**ORIGINAL PAPER**

# Professional Development in Visual Arts

**Linda Puppe**[1] · **Helen Jossberger**[1] · **Isabell Stein**[1] · **Hans Gruber**[1,2]

## Abstract

In the domain of visual arts, professional artists usually graduate from academies and universities. For professional development, art students must practise domain-specific activities. Support from lecturers and exchanges with fellow students also help advance accomplishments. Amateurs without academic or vocational artistic education can acquire their skills autodidactically or attend courses such as those at an adult-education centre. Empirical research in the domain of visual arts remains scarce; therefore, the present study's objective was to analyse which kinds of domain-specific practice activities and social interactions artists, intermediates and amateurs rate as relevant to their artistic development in visual arts. The Professional Development in Arts Questionnaire (PDA-Q), including closed and open questions, was developed to examine artists' activities and interactions. In this study, 81 experts, 58 intermediates and 31 amateurs participated. Experts and intermediates perceived domain-specific practice activities working on artworks and reflecting as the most important in their professional development. Experts and intermediates also rated these two activities as the most demanding. Amateurs rated these activities as less relevant and demanding. Experts and intermediates most often received feedback from lecturers and fellow students, while amateurs most often received feedback from friends and family. Experts and intermediates cited lecturers as being the most helpful sources of feedback, while amateurs cited family.

**Keywords** Domain-specific practice activities · Expertise · Professional development · Social interactions · Visual arts

✉ Linda Puppe
  linda.puppe@ur.de

1    Department of Educational Science, University of Regensburg, D-93040 Regensburg, Germany

2    Faculty of Education, University of Turku, Turku, Finland

## Visual Arts

The visual arts domain is characterised by its various sub-disciplines, such as drawing, painting, photography, sculpting, architecture, film and printmaking (Esaak 2019). Pieces of art trigger a visual experience, and each sub-discipline is distinguished by different properties. In the drawing domain, artworks are independent of colour (Rawson 2016) and are created with lines and dashes. Moreover, drawing does not depend on three-dimensionality. Painting works of art present motifs created by colours over an area. Electromagnetic rays or lights generate images in photography. Photographers must find a suitable motif (e.g. landscape or portrait). According to Langford (2000), photography is a conjunction of techniques and visual observation. Rogers (2019) described that compared to painting, drawing and photography, sculpting has its own distinct elements, namely, mass and space. A sculpture always exists in a three-dimensional space. The material can be hard (e.g. wood or stone) or pliable (e.g. clay).

Within these sub-disciplines, artists work with different tools, techniques and materials (e.g. oil, watercolour or acrylic in painting). They must determine the size of the artwork, what materials to use, which motif to use, and the type of representation (realistic vs. abstract), which provides them with almost unlimited possibilities for creating their art. Consequently, professional artists use diverse methods to produce their finished work. Galenson (2009) described two successful and famous professional painters, Cézanne and Picasso, who worked very differently. Galenson (2009) characterised Cézanne as an experimental innovator, while he called Picasso a conceptual innovator. Experimental innovators are stimulated by aesthetic criteria. They want to depict visual perception. They are unsure how to best achieve their aims; therefore, they work with the principle of trial and error. Conversely, as explained by Galenson (2009), conceptual innovators want to visualise their thoughts and emotions and have specific aims for their artwork. They plan their artwork before creating, for example, with the help of sketches. The similarity between the two types of artists is that they were both innovators. Creative thinking is crucial for innovation, and therefore, professional artists should be creative thinkers.

Botella et al. (2013) investigated which factors creative work artists found as facilitating and inhibiting in different artistic fields (painting, photography, video, net-art, sculpting, multidisciplinary, and graphic). They distinguished facilitating and inhibiting factors. The components of the factors are cognitive (e.g. selective combination and divergent thinking), emotional (e.g. emotional expressiveness and emotional regulation), conative (e.g. sociability, warmth and agreeability) and environmental (e.g. important events). The results showed that digital artists mentioned cognitive aspects as most important for creativity and emotional aspects as least important. Sculptors also spoke about cognitive aspects. Unlike digital artists, sculptors also referenced their education. Painters estimated emotional aspects as important, more so than digital artists did. According to Botella et al. (2013), multidisciplinary artists mentioned the social environment frequently and noted the need to interact with artists or persons from other disciplines (e.g. mathematics or architecture). Thus, interpersonal relations are also important for professional artists.

Gardner (1993) described the importance of relations for artists through the example of Picasso. The friendship between Carlos Casagemas and Picasso influenced Picasso's work. They were very close; they had the same friends and shared accommodations.

Casagemas committed suicide, which hit Picasso hard. To express his feelings, Picasso explained that he used the colour blue in his works when he thought of his friend. In addition, he made several portraits of Casagemas.

Although many artists are considered prodigies, they usually receive much support from their social environment, such as good teachers, attentive parents, and the public, to whom they present their art. Social relationships are relevant for artists not only on their path to becoming professional artists, but throughout their entire professional career as well. To investigate the influence of social relationships, Simonton (1984) categorised social relationships as predecessors, contemporaries and successors: predecessors were identified as paragons, masters, and parents; contemporaries were rivals, collaborators, friends or co-pupils; successors were described as apprentices or admirers. According to Simonton (1984), the most consistently effect for artistic success were the challenges with rivals and contacts with associates, while it appears that paragons are the predecessors who provide artists with their most dependable support. Artists need relationships and contacts with others to become financially successful.

Often, a good relationship with a gatekeeper is needed to establish an artist on the market. According to Abuhamdeh and Csikszentmihaly (2004), gatekeepers are the individuals who decide whether a new object or idea should be implemented in a particular field. Gatekeepers in visual arts can be art critics, art historians, art dealers, art collectors or artists.

## Becoming a Professional Artist

Investigating the development of professional expertise is based on different theoretical approaches with varying conceptions of "professional development", "expertise", or "profession". While stage theories of expertise development distinguish different phases individuals go through, others try to identify general problem-solving patterns underlying professional performance. We argue that approaches, which focus on cognitive adaptations during long periods of professional work, are most promising. These have most convincingly been described for domains in which "reproducible superior performance" (Ericsson et al. 2007) of experts can be identified. In many professional domains, however, either the task requirements or the professional practice patterns (or both) are ill-defined or still under debate. A most prominent example is the domain of teaching in which many facets have been investigated that could contribute to (reproducible superior) teacher performance. However, there is no generally agreed definition. Thus, researchers like Berliner (2001) argued to complement performance criteria by criteria shaped by social agreement or nomination of experts by other significant persons in the field. Such a complementary approach might be used to identify subjects, who are simultaneously "good teachers" and "successful teachers". According to Berliner (2001) "the demand to use student achievement as an indicator of expertise is made by those who rely on the common sense notion that there cannot be teaching without learning. Unfortunately, this common sense notion is not correct. (…) Good teaching is judged through reliance on standards applied to the tasks of teaching and related to norms for professional behaviour, including moral considerations. Successful teaching is about whether intended learnings were achieved. Judgements

of successful teaching are concerned *not* with the tasks of teaching or professional behaviour, but with the achievement of ends" (p. 468).

We assume that the performance criteria in the visual arts are similar to the criteria for teachers. Yet, there is a lack of comparative studies in which parallelisms between domains are thematised (Boshuizen et al. in press). Aspects for the development of occupational expertise are illustrated by Billett et al. (2018). Experience and practice are important. Experiences at work can happen for example through imitation or observation. Furthermore, goal-directed activities enable learning. The central assumption to develop occupational expertise is that learning happens during work and for work with access to activities and interactions, which enables the development of knowledge (Billett et al. 2018).

Departing from the classic expertise work by Ericsson et al. (1993), we know that expertise development is the result of a long-term endeavour to advance accomplishments and it takes at least 10 years of extensive practice. In the domain of visual arts, Chamberlain et al. (2015) showed that drawing skills were related to the amount of time a person spent on drawing and techniques. However, it is not simply an accumulation of practice hours that affects performance (Ericsson 2016). To achieve high levels of performance, students must engage in deliberate practice—specifically, domain-specific practice activity with a focussed effort on performance improvement. Deficiencies are gradually ruled out, which makes the training effortful and demanding (Ericsson et al. 1993). Individuals have to remain motivated and strive for perfection during their entire life in order to keep up with the challenges of their profession (Ericsson 2016). In addition, deliberate practice does not take place in isolation. Trainers or coaches design practice activities and guide learning processes. Training often involves a group of trainees who practise together (Ericsson 2018b).

In expertise research, the contrastive or relative approach is used frequently, in which experts are compared with non-experts (Abernethy et al. 2018). Expertise is viewed as a proficiency level. Comparing those who are more skilled with those who are less skilled helps to pinpoint how the individuals with more developed skills excel. Moreover, it helps in understanding how individuals develop professionally, an insight that can help less skilled individuals learn (Ericsson 2018a).

The concept of expertise comprises characteristics, abilities and knowledge that distinguish experts from novices (Ericsson 2018a). Experts have more experience, more differentiated knowledge and better technical skills than novices in a particular field. Novices are beginners with minimal exposure to the domain, and therefore, they have not yet acquired domain-specific knowledge and skills. According to the research, intermediates are a particularly interesting group, lying in between novices and experts. Research has identified differences between novices, intermediates and experts during problem-solving processes. For instance, intermediates cannot differentiate between relevant and irrelevant information as consistently as experts can (Arts et al. 2006). Moreover, due to this lack of differentiation of skills, intermediates cannot solve problems as quickly and thoroughly as experts can. Amateurs also have been investigated in expertise research (Längler et al. 2018; Parlitz et al. 1998). Although the definitions for amateurs differ slightly in prior research, amateurs are mostly described as having no academic or vocational education in the visual arts domain and do not aim to commercialise their works or make a living from them. In their classic study, Ericsson et al. (1993) compared piano experts and amateurs. The analysis showed that

experts spent 56.75 h a week on music-related activities, while amateurs spent only 7.02 h. An example of a music-related activity was solo practice on the piano. Piano experts practised 26.71 h per week, while amateurs practised only 1.88 h per week. Whether amateurs develop expertise or not remains open. The necessary skill acquisition and cognitive adaptations have not yet taken place. If they train in a professional context, where students practice deliberately together with a trainer or teacher, they can collect artistic experience and learn artistic related skills.

As research on expertise shows, practising domain-specific activities deliberately and receiving support from significant others are crucial ingredients for developing professionally and realising accomplishments. In the following sections, we briefly review extant literature related to domain-specific practice activities and social interactions for professional development in creative domains. As the visual arts domain is less empirically researched, we also refer to prior research in the related domain of music and transfer findings to the visual arts. Then the research questions are addressed, and the survey study is introduced. Differences between experts, intermediates and amateurs regarding domain-specific practice activities and social interactions are investigated.

## Learning and Training in Visual Arts

Whether art can be taught or not is heavily debated in the literature. For instance, Elkins (2001) stated in his book that it is not known when or how art is taught. According to him, few art students become outstanding artists, which indicates that art cannot be taught. From an expertise point of view, it is not surprising that so few individuals reach that level of excellence, as such levels are only achieved if individuals are willing to work hard and practice deliberately to eliminate their weaknesses. Thus, a lot of effort is required, which certainly not everyone is willing to invest.

According to Jarvin (2019), drawing students must develop skills and understand concepts to make better decisions regarding their own artwork. Furthermore, they need to learn how to perceive and transform their perceptual experience into a two-dimensional surface (Jarvin 2019). Sawyer (2018) investigated whether creativity can be a learning outcome and what concepts of creativity were taught. In the study, 38 professors of 15 different sub-disciplines in visual arts were interviewed, and the studio classes of the professors were observed. Some of the professors interviewed denied the principle of talent and did not believe in creativity as a personality trait. Instead, they were convinced that creativity could be taught and learned. Shreeve et al. (2009) described a broad range of learning formats that can be used in the visual arts. For example, they proposed live projects (with industry practitioners), event-based learning (e.g. real-life projects in galleries), group learning, talks with artists, consultancy, and peer learning. According to Shreeve et al. (2009), the locations for learning can also differ. Most learning in visual arts in an educational context takes place in the studio. However, students also learn outside the institution (e.g. organising exhibitions). The content that is taught varies depending on the study programme. For example, Asher (2004) dealt with the question of how abstract sculptures can be demystified and made more accessible.

When developing professionally, it is interesting to consider the instructional design for teaching and learning. James (1996) studied the construction of learning and teaching in a sculpture studio class. It was an introductory metal course, which included three phases: (1) foundational phase, (2) studio phase and (3) critique phase. In the first phase, techniques were demonstrated (e.g. basic brazing techniques). In addition, examples of artworks were shown. Students should learn aspects such as concepts and values, which are involved in creating art and thinking about the process. In the second phase, students interacted with materials, and a sculpture was created. The professor and two teaching assistants monitored the students' work phase, assisted physically and spoke with the students about their artwork. Students also interacted with peers during the studio phase. In the third phase, a gallery-like situation was created (including lighting and pedestals). In this atmosphere, the teacher and the students talked about the finished artworks. Important is that a learning environment was created that was safe and nurturing. The critique should be perceived as a positive experience. This is just one example of how an introductory course in sculpting can be designed to foster learning. Similar course structures are conceivable in painting and drawing. The study showed that domain-specific practice activities were taught and were required to be learned (e.g. brazing techniques), and interactions with teachers and students were also relevant (James 1996). In the next section, practice activities are considered in more detail.

## Domain-Specific Practice Activities in Visual Arts

We know more about domain-specific practice activities from the music domain than from visual arts. Ericsson et al. (1993) evaluated the various domain-specific activities of 30 student violinists with different expertise levels: the best violinists, good violinists and violinists with lower level of performance (music-teacher students). The study identified 12 categories of musical activities (e.g. practising alone, practising with others and music theory) and 10 categories of everyday activities (e.g. shopping, sports, sleep). The participants rated the activities' relevance, effort and pleasure levels in a diary. The results showed that music-related activities were rated higher regarding relevance and lower regarding pleasure compared with everyday activities. The most relevant activities were practising alone, taking lessons and solo performances. Moreover, the activities "practising with others" and "listening to music" also were rated as important. Additionally, time spent on each activity was analysed and significant differences between groups were found. For instance, the two best groups of violinists practised 24.3 h per week, while music teachers practised 9.3 h per week.

In visual arts, an equivalent of listening to music might be visiting exhibitions or museums. Obviously, not every activity can be transferred exactly from music to visual arts. However, visiting a concert is the activity of examining the performance of other musicians. In visual arts, this corresponds to studying artworks made by other artists in museums and exhibitions. Museums and exhibitions are a place for professional development. For example, Shreeve et al. (2009) described that traditional sites for student learning are museums and galleries, as these locations can help artists find inspiration and gain experience regarding current trends in their creative field.

An interview study by Sloane and Sosniak (1985) indicated that reading specialist literature was a source of knowledge acquisition in the sculpting domain. For example, one participant reported reading every art magazine and book that he received.

Hetland et al. (2007) described how students learn techniques, which they termed studio practice. One activity was learning about the elements of artwork, such as lines, forms and surfaces. They also can be characterised as details. Another activity was learning how to use materials and tools. Materials can include clay or charcoal, and tools can include items such as brushes or pottery wheels (Hetland et al. 2007). In a later publication, Hetland et al. (2013) defined techniques as situations in which students learn about procedures and attitudes for handling tools, materials and conventions. Eiglsperger (2002) also showed that knowledge about materials and special work techniques were important domain-specific practice skills in visual arts. During a sculpting course, art students got the task to create big sculptures with cement. Knowledge about cement (e.g., rapid hardening) and knowledge about and skills with tools and techniques (e.g., throwing) were crucial to performance, as it helped to be better able to wield tools correctly, intentionally and in line with the material. In the middle of the creation process, the students had to reflect on the development of their first drafts and to think about the reasons why they chose a particular draft and not another one. At the end of the creation process, the students were asked to reflect on their experiences during their work, as well as their learning progress, and they had to assess their finalised sculptures. The reflection was aimed at making students aware of their performance and triggering further professional development (Eiglsperger 2002).

## Social Interactions

Another key aspect of professional development is social interaction. For the acquisition of high-level performance, the social environment—including parents, peers and teachers—can be important in supporting professional development (Lehmann and Kristensen 2014).

In the visual arts domain, fellow students often work together intensively in small groups. According to Shreeve et al. (2009), the central environments for learning in visual arts are workshops, small communal spaces and studios. In these learning contexts, classmates interact with each other regularly. Because of small group sizes, lecturers can provide intensive support for their students' learning processes.

Jurkowski (2018) described feedback as one of the most powerful instruments to foster students' academic performance. According to Hattie and Timperley (2007), feedback can be provided by an agent. For instance, agents can be teachers, parents, peers, or books. Feedback can be given in different ways, such as through explanations, follow-up questions or identifying locations for accurate information and feedback is more than just error correcting (Finn et al. 2018). Learners can improve their conceptual understanding and knowledge with the help of feedback, which should include examples and specific ways to improve work and progress compared with earlier work (Hattie and Clarke 2019).

Eiglsperger (2002) described learning processes in a sculpting course. Different experts worked with the students, showing them some tricks and sharing their experiences (e.g. mixing cement for creation sculptures). For students, interacting

with experts or teachers was valuable. Gruber et al. (2008) found that the mentor's roles in music were essential to motivating students for practice and accompanying professional development. In the sculpting course, interactivity with peers also played a crucial role in the successful finalising of students' sculptures. Time and space were created to exchange experiences and to get inspiration from fellow students (Eiglsperger 2002). These findings are in line with Sloane and Sosniak (1985), who revealed that students appreciated the fellowship and helped each other.

After graduation, networks gain in importance. Artists often work alone in their studios, but they also need contact with gallerists, museums or associations to be able to exhibit and sell their artworks. In the related domain of music, Gruber et al. (2008) carried out a study on networks of jazz guitarists. Their findings revealed that networks change over the course of artists' lifetimes. Experts usually have several different networks, while novices have fewer and smaller networks.

## Aim and Research Questions of the Study

The review of the state-of-the-art showed what is known about professional development in the visual arts. The starting point is academic education where learning takes place in studio classes. Lecturers give feedback, interactions with classmates are common and the handling of techniques and materials is learned. Gatekeepers are then important to gain a foothold in the art market. It takes a long time to develop one's own artistic vision and to establish oneself in the art community.

Little is known, however, how important social interactions and domain-specific practice activities are for learners and professional artists, and how much time they invest in these activities. It is still open as well, which kind of feedback is perceived as helpful.

The aim of the present study thus was to examine which domain-specific practice activities and social interactions are rated as particularly relevant for the professional development of experts, intermediates and amateurs.

The following research questions were addressed:

1. Which domain-specific practice activities do experts, intermediates and amateurs rate as relevant in their professional development?
2. To what extent do experts, intermediates and amateurs rate social interactions as relevant in their professional development?

## Method

### Design

A cross-sectional study design with a three-group comparison—experts, intermediates and amateurs—was chosen. Dependent variables were domain-specific practice activities and social interactions.

## Participants

The sample included 81 experts (49 females), 58 intermediates (41 females) and 31 amateurs (20 females). Experts had to meet the following criteria: (1) be a member of the Association of Visual Artists Germany, (2) have an art-related degree, (3) have at least 10 years of experience and (4) be represented regularly in individual or group exhibitions. Their mean age was 54.90 years ($SD = 10.99$), with their ages ranging from 27 to 82. On average, participants had 28.09 ($SD = 12.06$) years of experience in the visual arts domain and exhibited their artworks regularly. Among the experts, 33 were active in painting, 18 in three-dimensional art, three in installation, 10 in drawing, one in video, five in photography and 11 had another focus (one in conceptual artworks, one in material arts, three in crossover arts, two in art in public space, one in textile art, one in glass art; two did not indicate).

The intermediate group comprised university or academy students in artistic study programmes with a mean age of 24.32 years ($SD = 3.34$), ranging from 19 to 36. Their experience in the visual arts domain ranged between one and 16 years ($M = 5.11$; $SD = 3.66$). Some students were in their mid-30s and already had many years of experience in visual arts but had started studying late. The intermediates were active in different sub-disciplines, 19 in painting, 13 in three-dimensional art, nine in installation, eight in drawing, three in video, one in photography. Five had another focus (one in crossover art; four did not indicate).

Amateurs' ages ranged between 23 and 58 years, with a mean age of 47.42 ($SD = 8.80$). Their artistic experience varied between one and 41 years, with a mean value of 14.23 years ($SD = 10.12$). None of the amateurs had a professional education or a university degree in the field of visual arts. They had participated in courses at the community adult education centre but did not earn their living from selling their artwork, as art was their hobby. All amateurs had a vocational training in a non-artistic field. Of the 31 amateurs, 16 indicated that they were active in the sub-discipline of painting, three in three-dimensional art, one in drawing, nine in photography. Two had another focus (one in object art; one did not indicate).

## Instrument

Based on the prior research of Ericsson et al. (1993), the Professional Development in Art Questionnaire (PDA-Q) was developed to investigate domain-specific practice activities and social interactions in visual arts. The PDA-Q included closed- and open-ended questions. Although the question content was the same for experts, intermediates and amateurs, two versions were designed. In contrast to intermediates and amateurs, experts were asked to answer questions about their art education. The questionnaire comprised three parts (see Appendix).

The first part focussed on biographical information, including items about gender, age, artistic focus, education (university, academy, university of applied sciences, vocational training) and exhibitions.

The second part included closed- and open-ended questions about domain-specific practice activities (e.g. working on techniques and details) and social

interactions (e.g. receiving feedback and helpful feedback aspects) concerning participants' art education. For the questions about working on technical skills, working on details and trying to improve skills, a four-point scale (1 = never, 4 = often) was used. For questions about receiving feedback and aspects of feedback, multiple-choice answers were provided. In addition, participants had to indicate by whom they received feedback and who helped to facilitate and nurture their artistic development the most.

In the third part, participants were asked to rate perceived relevance and effort tied to current artistic activities. Furthermore, they were asked to indicate time spent. The following items regarding domain-specific practice activities were included: "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions". Social interaction items included "Exchanges with other artists/classmates", "Working together with other artists/classmates" and "establishing contacts (e.g. galleries)". Here, a closed-ended answer format was provided.

There were several reasons why a self-rating questionnaire was chosen. In expertise research, retrospective questionnaires are commonly used in different domains, as it has been found to be a helpful tool for gathering data about activities and time spent on those activities (Baker et al. 2018). Additionally, recruiting artists is difficult, and the online questionnaire enabled us to contact individuals in different regions, which increased the number of professional artists participating.

## Procedure

A link to the online questionnaire was distributed via e-mail and regular mail, with 36 regional offices of the Association of Visual Artists Germany asked to forward the questionnaire to their members. Participants could fill out the survey online. To reach intermediates, 24 art academies and universities with artistic programmes in Germany, Austria and German-speaking Switzerland were contacted by e-mail. Contact persons (such as instructors at adult education centres) were asked to forward the questionnaire to their students.

## Analysis

For ordinal data, medians (*Mdn*) and ranges (*R*) were used as measurement units. The items with an ordinal scale in the second part of the questionnaire dealt with improving skills, working on details, working on particular techniques and creating artworks to improve skills. The third part's medians and ranges also were analysed.

Shapiro-Wilk tests showed that the data were not distributed normally; therefore, the data were analysed with nonparametric test methods. The scale data comprised perceived importance, effort and hours per week with the items "Working on artwork", "Reflecting on own artworks", "Exchanges with other artists/classmates", "Working together with other artists/classmates", "Establishing contacts (e.g. galleries)", "Reading specialist literature" and "Visiting museums/exhibitions". Kruskal-Wallis tests (H tests) were used to analyse differences between

the three expertise groups. For pairwise comparisons, Mann-Whitney U tests were used, applying Bonferroni correction, after which the significance level was adapted to $p = .017$. For the effect size, $r$ was chosen. The effect size $r$ is calculated from standardised $z$-values and the sample sizes ($r = \frac{z}{\sqrt{n}}$).

Open questions and questions with multiple answer options were calculated as percentages. In the second part of the survey, the following three items had multiple answer options: aspects of feedback, people who provided feedback and the most helpful people. The answers to the open-ended questions were grouped under inductively generated categories, e.g. family, fellow students or lecturers.

## Results

### Domain-Specific Practice Activities

Descriptive analyses revealed that experts rated the item on improving skills with the answer option "often" ($Mdn = 4$, $R = 1$–$4$), while items concerning working on details and working on particular technique were rated "sometimes" ($Mdn = 3$, $R = 1$–$4$). Intermediates and amateurs rated items on improving skills as "sometimes" ($Mdn = 3$, $R = 1$–$4$) and working on details ($Mdn = 3$, $R = 1$–$4$) with the answer option "sometimes". Intermediates rated the item on working on particular technique with the answer option "rarely" ($Mdn = 2$, $R = 1$–$4$), while amateurs rated it "sometimes" ($Mdn = 3$, $R = 1$–$4$). The results of H tests revealed no significant differences between the expertise groups regarding the items on trying to improve skills ($H(2) = 3.04$, $p > .05$), working on details ($H(2) = 5.54$, $p > .05$) and working on particular techniques ($H(2) = 1.24$, $p > .05$).

Table 1  Medians (Mdn), ranges (R) and results of H tests for expertise groups' domain-specific activities

| | Experts<br>Mdn (R) | Intermediates<br>Mdn (R) | Amateurs<br>Mdn (R) | H Test<br>$\chi 2$ |
|---|---|---|---|---|
| Relevance of activities | | | | |
| Working on an artwork | 6 (1–6) | 6 (1–6) | 4 (1–6) | 23.39** |
| Reflecting on own artworks | 6 (1–6) | 6 (1–6) | 4 (2–6) | 26.06** |
| Reading specialist literature | 4 (1–6) | 5 (1–6) | 4 (2–6) | 6.45* |
| Visiting museums/exhibitions | 5 (1–6) | 5 (1–6) | 3 (2–6) | 11.06** |
| Effort on activities | | | | |
| Working on an artwork | 4 (1–6) | 5 (1–6) | 3 (1–6) | 10.32** |
| Reflecting on own artworks | 4 (1–6) | 4.5 (1–6) | 3 (1–5) | 20.13** |
| Reading specialist literature | 3 (1–6) | 4 (1–6) | 3 (1–6) | 21.28** |
| Visiting museums/exhibitions | 3 (1–6) | 3 (1–6) | 2 (1–5) | 12.12** |

\* $p < .05$; \*\* $p < .01$; 1 = lowest rating (not important; not demanding), 6 = highest rating (very important; very demanding)

## Perceived Relevance of Domain-Specific Practice Activities

Medians and ranges of the perceived relevance and effort of the items "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" are presented in Table 1.

H tests revealed significant differences between the expertise groups regarding the perceived relevance of "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" (see Table 1).

U tests revealed that experts, compared with amateurs, rated the items "Working on an artwork", "Reflecting on own artworks" and "Visiting museums/exhibitions" as significantly more relevant. Intermediates, compared with amateurs, rated "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" as more relevant. The results of the U tests comparing the expertise groups regarding perceived relevance of domain-specific practice activities are depicted in Table 2.

## Perceived Effort of Domain-Specific Practice Activities

Significant differences were found between the expertise groups regarding perceived effort of "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" (see Table 1).

U tests revealed that for intermediates, the perceived effort of the domain-specific practice activities was significantly higher than for experts and amateurs. Compared with experts, perceived efforts for "Reflecting on own artworks" and "Reading specialist literature" were more demanding. Intermediates, compared with amateurs, rated

**Table 2** U Test for relevance and perceived effort on domain-specific activities between expertise groups

|  | Experts/Intermediates[a] | | | Experts/Amateurs[b] | | | Intermediates/Amateurs[c] | | |
|---|---|---|---|---|---|---|---|---|---|
|  | U | z | r | U | z | r | U | z | r |
| Relevance of activities | | | | | | | | | |
| Working on an artwork | 2175.00 | - 0.62 | .05 | 586.50 | - 4.56* | .44 | 459.00 | - 3.93* | .42 |
| Reflecting on own artworks | 1825.00 | - 1.39 | .12 | 566.50 | - 3.95* | .39 | 336.50 | - 4.99* | .53 |
| Reading specialist literature | 1993.50 | - 0.95 | .08 | 835.00 | - 1.80 | .17 | 481.50 | - 2.64* | .29 |
| Visiting museums/exhibitions | 2029.00 | - 0.79 | .07 | 736.50 | - 2.76* | .27 | 441.50 | - 3.25* | .36 |
| Effort on activities | | | | | | | | | |
| Working on an artwork | 2085.50 | - 0.92 | .08 | 784.00 | - 2.57* | .25 | 495.00 | - 3.19* | .34 |
| Reflecting on own artworks | 1339.50 | - 3.37* | .30 | 874.00 | - 1.35 | .13 | 404.00 | - 4.19* | .45 |
| Reading specialist literature | 1121.00 | - 4.55* | .40 | 921.00 | - 0.62 | .06 | 483.00 | - 2.70* | .30 |
| Visiting museums/exhibitions | 1378.50 | - 3.01* | .27 | 969.00 | - 0.62 | .06 | 456.00 | - 2.90* | .32 |

* Bonferroni correction $p < .017$; a: comparison between experts and intermediates; b: comparison between experts and amateurs; c: comparison between intermediates and amateurs

the items "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" as being significantly more demanding. The results of the U tests comparing the expertise groups regarding perceived effort on domain-specific practice activities are depicted in Table 2.

## Time Spent on Domain-Specific Practice Activities

Medians and ranges of the items "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions" regarding hours spent per week are displayed in Table 3. The analyses revealed that intermediates spent more time reflecting about their own artworks and visiting museums/exhibitions than experts and amateurs.

U tests revealed that intermediates, compared with experts, spent significantly more time "Visiting museums/exhibitions". Furthermore, the analysis showed that intermediates, compared with amateurs, spent significantly more time "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions". Experts, compared with amateurs, also spent significantly more time "Working on an artwork", "Reflecting on own artworks", "Reading specialist literature" and "Visiting museums/exhibitions". The results of the U tests comparing the expertise groups regarding time spent on domain-specific practice activities are presented in Table 4.

## Social Interactions

Next, the feedback-related items were analysed. Experts reported that they received feedback often ($Mdn = 4$, $R = 2$–4), while intermediates and amateurs reported that they received feedback sometimes (intermediates: $Mdn = 3$, $R = 2$–4; amateurs: $Mdn = 3$, $R = 1$–4). H tests revealed significant differences between the expertise groups ($H(2) = 15.88$, $p < .01$).

U tests revealed insignificant and significant results. No significant differences regarding the frequency of received feedback between experts and intermediates were detected ($U = 2050.50$, $z = - 0.88$, $p > .05$). Experts received significantly more feedback than amateurs ($U = 707.50$, $z = - 3.91$, $p < .01$). The effect size was $r = - .37$.

Table 3 Medians (Mdn), ranges (R) and results of H tests of time spent per week in hours on domain-specific activities

| Activities | Experts | Intermediates | Amateurs | H Test |
|---|---|---|---|---|
| | Mdn (R) | Mdn (R) | Mdn (R) | $\chi 2$ |
| Working on an artwork | 20 (1–60) | 15 (2–60) | 2 (1–10) | 54.81* |
| Reflecting on own artworks | 4 (0–40) | 8 (1–60) | 1 (0–10) | 34.92* |
| Reading specialist literature | 3 (0–20) | 3 (0–25) | 1 (0–5) | 14.23* |
| Visiting museums/exhibitions | 1 (0–6) | 2 (0–10) | 1 (0–3) | 20.30* |

*$p < .01$

**Table 4** U Test for time spent per week on domain-specific activities between expertise groups

|  | Experts/Intermediates[a] | | | Experts/Amateurs[b] | | | Intermediates/Amateurs[c] | | |
|---|---|---|---|---|---|---|---|---|---|
|  | U | z | r | U | z | r | U | z | r |
| Working on an artwork | 1695.50 | - 1.08 | .10 | 85.50 | - 6.93* | .69 | 54.50 | - 6.57* | .75 |
| Reflecting on own artworks | 1215.50 | - 2.00 | .19 | 387.00 | - 4.35* | .46 | 157.50 | - 5.88* | .66 |
| Reading specialist literature | 1471.00 | - 1.27 | .12 | 351.50 | - 3.10* | .33 | 206.00 | - 3.65* | .44 |
| Visiting museums/exhibitions | 1281.50 | - 2.39* | .22 | 427.00 | - 3.20* | .34 | 221.50 | - 4.14* | .49 |

* Bonferroni correction $p < .017$; a: comparison between experts and intermediates; b: comparison between experts and amateurs; c: comparison between intermediates and amateurs

Intermediates also received significantly more feedback than amateurs ($U = 541.50$, $z = -3.04$, $p < .01$). The effect size was $r = -.33$.

Intermediates rated all aspects of feedback, which supported them in their artistic development, more often than experts and amateurs. Content aspects of feedback were rated most often by all three expertise groups (experts: 79.00%; intermediates: 79.30%; amateurs: 64.50%). Technical aspects were in second place. For intermediates, feedback on technical aspects was more important than for experts and amateurs (experts: 58.00%; intermediates: 72.40%; amateurs: 61.30%). Large group differences were revealed regarding the art-scientific and society related aspects, with 41.10% of intermediates rating art scientific aspects, with 35.80% of experts responding likewise, but no amateurs rated these aspects. Furthermore, 48.30% of intermediates, 34.60% of experts, and 9.7% of amateurs rated society related aspects of feedback as relevant to their artistic development.

The participants could give multiple answers when indicating people who provided them with feedback. The results showed differences between the expertise groups. Experts received more feedback from other artists compared with the other two groups. Small differences existed in percentages regarding feedback provided by family. Most experts and intermediates indicated receiving feedback from university lecturers and

**Table 5** Nominations of persons providing feedback (percentages)

| Persons | Other artists | Classmates | Lecturers | Friends | Family |
|---|---|---|---|---|---|
| Experts | 61.70% | 71.60% | 84.00% | 63.00% | 54.30% |
| Intermediates | 25.90% | 87.90% | 94.80% | 55.20% | 43.10% |
| Amateurs | 22.60% | / | 12.90% | 80.60% | 67.70% |

Multiple answers were permitted

**Table 6** Nominations of most helpful persons (percentages)

| Persons | Other artists | Classmates | Lecturers | Friends | Family | Other |
|---|---|---|---|---|---|---|
| Experts | 34.38% | 9.38% | 35.94% | 3.13% | 10.94% | 15.63% |
| Intermediates | 13.79% | 48.28% | 50.00% | 10.34% | 3.45% | 3.45% |
| Amateurs | 24.14% | / | 10.45% | 20.69% | 31.03% | 6.90% |

Multiple answers were permitted

classmates. Amateurs most often received feedback from friends and family (see Table 5).

Altogether, 64 experts, 58 intermediates and 29 amateurs answered who moved their artistic development forward the most. Most experts rated university lecturers as the most important people in their artistic development, followed by other artists (see Table 6). Experts rarely chose fellow students as being most important to their professional development. In contrast, intermediates rated fellow students second most helpful. For intermediates, the most helpful people were university lecturers. Family was most helpful for amateurs, followed by artists and friends.

### Perceived Relevance of Social Interactions

The medians and ranges of the perceived relevance and effort of the items "Exchanges with other artists/classmates", "Working together with other artists/classmates" and "Establishing contacts (e.g. galleries)" are shown in Table 7.

H tests revealed significant differences between the expertise groups regarding perceived relevance in "Exchanges with other artists/classmates", "Working together

**Table 7** Medians (Mdn), ranges (R) and results of H tests for social interactions between expertise groups

| | Experts Mdn (R) | Intermediates Mdn (R) | Amateurs Mdn (R) | H Test $\chi 2$ |
|---|---|---|---|---|
| Relevance of social interactions | | | | |
| Exchanges with other artists/classmates | 4 (1–6) | 5 (1–6) | 4 (1–6) | 17.25** |
| Working together | 2 (1–6) | 4 (1–6) | 3.5 (1–6) | 12.87** |
| Establishing contacts | 5 (1–6) | 4 (1–6) | 1 (1–6) | 20.76** |
| Effort of social interactions | | | | |
| Exchanges with other artists/classmates | 3 (1–6) | 3 (1–6) | 2 (1–4) | 6.07* |
| Working together | 3 (1–6) | 4 (1–6) | 2 (1–5) | 7.44* |
| Establishing contacts | 5 (1–6) | 5 (1–6) | 2 (1–6) | 10.47** |

* $p < .05$; ** $p < .01$; 1 = lowest rating (not important; not demanding), 6 = highest rating (very important; very demanding)

**Table 8** U Test for relevance and perceived effort in social interactions between expertise groups

| | Experts/ Intermediates[a] | | | Experts/Amateurs[b] | | | Intermediates/ Amateurs[c] | | |
|---|---|---|---|---|---|---|---|---|---|
| | U | z | r | U | z | r | U | z | r |
| Relevance of social interactions | | | | | | | | | |
| Exchanges with other artists/classmates | 1521.00 | - 3.42* | .29 | 809.00 | - 0.90 | .09 | 316.00 | - 3.74* | .42 |
| Working together | 1402.00 | - 3.45* | .30 | 607.50 | - 1.93 | .20 | 543.00 | - 0.94 | .11 |
| Establishing contacts | 1954.00 | - 1.02 | .09 | 470.50 | - 4.45* | .43 | 381.50 | - 3.65* | .40 |
| Effort in social interactions | | | | | | | | | |
| Exchanges with other artists/classmates | 1707.00 | - 1.63 | .14 | 656.50 | - 1.02 | .11 | 376.00 | - 2.48* | .28 |
| Working together | 1594.50 | - 1.58 | .14 | 618.00 | - 1.25 | .13 | 361.50 | - 2.88* | .33 |
| Establishing contacts | 1865.00 | - 0.05 | .00 | 621.00 | - 3.08* | .30 | 420.50 | - 2.82* | .33 |

\* Bonferroni correction $p < .017$; a: comparison between experts and intermediates; b: comparison between experts and amateurs; c: comparison between intermediates and amateurs

with other artists/classmates" and "Establishing contacts (e.g. galleries)" (see Table 7). The analysis of U tests revealed that "Exchanges with other artists/classmates" was significantly more important to intermediates than to experts. "Working together with other artists/classmates" also was significantly more important to intermediates than to experts. The U test showed that the exchanges and establishing contacts were significantly more relevant to intermediates than to amateurs. The results regarding perceived effort in social interactions are depicted in Table 8.

## Perceived Effort of Social Interactions

H tests revealed significant differences between the expertise groups regarding perceived effort of "Exchanges with other artists/classmates", "Working together with other artists/classmates" and "Establishing contacts (e.g. galleries)" (see Table 7).

U tests showed that "Establishing contacts (e.g. galleries)" was significantly more demanding for experts than for amateurs. Intermediates rated "Exchanges with other

**Table 9** Medians (Mdn), ranges (R) and results of H tests of time spent per week on social interactions

| | Experts Mdn (R) | Intermediates Mdn (R) | Amateurs Mdn (R) | H Test $\chi 2$ |
|---|---|---|---|---|
| Exchanges with other artists/classmates | 2.00 (0–7) | 4.50 (0–42) | 1.00 (0–3) | 35.02** |
| Working together | 1.00 (0–30) | 3.50 (0–42) | 1.00 (0–10) | 19.48** |
| Establishing contacts | 1.00 (0–11) | 0.50 (0–10) | 0.00 (0–4) | 8.21* |

\* $p < .05$; \*\* $p < .01$

artists/classmates", "Working together with other artists/classmates" and "Establishing contacts (e.g. galleries)'" as significantly more demanding than amateurs did. The results of the U tests comparing expertise groups regarding perceived effort on social interactions are presented in Table 8.

### Time Spent on Social Interactions

Medians and ranges of the items "Exchanges with other artists/classmates", "Working together with other artists/classmates" and "Establishing contacts (e.g. galleries)" regarding hours spent per week are displayed in Table 9.

Experts and intermediates spent the most time on "Exchanges with artists/classmates". Amateurs spent less time in all three social activities than experts and intermediates, citing time spent in "Exchanges with other artists/classmates" and "Working together with other artists/classmates" as one hour per week on average. The median of the item on establishing contacts was zero.

U tests revealed that intermediates spent significantly more time on "Exchanges with other artists/classmates" and "Working together with other artists/classmates" than experts did. Intermediates spent significantly more time on exchanges and working together than amateurs did. The results of the U tests comparing the expertise groups regarding time spent on social interactions are provided in Table 10.

## Discussion

In this study, it was investigated which domain-specific practice activities and social interactions were rated as particularly relevant by experts, intermediates and amateurs in the visual arts domain. While artists usually work alone and practise in order to improve their artworks, the social component of the latter becomes relevant when exhibiting or selling it. Therefore, both practice activities and social interactions were focused in the study of professional development in visual arts. Based on prior research

**Table 10** U Test for time spent per week on social interactions between expertise groups

| | Experts/Intermediates[a] | | | Experts/Amateurs[b] | | | Intermediates/Amateurs[c] | | |
|---|---|---|---|---|---|---|---|---|---|
| | $U$ | $z$ | $r$ | $U$ | $z$ | $r$ | $U$ | $z$ | $r$ |
| Exchanges with other artists/classmates | 741.50 | - 5.06* | .47 | 337.50 | - 1.91 | .21 | 90.50 | - 4.47* | .55 |
| Working together | 838.00 | - 4.18* | .40 | 523.00 | - 1.33 | .15 | 321.00 | - 2.61* | .31 |
| Establishing contacts | 1208.00 | - 1.83 | .17 | 537.00 | - 2.64* | .28 | 483.00 | - 1.24 | .15 |

* Bonferroni correction $p < .017$; a: comparison between experts and intermediates; b: comparison between experts and amateurs; c: comparison between intermediates and amateurs

in related domains, the PDA-Q questionnaire was developed to get information about a domain that has not yet been well-researched empirically. The study revealed differences between the three expertise groups that shed light on professional development and deliver suggestions for future research.

## Domain-Specific Practice Activities

The first research question addressed which domain-specific practice activities experts, intermediates and amateurs rated as relevant for their professional development. Differences between expertise groups were investigated, and significant differences were found. For example, experts and intermediates rated "Working on an artwork" and "Reflecting on own artworks" with the highest values. In addition, experts and intermediates classified the activity "Visiting museums/exhibitions" as relevant, while amateurs perceived this activity as less relevant. Hence, these activities are important for professional development during study and beyond. The relevance of "Visiting museums/exhibitions" indicates that the examination of art-historical and contemporary art topics is a principal aspect of professional development. Knowledge gained from reading specialist literature contains the theoretical classification of artistic epochs or biographical information on artists, as well as theoretical knowledge about working with certain material (e.g. working with stone) or technical processes (e.g. firing clay). Reading technical literature was significantly more demanding for intermediates than for experts, which may indicate deliberate practice. This result is in line with the classic Ericsson et al. (1993) study that revealed that effort is necessary to improve skills, which are crucial for high performance and, therefore, for professional development.

Experts already have an extensive knowledge structure, which intermediates still must acquire. This extensive knowledge structure is indicated in the ratings of perceived effort while "Working on an artwork". "Working on an artwork" was less demanding for amateurs than for experts and intermediates. Based on these results, it can be assumed that amateurs do not practise as intensively, as they see artistic activities as a form of relaxation.

The analysis of the closed questions on "trying to improve skills", "working on techniques" and "working on details" showed no significant differences between the expert groups. Several reasons may explain these findings, one of which is that amateurs try to improve their technical skills by practising details and techniques. However, they might practise at a different level than experts or intermediates do. Amateurs spent an average of five hours a week on artistic activities, while experts and intermediates spent 28 h per week. This does not include upkeep of social networks, exchanges and working with other artists.

## Social Interactions

The second research question addressed which social interactions were rated as relevant to professional development. The analyses revealed that exchanges with artists or classmates were less relevant to experts than to intermediates. This result is in line with a study by James (1996) that revealed that peer interaction plays an

important role for students. This observational study also showed that teaching processes with lecturers were an integral part of learning. Components included evaluation of student work, interactions between teachers and students, and feedback. Intermediates rated all aspects of feedback more often as helpful than experts and amateurs. Technical feedback for improving the handling of different tools and material was relevant for them, as was society-related feedback to connect their artistic work with current societal themes.

Experts' and amateurs' combined time spent on social interactions was less than intermediates' alone. Intermediates rated working with colleagues or classmates as more relevant than experts and amateurs did. The reason for the higher time investment could be that intermediates need exchanges to develop professionally. While working together, intermediates can exchange information about various aspects of their training, sharing their experiences, strengths and weaknesses, and benefitting from others' knowledge. The shared experiences can be related to techniques and material use, but also can pertain to content issues. As art students learn in studio classes (James 1996; Shreeve et al. 2009), they have many opportunities to interact socially with teachers and peers. Experts, on the contrary, usually work alone in their own studios, except those who work in artists' communities. As revealed by our results, experts spent most of their time working on an artwork, whereas less time was spent on social interactions (e.g. with gallerists).

The experts had already completed their study programmes or vocational training and had at least 10 years of professional experience. Therefore, experts obtained much more experience and skills than intermediates—one possible reason why experts were less dependent on interactions with peers. They are focussed on their own artwork and often work alone in their studios. Intermediates have better opportunities to work or speak with others, and they can benefit from courses at the academy or university. Many learning formats in higher education for visual arts are designed to enable interactions, e.g. artists' talks, peer learning or event-based learning (Shreeve et al. 2009).

Establishing contacts was perceived as less important for intermediates than for experts. Consequently, intermediates also spent less time on this activity. However, becoming a professional artist also involves becoming known and established in the art market. Especially, intermediates who are prospective artists must build a network early on, as it can help them to exhibit their artworks and subsequently also sell it. Teachers at universities and academies can actively support their students by drawing attention to the topic and facilitating them to engage in networks.

Experts and intermediates both rated university lecturers as most helpful in their artistic development. In second place, experts rated artists and colleagues, intermediates nominated classmates, and amateurs rated family as most helpful. The reason for the differences between experts' and intermediates' ratings might be because experts were asked retrospectively. They not only were looking at their academic training periods, but also at the years after their study programmes, when they began to establish themselves as professional artists—a time when they encountered other artists. Intermediates were students who do not yet have extensive contacts and have only limited access to the vocational work field. The same is true for amateurs. Networks were less relevant for intermediates and amateurs. Moreover, for intermediates, their fellow students become their future colleagues.

## Limitations and Future Research

In conclusion, both domain-specific practice activities and social interactions are important for professional development. The present study shows which aspects contribute to professional development and were rated as more or less important. However, some questions remain unanswered. We found no differences between the expertise groups regarding domain-specific practice activities tied to trying to improve skills continuously, working on particular techniques, working on details deliberately and creating artworks primarily to improve technical skills. Based on prior research, we expected clear differences between the groups on these points. It is possible that the closed-ended question format was not sophisticated enough to detect differences. We chose a self-report instrument because it is a good means to gain insights into certain processes and activities that are otherwise difficult to investigate. Our questionnaire included open-ended questions, but the participants usually did not provide extensive answers to these questions. Answers to open-ended questions about how and why activities are performed by the different expertise level groups would broaden our understanding. By applying a multi-criterial approach to categorise the participants into three distinct groups, we made sure that several aspects needed to be fulfilled in order to be considered an expert. Nevertheless, the performance criteria in visual arts are less clear than in other domains, and thus they are often heavily debated. Certainly, there are many influences on expertise in visual arts. The methodology used in the present study does not allow us to judge the individual artistic performance or the quality of artworks.

Expertise research suggests that artists try to deepen the expertise they already have gained, while intermediates try to develop basic artistic skills. Future research that investigates artists' approaches further could reveal new insights. Observing participants while working on artworks could show what their work processes look like and how they deal with challenges while creating art. Studies in various sub-disciplines (e.g. drawing, painting or sculpting) could generate specific information about similarities and dissimilarities in professional development and relevant domain-specific activities and social interactions.

In the present study, we wanted to know more about the time invested in various activities. Our participants were asked to estimate the number of hours they had spent on these activities. A risk existed that participants were biased. Documenting the daily activities in a daily protocol might result in more accurate estimations.

Another study limitation is that it was not possible to calculate the response rate. We sent the link for the online survey to the regional offices of the Association of Visual Artists, who were asked to forward the PDA-Q. However, we did not receive information on whether the questionnaire indeed was forwarded, and if so, how many respective members received it. The same holds for the academies and universities.

In conclusion, our study indicates a variety of domain-specific practice activities and social interactions in relation to perceived importance, effort and number of hours spent by experts, intermediates and amateurs in the visual arts domain. The findings help in developing a better insight into the professional development in a barely investigated domain. It is a starting point to build upon and launch more empirical studies to understand the underlying processes in becoming a professional artist.

# Appendix

**Professional Development in Arts Questionnaire (PDA-Q)**

This questionnaire was developed in cooperation with the chair visual arts and aesthetic education and the chair learning and instruction at the University of Regensburg.The aim of our investigation is to learn more about activities that contribute to artists' professional development.

The questionnaire comprises 22 items divided into three parts:

1. Biographical information

2. Information about artistic activities and social interactions during art education time

3. Information about relevance, effort and time spent on different current artistic activities and social interactions

You will find two different types of questions:

1. Closed-ended questions (please mark the most appropriate answer option with x)

2. Open-ended questions (please write your answers on the lines)

Please answer all questions. Your data will be kept anonymous and confidential.

If you have any questions or would like to receive further information, please do not hesitate to contact us.

[contact information blinded]

**Thank you for your participation!**

**Part I: Biographical information**

1.) Gender:                                        O Male                              O Female

2.) Age: _____

3.) In which discipline of visual arts do you see your artistic focus?

O Painting                    O Drawing                    O Three-dimensional art

O Installation                O Video                      O Photography

O Other artistic focus (please specify): _____

**Please fill out questions 4-22 regarding your aforementioned artistic focus.**

4.) How long have you worked in your chosen discipline artistically?

_____

5.) What is your educational background? (multiple answers possible)

O Art Academy

O University/University of Applied Sciences

In which degree programme were you enrolled?

_____

Do you hold any degrees?                    O Yes                      O No

If yes, please list them?

_____

When did you receive your degree(s)?

_____

O Vocational training

Kind of vocational training:

_____

Are you still working in your profession?    O Yes                O No

Professional activity: from _____ to _____ (please provide years)


O Autodidact


6.) How many solo exhibitions do you have per year?

_____


7.) How many group exhibitions do you have per year?

_____


8.) Do you have artworks in permanent exhibitions?

                                          O Yes                O No


9.) Are your artworks exhibited in public permanently?

                                          O Yes                O No

**Part II: Practice activities and social interactions during art education**

10.) Do you receive feedback concerning your artworks?

O Never              O Rarely              O Sometimes          O Often

If yes, by whom (multiple answers possible)?

O Artists            O Classmates          O University lecturers

O Friends            O Family

Other persons:_____

Who among the above-mentioned persons helped facilitate and nurture your artistic development the most?

_____


11.) What aspects of feedback or exchanges with other persons supported your artistic development?

O Technical aspects        O Content aspects          O Psychological aspects

O Art-scientific aspects    O Society-related aspects    O Other aspects:_____
In what way was the feedback helpful for you?

_____


12.) Did you work on particular techniques?

O Never              O Rarely              O Sometimes          O Often


13.) Did you work on details deliberately? (for example, single elements of an artwork)

O Never              O Rarely              O Sometimes          O Often


14.) Do you try to improve your skills continuously?

O Never              O Rarely              O Sometimes          O Often

**Part III: Relevance, effort and time spent on current artistic activities and social interactions**

The following table provides information about different artistic activities and social interactions.

Please rate the activities according to their relevance concerning development of your own skills on a scale from 1 to 6.

The activity is for my personal development…

| | | |
|---|---|---|
| 1 = Very unimportant | 2 = Unimportant | 3 = Rather unimportant |
| 4 = Rather important | 5 = Important | 6 = Very important |

Please rank the activities in accordance with your perceived effort.

The activity required…

| | |
|---|---|
| 1 = No effort | 2 = Little effort |
| 3 = Rather little effort | 4 = Some effort |
| 5 = Much effort | 6 = Very much effort |

**Items 15-18: Artistic activities**

| Activity | Importance | Effort | Number of hours per week |
|---|---|---|---|
| Working on an artwork | | | |
| Reflecting on own artworks | | | |
| Reading specialist literature | | | |
| Visiting museums/exhibitions | | | |

**Items 19-21: Working together with other artists**

| Activity | Importance | Effort | Number of hours per week |
|---|---|---|---|
| Exchanges with other artists/classmates | | | |
| Working together with other artists/classmates | | | |
| Establishing contacts (e.g. galleries) | | | |

22.) Are there any other activities you spend lots of time doing?

O Yes                    O No

Please specify any such activities below.

| Activity | Importance | Effort | Number of hours per week |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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**Linda Puppe** M.A., is PhD student at the Faculty of Human Sciences, Department of Educational Science at the University of Regensburg, Germany. Her research focuses on professional development, the performance of experts, and social interaction during expertise development in the domain of visual arts. She teaches courses on theories of learning and instruction and qualitative methods of educational research. She obtained a Master degree in Educational Science at the University of Regensburg.

**Helen Jossberger** , PhD, is Assistant Professor at the Faculty of Human Sciences, Department of Educational Science at the University of Regensburg, Germany. She teaches courses on learning and professional development, expertise research, instructional design, evaluation research, development and socialisation, and methodology. Her research focuses on self-directed and self-regulated learning in vocational education, professional learning, workplace learning and (visual) expertise development. Currently, she is Assistant Editor of Educational Research Review. She received her PhD at the Open Universiteit Nederlands on self-regulated learning in vocational education. She obtained a Master degree in Cognitive Psychology at Maastricht University, the Netherlands.

**Isabell Stein** M.A., maiden name Guntermann, is PhD student at the Faculty of Human Sciences, Department of Educational Science at the University of Regensburg, Germany. Her research focusses on expertise research in the domain of visual arts in particular in the domain of sculpting. She investigates visual information processes with mobile eye tracking in real life settings in the domain of arts (e.g. in a museum) and she develops new ways to visualise and analyse gaze data on three-dimensional stimuli. She obtained a Bachelor of Arts degree in Educational Science and a Master of Arts degree in Visual Arts and Aesthetic Education at the University of Regensburg.

**Hans Gruber** , Prof. Dr. Dr. h.c., is Full Professor at the Faculty of Human Sciences, Department of Educational Science at the University of Regensburg, Germany, and Visiting Professor at the Faculty of Education at the University of Turku, Finland. His research focusses on expertise research, network analyses, learning and professional development and epistemic beliefs. He was President of the European Association for Research on Learning and Instruction (EARLI) and Vice-Rector for Study and Teaching of the University of Regensburg. Currently, he is Editor-in-Chief of Educational Research Review.