

# Fostering Design Students' Visual Engagement using Personas

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## Abstract

Visual awareness cannot be explicitly taught, as it is a subjective and an implicit skill<sup>1</sup>. However, it can be developed through design students reflecting upon their visual experience, to understand how they have made visual judgments and identifying areas to aid improved visual engagement. It is proposed that the development of students' visual engagement, their ability to question their visual usage, can be fostered.

A method to foster design students' visual engagement emerged from three action research projects with first year undergraduate Multimedia Design students at Northumbria University. Over the course of three projects they were asked to maintain weekly reflective logs which were analysed in conjunction with semi-structured interviews and ethnographic research in a studio setting. This informed the development of three levels of visual engagement, communicated to students through the creation of personas. These were used in the design 'crit' where the students presented their work as a method of peer and tutor assessment, allowing criticism to be directed towards an external persona rather than towards the students themselves. If students are to self-reflect on visual experiences and transform their visual practices any method of fostering visual engagement must draw on design students' social experience, as well as assisting them to take ownership of their learning needs.

Keywords: Visual engagement, reflective logs, defamiliarization, personas

## 1. Introduction

"For students trying to achieve greater visual awareness, it can be bewildering process."<sup>2</sup> Moore<sup>3</sup> argued this is because visual skills are implicit and are experienced subjectively and emotionally. But how can it be fostered? Schon<sup>4</sup> suggests visual skills can be fostered through practice by 'reflection on action'. Therefore visual awareness cannot be explicitly taught, as every person may interpret the same visual experience in a different way; it is dependent on context and past experience. This is typified in a design brief, which requires the designer to understand both the context and the target audience if they are to make appropriate visual judgements.

An approach to develop design students' visual awareness based on Schon<sup>5</sup>, is for them to learn from their visual experience. This involves self-reflection on how they 'see' and the identification of their behaviours when

making visual judgements, to develop students' understanding of where they need to improve. However, Moore<sup>6</sup> disagrees with this approach:

“To suggest there is a kind of osmosis going on is ducking the issue. It is simply another example of the fusing, merging, and blending...of irreconcilable opposites, again without any convincing explanation as to how it actually happen. It is also suggested that visual skill is acquired through experience. This is singularly unhelpful for a young student.”

To address this ambiguity when developing visual awareness the research findings suggests that design students require clear boundaries on what to look for when reflecting on their visual experience.

#### A. 'Surface' and 'In-depth' Seeing

'Surface' and 'in-depth' seeing are types of visual experience that students can use to categorize and reflect upon their activities and behaviours.

- 'Surface Seeing' is a passive visual experience where the learner is looking around at the familiar; they recognise what they are seeing and learn through trial and error but do not necessarily understand how or why they have achieved the final result.
- 'In-depth Seeing' is an active visual experience, where the learner inspects the familiar until it becomes unfamiliar; stepping outside and seeing the bigger picture and questioning what they do not understand through *critical visual engagement*.

This is based on Dewey's concepts of recognition and perception in the 'Art of experience'<sup>7</sup>, noted by Dunne<sup>8</sup>. Recognition relates an object to what is already known whereas perception involves an object we are actively probing in order to see it in a new light. Recognition involves no further questioning, often leading designers to inappropriate judgements rather than fostering "growth and learning". Thus if a student is to understand the meaning behind their work, a balance between 'surface' and 'in-depth' seeing must be found and they must recognise when to apply these modes of seeing in the design process.

#### B. Fostering Visual Engagement

Visual engagement (in-depth seeing) takes time to develop and every new brief requires re-engagement when seeking appropriate solutions. This includes updating knowledge and understanding of current barriers which are impeding their learning and seeing, for example, perfectionism,

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negativity or being outside their 'comfort zone'. As mentioned above, one way for design students to develop visually is self-reflection on past visual experience. However, as students are reflecting on personal experience, development of their visual approach requires an element of self directed learning. This involves taking ownership, valuing openness and gaining feedback in order to set themselves goals, particularly with regard to updating knowledge and changing their learning processes.

Visual engagement takes time to develop and progress may not be smooth but rather governed by individual behaviours and abilities. If educators are to develop self directed learners they need to understand where the barriers which impede individual student's visual engagement lie and provide a framework to help them self-reflect on their seeing throughout the design process. The key to design students' self reflection and transformation of their learning is based on a notion of defamiliarization, developed by Victor Shklovskii. Makaryk<sup>9</sup> describe Shklovskii's notion:

"In everyday life, argued Shklovskii, we do not see things... we respond to them automatically. The purpose of art is to disrupt that automatic perception and to impart the sensation of things as they are perceived and not as they are known. Art operates through the device of 'defamiliarization' that makes objects unfamiliar."

The primary function of the arts is to question and renew our awareness of objects that have become routine in daily living, in Dewey's terms, to perceive rather than to recognise. This notion informed the use of three personas in a design 'crit' to give feedback on which persona best described the way a student had worked; with each character communicating how they conducted their 'surface' and 'in-depth' seeing in the design process. This helped students to view the development of visual awareness as an achievable rather than a bewildering process. Personas are a useful tool for communicating and directing design decisions as they avoid the 'personal' element of criticism.

## **2. Aims and Setting of Action Research Projects**

The main aim of the action research projects was to develop and support a process that design students could use to reflect on their visual experiences and transform their visual practice. Forty-three first year undergraduate Multimedia Design students were asked to keep a weekly reflective log over three design projects, each project had a different audience to design for as well as a different medium print or screen-based design. The

students had no previous experience of reflective practices. The author was as the primary lecturer during the action research projects. In this research role the author could design the briefs, learning environment, material, session and exercises to aid in-depth seeing and reflection.

### 3. Methodologies: Theory into practice

#### A. Action Research Project: Iteration 1 Pilot – Print Design

This first action research project set a design brief requiring students to promote a music band with four original printed images. Critical viewing exercises, debating the differences between looking and seeing using a written text as a guide<sup>10</sup>, and reading each others images, were intended to improve their interpretation of images, to help question their own visual work. The students recorded their experience for these exercises, as well as explaining the decision they have made in reflective logs.

The pilot action project aimed to explore the possible patterns in students' reflection, 'surface' and 'in-depth' seeing together with their learning styles. However, from the outset the objectives were not fixed and were open to change depending on the outcome of the projects.

Table. 1.1 Selection of students which inform the visual engagement levels

Level of reflection in student reflective logs	Learning style (MBTI)			
	Sensate Thinking	Intuitive thinker	Sensate feeler	Intuitive feeler
No Reflection	Level 1	Level 1	Level 1	Level 1
Reflect on their work	Level 2	Level 2	Level 2	Level 2
Reflection on themselves	Level 3	Level 3	Level 3	Level 3

Before the design 'crit' at the end of this project, twelve different students were selected such that it was possible to separate them into four groups of three (table 1.1). Each of the four groups related to a specific learning style (based on Levesque<sup>11</sup> version Myers-Briggs Type Indicator). Each of the three students in a group had a different level of reflection (none; only on their work; and on themselves). The textual analyses of the twelve reflective logs revealed a relationship between how they were 'seeing' and reflecting, this informed three levels of visual engagement: *Level 1*: Students who were just 'doing' and not reflecting. This was evident in their reflective logs which showed that students had started to look passively, and might ignore what they had found and continue to copy and paste inappropriate images in their work without questioning their visual process. *Level 2*: Students reflected on their work but not their mode of learning. These were 'surface' and 'in-depth seeing', but did not know when to apply them in their

design process. *Level 3*: Students who reflected on their work and learning understanding when to use each mode of ‘seeing’.

The three levels of visual engagement informed the first version of the Sherlock Holmes Characters (table 1.2); ideas behind the personas were inspired by Perkins<sup>12</sup> discussion on how Sherlock Holmes ‘sees’ and observes the world compared to Dr. Watson. This seems to be one of the most effective ways of conveying the concept of visual literacy, as it is easily usable, told in a narrative and can be enforced through simple teaching. It was recognised by the researcher that *Level 2* had characteristics of Dr. Watson and *Level 3* those of Sherlock Holmes, as described in Perkins<sup>13</sup>.

Table. 1.2 First version of the Sherlock Holmes Characters

Level 1: The Cleaner	Level 2: Doctor Watson	Level 3: Sherlock Holmes
 <p><b>"Active but never questions"</b></p> <p><b>Profile</b> The Cleaner is always busy tidying up and dusting, she is happy with her job. The Cleaner does not consider why she does things, the way she does them. The Cleaner is just happy doing them that way. The Cleaner works alone and does not get advice from peers.</p> <p><b>Her knowledge and skills</b> The Cleaner carries out the task in her own way. The Cleaner develops her knowledge and skills from her experience of working alone. The Cleaner is thinking about what to clean next, not what she has just done, and therefore does not see the need to change.</p>	 <p><b>"Watson does reflect, but does not use this to develop himself."</b></p> <p><b>Profile</b> Watson is great at observing points of interest, obstacles and dangers, but not seeing past them to get around them. Watson is not a great thinker. When he is in a medical situation, but he can only see from his perspective. He can reflect on his actions as he understands the need for self-development, but does not know how to go about it.</p> <p><b>His knowledge and skills</b> Watson can observe. Watson 1: Watson can reflect on his actions and see the need for change. But he does not know how to change and further himself forward. He requires guidance. Watson 2: Watson asks the right questions, but only for someone else, when he gets a diagnosis, he does not see how to get it right.</p>	 <p><b>"Sherlock Holmes reflects, and applies this in his work."</b></p> <p><b>Profile</b> Sherlock Holmes can apply himself to new challenges, so he reflects upon the problem, and identifies how to solve it. In the problem, he puts this into practice when next investigating a murder. Although he works alone, he knows how to apply other people's perspectives when solving a problem.</p> <p><b>His knowledge and skills</b> Sherlock Holmes can observe. Sherlock Holmes always takes a reflective approach and can see the need for change, and knows how to change. Sherlock Holmes can use other people's perspectives and apply this in his work. Watson Holmes understands the importance and value of this.</p>
<p><i>Level 1</i>: The Cleaner; always doing but never questioning.</p>	<p><i>Level 2</i>: Dr Watson; reflects and sees the need for change but does not know how to go about it.</p>	<p><i>Level 3</i>: Sherlock Holmes; reflects on himself and his/her performance and puts this into practice in the reflective log.</p>

Peers and the tutors in the design ‘crit’ were asked to evaluate which characteristics of the personas were observed in each student’s work. The persona enabled a structure for peers’ feedback to be delivered and received. Students understood the characters straight away, as analysis of peers’ marks showed they were comparable to those of tutors in the design ‘crit’.

**B. Action Research Project: Iteration 2 - Website Design**

Here the students were asked to design a website for a music band. During this project it became unrealistic to assume that all variations of learning styles in a group could be encompassed whereas the observable behaviours shown in the way the students’ worked could be. This idea was based on de Bono’s<sup>14</sup> notion of ‘what can be’, instead of ‘what is’, suggesting that development-specific learning styles will only develop the students in their strongest area and will not help them to deal and adapt to different

contexts. Therefore, it was decided the personas would support students to adapt and update their knowledge over different design projects.

C. Action Research Project: Iteration 3 Interface Design

After the first two projects a number of issues arose with the first version of the ‘Sherlock Holmes Characters’:

1. The characters did not prompt students of what to pick to upon when reflecting on their visual practise as they were insufficient in communicating the:
  - a. concepts of ‘surface’ and ‘in-depth’ seeing. This was solved by drawing upon previous discussions upon the meaning of looking (surface) and seeing (in-depth).
  - b. activities relating to ‘surface’ and ‘in-depth’ ‘seeing’.
  - c. barriers which may impede ‘in-depth’ seeing
2. ‘The Cleaner’ was a negative character and did not demonstrate that every person has goals yet may be outside the learning environment.
3. The personas were based on one data set, and not data triangulation
4. They did not help students progress to the next persona.

These points were addressed through ethnographic research, reflective practice, twelve semi-structured student interviews, and further analyses of their reflective logs from projects 1 and 2. All of the new data was categorised into either ‘surface’ or ‘in-depth’ seeing to create personas that accounted for this as well as detailed associated visual activities and areas of improvement. The second version of the Sherlock Holmes Characters (table 1.3) conveyed ‘The Cleaner’s’ goals, and making her ‘Mrs Hudson- the Housekeeper’. It was used again in the student design ‘crit’ as a method of peer and tutor evaluation.

Table.1.3 Second version of the Sherlock Holmes Characters

 <p><b>Mrs Hudson, the housekeeper</b></p> <p><i>Character description text...</i></p>	 <p><b>Doctor Watson</b></p> <p><i>Character description text...</i></p>	 <p><b>Sherlock Holmes</b></p> <p><i>Character description text...</i></p>
<p><i>Level 1: Mrs Hudson; "Looking but not seeing"</i></p>	<p><i>Level 2: Dr Watson; "Looking and seeing"</i></p>	<p><i>Level 3: Sherlock Holmes; "Knows when to look and when to see"</i></p>

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#### 4. Discussion

##### A. Personas Fostering Visual Engagement

The methodology has outlined a process to develop visual awareness by identifying levels of visual engagement. The use of three personas in design ‘crits’ implemented the notion of defamiliarization and storytelling, aiding design students to see their visual experience in a new light. This was facilitated by feedback from peers and tutors allowing criticism to be directed towards an external persona rather than the students themselves. The greatest value in using personas is that they are a basis for sharing communication<sup>15</sup>. Therefore the personas generated a language to frame feedback delivery on (a) how they were seeing (b) barriers which may impede ‘in-depth’ seeing (c) how they were reflecting, and (d) where they needed to improve. The feedback encouraged students to identify these aspects of their learning in their reflective log, enabling them to set their own goals and take ownership of their work, as reflected by a student:

“In my experience of the Sherlock Holmes Characters, I have discovered that it is a process to help you reach for your goals and help you meet the goals easily, as they are there as a guide to correct your learning skills.”  
(Multimedia Design Student, 2007)

A key aspect which helps the students to self-reflect was being critical of others, using the personas to give feedback helped them understand their current learning state. Therefore the personas, as well as aiding self-reflection on reflective logs, offered a structured method of peer assessment and a tool to aid tutors’ diagnosis of students’ weaknesses, enabling them to propose solutions. In the third project the assistant tutor commented:

“It is really fantastic in terms of having a clear understanding of the students, the characters make it really easy to identify where the student is at, what problems they have got and where they need to get to, to move on.”  
(Jenny Gibson, Multimedia Tutor, 2007)

A drawback of this tool is that some students felt there was an element of stereotyping, and that they were not treated as an individual; therefore it was important to explain that the aim was to aspire to the characteristics of the next persona although some may have some characteristics of each character.

### B. Broader Application of Persona Methods to Foster Visual Engagement

The design students in this study have been considered to be *users* of visual literacy, drawing on their social experiences to understand their own practices. This is drawn from designers' own practices being guided by their user, personas are developed through observations to direct design decisions. Personas are based on the idea of 'theory of mind'; we as humans have incredible ability to analyse and predict a person's behaviours<sup>16</sup> based on our past experience. The Sherlock Holmes Characters have drawn on the students' previous social experience to understand the personas as real people, similar to fictional characters on Television. This leads to another aspect which people are also able to engage in; use of fictional characters can project humour and encourage playfulness.

The personas have helped students to see their visual experience and process in a new light, becoming defamiliarized to their work (see section 1.B), which encouraged them to question their knowledge and skill use. Thus the role of the educator has been slightly altered in that the students may now set their own goals rather than being given guidance. This makes it even more important for educators to understand their students' use of visuals (*users* of visual literacy) before deciding on a strategy to aid their learning and seeing. As when designing for any context or need, the user will have specific goals, therefore these personas are not transferable. Thus either new sets of personas will need to be developed to suit new contexts, or perhaps students, with appropriate guidance, would like to design their own. This could be based on people in industry or fictional characters, it is only important that the *users* (the students) can identify and engage with the personas chosen. This is based on the idea that the students are the authors of their work and the educators are the editors, co-creating their in a learning environment. Viewing design education as a service will aid students' effective visual engagement.

## 5. Conclusion

This paper has described an approach which enabled first year degree level design students to reflect on their past visual experience in order to transform their future visual practices. On reflection, a more effective approach to develop students' visual engagement would be:

1. *Observation* of the students' visual practices in their reflective logs.
2. *Identified* visual engagement levels based on the student's visual practices in suggestive areas to identify in the following order: (a) how they were reflecting, (on their work or

themselves), (b) barriers which may impede 'in-depth' seeing (e.g. motivation, negativity, unconfident), (c) how they were seeing (unquestioning or questioning visual usage) and (d) improvements.

3. *Persona development* based on identified visual engagement levels to enable students' to see their visual experiences in a new light.
4. *Implement* in a design 'crit'; ask students to evaluate their peers on which characterises of the persona they have shown in their project.
5. *Alter* the personas that are not effective in either aiding the student to see their visual experience in a new light or helping them to move on.

The methods are based on students' visual practice can be revealed through conversations and understanding of the perspectives of others in the design 'crit'. Through the use of personas, an attempted has been made to address visual engagement by encouraging students to think about what they are doing and why they are doing it. This aids them to update knowledge and understanding of their own process resulting in self-directed learning.

Moore,<sup>17</sup> suggests, "Problems also arise when visual skills is thought of as some kind of innate 'gift'...if...innate then how does one develop it?" The use of the personas has, to some extent, demystified the process of becoming visually aware by communicating in a manner that design students' could understand. If students are to transform their visual practices, any method of fostering visual engagement must draw on their social experiences as well as assisting them to take ownership of their learning needs.

## 6. Bibliography

1. K Moore, Overlooking the visual. *Journal of Architecture*, 2003. **8**(1): p.28
2. *ibid.*
3. *ibid.*
4. D A Schon, *Educating the reflective practitioner*. 1st ed. Jossey-Bass higher education series. 1990, San Francisco: Jossey-Bass. xvii, 355 p.158
5. *ibid.*
6. Moore op. cit p.34
7. J Dewey, *Art as experience*. 1958, New York: Capricorn Books. 355

8. T Dunne., Royal College of Art. Computer Related Design Research, *Hertzian tales: electronic products, aesthetic experience and critical design*. 1999, London: RCA CRD Research Publications. 117 p.59
9. I R Makaryk, *Encyclopedia of contemporary literary theory: approaches, scholars, terms*. Theory/culture series. 1993, Toronto: University of Toronto Press. xiv, 656 p.54
10. T Schirato, and J Webb, 'Understanding the visual.' 2004, London: SAGE. 213 p.3
11. L Levesque, *Breakthrough Creativity: Achieving Top Performance Using the Eight Creative Talents*. 2001, Palo Alto, CA: Davies-Black Publishing
12. D Perkins, *The intelligent eye: learning to think by looking at art.* ; 4. 1994, Santa Monica, CA: Getty Center for Education in the Arts. xiv, 95
13. *ibid.*
14. E De Bono, *Six thinking hats*. Rev. and updated ed. 2000, London: Penguin. xiii, 177
15. Pruitt, J. and J. Grudin (2003) *Personas: Practice and Theory*. 02 June 2007  
[research.microsoft.com/research/coet/Grudin/Personas/Pruitt-Grudin.pdf](http://research.microsoft.com/research/coet/Grudin/Personas/Pruitt-Grudin.pdf) p.3
16. *ibid.* p.11
17. Moore op. cit. p.34

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