Design story of dr. Julie Menne

Interview

Design in educational settings

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1. Summary

This chapter comprises a summary of the interview and the reflection.

This paper consists of a reflection on the interview I had with dr. Julie Menne.

Menne is an educational designer and since 2008 she has her own institute. Menne has developed the arithmetics and mathematics practice program 'Met sprongen vooruit' (In English: 'Jumping ahead'.

First, there will be given some background information about Menne, which is followed by Mennes' design experiences.

Subsequently, there is a reflection on the design style of Menne.

Finally, the paper ends with the references used.

2. About dr. Julie Menne

This chapter comprises background information about dr. Julie Menne.

Dr. Julie Menne has passed the teacher training (in Dutch: pabo) in 1992. Then in 1995, she completed a study in educational science (in Dutch: onderwijskunde).

To become a doctor in educational science, Menne was a PhD student at the Freudenthal Institute for Science and Mathematics Education, in Utrecht. In 2001, Menne promoted with the thesis: "Met sprongen vooruit' (in English: 'Jumping ahead').

Following her PhD, until 2005 Menne did research and development at the Freudenthal Institute for Science and Mathematics Education. In 2002/2003 Menne developed an in-service training for teachers of grade one and two (in Dutch: groep drie en vier).

In de period of 2005 till 2009, Menne was an educator, a researcher and a developer of arithmetics and mathematics didactics. Since 2008 Menne is owner and director of her own Menne institute. She is still a researcher and developer of arithmetics and mathematics didactics.



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3. Specific design experience(s)

This chapter comprises the specific design experience(s) of dr. Julie Menne.

Year	Design experience
2001	Master thesis: 'Met sprongen vooruit' (in English: 'Jumping ahead')
	Arithmetics and mathematics praxtice program for grade one and two (in Dutch:
	groep drie en vier)
2002	Recieved Basic Teaching Qualification Development (In Dutch: Basis Kwalificatie Onderwijs Ontwikkeling)
2002 – 2003	In-service training of arithmetics and mathematics practice program 'Met sprongen
2002 2003	vooruit' grade one and two, for teachers and educators
2004-2005	Practicum for the 'National Arithmetic days' (In Dutch: Nationale Rekendagen)
2005 – 2009	Arithmetics and mathematics didactics:
	Curriculum of teacher training (In Dutch: pabo) of Amsterdam
	Of the arithmetics and mathematics method 'Pluspunt' the part for grade
	one, two, and three, called: 'Practice together' (in Dutch: 'Samen oefenen')
	of publisher 'Malmberg'
	Of the method 'Kleuterplein' of publisher 'Malmberg' all arithmetics and
	mathematics activities
2008 – 2009	In-service training of Arithmetics and mathematics practice program 'Met sprongen vooruit' for kindergarten, for teachers and educators
2010-2013	Arithmetics and mathematics practice program 'Met sprongen vooruit' for
2010 2013	kindergarten
2011	Arithmetics and mathematics practice program 'Met sprongen vooruit' for grade
	three and four (in Dutch: groep vijf en zes) and corresponding in-service training for
	teachers and educators
2012	Advanced in-service training of arithmetics and mathematics practice program
	'Met sprongen vooruit' grade one and two, for teachers and educators
2012 – 2014	Arithmetics and mathematics practice program 'Met sprongen vooruit' for grade
	five and six (in Dutch: groep zeven en acht) and corresponding in-service training
	for teachers and educators

Arithmetics and mathematics practice program 'Met sprongen vooruit'

The thesis 'Met sprongen vooruit' (In English: 'Jumping ahead') of dr. Julie Menne shows that arithmetic performance of weak students significantly will improve, if the teacher three times a week for fifteen minutes gives productive practice lessons, for a whole year.

Menne elaborated the thesis to the arithmetics and mathematics practice program 'Met sprongen vooruit'. This is a productive program that can be used in addition to the arithmetics and mathematics method, by teachers, remedial teachers, and internal supervisors. The program contains many arithmetics and mathematics exercises and games, that can be used in interactive tutorials, three times a week.

Up to now, the program is developed for kindergarten, grade one, grade two, grade three, and grade four. The program for grade five and six is still under development.

Teachers, remedial teachers, and internal supervisors can get a corresponding in-service training of the program.

The program will also be developed for consumer market and will be called 'Met Sprongen Voor Thuis' (In English: 'Jumping for home').

(http://www.menne-instituut.nl/; Menne, personal communication, February 14th, 2012; Van Andel, 2009)

4. Reflection

This chapter comprises the reflection on the design style of dr. Julie Menne.

Menne is a very inspirational designer for me. She has a career of which I dream. I am very enthusiastic about her way of designing, because it is very pragmatic and ecologically valid.

At the outset, Menne conducted educational design research, because the thesis was more focused on external users. The research of Menne has yielded usable, scientific knowledge. At the same time, the thesis of Menne has informed the intervention; Menne has elaborated the thesis to the arithmetics and mathematics practice program 'Met sprongen vooruit'.

But currently, Menne conducts mainly research-based educational design, because the focus is mainly on internal users and clients, namely teachers, remedial teachers, and internal counsellors (McKenney & Reeves, 2012).

Menne focuses mainly on intervention development, and she does not strive explicitly to make a scientific contribution – of value to others outside the research/design setting – in addition to the intervention development (McKenney & Reeves, in press). However, through the in-service course, lectures, workshops, and articles in journals, Menne shares new insights and knowledge, gained by research through the development of the interventions, with teachers, remedial teachers, and internal counsellors.

According to the quadrant of Pasteur (McKenney & Reeves, 2012; Phillips & Dolle, 2006) I consider Mennes' research approach as a combination of use-inspired and pure applied research. Menne aims strongly to contribute to improvement in math teaching practice, as in pure applied research. But at the same time she aims to contribute to the fundamental understanding of teachers of learning and instruction, as in use-inspired research, although she expressed less interest in contributing to a broader scientific understanding.

According to Menne (personal communication, February 14th, 2012), she conducts development-oriented research (in Dutch: ontwikkelingsgericht onderzoek).

I think the emphasis in the design process of Menne is on research *through* interventions. The overall goal of the program is to improve the math scores of children. Menne evaluates this overall goal by research on the effectiveness of the program through evaluating the test scores of children (McKenney &s Reeves, 2012).

Besides research *through* interventions, there is research *on* interventions, because Menne focuses on the quality of the developed components of the arithmetics and mathematics practice

programs, to meet certain arithmetic and mathematic goals. Menne evaluates continuously with practitioners how effective and practical the interventions are, and she revises interventions if necessary (McKenney, S. & Reeves, 2012).

According to the features of the four paradigms and rationalities to design of Visscher-Voermand and Gustafson (2004), Menne mainly has a pragmatic design approach. The design process of Menne is characterized by an interative cycle of testing, evaluation, and revision of prototypes by practitioners and Menne. Menne (personal contact, February 14th, 2012) calls this selecting, integrating and customizing.

What is worth noticing, is that Menne herself gives lessons to children, to test her prototypes and acquire knowledge (research). In this way, Menne keeps feeling with the work field (education), the end users (teachers), and the eventual target group (children).

For the in-service training, Menne herself gives a pilot of the in-service training to teachers, and a pilot of the internal training to internal trainers. After each session of these pilots Menne revises the in-service training.

Because of this pragmatic approach, and testing of prototypes in practice, the interventions of Menne are ecologically valid and robust and internal consistent (Reeves & McKenny, 2012; Walker, 2006). This is a very strong point of the interventions of Menne.

Another very strong point is the involvement of stakeholders in judging design quality of the (prototypes) of the interventions.

There is a kind of co-learning agreement between Menne and the practitioners (McKenney & Reeves, 2012). In the design process, Menne and practitioners collaborate intensively: through action – testing of prototypes (research) – and reflection on action (evaluation of prototypes) (McKenney & Reeves, 2012).

In this way, the external consistency of the program is ensured.

To conclude, I admire Menne because of her way of design, and the fact that she so much has reached. She has done and is doing wonderful things!

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