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# Ikebana: A Collaborative Design Pedagogy

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**Abstract:** Interdisciplinary collaborative practice is a necessary aspect within art and design pedagogy. It is a means to develop teaching methods and engages students as co-developers of their learning. Collaborative pedagogy puts disciplinary cultures, and learning styles under scrutiny, making it particularly ripe for critical academic evaluation.

This paper focuses on the research question: Can visualisation models be used to help support learning within collaborative projects? For this project, a collaborative learning tool was developed using the principles of Ikebana, the Japanese art of flower arranging. Branches and organic elements were used to help students visualise where and when crossovers appear in collaborations and where the spaces created can be used to support reflection and assessment. What started as an *ad hoc* solution to a teaching problem became the start of a bigger investigation into collaborative pedagogy.

**Keywords:** Collaboration, Interdisciplinarity, Threshold Concepts, Alienation.

## 1. Introduction

This paper evaluates current collaborative Teaching and Learning within Art and Design Higher Education in the UK. The research for this work considers evidence to suggest that student led collaborative projects can develop new teaching methods and engages students as co-developers of their learning experience (HEA, 2014). Collaboration can be described as a coming together to exchange ideas through joint endeavor (Ravetz, Kettle, Felcey 2013) and can be considered as both a pedagogic and psychological activity. Pierre Dillenbourg (1999) suggests that collaboration might be a mechanism to cause learning.

“the words 'collaborative learning' describe a situation in which particular forms of interaction among people are expected to occur, which would trigger learning mechanisms, but there is no guarantee that the expected interactions will actually occur. Hence, a general concern is to develop ways to increase the probability that some types of interaction occur”. (Dillenbourg, 1999:5)

The different common terms available to us to describe collaboration are: Disciplinary: working within a single discipline; Cross-disciplinary: to work between two perspectives; Multidisciplinary:

different disciplines working together; Interdisciplinary: meaning integration and synthesis of knowledge from disciplines and the Transdisciplinary: the creation of intellectual frameworks beyond disciplinary perspectives.

“By challenging traditional departmental inhibitions, the aim of Department 21 was to sustain a community that did not presuppose established categories of identity. The conviviality that was cultivated in this cross-disciplinary environment created the context for hybrid identities to develop, rooted in mutual support”. (Hunter, Elzenbaumer and Franz 2010:1).



*Figure 1: Ikebana Floral Arrangement (source: Shutterstock 2017)*

This paper considers an identified research gap within interdisciplinary collaborative undergraduate teaching. Working from literature reviewed, the paper explores the student learning experience within collaborative projects, using examples to identify what could be a prevalent HE context. The

research aims to establish guiding principles for the development of collaborative teaching practice via the study and evaluation of creative learning tools. The paper includes an evaluation of research activities undertaken within *Ikebana: A Collaborative Design Pedagogy*, a Manchester Metropolitan University Scholarship Project 2016-17, where qualitative data has been collected from design department undergraduate disciplinary and interdisciplinary collaboration observations and via a cross faculty Science and Engineering and School of Art and Design residential field study.

*Ikebana: A collaborative design pedagogy* considers the development of interdisciplinarity within Higher Education today. There is a potential when disciplines and ideas merge and cross to replicate what happens in professional practice. This is perhaps the most crucial aspect if collaborative learning experiences are a way to prepare students for life when they leave university and enter the world of work. By entering into creative collaborations, a critical edge is sharpened where ideas are tested by forum, challenging the orthodoxy of the individual. "Ideas emerge tempered and strong" according to Millar in Ravetz, Kettle, Felcey (2013:22). The research outcomes of this paper and project identify an improvement in communication and enable students to self-manage their learning within collaborations. The more ambitious potential of this research is to use the methodologies developed to support the identification of liminal learning spaces and where threshold portals of learning might be entered during collaborative teaching and learning practice (Meyer & Land 2003, 2005).

## 1.1 Alienating Perspectives

A consideration of current student characteristics can be made, to help identify those we are hoping to engage within collaborative design pedagogy. Sarah Mann's 2001 paper *Alternative Perspectives on the Student Experience: alienation and engagement* explores how alienation has become a defining feature of undergraduate student experience (Mann 2001:7). Alienation is a no-man's land where dreams and ideologies can wither. Mann's approach is based on evidence of the "need to engage the learner's personal stance in the learning process in order to enable them to take on the role of active agent in society" (2001:7).

Mann begins her paper by discussing surface (Marton & Saljo 1976) and strategic approaches (Ramsden, 1992; Biggs, 1993; Marton et al, 1997; Prosser & Trigwell 1999) to learning. Students may skate on the surface of their learning by focusing on assessment only or working only to meet lecturer expectations. This emphasis on assessment and appraisal results in student inability to reflect in depth, or engage with the subject and the process of study (Mann 2001:7). These approaches by students could be considered as a strategy for student survival within their Higher Education. It has been evidenced that some students can develop a "false self" (2001:13). This false self, diminishes the student's learning personality and is recognized in the characteristics of surface and strategic learning. Within collaborative projects, such concerns are exacerbated, especially if collaborative work is assessed by group.

"alienation...is the estrangement of the individual student from their own creative and autonomous self as a learner, replaced by a compliant self, unable to access the vitality of their creative self, and acquiescing to the demands and prescriptions of their course requirements" (2001:13)

Students who display alienated characteristics will find collaborative projects very difficult. The impact of their anxieties and surface learning approaches ripple across the whole collaborative experience, outcomes of which might mean the group are unable to work effectively and miss out on the learning opportunities and valuable experiences such projects bring. What is being described by Mann and considered as a call for action by this paper, is counter to what Biggs and Tang (2011)

identify as necessary to enable the basic tenets of effective teaching and learning. In order to teach collaborative projects effectively Teaching and Learning must be aligned to enable students to see their learning; be clear as to what the intended learning outcomes of teaching and learning are; be motivated as a result of good teaching; and that students have the opportunity to work collaboratively in dialogue with others. (Biggs and Tang 2011).

The characteristics which students demonstrate as a survival strategy in their learning behavior, make the job of teaching complex and difficult. Mann describes with great clarity the role Higher Education institutions play in maintaining student alienation, so to view Mann's observations as a cause for concern, this paper considers how we as academics can develop and support what students do during collaborative design projects.

## 1.2 Ikebana

*Ikebana: A collaborative design pedagogy* arose as result of a teaching problem when a lecturer felt that an impasse in a collaborative project had been reached. The idea was practice led, from a real situation that had to be improved. The development of Ikebana as a tool for collaborative pedagogy was stimulated by a reflection on the tensions reported in project evaluations. Student feedback illuminated that collaborative modules can be a necessary evil, something to be got through but with no real awareness of why this is part of the curriculum. "I don't like it, (working in a group) but I guess it is good for us to do. We'll have to get used to it' 2<sup>nd</sup> yr. Fashion student" (Goodman 2016).

In the development of Ikebana as a Learning Tool, the experiential and constructionist learning theory of Seymour Papert (1928-2016), and LEGO Serious Play method (Gauntlett 2014) were considered. The Ikebana Learning Tool at this stage, is a methodology based upon constructionist theory, to enable students to work with materials to generate physical model outcomes for active teaching and learning.

Ikebana is the Japanese art of flower arranging and is a practice which considers the spaces created within flower arrangements to be of equal importance to the organic or floral elements it contains. Ikebana as an art form is about creating balance and harmony between differing organic forms. Aspects of Ikebana which have been identified as useful for the development of a collaborative Learning Tool are:

1. The formal structures of Ikebana include a representation of a Subject- *Shin*, Object- *Soe* and base- *Utsuwa* (Ohara 2015) For the development of the Ikebana Learning Tool, students consider these structures in relation to their projects and as a basis for making collaborative project models and visualisations.
2. The use of organic, found and often ambiguous or disconnected materials to create coherent outcomes; This approach supports a thrifty studio culture where off-cuts and waste materials can be made useful.
3. The manner of "ad-hoc or bricoleur qualities" (Adamson 2007:89) working in congruity with the circumstances and materials to hand, rather than creating something designed; This aspect is vital in the process of the learning tool where students work in the moment and the present, to reflect upon their collaborations.
4. The role of teacher, or a Vygotskian *More Knowledgeable Other* (1978). In Ikebana a teacher will encourage and suggest adaptations rather than critique. Within this learning context the tutor becomes a facilitator and participant rather than a lecturer.
5. The consideration of space and object as a metaphor for collaborative practice is an essential factor enabling Ikebana methods to be considered valid as a Learning Tool

for collaborative practice. Students can visualize their projects as models and identify where and when learning activity has taken place.

In devising Ikebana as a learning tool, the aesthetics of the experience were considered to resonate with design students.

“the idea of using branches was a bit weird at first...but when we used them to show how our group had been working and to represent how we feel it really was useful to see how everyone was feeling in the group. Because otherwise I think we would have carried on and not said anything” Anonymous L5 Design Student Reflection (Goodman 2016).



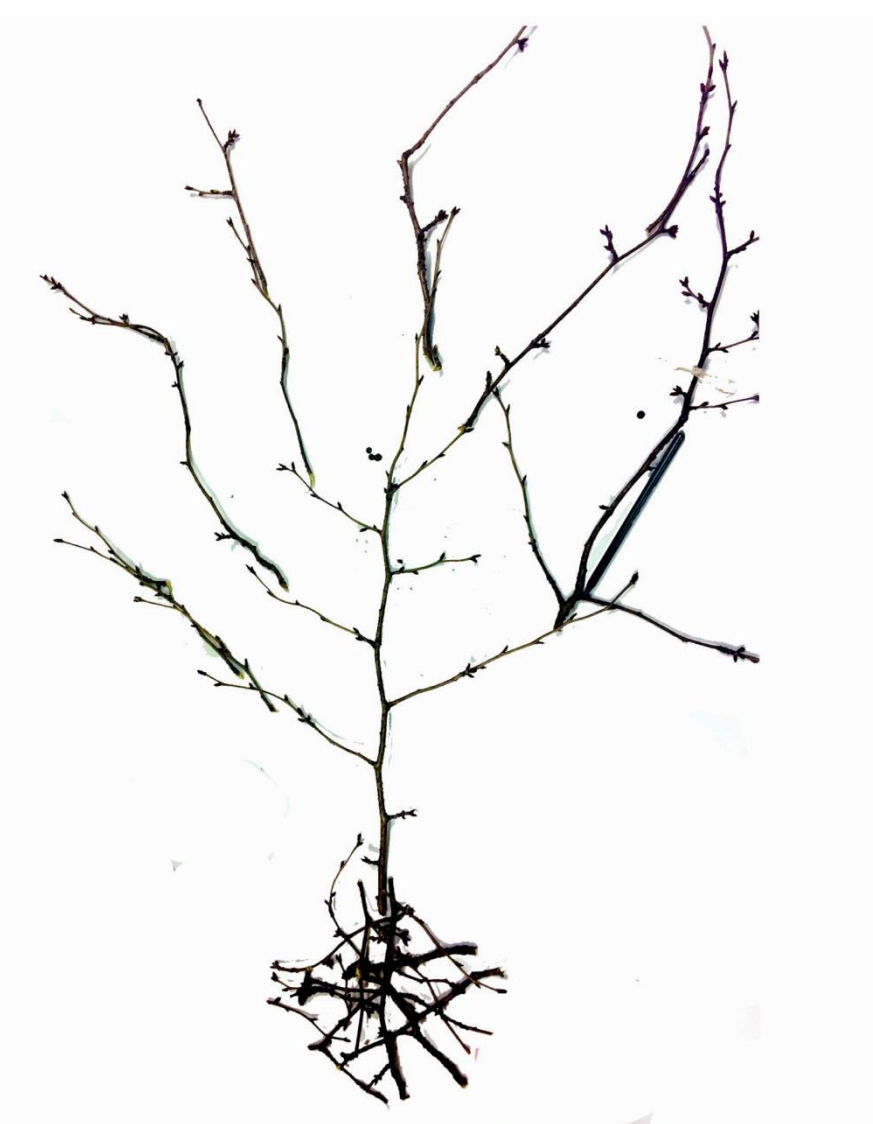
*Figure 2. Ikebana in progress; A student adding to his collaborative model during Middlewood Trust, Lancashire, Cross Faculty Field Study (Source: Rachel Kelly 2017)*

The initial testing of Ikebana as a learning tool, highlighted where communication within groups was poor and collaboration was not being demonstrated. The tool was a very good way for students to discuss the negative aspects of where the groups were not managing to work together. Ikebana had achieved an aim of enabling students to open up and discuss their projects more collaboratively, however the models raised questions about how collaborative learning is taught and the need for pedagogic methodologies to support students to collaborate more effectively.

“explore existing and potential relationships...engage with those spaces between fields of practice and discourse, and help clarify the boundaries of an individual’s own developing practice” (Damsa 2014).

Parameters were sharpened and the structures of Ikebana *Shin, Soe and Utsuwa* were re-identified as essential components in the development of useful models. Students used Ikebana to visualise the negative spaces and vacuums between students, to describe where congruent ideas and crossovers

might exist. Non-organic materials were tested as an alternative to branches, but the most successful work resulted when organic elements featured. The organic forms lend themselves to the structures students wanted to create. They also enabled students to work outside of their disciplinary norms. By stepping away, students were free to explore, test, revise and scrap ideas. Collaborative language developed from the process and materials being used and the following descriptions of models could be identified: *creative abrasion*, *contingent practice*, *branching forms* and *bamboo crossings*. An evaluation of these findings was presented in *Ikebana: A Cross-Disciplinary Workshop Exploring Collaborative Projects within Manchester School of Art* Poster Presentation (Kelly 2016).



*Figure 2. Image from Ikebana Workshop at Manchester School of Art. Student reflection: "The diagram represents the group coming together with all the ideas at the beginning and then each person branching off. However, in visualizing the model using the branches we realized we were not collaborating as everyone was going in separate directions" (source: Rachel Kelly 2016)*

A cross faculty workshop opportunity was sought to test if Ikebana could be used within cross faculty interdisciplinary contexts and a collaboration project between MMU Faculty of Science and Engineering and Manchester School of Art titled *Testing the Field* was organised. *Testing the Field* was a residential field visit with 16 cross faculty students and staff at the Middlewood Trust,



Lancashire. Middlewood Trust is a permaculture community which provided an ideal context away from the university to observe and test collaborative interdisciplinary practice.



Figure 3. Middlewood Trust venue for Testing the Field Cross Faculty Collaborative Field Study (Source: Rachel Kelly 2017)

### 1.3 The Lifeworld

From the research and literature reviewed in the development of the Ikebana project, there is evidence to claim that an experiential and constructionist approach to collaborative pedagogy is useful to learning. Vgotsky (1896-1934) in the early twentieth century proposed that Social Constructivism as a process, identifies how learning happens through collaborative activity and socialization (Vgotsky, 1978). Vgotsky's theory explains that knowledge arises from the process of action or activity within a social context, so therefore the benefits of collaboration can be measured as both collective and individual. Action Research theory describes the collaborative process as a becoming of a collection of "I's rather than as we" (McNiff 2013). It is therefore important for members of collaborative projects to be able to visualize their role within the collaborative process, to limit alienation, and to develop the potential of their group outcomes. The Ikebana Learning Tool enables students to consider and justify such complex perspectives of collaboration.

To develop how we come to know about collaborative practice from a theoretical epistemology, this paper considers phenomenological philosophy, which takes what is known in our own experience as central to that which is known (Ladkin 2014). Phenomenology can be interpreted usefully for the teaching and learning environment by using the term Phenomenography (Marton 1981), a theory which takes into account student perspectives of their learning. A phenomenographic reading of collaboration might mean that students who cannot value the collaborative process of study may face learning obstacles. Through collaborative learning and via the reflections of practice in the work of others, a unique perspective of visible learning is created (Hattie 2001).

Collaborative learning puts individual students at the centre of their design projects, enabling transformative, reflective and generative learning experiences to happen, irrespective of practical outcomes. The theoretical perspectives of Social Constructivism and phenomenology support undergraduate pedagogic collaborative practice in particular, because the social aspects of the learning activity expose the learning across the teaching group involved. The experience is collective. “Having to explain to non-specialists what you do is the most difficult and helpful challenge to face in any project” (Stephen Knott, Polly Hunter and Bianca Elzenbaumer 2010:67). Collaborative practice helps make student learning visible (Hattie 2001) because it enables dialogue and from this dialogue new learning perspectives emerge as shared positions, from which both the student and academic tutor can reflect.

Phenomenology is a principled perspective from which to explain how institutions can support the values which arise from collaborative practice might arise. Edmund Husserl’s (1859-1938) study of the Lifeworld or *Lebenswelt*, meaning the environments in which we live, play, work and learn are worlds we can experience together (Given 2008: 2). This is not stating the obvious, but drawing attention to the immediacy and spontaneity by which design thinking happens by conjecture (Cross 2011). Design thinking and learning within collaborative activity takes place during action and is pre-reflective, as Heidegger in his 1927 work *Being and Time* considers “ready-at-hand” and “present-at-hand”, knowing to be (Coghlan & Brydon-Miller 2014:5). Pre-reflective activity describes the psychological zone where most of our everyday lived experience and learning lies, but as Heidegger illuminates, it is only in the process of stepping back from our ready-at-hand activities we can consider the present-at-hand. The process of experiential contingency or side-by-side practice is a way to explore the present-at-hand, because when one starts to see one’s own practice via the presence of others, unique perspectives and reflections can be made.

## 1.4 Collaborative Learning Communities

A rationale for the Ikebana Project and research underpinning this paper are; the ontology of practice based research; the importance of “doing and making” (Gauntlett 2015) and “doing over thinking” (Newman 2010 in Alix, Dobson and Wilsmore 2010:52), where “meaningless combinations and chance encounters, the occasional glance and interaction between two presupposed figures would glow with poignancy” (2010:53).

Collaborative practice has been researched by Elizabeth Kealy-Morris within her project at The University of Chester; *The bookbinding workshop: Making as collaborative pedagogic practice* in 2015. Kealy-Morris evaluates collaborative learning from the context of a lecturer and student workshop. “I was dependent on the knowledge of my peers as they with me; learning the skill set to perform the tasks adequately was dependent on collaboration from within our team and outside it” (2015:2).

In Kealey-Morris’s project, the workshops were situated away from the main teaching studios where students work. There was no planned teaching within the workshops nor was the work to be assessed. This approach echoes Manifesto *Against Value* a case study report which resulted from an HEA 2013 Award Winning project at The University of Sheffield to support Interdisciplinary Research in Practice in the Arts and Humanities. This project generated a manifesto of shared pedagogical aspirations, which supported staff and students to participate as equals, where ideas such as communal open doors, collaborative work, peer review, and more staff time spent with students emerged, among other suggestions.

To reflect upon Kealy-Morris’s project, Department 21 and Against Value as examples of risk taking collaborative pedagogic experiments, this range of examples of practice, along with the literature

reviewed, help build a picture of what good collaborative teaching and learning environments might look like. This research has supported the rationale for the development of *Ikebana; A Tool for Collaborative Pedagogy* and enabled the following evaluations and suggestions for collaborative teaching and learning to be made:

- Hierarchical structures impact upon the teaching and learning context which supports collaborative learning. In removing such structures and when students and staff work and reflect side by side as equals outside of the formal University teaching context, the shared learning spaces created encompass the *Lebenswelt*, and tacit and unique interdisciplinary practice can emerge.
- The role of *More Knowledgeable Other* theory Vygotsky (1980) is vital for the development of a sense of support for students. Risky or unusual pedagogic approaches require robust and confident teachers to facilitate them.
- That the activity should facilitate communication through making, doing and contingency. By using the branching forms, participants are able to represent where they feel they are in relation to other students in the group, to identify impasses, smooth trajectories, alienating spaces and comfortable areas of co-habitation. The visualization of student perceptions, encourages discussion of their projects in a way that is supportive and less threatening than direct face to face discussion.
- That the space where collaboration is to take place should describe both the physical group and psychological reflective spaces which students withdraw to during collaborative design projects. A consideration of space can potentially stimulate reflective practice within collaborative design contexts and can be used to describe the liminal spaces we travel through in our learning experiences.

## 1.5 Conclusion

Stephen Knott in his chapter *Department 21: The Craft of Discomfort* in Ravetz, Kettle, Felcey 2013, describes vividly what really happens when in 2009 a group of students set up a radical interdisciplinary “zone of free thinking” (2013:137) workspace, in the floor of the recently decommissioned Stevens Building at *The Royal College of Art* in London. On the whole this project is exemplary of collaborative practice, however Knott describes how:

“Participants stood before a vacant floor with nothing but chipboard and timber leftovers. However free to do whatever they wanted with the space and under no constraint from Department 21 organisers, students established their own workstations and brought in their tools... the project became more of an extension or displacement of studio practice in a slightly refracted realm, rather than a terrain of unknowing. I brought in my laptop and was instantly comfortable” (2013: 137)

Knott’s reflection demonstrates, that even within critically acclaimed successful collaborative projects such as *Department 21*, there are challenges. There will always be a need for definitions of how groups are going to work and an awareness that collaboration doesn’t just happen. There is a need for rigor to the enterprise.

Knott states that it was “enough to develop a parasitical educational structure that provided breathing space for students overwhelmed by their intense courses” (2013:139) In this context it makes it a worthwhile question to consider what exactly constitutes enough? Design students need to be given *enough* freedom to embrace collaboration as a necessary part of their education, but they also need to be given tools to navigate this unfamiliar terrain.

Mann (2001) discusses a range of scenarios where students can feel nothing other than alienation within Higher Education. The approach of *Department 21* echoes her ideas around how the undergraduate student needs can be met, by providing a welcome space within universities, a space



Figure 4: Department 21 Space Image (Source: <http://www.brave-new-alps.com2010>)

without judgement and a space that supports the view that there are no hierarchies in learning. A more comfortable space.

The findings of this paper evaluate that through a process of contingent collaborative learning, it can be shown that collaborative design pedagogy can in turn become valuable practical design practice. “Shared understanding can be viewed as an effect, if the goal is really that a group builds the common grounds necessary to perform well together in the future. Shared understanding can be viewed as a process by which peers perform conceptual change” (Dillenbourg, 1999:12). Conclusions to be drawn from this paper and research are that collaborative learning tools can support assessment, and become a necessary part of all Design HE teaching and learning. Collaborative practice is a complex area of pedagogy to negotiate, but is valuable as a means to develop new interdisciplinary knowledge.

To enable all students to benefit within undergraduate HE collaborative contexts requires:

- well supported faculty and department facilitation;
- access to appropriate and stimulating shared learning contexts;
- structured delivery of teaching and learning specific to the development of collaborative practice including the use of collaborative learning tools.

All design students need to aware that the collaborative *box* needs ticking, to demonstrate that they have been out of their disciplinary comfort zone. As pedagogues we encourage our students to *think outside the box* and within design practice this is a given. Thinking out of the box is a box that needs

ticking for both educators and students. “It is saddening to consider that students have such difficulty with collaboration, the myth of the single genius is still too strong and education is generally a very individualising experience” state Bianca Elzenbaumer & Fabio Franz who pioneered The Department 21 Project, in email conversation with Rachel Kelly (2017). The findings evaluated within this paper support how collaboration enables students to experience a break from the individualizing and alienating experiences that Higher Education can provide.

Collaboration should be a design skill and Ikebana as a collaborative learning tool is an attempt to support this. Ikebana, results in students undertaking preparation for what it is like in the world of design studios, perhaps being part of a company or collective with colleagues, clients, deadlines and put downs. Within design academia it often seems that lip service is paid to this aspect of their education. This research paper evaluates that collaborative contingent practice and reflection introduces students experientially to a real world experience and seeks to provide them with methodologies and techniques to manage and gain fulfillment from their work in HE and the future.

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## Images

- Figure 1: Ikebana Floral Arrangement (source: Shutterstock 2017)
- Figure 2. Image by Rachel Kelly taken during Testing The Field Residencial Cross Faculty Collaborative Field Study (Source: Rachel Kelly 2017)
- Figure 2. Ikebana Model from Workshop at Manchester School of Art (Source: Rachel Kelly 2016)
- Figure 3. Middlewood Trust venue for Testing the Field Cross Faculty Collaborative Field Study (Source: Rachel Kelly 2017)
- Figure 4: Department 21 Space Image (source: <http://www.brave-new-alps.com> 2010)

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