EVOCATIVE OBJECTS: HOW STORIES HELP YEAR 7 BOYS UNDERSTAND THE SIGNIFICANCE OF ARTEFACTS

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Abstract

In October 2018, ten Year 7 boys in a Design and Technology class participated in a seven-week project in which they explored how stories could help them investigate and design objects with significance. After a series of structured studies into storytelling through objects past, present, and future, the boys created a prototype for their future story in order to discover how and why artefacts became significant, what conditions enabled meaningful sharing of stories, and how these investigations brought insight into the design process of both everyday objects and school projects.

This action research project produced both intended and unintended outcomes. As expected, stories triggered by personal objects evoked strong emotional responses about loss, pain, and comfort; however, it took more time, reflection, and effort than expected to develop mutual trust and share these feelings. Eventually, this "community of learners" felt safe, collaborated, and empathised strongly with each other's stories and projects. Despite the crude prototyping, boys appreciated their peers' responsible attitudes towards creating caring and complex solutions to difficult problems. They recognised how personal stories had generated significant design ideas, and they clearly valued the supportive group dynamic. Active participation in the design process triggered by narrative, helped boys understand and articulate an appreciation of everyday objects.

Introduction

Teaching design and technology for the past fourteen years, I had become increasingly concerned about pupils' attitude towards both resources and finished products. After numerous conversations with family and pupils, I sensed that my young students felt anxious and concerned about their environment, but this was not evident in the careless and often wasteful way they used materials or the value they placed on objects they made.

I believed the investigation into understanding and designing artefacts with significance was worthy of research for two reasons. Firstly, designing for a specific need that arises from a personal story provides an alternative, constructive model to the unsatisfactory but widespread

simulated design projects, which Miller and McGimpsey (2011) describe as "a recipe for failure. There is just too much to do in a design project – too many different skills and techniques involved – that, for a 12-year-old, it is likely to end in a disappointing result" (p.10). Secondly, it also felt imperative to ensure that students develop a sense of responsibility for the resources they use to create meaningful products that have longevity and significance to challenge the overconsumption that afflicts most Western Cultures (Sudjic, 2008).

An alternative relationship to pupils' sometimes "care-less" attitude to objects and resources is explored by designer Jonathan Chapman (2005) and sociologist Sherry Turkle (2007), who investigated how objects can carry stories and become what Levi-Strauss called the "goods-to-think-with" (Turkle, p. 4). They question how ordinary objects receive and accrue meaning, how an object can become a companion in life experience, bringing together intellect and emotion; they show how "we think with the objects we love; we love the objects we think with" (Turkle, p.5).

Stories can have a transformative effect on students' attitudes to their environment and sense of community (Anderson & Tisdell, 2016). By incorporating stories into the investigation and design of artefacts, I hoped to change students' attitude to the objects they use and make, and foster a deeper understanding and appreciation of everyday objects. As a result, I developed the following action research question: *How can incorporating story into the study and design of artefacts help Year 7 boys understand the significance of objects?*

Action research was appropriate for this project as the methodology is participatory, encouraging systematic inquiry into one's own practice to assess its quality and effectiveness. This allowed open-ended questioning of both student and teacher attitudes towards sustainability, as well as critiques of teaching and learning methods. I hoped the classroom could become a collaborative environment, or "agora," where when we listen deeply to each other and also, by example, encourage others to listen, and create a place where "magic happens" (Lambert, 2009, p. 86). I anticipated, an action research methodology might also have particular appeal for boys as Reichert and Hawley (2010) suggest they respond well to:

- relational learning;

- feedback dynamic (both peer and teacher); and

- transivity: "the capacity...to arouse and hold student attention in a way that leads to understanding and mastery" (p. xxi).

Literature Review

I looked to Turkle (2007) and Chapman (2005) to discover how objects themselves can carry significance, how they can trigger deep emotional responses, and how they become artefacts with longevity. I also researched Freed's (2011) findings on how listening and telling personal stories crafts a sense of identity and helps build an active, empathetic learning community. Firstly, however, I examined existing literature and research on the power of stories.

Stories impact the storyteller, the listener, and the group. Rosenwald and Ochberg (1992) argue "personal stories are not merely a way of telling someone (or oneself) about one's life; they are the means by which identities may be fashioned" (p. 1). In other words, narratives are creative, transformative, and evolving structures that allow us to think about our difficult, complex personal experiences and communicate emotions that are universal. Heinemeyer (2018) adds that telling personal stories may require storytellers to not only explore who they are and how they became that person, communicating vulnerabilities and emotions with honesty, but to also explore their own growth, transformation, and hopes for their future, o,r as Freed (2011) writes, "to live more of (their) spiritual and earthly potential" (para. 2).

Moreover, listening to these stories can also have profound effects. Heinemeyer (2018) discusses how listening to others' stories allows for a deep absorption in alien contexts that extends life experience by using imagination to stitch "this exotic second-hand experience to their library of personal experiences" (para. 7). He cites Jerome Bruner who suggests that narrative storytelling develops learning that is deep, culturally embedded. and multi-layered, which is itself an enriching outcome.

Engaging students by relating and listening to compelling stories that impart important material reaches students both emotionally and biochemically and can have an effect on the narrator and the listener that is transformative. The hard wiring in our brains allows us to understand and retain stories that move us as listeners, and "when the listener goes on that journey they feel different and the result is persuasion and sometimes action" (Rush, 2014, para. 14). Storytelling is also a living "social process" (Anderson & Tisdell, 2016, para. 8). It allows the narrator to conduct simulations of events, imagining different strategies particularly in social situations (Robson, 2018). It is this rehearsal that hones an individual's abilities to make moral decisions and discuss social dilemmas, developing refined social skill sets.

Telling and listening to stories is active, social, transformative, and empathetic, and objects can enrich this storytelling experience. Chapman (2005) contributes to this debate, suggesting that objects that carry experiential and emotional resonance can illustrate our personal life

journeys "both to society and the self" (2005, p. 108). The Director of the Design Museum in London, Dejan Sudjic (2017), explains that if you examine objects carefully, they reveal "a lot about the way we live, who we are, what we value and what we don't value, how we use things" (para. 12).

A storytelling "agora" is a place where deep and respectful emotionally rich stories are told and actively heard. Portland Art Gallery created this environment through a programme which required students to record stories about an object of personal significance (Object Stories, n.d.). They discovered that connection with personal objects became a bridge to learning about the meanings contained within all objects, developing students' art literacy–their understanding of the significance of both personal and historic objects through storytelling. This is a fine example of reciprocal, relational learning, one of the three key features Reichert and Hawley (2010) recommend for engaging boys. They also found "vigorous creation of student-constructed products" (p. 17) to be an especially effective teaching method with boys, as is the opportunity to explore matters of "deep personal importance, clarifying boys' awareness of realities and values" (p. 137) using open inquiry methods.

This literature review provides evidence that objects can carry emotional and experiential resonance, illustrate personal and social stories, and become a bridge to understanding meaning in historical, current and future artefacts. My project aimed to encourage boys to teach others about themselves through their objects - their identities and how they understand the world, their fears, aspirations and values. Using objects as a catalyst to consider each other's stories could help the boys develop a deeper sense of empathy and an understanding of how objects can carry significance and meaning, possibly resulting in a transformative effect on their attitude to products they make and use. Current searching revealed very little research about how investigating stories related to objects might develop boys' understanding of an object's significance and was, therefore, an interesting and useful action research topic to develop further.

Research Context

The research took place at Dulwich Prep London, the largest boys preparatory school in the UK. It aims to inspire excellence and prides itself on creating an environment where learning can flourish, incorporating relational learning, and the feedback dynamic into classroom practice. The school has a national reputation for high standards of achievement in sport, music, art, and academics. Character and value-based education are central to its ethos, as is the well-being and happiness of each boy.

The participants in my research were the first Creative Rotation cohort of ten Year 7 boys (aged eleven and twelve), some of whom I had taught for six months the previous year. The boys had all opted for the Design and Technology module for a seven-week block. I felt that this project would be an interesting exploration of alternative approaches to design that could remain relevant to their GCSE/A level studies.

All the boys and their parents/guardians gave written consent for the boys' participation in my research through letters of consent as suggested by the IBSC. The data collection process was detailed and assurances were given that information collected would only be used for educational purposes and within the context of this research project. Considering the personal and emotional content of the unit, it was important that I maintained anonymity by withholding the boys' names when discussing data, sharing responses, and filming video recordings.

Action

Initially, I recorded baseline data to determine the boys' understanding of key terms (story, object, significance) and their attitude to listening.

Realizing that a connection to a personal, significant object could form a bridge to developing an understanding of personal, as well as historical and social objects, I began the project by sharing a personal object story with the group (present story). We then visited Dulwich Picture Gallery to discover historic object stories (past story), and the boys completed worksheets from the Portland project (Appendix 1). As a follow-up to this gallery visit, they wrote one-sentence stories about their own past, present, and future, incorporating ideas from a significant object of their own.

For the final phase of the action, the boys researched design ideas for future prototypes (future story) at *The Future Starts Here* exhibition in London's Victoria and Albert Museum. They used these ideas to create an initial prototype for their future story using plasticine, pipe cleaners, cloth, and lolly sticks. They explained their design to their classmates, and we used the "charrette" method (Appendix 2) for collaborative feedback: "a workshop-style technique that provides a collaborative space that allows for … creation and cross-pollination of design ideas" (Martin & Hannington, 2012, p.58). This fed into the production of a further iteration, incorporating the developments suggested by the group. Boys then described their products in a semi-structured interview.

It was peer rather than teacher responses that were essential for the feedback loop, encouraging constructive criticism, empathy with the clients and collaboration. Boys were also

encouraged at every stage in the project to be particularly reflective participants reviewing their progress and thoughts using video, visual or written communication.

I made two major changes to my practice during this action research project. First, instead of providing a design brief as a starting point, I had the boys use object stories. This change would allow outcomes to be open-ended. Second, I encouraged the boys to be a discerning focus group. By becoming active critical experts, the feedback dynamic could be shared.

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Data Collection

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I used qualitative methods of data collection as they are "broad, holistic and interpretive; require inductive reasoning and attention to detail; and encompass multiple realities constructed by different individuals" (Mertler, 2017, p. 91). The ability to consider the multiple reality approach was especially useful here because the research emerged from pupils' own memories and associations. The IBSC's Guidelines for Data Collection and Analysis (2018 - 2019) also suggest, "the context-specific, inductive, interpretive and behaviour-focused" (para. 1) nature of action research lends itself to qualitative data collection. This data collection method enabled flexibility in my working methodologies as patterns and themes emerged.

I used surveys, questionnaires, interviews, and students' design work to collect information about the boys' definition of keywords, views of their own listening skills, and attitudes towards significant objects. These were useful tools for "acquiring information from individuals…. about their opinions, attitudes or characteristics - by specifically asking them questions and then tabulating their responses" (Mertler, 2017, p. 98). Specific data collection methods were:

- Baseline data collection – boys' definition of key words, 'story', 'object', 'significance' (post-it notes, questionnaires)
- Listening continuum – boys' evaluation of listening skills (videoed)
- Personal object story –objects from home for 'show and tell' (videoed)
- Visit to Gallery –recorded thoughts, sketches, ideas about historical object stories (worksheets, see Appendix 1)
- Visit to exhibition – researched ideas for future prototypes (videoed, sketches)
- One sentence stories – past, present future (written)
- Initial prototype models (junk modelling, photographed)
- Charrette feedback (written, sketches, videoed, photograph, typed, see Appendix 2)
- Prototype development (modelling, videoed, photographed)
- Semi-structured final interview (video)

- Field notes journal recording my weekly observations, thoughts and ideas

I ensured that the results were credible and trustworthy by triangulating the data - comparing written comments with interview questions and focus group discussions, creating opportunities to dig deeper or clarify particular issues. Furthermore, students, parents and staff were fully informed of the progress and the programme of the project.

Data Analysis

I used the method of interpretational analysis (Shenton, 2004) to identify patterns and themes when looking at the definitions of keywords; choice of objects and personal narratives; and change in approach to listening. It was interesting to gain understanding about students' attitude to objects before and after the action research by comparing data from the baseline questionnaire data to that at the end of the study.

Gray and Mallins (2004) suggest "playing" (p. 124) with the data in order to enjoy and explore ways of deriving meaning, including:

- Sorting/organising the data in a variety of ways

- Using colour and mapping to code the information

- Discussing data with participants and collaborators

These methods helped developed a rigorous, systematic approach to the analysis while allowing for reflective activity throughout the life of the project (Coffey & Atkinson, 1996).

Discussion of Results

After analysing and categorising the qualitative and creative data, the following themes emerged:

1. Connecting stories to objects triggered deep emotional responses in boys

2. Sharing personal object stories requires a safe community

3. Boys offered better feedback/guidance to peers based on an understanding of the story behind an object

Connecting Stories to Objects Triggered Deep Emotional Responses in Boys

Figure 1: Personal objects from home

The boys brought in personal objects from home, and they exhibited deep emotional connections with these objects. Chapman (2005) defines a significant object as "capable of purveying potent experiential and emotional resonance" (p. 108). Six of the ten boys discussed objects that held strong personal significance: a Furbie toy, a baby blanket, a cello, books, a signed rugby shirt and a souvenir trophy ball.

Several boys brought in objects that had strong links to family (emotional resonance). RQ's story told of the importance of choosing his own toy as a child of six. His Furbie gave him a sense of comfort; he shared, "when I was scared at home this was always beside my bed." He spoke with pride that his care ensured it can still "sing and dance and speak. When you hook him up he still smiles and talks. It dances, it makes me feel comforted" (RQ).

One boy discussed his fear, confusion and distress when an intruder entered his bedroom, and he showed us the baby blanket, bought by his mother, that gave him a sense of security and comfort, protecting him from the terror. "I've had it ever since I was young, it helped me sleep a lot in the night when I was scared" (HM).

Four students brought objects that indicated a shared family interest. For example, MP's rugby trophy connected him to several generations of players: "My Great Grandfather played Hooker for Scotland in rugby, that's a position I play."

Seven of the ten boys spoke about their passion and/or love for their object or what it represents (experiential resonance), sharing statements such as "cricket is something I have a passion for" (SH), "my precious object is my cello" (ZS), and MC's reading book allowed him to discuss his love of books:

My special thing is books in general…I love reading, I love to read for hours and I have millions of books. I love intense books… it makes you have good dreams in your head, it's easy to imagine stuff with books. I like the smell of the pages.

ZS spoke of his object as a combination of emotional and experiential significance:

My precious object is my cello… I've gone through many cellos, this is probably the best cello I've had so far … It's probably my favourite object because it's one of the things I value most, it's one of the only reasons I ever come to school, actually to have my cello lessons, …I just makes me feel happy playing it. I forget what's around me.

Interestingly, in the final interviews, two students actually discussed both the way the objects had evolved over time and had longevity because of this shared history. For example, ST stated, "I think that objects that you have had for a really long time have a story and having a story means that they have either been there for a long time or are kind of close to you because you have done something with them so that makes them a lot more relevant."

Sharing Personal Object Stories Requires a Safe Community

The object story exercise confirmed that, as Portland Art Museum's website (n.d.) claims: "almost everyone, at every age, has a relationship with an object—whether it is a memento, a saved keepsake, or a work of art, and the act of sharing such objects and telling their stories is empowering" (Object Stories, n.d., para. 2). However, the boys were initially reticent to share personal stories that exposed deep emotional attachments. It required the establishment of what Lambert (2009) calls a "community of learners" (p. 86). This proved vital in initially enabling boys to show their own significant, or "precious" objects with confidence, to appreciate the "story" told through the objects and later for them to design their own unique and profound artefacts that were modified and enriched by feedback from peers.

Establishing this agora took patience and effort. Several lessons transpired before the boys began to trust me and each other. Initially only three boys brought in objects to discuss. These objects related to sporting achievement or collecting, and it took some prompting to link the objects to family or more emotional connections. Skarr (n.d) recognised this phenomenon, "In contrast to the girls, the boys do not relate their stories to their own feelings and experiences but to a discourse outside their own sphere of intimacy… indicating that boys prefer to draw their narrative from "a secondary territory" (para. 58).

Figure 2: Significant personal objects

Modelling the process proved important. Rockower (2018) notes, "good stories make us feel something" (para. 12) and this emotional connection requires vulnerability and honesty. I recorded in my journal how the boys responded to my story of a carpet given to me by my sister. The following passages capture my reflections:

> I was amazed at the boys' concentration throughout the narration… They asked questions about the journey, how long I had been married, how long I had had the carpet and what the leap year tradition meant. (para.15)

> When asked what made them listen so carefully the answers were very interesting - it went straight to the point, it was about a journey, I was interested in your sister, there was a problem to solve…. I told them that these elements would be useful for them when they wrote their own object stories. (para. 16)

Developing better listening skills helped build a safe community. ST was one of eight boys who initially placed themselves towards the bottom of the listening continuum. At the start of the project, he shared, "I'm not very good at listening, I just don't really like listening," but in his final interview he realised that listening had become an active skill, stating, "I think my listening skills have changed because now I enjoy listening to stories a lot more because I find it very interesting to find out how people connected to things and what's the plot of the story and stuff." This active listening by classmates promoted a sense of empathy with their narrator's experience and contributed positively to the group dynamic (Anderson & Tisdell, 2016; Lambert, 2009).

Figure 3: The listening continuum

In their final interviews, eight of the ten pupils also acknowledged that they had bonded by listening to each other's object stories and by contributing to their design discussions. However, ST also added "we've got a lot closer together, knowing about things we don't see on a normal school day, now we've seen their objects and what's close to them we know them a bit better."

These findings acknowledge the power of the agora that Anderson and Tisdell (2016) suggest can be a meeting place where stories can be shared, when "you gather people in a room, and listen, deeply listen" (para.21). She explains that stories can change attitudes, promote empathy, and motivate a desire to help others.

Boys Offered Better Feedback/Guidance to Peers Based on an Understanding of the Story Behind an Object

The boys provided peer feedback on interim designs using "charrettes" (see Appendix 2); this task required students to not only add helpful, specific, or kind comments on a long strip for every design but also to use complex critiquing skills. As Martin and Harrington (2012) recognised, the low-tech workshop-style technique of a charrette provides a collaborative space that allows for the creation and "cross-pollination" of design ideas (p. 58).

Initially, three students added fairly negative comments and doodles. For example, "what is the point of it? ... and you're not really doing sport, it's doing it for you." (MP)
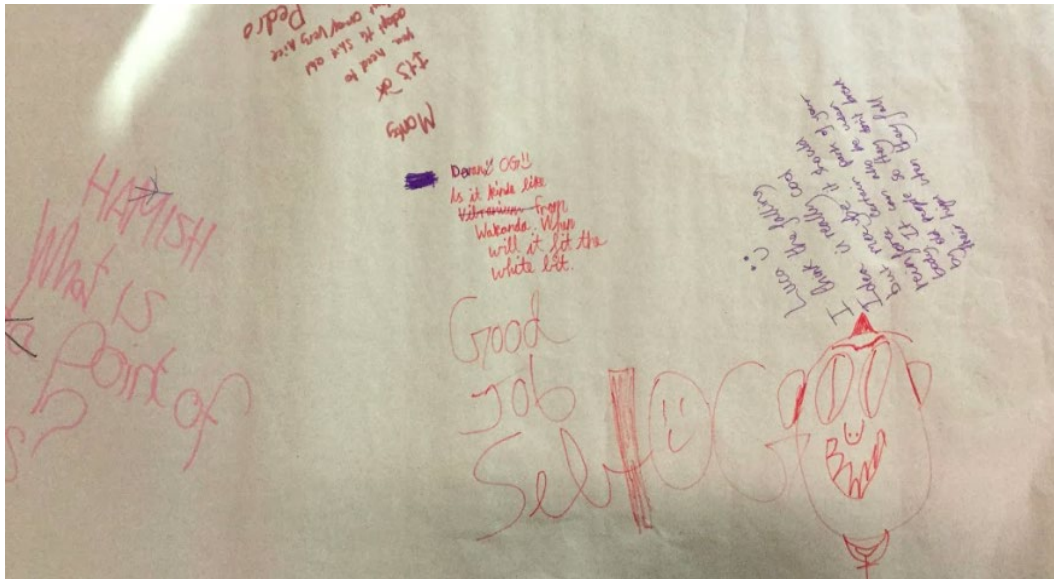
Figure 4: Charrette feedback

Figure 5: A charrette session

However, the final charette showed how these negative comments developed into more helpful, specific or kind suggestions, as shown in Figure 6. Moreover, although the model prototypes were rough, the boys recognised that the ideas were profound and refined. They understood that these were "significant" designs.

Figure 6: Charette comments

Based on an understanding of the story behind the design, examples from SH's feedback for his blind classmate's object also showed how his own design emerged from empathetic understanding. Other boys responded similarly, sharing, "Super idea ... I think the designs are also unique but the ideas should be more subtle ... but it is good for people who want to express their disabilities," (LT) and, "How about something more comfy?" (HM).

The final interviews revealed both how helpful this process was for the "designer" and also how the "critics" could appreciate the design ideas and help improve them. SH said, "I've enjoyed putting questions at people because I know they can help, and making the models, because it helps me think as I'm doing it, just doing it helps me think - no, I can redesign it in a different way and I already know what that way is."

Conclusion

In summary, creating a product from a need identified by investigating stories allowed boys to empathise with their clients. This finding is supported by Miller and McGimpsey (2011) in the report for the RSA Design & Society in which they note:

> If you engage her(/*him*) in the design process as a client, the effects can be amazing –
> not because of the insight she (/*he*) can bring to the project, but because of the

transferable skills she/(*he*) can gain in things like negotiation, working together and citizenship. (p.10)

In their final interviews the boys themselves explicitly discussed how incorporating story into the study and design of artefacts helped them understand the significance of objects in three ways. Firstly, when they looked at objects they used every day, for example, a computer or a pen, they appreciated the design process involved in its creation and understood how this process could have been sparked by an understanding of a client's situation or story. Secondly, they realised how their own stories/passions could turn a problem (rugby injuries) into a unique and useful design (protective suit). Thirdly, the boys recognized a correlation between significant personal and object stories. They could see that by studying object stories from the past and those envisioned for the near future that objects can tell their own stories and can be used to tell ours, becoming significant and valuable life companions. As MC succinctly stated, "I have a story … everything needs a story."

Importantly, by incorporating stories into the study and design of objects, the boys developed a strong learning community where they could empathise with each other's experiences and with the clients of their designs. Interestingly, the boys were clear in how valuable this was and how it helped them think. To quote HM, they became "friends … good people who know how to learn."

To conclude, using stories as a springboard helped the boys understand the significance of objects quite profoundly. They ably articulated their appreciation of "the massive design process" (LT) involved in creating everyday objects and could appreciate and value these products more fully. However, using stories to generate their own design process had consequences far beyond my expectations. It allowed boys to identify with their users and respect each other's design ideas because they recognised that very real needs were being addressed.

This action research has allowed me to explore the powerfully creative effects of engaging the pupils in the design process as a client. The collaborative environment it fostered where magic can happen has convinced me how important it is to now use and adapt this approach in my teaching of Design and Technology.

Future Practice and Further Action Research Cycles

Not only could stories become the springboard for future projects, but I will also be eager to use the charrette to encourage collaborative student-led feedback and incorporate personal object stories into the units to promote an empathetic understanding of what is important to

others in the group. I would be fascinated to adapt and repeat this project with different year groups in a further research cycle to investigate which elements are consistent and how development and maturity affects the outcome.

Reflection Statement

As this was only my second year working in an all boys' school, I felt the project taught me much about teaching boys, and I feel I learnt as much from them as I hoped to teach. I realised that it took time and work for the boys to trust me and each other (relational learning), but once established, they were eager to discuss deep, emotional experiences surprisingly openly and honestly. The boys' ability to lead the design critiques (feedback dynamic) made me appreciate how capable and responsible they could be and consider how I could let them take more control of this. Moreover, the gallery trips that the boys expressly "loved" reinforced how important it was that the learning was relevant and that their projects belonged to a wider professional design discussion (transitivity).

During this process, I often felt uncomfortable, not always in control, and apprehensive about how the boys would respond to the new experiences and challenges. Many activities had to be modified, discussed, and repeated, but I was also bowled over by the boys' honesty, their ability to express deep feelings, their willingness to discuss their appreciation of the support of the group, and the opportunity to learn in unexpected and challenging ways.

It felt as if this was experiencing the teacher as action researcher. It was a privilege to share thoughts and experiences, working collaboratively with my mentors Niav Fisher and then Jeannie McElroy, and my team advisor Laura Sabo, about teaching strategies, styles and ideas, It was an opportunity to look at my teaching in a structured manner, and importantly, discuss the effect this has on students.

I would hope that action research has encouraged me to be more flexible in my thinking and more open to new ideas (Pine, 1981), but most importantly, it has given me the opportunity to learn – to try new methods, to struggle and test ideas, and to grow as a teacher. To quote Heidegger,

> The teacher must be capable of being more teachable than the students. The teacher is far less assured of his [or her] ground than those who learn are of theirs....Teaching is more difficult than learning because what teaching calls for is this: to let learn. The real teacher, in fact, lets nothing else be learned than—learning. (as cited by Davidson, 2017, para. 47)

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PORTLAND ART MUSEUM WORKSHEETS

APPENDIX 2

DEFINITIONS OF CHARETTE

"The word charrette may refer to any collaborative session in which a group of designers drafts a solution to a design problem" (Wikipedia)

Charrette. (n.d.). Retrieved November 26, 2018, from

https://en.wikipedia.org/wiki/Charrette

"A charrette is an intensive planning session where citizens, designers and others collaborate on a vision for development. It provides a forum for ideas and offers the unique advantage of giving immediate feedback to the designers" (The Town Paper)

https://www.tndto wnpaper.com/what_is_charrette.htm

"A design charrette is a workshop-style technique that provides a collaborative space that allows for ... creation and cross-pollination of design ideas ... The session should be low tech ... A moderator can help things moving ... Use design charrettes when you want to explore a problem space and quickly generate a wide range of ideas ...: (Martin & Hannington, Universal methods of Design, 2012, p.58)