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Design Tasks Beyond the Studio

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Abstract: *Students within the design disciplines can be faced with a duality when they are studying at university – the 'practice' they experience in a workshop/studio environment is put in contrast with the 'theory' of contextual, critical and historical studies. This paper presents a research project that investigates whether the design thinking and problem solving used in the studio can also improve students' levels of academic literacy.*
The 'Fishscale of Academicness' was initially inspired by an analogy in the work of Claire Penketh. This analogy, likening texts to fish in the context of developing undergraduate students' reading skills, has been extended and developed into a lecture and seminar activity to support students to better determine the provenance of secondary sources for their own research and essay writing.
This paper analyses metaphors student groups developed and discovers that allowing students to design their own personalised (and visual) metaphors turned the abstract experience of analysing secondary sources into something more concrete. It argues that integrating studio-like teaching and learning into the seminar environment has the potential to develop not only understanding, but also ownership, crucial to fostering engagement with academic skills in the Higher Education environment.

Keywords*: study skills, academic literacy, metaphor, fishscale, information determinacy*

Introduction

This paper is part of the evaluation of an ongoing research project which attempts to develop ways of teaching academic practice based on learning strategies found in the workshop/studio environment. A session was developed with the aim of prompting students to focus on identifying the provenance of secondary sources using the metaphor of sea creatures and utilising design thinking. While the overall research includes students from a number of disciplines and levels, as well as feedback gathered through questionnaires, the data discussed here is concerned exclusively with first-year students from studio-based art, design and media courses and analyses the drawings students produced and discussed during the sessions. For the purpose of this paper, particular attention is paid to how the students visualised a selection of sources from different academic levels, as well as the variations between their descriptions and the images they produced. It will be argued that including a visual design task in the teaching of this very academic practice allows design students to use learning strategies they are familiar with from the studio environment and, in extension, experience more ownership of the task.

Background

Many students starting in Higher Education are faced with the hurdle of academic practice so often hidden from all but the most inquisitive university starter. They might think they are prepared for the work not realising how much of a step up from school they will be expected to make. Their tutors most certainly will mention (and possibly instruct them in) a number of vital study skills, but there is a reason that this is sometimes called academic *practice*: it needs to be done repeatedly in order to be internalised.

In a way, one would think that students of design would be a step ahead of their peers from other disciplines: they are well used to practising something in order to develop the considerable technical and thinking skills a professional design practitioner needs on graduation. While there are certainly Higher Education institutions in which theory and practice are well integrated within design education, in others that is unfortunately not quite the case. In the latter there still seems to be a divide between what happens in the workshop/studio environment as opposed to what happens in the lecture theatre/seminar room. In the studio these students hone their (technical) skills. In the lecture theatre and seminar room things are happening that are integral to the future of a practising professional, but often seem disconnected to the design student: the contextual studies, the history and theory of their discipline and the broadening of their horizons to both the past and the future. Students who have no difficulty doing immaculate research in order to sort out minute details in, for example, the design of a new chair can seem completely disengaged in the context of reflecting on said work and putting it into a larger context.

Maybe this disconnect is not due to the subject matter; the reason students often seem utterly baffled by what we ask them to do in the lecture theatre and seminar room could be based on a very different way of doing it. It is a different sort of practice they need to engage with, and maybe it is this disconnect between studio practice and academic practice that needs to be addressed. After all, a neat referencing system does not make a high quality reference list.

At Staffordshire University, where this study is located, a certain disconnect can be found between theory and practice in some of the art and design courses offered. Study

skills have been identified as a potentially challenging issue for students on these courses, so much so that a writing-in-the-disciplines approach is followed with dedicated contributions from a specialist. This includes credit bearing input into a dedicated module on all the creative, studio-based disciplines in art, design and media, which include courses in 3D design/crafts, animation, comic and cartoon arts, film and media production, fine art, graphic design, illustration, photography, photo journalism, surface pattern design as well as textile surface design. These modules are taught through a mixture of lectures and seminar work and are assessed by short illustrated essays of between 1000 and 2000 words.

Traditionally a weakness in these modules has been that students, who more and more rely on a simple search engine to find their sources on the internet, seemingly put little effort into analysing the type of source they are using as evidence for their research. It seems that these students are not alone; actively questioning the provenance of secondary sources, particularly when found online, has been identified by Metzger et al. (2003), Hepworth and Walton (2009), as well as Wiley et al. (2009) as a weakness in student researchers' academic practice. According to an estimation by Breivik and Gee (2006), undergraduates are searching only 0.03% of the web, and there seems to be little understanding of academic peer-review in the context of publishing information.

While research is common in the context of artistic and design practice, whether it be investigating the properties of material or looking for inspiration, a deeper exploration of academic sources unfortunately does not follow this, and art and design students seem to be as (if not more) inexperienced at establishing the provenance of their sources as their counterparts in less visual subjects. Hemmig (2008), for example, found that artists particularly 'frequently cannot evaluate information that is given to them' (349). It seems that merely explaining the importance of the provenance of secondary sources with some choice prompts to identify which sources are trustworthy and valuable in the academic context, has little impact on the sources cited in the students' essays.

There are strategies that address this and introduce students to this field of academic literacies. Walton and Hepworth (2011) used online discourse as the main tool to get students to develop their own evaluation criteria. Balusek and Oliver (2012) tested their students using a scaled point system and found that, with the help of this template, students effectively distinguished between different types of sources, evaluated them and, crucially, identified peer reviewed sources from examples.

However, in the particular context of art and design students, who often think of the academic side of their studies as 'boring' and 'dull', presenting the provenance of sources as something combining numbers and checklists is counterintuitive. An alternative presented itself in the work of Claire Penketh, who used an analogy likening academic texts to deep water fish in the context of developing undergraduate students' reading skills (Beaumont and Penketh, 2010). This concept has been extended and developed into a lecture titled 'The Fishscale of Academicness' with supporting group work in a seminar setting (see Figure 1 for a sample illustration). The teaching and learning strategies used here draw specifically on turning the academic practice of determining a secondary source's provenance, which is so often hidden from students, into what is basically a design problem. Rather than teaching resources and their use, learning activities were created that would attempt to facilitate students to engage with information using a set of

Figure 1: An overview illustration showing the depth of the academic ocean populated by sea creatures representing secondary sources from the Fishscale of Academicness resource. Illustration by Josh Filhol

critical thinking skills, one of the main principles of inquiry-based learning (Hampton-Reeves et al., 2009).

The Fishscale of Academicness, discussed in detail in Gröppel-Wegener and Walton (2013), is a teaching intervention based on the idea of giving students a task in order to consolidate their learning. As in the studio, an initial demonstration by an expert would be followed by the learners exploring and practising the newly introduced skill. Students are not just asked to make a judgement call based on predetermined criteria, they are utilising a learning-by-doing approach to analyse types of sources through their visualisation as sea creatures. In the process student groups design their own personalised (and visual) metaphors, thus also making use of one of Lawley and Tompkins' (2000) key points about metaphor: they are turning the abstract experience (of analysing secondary sources) into something more concrete (the sea creatures). They are also linking the concept that some sources are considered of more academic worth than others into the visual of depth in an ocean, with the sea creatures representing their sources living somewhere between the shallows (of little academic worth) and the deepest sea (of most academic worth).

The use of metaphors and analogies is key to this learning strategy. In the context of psychoanalysis, metaphors are used extensively to discover meaning that might be concealed. Similarly the 'academicness' of a secondary source is just as hidden to the uninitiated, and the 'proper' vocabulary to discuss this is also something that students might lack, particularly in their first year of studies. So it makes sense to use metaphors in the context of the hidden academic practice of establishing a source's provenance. But it is not just the use of metaphors as such that is useful here, the trick is to ask students to make use of two common stages of translating one form of metaphor to another: verbalising and physicalising.

As Lawley and Tompkins explain:

> Much of the Symbolic Modelling process involves facilitating the client to *verbalise* the symbolism they ascribe to their imaginative representations, their nonverbal behaviour and to the material objects that draw their attention. […] The other common type of translation involves the client *physicalising* their spoken and imaginative metaphors,

> that is, intentionally creating a physical symbolic representation. This could be drawing, painting, sculpting, poetry, prose and making music. […] Physicalising a metaphor often enables clients to depict things they cannot say, and to encapsulate and convey the overall wholeness of an experience in a single material representation. (Lawley and Tompkins, 2000, p. 16, their emphasis)

Determining the provenance of secondary sources is, of course, not happening on such deep a level as psychotherapy and it is not a therapeutic process. However, some of the same principles apply in the design process. Indeed, metaphors are already being discussed in the context of designing and design education (see for example Coyne, Snodgrass and Martin, 1994), with Hiort af Ornäs, Keitsch and Schulte arguing that 'Metaphors are pedagogic tools for conveying certain ideas, providing ways of structuring thinking and understanding abstractions' and that 'Metaphors can support learning in novel ways and contexts. For beginners, they can be used to encourage students to structure thinking and understand abstractions.' (Hiort af Ornäs, Keitsch and Schulte, 2014, p. 5)

The tasks linked to the Fishscale combine the processes Lawley and Tompkins discuss – students are asked to verbalise their understanding of the sources in group discussions and at the same time to physicalise them as a visual representation. As the 'theme' for this visualisation is predetermined (sea creatures), students have a ready-made vocabulary of both images and words at their disposal to work towards the understanding of what makes a source academic. Design students go through a familiar process (of designing something); they are tapping into tacit understanding (according to Biggs, 2004, tacit knowledge 'has an experiential component that cannot be efficiently expressed linguistically', p. 7) and make it more tangible through observation, verbalising and physicalising, until it becomes understood.

Research Design

This paper analyses the way student groups drawn from first year art and design disciplines physicalised and verbalised sample sources they had been given during a session when the concept of the Fishscale was explained to them. The aim was to find out whether the concept was understood and whether it was important to ask students to both visualise and verbalise their understanding of the provenance of the sources.

Seven different classes of students took part in the research covering the disciplines of Animation (17), Comic and Cartoon Arts (17), Film and Media Production (39), Fine Art (26), Graphic Design and Illustration (21), Photography and Photojournalism (28), as well as Surface Pattern and Textile Surface Design (17). A total of 165 students participated. In groups of about 5 students each, the students discussed a number of sample sources, one or two sources per group, depending on the time available during the class. The sources were selected according to their type and care was taken that none of the small groups worked with two texts of a similar academic depth. Each class had representations of all the levels of academicness, which were later discussed as part of a ranking exercise.

The types of sources were drawn from leisure publications, the online presence of a reputable newspaper, a page from Wikipedia, a 'creative' type high quality magazine, a book giving examples of infographics curated for a general public, two peer-reviewed

Figure 2: It's fairly flat and has some quirky illustrations hence the star shape. I would trust starfish, despite the lack of facial features. It lives on the rocks so it can be found both on the surface (the web) and in a deeper source (the Guardian newspaper). [Graphics/Illustration student on newspaper article]

academic journals and an academic book based on a PhD thesis. The same collection of sample sources was used for all the classes, and students were told that these were not connected to their subject disciplines on purpose as the point of the exercise was to identify and appreciate the *types* of sources rather than their *content*.

The students produced a total of 65 images of individual sources as sea creatures in response to the samples. Students were asked to include a commentary explaining why these sea creatures had been chosen as representations, 8 of the images did not include this commentary. The image examples included here are published with the permission of the individuals who drew them. When this permission could not be obtained the images are only described. An example can be seen in Figure 2, with the description given by the student groups as the caption (original spelling and grammar has been kept here and in the following captions). It is important to keep in mind that the students also presented their designs in class, so another layer of communication, the oral presentation and discussion, is in the mix for them. Unfortunately this layer could not be captured in this research.

Findings

To give an overview of the findings, first there will be a discussion of the images and commentaries on the types of sources produced by the groups. Here particular attention will be paid to the more academic ones and how they were perceived by students – as well as whether this way of analysis allowed the students to show their findings even if they were lacking the right academic vocabulary. This section will end with a discussion of what the images show that the written commentary does not, with a particular focus on the accessories that were added to the sea creatures.

The students successfully identified the sources from the leisure category as not suitable for academic research and ranked them near to the surface of the 'academic ocean'. The 12 student groups working with those sources often portrayed them as groups

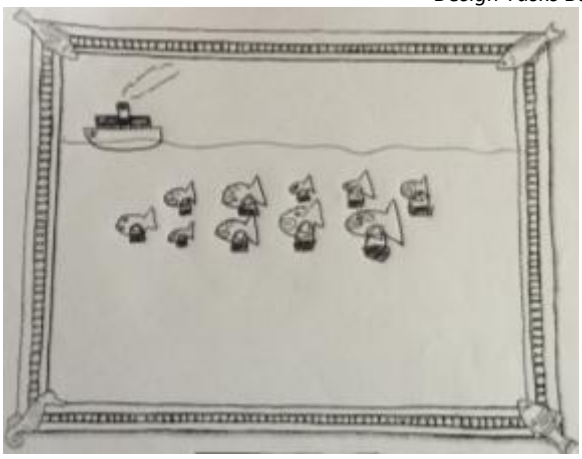

Figure 3: -One-sided.-Opinionative.-Not a great deal of content.-Very image heavy.-Famous female sex. [Photography/Photojournalism describing women's leisure magazine]

of small fish, and they were mostly either described as or drawn colourful. Other words used to describe them were 'lively', 'bright', 'cheerful' and 'friendly'. Comments also showed that students analysed their sources, including terms such as 'opinionated', 'one-sided', 'all form with no function' or 'information is pointless' (see Figure 3 for an example).

6 student groups tackled the printout of a Wikipedia page. Most of these commented on its potential ambiguity when it comes to academic work, mentioning the way it is compiled. It was described as 'straightforward', eel-like, 'fat' (because it has a lot of information in it), a pufferfish (because 'the wrong part' is 'poisonous'), and as a jellyfish (as incorrect information 'can sting you'). All student groups ranked Wikipedia as a mid-range academic source.

The newspaper article was investigated by 7 student groups. Most of the comments here showed that students felt it was an accessible and trustworthy resource with lots of information, located at a mid-range academic level. One group likened it to an angler fish, saying that 'the article relies on visual aids in order to guide the reader through the information.' Another group visualised it as a shark 'because there is too much text and there isn't much photographic pieces that show anything' (an example can be seen in Figure 2).

7 student groups analysed the design magazine. All of them ranked its academicness as not quite on the surface, but pretty shallow nonetheless. Terms to describe it included 'personal', 'colourful' – so much so that one group designed a 'rainbow fish' to visualise it – and a lot of them mentioned that it included a lot of images. One group described it as an eel, as it was 'long and straightforward' and another as an octopus (see Figure 4).

Figure 4: It is an octopus because it has a series of information which are all to do with the same thing, the octopus is the main parts and the legs of the different facts. [Fine Art describing creative Magazine]

Figure 5: We have chosen a jellyfish to represent our source of information given to us because, much like a jellyfish it is colourful and comes in different colours. The information is spread out and patterned around much like a jellyfish's limbs. It also may start off simple but it ends complicated. Jellyfish also go and do what they want with no care, this book is sets out the same way. [Film/Media Production describing infographic book]

The non-fiction book for the general public was analysed by 6 student groups. Terms to describe this were 'visual' and 'colourful'. The sea creatures represented ranged from traditional fish shapes to the puffer fish ('The information in the book seems small at first but when you continue to read you realise that the information goes into more depth'), a flat fish, rather like a flounder, and a jellyfish (see Figure 5).

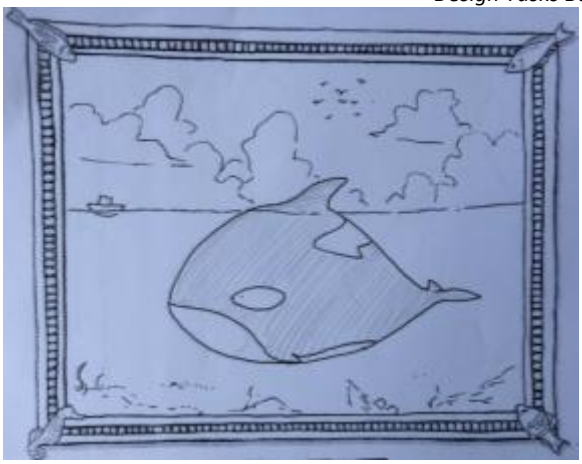

Figure 6: It is large and full of information. It appears intimidating to anyone unfamiliar with it and its content. It is black-and-white covered blue. [Comic and Cartoon Arts describing PhD book]

For this research it was of particular interest to see how academic secondary sources were considered by the students. One of the aims of the session was to introduce them to the concept of peer-reviewed journals and to make them aware that the further they would progress through their three year programmes the more they would be expected to engage with 'deeper' academic sources. For this reason three types of sample academic sources were discussed in class: a book based on a PhD thesis and two peer-reviewed journals, which will be discussed here in more detail.

The book based on PhD research was published for a specialist audience, but it was not the PhD thesis itself, thus missing the formatting and idiosyncrasies that can be found in an original doctoral submission. 7 student groups analysed this source. The attributes given to it were well observed. Two groups described it as a whale (one example can be seen in Figure 6), focusing on the amount of information given on one specific topic. Other groups mentioned an octopus, a jellyfish, an eel-like fish and a flat fish.

Most of the student groups identified this as a very deep source, and terms used to describe it included 'boring' and 'dull'. A lack of pictures was remarked on, as was that it was full of information.

While the PhD book was considered overall full of information, but dull, the two peer-reviewed academic journals were often seen as scary and teeth featured a lot in the relevant illustrations. Students were sampling two different academic journals, the *Journal of Writing in Creative Practice (JWCP)*, which is closely connected to creative practice in the articles featured, and *Teaching and Learning Inquiry (TLI)*, which is very theoretical in scope. 11 student groups looked at the former. While some of them identified this as a deep academic source, most of them had it in lower mid-range. There were also a lot of differences in how it was described. Some students saw it as scary fish (piranha, two sharks, kraken). Others saw it as flat and straight forward (turtle). One described an octopus. Terms like 'trustability', 'informative', 'references his findings' were added. Some students were not impressed, using terms like 'wordy', 'unfriendly', 'quite bland but content rich' and even 'nasty'.

Figure 7: This article is a kracken because the journal is big and unfriendly, has no images. [Graphics/Illustration students describing an article in JWCP]

Both groups from the Graphics/Illustration class make the point that the source has no images (which was true for the issues they had available, although more current issues of this journal do include pictures). They describe a reading experience the students find scary (Figure 7) simply by showing a kraken crushing a ship.

Other groups use the metaphor of sea creatures with limbs in order to make the point that the journal includes information on different things; Figure 8, for example, shows the journal as a combination of starfish and shark.

9 student groups analysed issues of *Teaching and Learning Inquiry*. Imagery used here was mostly of sharks (one of them sleeping to show how boring the text was), and there were a lot of terms in the descriptions identifying this source as 'complicated', 'hard', 'intimidating', 'dull', 'academic' and 'formal'. A number of groups commented that this journal made them feel out of their depth because it was not targeted at their own area of expertise. In the commentary given in addition to Figure 9, for example, students are able to identify features of this genre, such as 'language is specialised', 'very complex' and 'orderly'.

Figure 8: Shark grey scary, a lot of information. Star shaped because it talks about a range of different things. [Surface Pattern/Textile Surface describing article in JWCP]

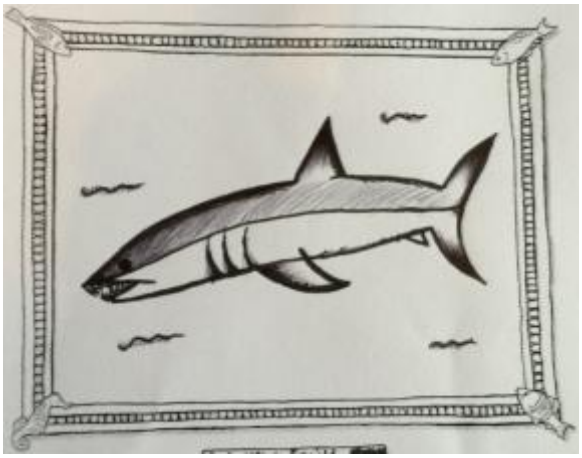

Figure 9: The language is specialised and unfamiliar making it less accessible. Without a brief knowledge of the background to the text it is very complex to understand. It is very orderly and academic. [Fine art describing an article in LTI]

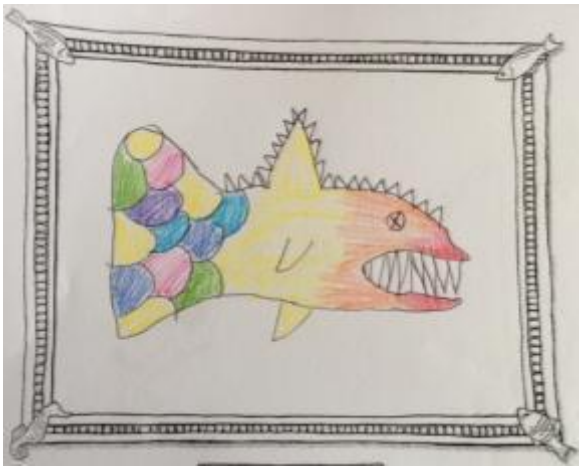

Figure 10: The fish is scary to begin with and it seems you will find nothing. But if you keep searching, to the right person it becomes easier and there is useful information. [Photography/Photojournalism describing article in TLI]

There is an interesting difference between the commentaries of two groups in particular, both of which describe the experience of approaching the source rather than the source itself. A group from Photography/Photojournalism (Figure 10) described (and drew) a fish that initially is scary (with lots of teeth at one end), but which then becomes 'easier' to understand and with 'useful information' once the time is put in to understand it in more detail. This is shown nicely by the nature of the fish changing at the tail, which is less spiky than the rest of the fish and becomes more colourful. Figure 11, on the other hand, an illustration provided by a group of Animation students, is described as looking 'enticing from the outside', but that once the reader is beyond the cover the source is judged as 'complex and rather intimidating-scholarly, academic and formal.' This is not a shark, but an angler fish, with very sharp teeth, complete with mortarboard and diploma as a nod to its academic status. This illustration also includes the warning "Do not Feed" to show that it is potentially dangerous.

As with the mortar board and diploma in Figure 11, it is the sometimes added accessories that make a bigger statement than the sea creatures themselves. By adding mortarboards and diplomas students express a particular view of the university environment; dressing up fish with pipes and monocles shows the expectation of a certain traditional stuffiness when it comes to academia. But in this case, these stereotypes help students get to grips with the fact that there are different levels of academic sources out there.

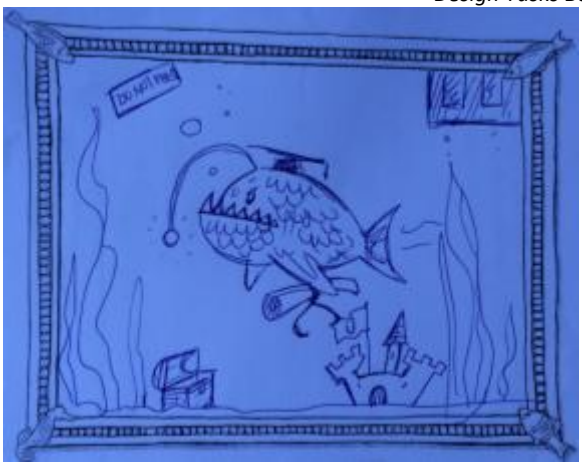

Figure 11: Looks enticing from the outside, not a creative fish-once opened it is complex and rather intimidating-scholarly, academic and formal. [Animation students describing article in TLI]

The students do not just reference their idea of academic life in this way, added accessories are a way of making additional points, even when they are not mentioned in the commentary. The source in Figure 3, for example, is dismissed as academically useless through the visual clue of adding handbags to a whole school of fish, accessories that are not mentioned in the written description.

Indeed, sometimes the images produced are more telling than the commentary. Figure 12 portrays a peer-reviewed academic journal and the written commentary is in a way quite funny, with students trying to imagine the type of character this source could be described as ('Probably lives in a semi-detached house, has a library card'). The fish that was drawn does not show teeth to show that it is scary, although the expression of its mouth is probably best described as quizzical. What really gives this picture significance, however, is the thumbs down gesture the fish makes. It is a tiny detail that clearly shows how dismissive the students are of this source, and possibly this type of source.

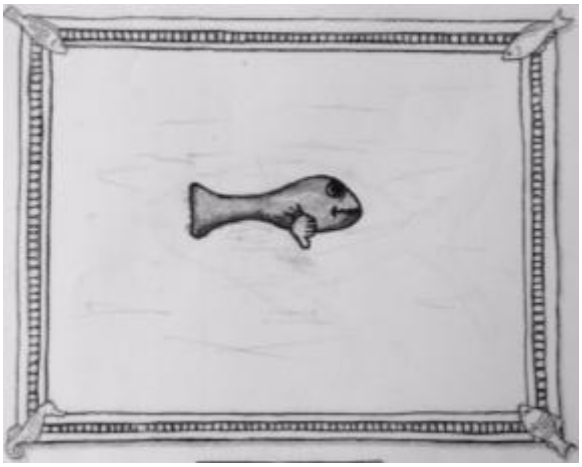

Figure 12: Lots of text - very dull. Grey cover. Probably lives in semi-detached house, has a library card. [Graphics Illustration students describing TLI]

As mentioned before, sometimes there was no commentary included with the pictures. That does not mean that they do not tell a story about how the students perceived the particular source, although of course some of this is down to interpretation and possibly guess work. Figure 13 shows the analysis of the PhD based book by a number of Fine Art students. It is clearly a jellyfish, so based on the use of this type of sea creature by student groups we can assume that the 'sting in the tail' plays a part in this evaluation. This particular specimen also has facial features, which are very neutral – a 'mouth' that is very straight, no smile or frown is included. But most striking perhaps is the inclusion of a 'nose' made up of a question mark. The picture gets a sense of scale by the inclusion of a much tinier fish alongside the jellyfish, which might relate to the amount of information included in the book. The tiny fish also says 'Help', which (particularly when considered together with the question mark nose) might be in reference to the students feeling helpless and overwhelmed by this type of source.

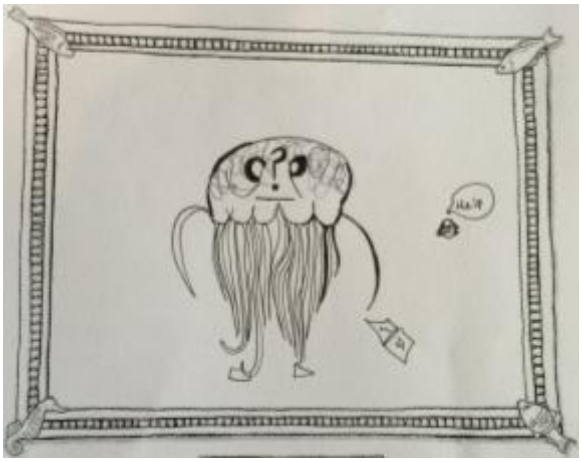

Figure 13: [Fine Art on PhD book, no written commentary included]

Discussion

As the images and explanations show, in a relatively short time, students come up with insightful assessments of sources and usually their assessments of how useful the respective types of sources are in an academic context are accurate. The few times when they are not, discussion in the classroom showed that students tried to determine the value of the sources for them specifically in the context of their own subject, when they did not take on board that the sources were chosen outside of their discipline on purpose.

As has been seen, sometimes the same creature was designed by different sets of students for different sources, and it is interesting to see that the commentaries accompanying these designs clearly explain why that particular creature was chosen. So different aspects are highlighted, or they are explained in a variety of contexts.

It comes as no surprise that the shark features a number of times, particularly to describe an academic source, because this is included as an example of representing an academic source in the presentation that introduces the Fishscale concept. However, a number of sea creatures came up repeatedly in student work that did not feature in the presentation. For example, there are a number of different sources that are described as creatures with a number of limbs, like starfish, squid or octopi. In these examples, the limbs are often compared with different facts or perspectives, they are often chosen for magazines or journals. However, there are still clear differences made between the octopi which represent the academic level – the creative magazine visualised in Figure 4 is multicoloured and sports 'creative' accessories like a hat and sunglasses, whereas the kraken in Figure 7 visibly wreaks havoc making it not just more serious in appearance but also scary.

Overall, the comments that students use to describe their reasoning behind which sea creature best visualises a specific source gives an insight into their thinking processes and it gives them the vocabulary to analyse types of text that might be unfamiliar to them. Most of these students lack the right terminology to analyse academic literature, to the point that many of them refer to journals as 'books'. Encouraging them to describe the sources in terms of sea creatures allows them to show their analytical skills by using means of communication that they are familiar with: drawing/designing on the one hand and talking about something that, while some of them might see it as an odd subject, is nevertheless much less alien than academic terminology.

The concept behind the Fishscale of Academicness might be considered as particularly useful for art and design students as it is a visual approach to a very real problem in Higher Education. However, the visual nature of the concept is only one of the aspects that makes it useful. Rather, it is the design task and integrated designerly thinking that makes it invaluable. This works because students are alerted to the necessity of analysing the provenance of the secondary sources they are considering to use. Rather than just ranking them, students need to find a way to represent sources through an analogy and externalise a brief analysis of them in three ways: as picture, in oral discussion and as written text. So any inherent understanding they might have that comes from skimming the sources needs to be specifically externalised. As has been argued by Gröppel-Wegener and Walton (2013) this task allows students 'to move from an affective state of uncertainty regarding the information they are engaging with to a point of relative certainty' (p. 16).

The important factor is not necessarily the visual nature of this concept, but rather the activities through which the translations of the students' understanding into different

physicalisations become visible to them: because they are being asked to analyse and describe sources they become aware that this is behaviour they need to integrate into their own research practice. They develop a sense of ownership not just of the sources they have analysed and translated into a sea creature, but also of this activity. It works because it uses an approach that is embedded in the practice of design teaching. In a way the presentation is a demonstration of how to go through questioning the provenance of a secondary source. The students are using team work to practise (and practice) this crucial stage of academic practice and they produce a physical outcome that potentially becomes part of their research process, just as an early sketch becomes part of their design process.

Conclusion

The engagement of the students with the provenance of secondary sources and the related design tasks clearly demonstrates an understanding of the concept of information determinacy. While the research data collected at this stage does not show whether there was long term retention of the concept, as a strategy to make the problem understood it has been proven successful (and the data collected as part of the larger research project confirms this).

Through the analysis of a range of metaphors student groups developed during these sessions, it is clear that using a studio-like teaching approach is a possible way to make students aware of the sometimes hidden academic practice of questioning the sources they come across in their research. Engaging students in an active way gives them a ready-made strategy for following this through individually – and taking ownership of this activity.

What this research also has shown is that while first year students may lack the right terminology to describe academic sources correctly, they do have the right skills to analyse them and describe them if another vocabulary is presented. The physicalisations of the metaphors the students are coming up with also show their impressions of the type of sources they are expected to engage with – some of them are clearly intimidated by the complexity of academic texts. However, hopefully they realise that academic practice gets easier by being practised, just like the tasks design students encounter in their workshops.

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