ABSTRACT
This paper presents a design ‘practitioner’ in dialogue with a design ‘theorist’ about the importance of practising design for design educators and design researchers. The use of dialogue as a research method was inspired by dialogue seminars at the Swedish Centre for Working Life. The ‘practitioner’ in this paper is primarily a fashion-design teacher with a background in the design and dressmaking profession, while the ‘theorist’ teaches specialised design and art and crafts teacher training and researches vernacular design. Designers and craftsmen continuously make intuitive assessments; this kind of knowledge is difficult to formalise, although the ‘practitioner’ transmits this knowledge to her design students while they view samples and practise their craft. Although reflections and choices may differ, generally speaking, the greater a designer’s or artisan’s experience and repertoire, the deeper his or her reflection. The ‘theorist’ uses her experiences of designing, knitting and sewing as inside knowledge in her investigation of how vernacular designers practise and learn to design and make vernacular clothing. This kind of knowledge is often based on tacit knowledge. Both the practitioner and the theorist see their own experiences as designers and makers as being crucial for their design teaching and design research. In line with reading- and writing-based research, design-education institutions should give their academic staff time and opportunities to practice design as a part of their profession in order to achieve best practice in design education as well as research in design/design education.

Keywords: Artisan, design learning, research-by-design, design teaching, design research.

1 INTRODUCTION
This paper is based on a dialogue between two associate professors in design; one is primarily a practitioner, while the other is mainly a theoretician. The paper is the start of a future research project on the importance of practising design for both design educators and researchers; in this project, students will be involved in the research.

2 RESEARCH METHOD
The research method is a dialogue between two associate professors at a higher education institution for design and design education. This method is in accordance with the dialogue method, which was developed at the Swedish National Institute for Working Life [1]. The theorist joined several of these dialogue seminars at the Swedish Centre for Working Life; the dialogue as a research method used in this paper was inspired by these seminars. As Florin, Göranson and Sällström argued when discussing the role of dialogue as a research method at the dialogue seminars, in which the relationship between occupational knowledge and technology was given particular attention [2:17], ‘Achieving knowledge through reflective reasoning on concrete experiences is what both are about’ [2:36]. Dialogues that create insight are based on the idea that knowledge development ‘takes place between people, it continues over time, and it makes complexity and multiplicity visible’, according to Göranson, Hammarén and Ennals [3:60].

In this paper, a design practitioner is in a dialogue with a design theorist about the importance of practising design for both design educators and researchers in design and design education. The ‘practitioner’ teaches fashion design at the BA and MA level; her background is in the artistry of dressmaking and design, educated as a Specialized Teacher Training in Design, Art and Crafts and she earned her associate professorship based on artistic development and the development of networking
between the university and the textile industry. The other participant, hereafter the ‘theorist’, teaches Specialised Teacher Training in Design, Art and Crafts at the BA, MA and PhD levels. Her background is in classroom teacher training, with an emphasis on art and design education and research on design education and vernacular design. She earned her associate professorship based on her PhD at the Oslo School of Architecture and Design, in which she researched the practices and learning processes of vernacular design.

Both associate professors share the common experience of having learned how to design, sew, knit and weave from watching their mothers and other family members during their early childhood; both have practised designing and making their own clothes from the time they were young teenagers. Both attended handicraft high schools after matriculation, where they continued their learning. Their paths split as young adults, however, when they were in their early twenties: the practitioner earned a craft certificate in dressmaking and continued her education through the Specialised Teacher Training in Design, Arts and Crafts, whilst the theorist began general teacher training. Their paths later aligned once again when they both earned their master’s degrees in specialised teacher training in design, art and crafts. The practitioner studied upper secondary school training and examinations in the dressmaking trade to earn her degree, whilst the theorist studied how traditional Norwegian Selbu knitting could be an important area of competence in the future.

This paper examines the commonalities and differences in how these two associate professors see design education based on their respective experiences as practitioner and theorist.

3 DIALOGUE WITH THE MATERIALS

When the practitioner thinks of silk, she describes it as a smooth, cold and cool material. She mentioned the smell of silk when she sewed the ball gown shown in Fig. 1-3. She perceives silk as something sublime, stating that the women in her family have done a great deal of sewing and stitching over the years; some were seamstresses and lived their lives in the trade. She remembers the smell of silk from her childhood, when her mother sat by the large kitchen table and sewed clothes for her and the other children. She recalls the smell of silk; she also observed how, before starting to sew, her mother would feel the fabric and lift it to see how it would fall. She often wondered whether her mother bought the fabric because she liked its qualities and colours or whether she had planned to create a specific garment before she bought the material.

The theorist has similar experiences from her childhood, during which she watched her mother sew clothing. Her mother sewed almost all the clothing for herself and her children; many of the clothes were redesigns of used clothing from friends and other family members.

Figure 1. The practitioner designing a ball gown made of silk for a customer and using the experience to teach her fashion-design students

The practitioner remembers sitting in the kitchen with her mother and sister as they observed her sewing. In her generation, almost all the women knew how to knit, and she became conscious of quality as she watched her mother and her mother’s relationship with both quality and design. This experience also made the practitioner more picky regarding her clothing, as she was a small and thin teenager.

The theorist has similar experiences from her childhood, during which she watched her mother sew clothing. Her mother sewed almost all the clothing for herself and her children; many of the clothes were redesigns of used clothing from friends and other family members.
This way of learning is quite similar to what the theorist observed when she investigated how Inuit women in North Alaska learned to design and sew contemporary vernacular clothing. Typically, the knowledge was transmitted from mothers to daughters through the latter’s observation of their mothers from infancy to their teenage years or young adulthood. The learning process begins as soon as the children are able to see and hear what is going on around them while their mothers, grandmothers and other seamstresses design and make Inuit clothes. As time passes, the children gradually understand more of the design and production process, until the girls eventually are able to make their own garments as young adults. Because they learn by observation, they specifically watch how the seamstresses design the clothing; this is an example of learning by watching, and not learning from teaching. This situation is similar to how the vernacular Inupiaq Inuit seamstresses in Alaska learn to design and sew traditional clothing [4].

The phenomenon that the theorist observed and the practitioner experienced is very similar to what Jean Lave experienced in her study of apprenticeship among tailors in Liberia [5]. According to Lave, the apprentices learn their trade without any recognisable teaching from masters, journeymen or other experts while executing their craft [5]. This observation led her to conclude that learning is not a result of instruction by a teacher or master but is a by-product of the practice itself. Through legitimate peripheral participation, the newcomers learn how to successively become participants in a community of practice [6]. The learning process of the Liberian tailors’ apprentices does not follow the practices of Liberian tailoring; in fact, their process is quite reversed [5:72]. The apprentices begin with the finishing stage of the production process, sewing buttons on almost-complete garments. Lave argues that handling the nearly finished product and then learning to make the different pieces with which the final product will be composed makes the apprentices familiar with the whole process, from end to beginning, in a reversal of the production process.

The final skill the apprentices learn is how to measure and cut the fabric, which is normally the starting point in the practice of tailoring. Lave also discovered that the apprentices usually did not learn directly from their masters, as is often assumed to be the case in apprenticeship research, but rather from other apprentices and journeymen [7:233]. This social learning – whereby learners learn from one another and measure their knowledge against the socially received body of knowledge represented by masters or more experienced practitioners – is what the social psychologist Lev Vygotskij has called ‘the zone of proximal development’ [8]. Lave and Wenger owe a debt to this view, as they indirectly admit [5:48].

In addition to learning by watching, the theorist has observed that Inuit children listen to seamstresses talking to themselves (or even to the medium itself, meaning the clothing they are creating) as they work. The theorist regards this talking as an explicit verbal expression of what Schön has called reflection-in-action [9]. The children therefore used their senses by listening to the seamstresses, touching the fabrics and tape, and smelling the materials [4]. The Inuit seamstresses in North Alaska, particularly the more experienced seamstresses, learn by adopting new materials and adding new techniques to the common repertoire [4:186].
4 THE STARTING POINT OF DESIGNING AND MAKING

The practitioner began to sew Barbie doll clothes for a girlfriend when she was nine or ten years old. Later, she stole spawn wool fabric from the attic and made her first ‘mini-mini’ skirt for a party she had been invited to attend. The mini-mini skirt had no waistband and had a visible zipper sewn into the side seam, which did not quite follow the conventions of sewing at the time. She proudly showed her creation to her mother. Because the practitioner had taken cloth that her mother had allocated for a garment, her mother was unhappy with her, but she was impressed that her daughter had created such a fine result. Though her mother commented on the missing hemlines, she did allow her daughter to wear the garment to the party. Later, the practitioner’s first real order was from a girlfriend who wanted a pair of denim slap trousers. Because the practitioner’s mother was so good at sewing, the future practitioner thought she could probably sew as well. Once she started, she discovered that she could indeed do it, likely because she had watched her mother in action.

The theorist also started to sew doll clothes and from the ages of fifteen to twenty-five she made all her own clothing by sewing, knitting, crocheting and weaving. She learned all these techniques from her mother.

Both the practitioner and the theorist knew from an early age how to transform and redesign old clothing into new shapes. For example, the theorist recalls receiving a purple-cord velvet bathrobe from her grandmother who was moving; she transformed it into hot pants and a short jacket, absolutely correct for the fashion at the time, and wore it to a party.

This kind of knowledge is often based on tacit knowledge [9,10]. Craftsmen intuitively make assessments and decisions, and the knowledge that drives them is difficult to assess. Though artisans’ reflections and choices may differ, the greater the experience and repertoire an artisan has, the deeper his or her reflection [9,10,11]. With this in mind, Bengt Molander has argued against the Western philosophical and scientific tradition of focusing on articulated aspects of knowledge; instead, he argues that knowledge has different loci, including the body, culture and action [10:50].

5 PRACTISING DESIGN AS A TEACHER AND AS A RESEARCHER

The following section explores how the practitioner and the theorist use their individual experiences of designing and making as teachers and researchers.

5.1 The practitioner’s use of her own practice in research

The practitioner incorporates her crafting experiences into the fashion programme at her university, where she often advises students individually (and therefore receives a variety of questions). Because she has extensive experience and has acquired a deep knowledge bank, she can recall many good examples to share with her students. The storytelling behind these examples allows her to put details, techniques, shapes and materials into an understandable context for her students. The practitioner states, ‘We never become perfectly trained, but every time the work gets better.’ This statement aligns with what Schön – also a jazz musician [12] who knew how to improvise – said about professionals and their rich repertoire. Similarly, Richard Sennett has stated that ‘All craftsmanship is founded on skill developed to a high degree. By one commonly used measure, about 10,000 hours of experience are required to produce a master carpenter or musician’ [13:20]. This time is roughly equivalent to six years spent at a full-time job.

According to the practitioner, some students go on to work at large companies, where they must work in teams from the birth of the idea or the point at which the order is taken through the finished-product stage. Schools thus must offer general design education that includes designing, product development, pattern design and production, and seams and dissemination. Students who primarily ‘only’ want to be designers will then also have a solid knowledge of materials, form construction and manufacturing; in this way, they can understand how to realise their designs. The practitioner also brings her service-minded customer-care experience (which she acquired from owning her own dressmaking company) to the programme, encouraging her students to invite customers to participate in the design development so that the customers will have a more personal relationship with their garments. She sometimes even brings customers to class to show students how to treat customers. She also cuts the fabric in the classroom so that her students will be able to learn by watching [4].

The practitioner also has experience working with larger design projects. For example, she helped design and manufacture Norway’s contribution to the 1985 World Expo in Vancouver in 1985 (costumes for three people who sat in a replica of a Gokstad Viking ship). She has also created modern
and ballroom-dance costumes; theatre costumes; clothing for disabled people; and suits, wedding dresses, gowns and uniforms using model-dressmaking techniques. She often collaborates with businesses; representatives sometimes attend her classes and confirm the quality of the work she has produced. With this experience, the practitioner can then give students advice about real-life work in the industry. In the practitioner’s classes, students work both individually and in groups so that they can discuss and reflect on the choices people make during the work process. She often tells her students, ‘Dare to go! Don’t be afraid to fail’. As the practitioner has said, her students ‘must be drilled in the sense of form, balance, technique and materials’ so that they can build their own knowledge bank, or ‘repertoire’, as Schön refers to it [9].

The practitioner describes some of her students’ comments to her; they say, ‘It looks so easy when you demonstrate…the way you sew by hand and when you cut paper and fabric’ or ‘what are you doing? Could I watch when you make the pattern and cut the fabric? Is it possible to ask questions along the way?’ As she describes, the students also watch how she holds the scissors when she cuts the fabric or the pencil when she draws gigantic lines as she is designing new garments. This kind of knowledge is not possible to read in a book; students must watch experts practise their work and then do the work themselves. The practitioner has a breadth of knowledge that students see as a strength, and she in turn finds it very stimulating to be with her design students.

5.2 The theorist’s use of her own practice in research

One of the main research methods the theorist utilises in her research on vernacular design is research-by-design [14,15]. Her PhD research was based on observations, interviews with seamstresses, and research-by-design methods through both authorial participation in designing and sewing in conformity with Inuit traditions; her master’s thesis was based on knitting in conformity with traditional Norwegian Selbu knitting. In her PhD research – on how Inuit women practise and learn to design and sew contemporary vernacular clothing – she used research-by-design to make qupak trim as samples when asking seamstresses about the boundaries of their traditions (Fig. 4).

She also designed and sewed a garment according to the northern Alaska Inuit tradition herself (Fig. 5) so that she could understand the practice and have a foundation for interviewing the seamstresses about their designing and learning processes. The theorist regards research-by-design as essential in both cases. As a master’s-level professor, the theorist dresses up and shows her designs to her students so that they can touch and smell the materials and watch the design’s creation. The master’s students appreciate learning from the theorist’s experiences, since these experiences provide a learning arena for their own master’s work in a joint theoretical and practical master’s programme.

The theorist sees research-by-design as a crucial research method for accessing tacit knowledge within research in design and design education.

![Sample of qupak #5](image1)
![Sample of qupak #6](image2)
![Sample of qupak #1](image3)
![Sample of qupak #2](image4)

![Sample of qupak #7](image5)
![Sample of qupak #8](image6)
![Sample of qupak #3](image7)
![Sample of qupak #4](image8)

**Figure 4.** Samples of qupak trim used to investigate the boundaries of northern Alaska Inuit tradition

**Figure 5.** Samples of qupak trim used for designing a garment according to northern Alaska Inuit tradition
6 SUMMARY

Allowing students to observe the real practice of designing and making, performed by arts and design teachers or by professional artists or designers, has been an all-too rare occurrence. This form of education, commonly associated with apprenticeship, is generally regarded as old-fashioned and thus an obstacle to contemporary creation. In a sense, immersing novice designers in a community of practice is analogous to exposing them to the gestalt or holistic experience of workshop learning, which is at the core of much vocational training [4:224]. This dialogue between the ‘practitioner’ (a fashion-design teacher and professional designer and dressmaker) and the ‘theorist’ (a design-education teacher for the general public and a vernacular design researcher) shows that the practical knowledge of designing and making are crucial both for design teaching and for design research. The practitioner would not be able to teach her fashion-design students if she had not experienced this tacit knowledge by practise. Similarly, the theorist would not be able to understand the tacit knowledge of vernacular design without her experiences of designing and sewing gained during her childhood and the practising of northern Alaskan Inuit vernacular design in her fieldwork. The result of these insights is that, in line with reading- and writing-based research, design-education institutions should give their academic staff time and opportunities to practice design as a part of their profession in order to achieve best practice in the fields of design education and design-education research.

REFERENCES