

## INTERVIEW WITH MARIANE HEDEGAARD: CHILD DEVELOPMENT AND THE DOUBLE MOVE METHODOLOGY IN TEACHING

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### ABSTRACT

The interview with Professor Emerita Mariane Hedegaard focuses on her contributions to the scientific study of child development in relation to teaching and learning processes, with particular attention to the Double Move methodology in teaching. Her propositions emerge from a body of research within the cultural-historical tradition that examines the relationship between the teaching of scientific knowledge and processes of children's learning and development. Drawing on the work of Vygotsky and Davydov, Hedegaard explores how school subject matter can be made meaningful for both preschool and school-age children. The interview addresses the development of her research programme, the theoretical and conceptual foundations of the Double Move methodology, and the challenges involved in organising teaching practices grounded in this approach.

**Keywords:** interview; double move in teaching; childhood development

## Entrevista con Mariane Hedegaard: desarrollo infantil y la metodología del doble movimiento en la enseñanza

### RESUMEN

La entrevista realizada con la profesora e investigadora Mariane Hedegaard tuvo como objetivo la comprensión de las proposiciones de la autora a respecto al estudio científico del desarrollo infantil y, también, sobre la organización de los procesos de enseñanza y aprendizaje, más específicamente, sobre la metodología del Doble Movimiento en la Enseñanza. Esas formulaciones se insertan en el conjunto de investigaciones dentro de la tradición histórico-cultural que buscan investigar las relaciones entre la enseñanza de los conocimientos científicos y los procesos de aprendizaje y desarrollo del niño. Así, Mariane Hedegaard, con base en las proposiciones de Vygotsky y Davidov, se propone a discutir cómo los contenidos escolares pueden hacerse relevantes para niños en edad escolar y preescolar. La entrevista se estructuró de modo a contemplar aspectos vinculados al desarrollo de las investigaciones científicas conducidas por la autora, así como aspectos teórico-conceptuales de sus proposiciones y desafíos encontrados para la organización de la enseñanza con base en la metodología del Doble Movimiento.

**Palabras clave:** entrevista; doble movimiento en la enseñanza; desarrollo infantil

## Entrevista com Mariane Hedegaard: desenvolvimento infantil e a metodologia do duplo movimento no ensino

### RESUMO

A entrevista realizada com a professora e pesquisadora Mariane Hedegaard teve como objetivo a compreensão das proposições da autora quanto ao estudo científico do desenvolvimento infantil e, também, sobre a organização dos processos de ensino e aprendizagem, mais especificamente, sobre a metodologia do Duplo Movimento no Ensino. Essas formulações se inserem no conjunto de investigações dentro da tradição histórico-cultural que buscam investigar as relações entre o ensino dos conhecimentos científicos e os processos de aprendizagem e desenvolvimento da criança. Assim, Mariane Hedegaard, com base nas proposições de Vigotski e Davidov, se propõe a discutir como os conteúdos

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escolares podem se fazer relevantes para crianças em idade escolar e pré-escolar. A entrevista foi estruturada de modo a contemplar aspectos vinculados ao desenvolvimento das investigações científicas conduzidas pela autora, bem como aspectos teórico-conceituais de suas proposições e desafios encontrados para a organização do ensino com base na metodologia do Duplo Movimento.

**Palavras-chave:** entrevista; duplo movimento no ensino; desenvolvimento infantil

## INTRODUCTION

The present interview with Professor Emerita Mariane Hedegaard took place in December 2021, coinciding with the doctoral sandwich internship undertaken by one of the interviewers at Aarhus University, Denmark.

Mariane Hedegaard is Professor Emerita in Developmental Psychology at the University of Copenhagen, Denmark. Her academic engagements have extended to roles as a professor and researcher at various universities, including those in Norway, Spain, and the United Kingdom, and was awarded the title of *Doctora Honoris Causa* by the Universidad Pablo de Olavide, in Seville, Spain. Additionally, she is recognized as the author and co-author of publications available in both English and Danish.

The interview script was structured around the author's propositions regarding the study of child development and, specifically, the organization of teaching and learning processes, focusing on the methodology of the Double Move of Teaching.

This discussion is part of a set of investigations within the cultural-historical tradition that seeks to explore the relations between the teaching of scientific knowledge and the processes of child learning and development.

Hedegaard (2018) states that in Denmark, between the 1970s and 1980s, there was criticism of school education that promoted the memorization of knowledge. As a result, discussions emerged about the importance of exploration and children's involvement in their school learning. However, in her perspective, these proposals did not address which central concepts of school subjects should be taught. In light of this, and inspired by Vasily Davidov's (1930–1998) ideas about theoretical knowledge, Hedegaard (2018) developed, throughout the 1980s and 1990s, intervention projects in schools, in cooperation with teachers and professionals in the fields of biology, geography, and history, which were based on the idea that the central concepts of a given subject should guide teachers in creating tasks for students.

This methodology came to be known as the Double Move in Teaching, as it proposes movement between scientific and everyday concepts in the service of the development of theoretical thinking. According to Fler (2010), this formulation is grounded in the Vygotskian distinction between everyday and scientific concepts, and it advances based on Davydov's theoretical and pedagogical writings. Fler (2010) states that the Double

Move in Teaching addresses a fundamental question: how can school content, with its long-standing tradition in scientific disciplines, become relevant for school-aged and preschool-aged children?

This methodology takes as starting point situations in which the student explores their everyday concepts, guided by tasks formulated by the teacher based on the core conceptual relations of a given subject. It is proposed that through this movement, the theoretical knowledge acquired can be used in the student's local practices.

Therefore, this methodology emphasizes the relations among everyday concepts, local knowledge, and the central concepts of a given area of knowledge to be taught – in other words, it is a proposition that aims to identify how theoretical concepts can be taught in such a way that they guide the person's practice in their community. These proposals were later developed and termed Radical-Local Teaching by Hedegaard and Chaiklin (2005).

Hedegaard (2018) emphasizes that subsequent investigations also led her to understand that it is not possible to examine the process of concept formation in children apart from the activities they engage in and the institutional practices within which these activities are embedded. In other words, she highlights the relation between the appropriation of knowledge and the child's social situation of development – that is, the social, cultural, and institutional conditions that shape their activity in school.

Accordingly, the following interview revolved around questions through which the author could discuss central aspects of the Double Move methodology in teaching and how it is grounded in and represents the development of proposals regarding teaching and learning processes within the cultural-historical tradition.

## INTERVIEW

**Interviewer:** What is the main point in the Double Move in Teaching?

**Mariane:** The main point in the Double Move is to consider the child's emotional experiences and what is important for the child, relating this to the aim of all subject matter teaching. So, it's like starting with a child when you are a teacher, thinking, "What is important for the child?", but at the same time considering the content that needs to be taught from the perspective of the child. So, you go from the child to the subject matter, but then you qualify the child's everyday concepts because if

the child comes to acquire the concepts in the subject matter, then his or her cognition develops. You always have to consider the emotional experiences and what is important for the child, so it's not only the cognition of what the child knows but also what the child is interested in and motivated by.

And then you go search for what the child is interested in from the perspective of the subject you want to teach the child. So, it is not everything that the child is interested in. You try to find something from this perspective. And, then if you get the child interested and the child acquires knowledge, then the child's knowledge and motives change, develop. So, that is the double move. You always see one from the other perspective. When you want the child to learn something, you have to see what could be interesting for the child. For instance, in my work with evolution, you have to consider the child's age and what is interesting for children. I had 9-year-old children, and they were still interested in the world and big questions. That's why I could ask, "Have there always been the same animals on Earth?" And then I hoped that would be interesting. But I found something from the perspective of the subject matter, and then you have to go back to the subject matter based on what the children are saying. So, it's a continual back-and-forth movement.

**Interviewer:** Could we say that the Double Move approach is inspired by Vygotsky's analyses of scientific and everyday concepts and Davidov's elaborations on theoretical knowledge and thinking? If so, how are these aspects articulated to the double move approach?

**Mariane:** Certainly, I agree with you. They are inspired by both Vygotsky's analyses of scientific and everyday concepts and Davidov's ideas about theoretical thinking and the "germ cell." This is what I tried to articulate in the double move. So, I agree with you.

**Interviewer:** How did Vygotsky's elaborations about scientific and everyday concepts inspire the double move approach? What was the shortcoming identified in Vygotsky's elaborations, and how does the double move approach extend them?

**Mariane:** I think I contributed a little more. This is about the child's perspective. We need to try not only to consider the individual child's perspective but also to understand the age period and what is important in this specific age period for the children present in this group. So, in some way, it is the child's everyday concepts, but it is also the child's everyday emotional meaning and what is important to them.

**Interviewer:** What about Developmental Teaching? I mean, what is the main difference between the Double Move approach and developmental teaching?

**Mariane:** I think that developmental teaching does not sufficiently take into account what is meaningful from the child's perspective. But it's not that I'm disagreeing with developmental teaching. I'm just

emphasizing an aspect in developmental teaching because developmental teaching can encompass the Double Move; it's not an opposition.

**Interviewer:** In the Double Move you wrote about the core models in teaching. So, what is the function of the core models in teaching, and what are the main characteristics of a core model?

**Mariane:** Core models or germ cell models guide teaching, influencing how teachers create tasks and questions for children. In the end, these core models become the children's understanding or keys to understanding a subject matter. However, it always starts with the teacher's guidance in the beginning and gradually becomes the children's knowledge if the teacher is effective and designs good tasks.

However, it's not a method taught to teachers in their education. What is the central concept in the subject? This is not typically presented to teachers. It should be developed, but we need somebody to take on this task. It is a significant challenge. Therefore, I believe we should create teaching materials that teachers can refer to. They should consistently act based on the ideas of what the central concept is and what core models should guide the teaching. The problem is that most teaching materials are built to represent various areas in the subject matter. Teachers are often required to cover a little of this and a little of that without sufficient time to explore how to understand these topics from a central concept. Of course, this concept can develop and change in our study, but it's like finding something as a key or the core in an area that you can build your understanding around. This is a problem, I think, not only for primary teaching but also for university.

**Interviewer:** Yes, I thought about how we teach and learn psychology.

**Mariane:** I started with psychology; that's why I created this model with society, institution, and child. It's because I wanted to identify what is central. People always say it is the environment and the child. You can view this as the personal or the environment, but you can specify. You can actually say, "it's a practice or it's an activity or it's an activity setting," and ask, "how can you relate the person and society to this?" So, this is my way of figuring out what the goal is.

**Interviewer:** In the article "Ascending from the Abstract to the Concrete in School Teaching — the Double Move between Theoretical Concepts and Children's Concepts", you mentioned that only through using research methods is it possible to ascend from a substantial abstraction to concrete events. What are the similarities and differences between the research method in the learning situation and the research situation?

**Mariane:** I think that it's only through exploration, but Vygotsky and Davydov say the same. It's only through the children's own exploration. You cannot present

material directly to the child, or you should not present it. The task for the teacher is to create the possibility to make exploration, and this is created by tasks that, in some way, lead the child to grasp these core concepts. That's how I read Davydov, and it is also how I interpret Vygotsky. In his *Educational Psychology*, the first book he worked on, he said, "It's only the child himself who can give the child knowledge through his own activity or through his own exploration" – I can't remember if he used the word "exploration" because I read it in Danish, so I don't know the word he used.

Additionally, I think one thing that I find important in Davydov's ideas is that in traditional school teaching, the focus is always on content, and this is exploration, which we can agree upon. However, there are two other processes: goal formation and evaluation. And here there are three phases: goal formation, exploration, and evaluation. All three phases should be part of teaching. Davydov starts by saying, "When you start teaching, you should know how to create tasks that have all the concepts or when you try to solve it, show all the concepts that you will go on to learn." It's complex in a way; you might not remember it all, but you get an idea, a first idea that may not be so structured, but it gives you an idea about where it is going. This is important when you start to learn something or for the teacher when starting to teach something.

What I found in my research is that again and again, you have to go back to what the aim is, what the objective of the teaching is. It's not enough to say it at the beginning and think you'll remember. You really have to revisit it again and again. In the end, there should be tasks that also encompass, in some way, a small circle within a big circle that includes all these three aspects - goal formation, exploration, and evaluation. Davydov says that to begin teaching, you must create an example that contains all the concepts of the basic model you want the child to learn. So, it's complex, but somehow, you have an idea, a first idea of where you're going, and you must have that when you start teaching something. What I discovered when I did my research is that sometimes it's necessary to go back to what the teaching objective is. It's not enough to say it at the beginning and then expect them to remember. You really have to go back again and again. And, in the end, there should be tasks that also encompass, in some way, a small circle within a large circle that includes all three aspects – goal setting, exploration, and evaluation. For each teaching session, the teacher should begin by asking: "What are you going to research today in relation to the larger problem?", and "What did we learn?". You can start with "What did you learn last time?", and "What are we going to explore today?". Somehow you have to have an evaluation in each teaching session. It doesn't always need to be present after a while in the later teaching sessions, because the children can now remember

what they learned. But in the first teaching session, the teacher should start with this. When teaching, it's always necessary to have all three parts. Davydov emphasized this, and I also think it's important.

**Interviewer:** Are these the main principles to guide the structuring of classroom activity throughout the school year based on the Double Move approach?

**Mariane:** I think that is the main principle. But it should be applied in every section or unit you have. If you have 29 or 30 sections in one year for teaching the evolution of animals, then you start each section with "What are we going to study today?" or you start with "What did you learn last time?" and "What are we going to study today?" and "How is this connected?" Then you have the exploration task. So, these are the main principles.

**Interviewer:** What are the barriers and challenges for the use of the Double Move approach in practice?

**Mariane:** If you have to create this germ cell, the core concepts, it takes a long time to find them, and it takes a long time to prepare this kind of teaching with tasks and exploration. I think the reason Seth [Chaiklin] and I continued with Radical-Local Teaching is that it is not only about considering what matters for the child but also the community that the child lives in, and this is the local aspect. That's why I think we took one step further when we came to Radical-Local Teaching. We still have the double move, with the core concept and what is meaningful for the child and the child's experience. But you have to locate the child's experience in the community where they live. And it's not always that the child has so much knowledge about their community, so in some way, it is also about giving the child knowledge about the community in relation to what the core concepts are, especially when you go to early childhood education. Young children don't have much knowledge about the community. It's about providing them with this basic knowledge about the community because it is related to the institution. So, in some way, you should provide the possibility to experience the community so they can gain knowledge about it, and this can be important for them.

Another aspect that is problematic is when we did this Double Move with children in New York City, the main culture and the minority culture trying to come together is not always an easy task. I think it's one of the challenges to go further in the double move. I believe that everything is possible in developmental teaching, but I don't think that developmental teaching has taken the local community so much into consideration. And, I actually think it's important to anchor your knowledge also in relation to the local community because the whole idea, Davydov, but also Vygotsky, is this movement between the abstract and the concrete, ascending to the concrete, and you cannot ascend to the concrete if you don't relate to your community because this is everyday life.

**Interviewer:** In the book about Radical-Local Teaching, you and Seth mention that you do not propose to reduce the content of teaching or confine it to children's everyday life but teaching in order to create situations that allow children to make connections between the scientific knowledge and their life in their community.

**Mariane:** This is also the whole idea, the possibility that children understand their own reality. Seth told me about these children that he worked with in New York City in this after-school program. They didn't want to speak Spanish because they felt that this language is not as good as the American language. They felt that, because they had difficulties in school, they were not good persons. This influences the children's identity formation. School also has to embrace personality formation and identity formation. And they should feel possibilities. They don't need to feel that they are not good enough children.

**Interviewer:** Now, I would like to ask you about what you wrote in relation to child development. You have made some propositions about child development research. What are the gaps you identified regarding the methodology in relation to child development based on cultural-historical psychology? How did you try to advance from the elaborations of Vygotsky, Leontiev and others, both in the theoretical field and in the investigation?

**Mariane:** This is to take the child's perspective into consideration in our research. I wrote this book together with Marilyn Fleer<sup>1</sup>. It is to understand what the children are, what their intentions are in actual situations, how the interactions are, and what kind of problems they encounter in the actual situation. It is to make

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<sup>1</sup>The book the author refers to is "Studying Children: A cultural-historical approach". Mariane Hedegaard & Marilyn Fleer, with Jytte Bang & Pernille Hviid, 2008. Maidenhead: Open University Press.

interpretations from the actual situation; from there, you can make interpretations about the motives and cognition. But it is to go from the intention, interaction, and problems in the concrete situations and then make interpretations about their development.

**Interviewer:** And, in this way the concepts of the child's perspective and demands of the practice are important.

**Mariane:** Yes. You can analyze demands both from practice but also from the person to the other person, and from the child to the teacher. There are demands in both ways, also to analyze these demands. The child's intentions and demands are very important. When you look at behavior from the outside. When you look at intention, you try to go inside. Also, the intention in relation to the demands, you go into the child's perspective and try to see how life is.

**Interviewer:** Great. I think that we covered the questions. Would you like to comment or add something?

**Mariane:** I would say that you cannot talk about development without talking about education; these two are completely connected. As you say, education encompasses demands, and you can place demands that the child lives up to, and through this, support the child's development. I think I cannot say much more.

**Interviewer:** Thank you so much, Mariane.

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