster. It was so enormous that many children could sit inside it. They loved their monster; and for a while, it was pivotal for their play. Parallel with the play, the teachers told narratives about waste and pollution, among others a story about a new technology to convert plastic into fuel. In addition, a Danish ship, which at the same time collected and converted plastic, used the produced fuel to drive the ship. The children found this smart and quickly decided to change their monster-fish to a 'plastic-convert-ship'. The ready ship functioned as a new frame for their play, which lead to a rich social dramatic play with roles like captain, chief, second officer, seamen, engineer, and researchers who constantly developed new technology. The children composed long narratives about their fantastic and dangerous journey on the seven seas, containing dramatic technology, and also adventure, drama and tension. Then the play proceeds for days (Broström & Frøkjær, 2021).

The play holds several characteristics that define a playworld of sustainability. The starting point was the children's knowledge on sustainability related to plastic in the sea and the possibility to convert plastic to fuel (item 1). Moreover, the frame story invites play in a physical device, the ship (item 2), which is able to maintain children's phantasy, and the play about sustainability (item 3), which with strong feelings was elaborated and carried on for days (item 4 and 5).

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Behind the educational play, the teachers have reflected on the overall aims: the Bildung ideal about "a critical-constructive awareness of the environment, acting for peace and a global sustainable development". Furthermore, they have reflected on a goal related to children's play about learning possibilities via teacher supported play. Also, they have confronted practice with their decided educational principles.

Taking a play approach makes it possible to involve young children in epoch-typical key problems such as the ecological crisis and sustainability. Today, different initiatives concerning a sustainable development are common (Pramling Samuelsson & Park, 2017; Broström & Frøkjær, 2019, 2021).

4. Some alternative views

The Bildung approach is criticised for several reasons, among other it focuses too heavily on the Bildung ideal and content, and with that the teacher's central role. The paradox is comprised of the teacher's endeavour to lead the child towards knowledge in order to achieve Bildung and self-determination. However, the process to freedom can be overly structured and authoritarian. In addition, a well-known criticism by Giesecke (1998) rejects the concept solidarity as a moral postulate, and therefore it cannot function as a general national Bildung ideal. Further, he questions the epoch-typical key problem; among other things, he asserts it is doubtful whether this theme will infuse children with the planned feeling of responsibility.

Therefore, other possible didactic approaches appear. First of all, a post-modern inspiration expressed in early childhood by Dahlberg and Moss (2005), Dahlberg, Moss and Pence (2007), Jensen (2013) and Lenz Taguchi (2009) argues for a process-oriented practice like 'Didaktik of the now', forward planning and a readiness to continue from the child's 'beginning' in order to bring democratic space into the preschool. Thus, a linear practice with pre-described educational goals, objectives and content are replaced by an imminent, co-operative, intra-active and rhizomatic practice that gives the child power and agency. In addition, not only interactions with other children and preschool teachers are emphasised (Vygotsky, 1978), but also the so-called intra-actions, that is children's intra-actions with

objects and material. Even though the intention is to be 'evocative rather than didactic' (Dahlberg, Moss & Pence, 1999, p. 2), and thus a toning down of didactical dimension without the provision of clear principles and methods, the overall aims underline democracy and children's influence, which in some respect is in accordance with wordings like self-determination, co-determination and solidarity.

A more radical view is to question the relevance of Didaktik. For example, Englund (2007) states that the communication between teacher and children orientating a communicative learning gains more ground than a traditional didactical approach with the formulation of goal, aims and selection of content.

5. Conclusion

This paper focuses on the development of a critical-democratic preschool Didaktik. Based on a review process, articles and chapters appear to be related to the dialogue Didaktik and/or curriculum and to Bildung oriented approaches. In consideration of the tradition of preschool, the German Bildung Didaktik seems to be the most appropriate for the construction of a Didaktik for preschool with the integration of a clear teaching and learning dimension. The critical-democratic dimension calls for an active teacher, which might worry the field of early childhood education. However, the paper suggests a play-based teaching and learning process with use of the principle playworlds. Teachers and children in shared play form a balance between teaching and play, which forms a platform for children's acquisition of subject learning. However, different forms of play-based learning, a play Didaktik, are still at an early stage. Thus, there is a need for more research.

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