



University of Reading

Investigating Practice

Can collaborative art and design projects, in secondary education,
promote affective development and effective peer feedback?

Word Count: 1885

Literary Review

Introduction

This literary review aims to locate key considerations surrounding collaboration, affective development, and peer feedback, within secondary art and design education. My hope is to gain a better understanding of both positive and negative concerns, which will allow me to better prepare and plan for my future practice. I have gathered information from several journal articles, books, and websites, where the following key words and themes are present: art and design, collaboration, affective development, socio-cognitive, explorative talk, and peer feedback.

Collaboration

Collaboration can ready students for the real world where they will have to become co-operative team members and independent learners. Mercer & Dawes (2008/2013) point out that students need to communicate with their equals for problem-solving talk to arise. However, Explorative Talk is hard to cultivate - it can only arise during 'symmetrical talk' which the teacher cannot provide, since they are in a position of power.

Black et al. (2004) posits that students need to move away from seeing the teacher as the sole provider of information and turn to each other, allowing for more autonomy and responsibility. Pushing them into a state of reflexivity, where continued self-analysis takes place throughout collaborative projects. Newman (2020), an educator in post-16 art and design education agrees and embraces discomfort for her students, realising that where friction meets, potential for affective development lies. Mercier and Sperber (2011) disagree, stating that some individuals are skilled at arguing, and sway ideas in a direction that suit their agenda, even at the expense of others "*...that reasoning often leads to epistemic distortions and poor decisions.*" They believe that groups are filled with competition, not co-operation. Mercer (2013) acknowledges that there are negative occurrences that happen in groups, such as 'groupthink', where the group makes decisions based on ill-informed and unquestioned discussions, but believes they are missing the point - these instances provide opportunity for self-analysis. 'Groupthink' indicates that the group could be avoiding uncomfortable feelings by ignoring or silencing questioning voices, perhaps

through a lack of creativity or unrealistic expectations, leading to group consensus. This can be avoided by modelling and providing a structure for students to work to. Teachers can make Explorative Talk part of their classroom culture by thinking out-loud, active listening, questioning, sharing ideas and cultivating a trusting and safe atmosphere where everyone is encouraged to contribute.

The Thinking Together Project (2024) provides age-appropriate resources, such as ground rules and discussion cards. Using these resources during collaborative art and design projects, as a framework, could help students share ideas and cultivate a safe environment, leading to more co-operation and independence in their learning.

Affective Development

Using talk as a tool for thinking can create space for affective development and have a positive psychological effect. Toppings (2017) wants students in situations where they feel compressed for them to acquire experience in developing thinking skills to overcome adversity and master the art of self-regulation. Newman (2020) realises art and design students are in their own '*private hell*,' where egos misunderstand each other, creating alienation. She believes that although working independently feels safe because of the lack of questioning and justification involved, it does not provide adequate opportunity to unravel the subconscious. That this can only be achieved when students work in collaboration, and it comes at the cost of admitting to faults and allowing others to question what they are doing and why they are doing it.

Mercer (2013) advocates for socio-cognitive development and believes that a great deal more can be achieved if people unite in solving problems through language and good communication. Linking people's minds together, in group situations, creates a new and more powerful problem-solving force that is built through collective thinking. He calls this 'interthink' which requires open communication and information sharing so that all known information becomes the group's 'common knowledge.' Mercer & Dawes (2008/2013) believe students who share ideas that are not fully formed are working at an advanced level of open-communication and this is highly collaborative and useful for sorting out thoughts.

Mercer (2013) is frustrated at the lack of communication between evolutionary, social, and developmental science with neuro and educational science. Believing that if the disciplines were to unite, a rapid understanding of how to enhance cognitive development would occur in the education sector. He uses mirror neurons as an example of how we could advance our understanding by explaining how they function during collaboration. Triggered by observing action in ourselves and/or by others. An empathising emerges and allows for cultural understanding and psychological and emotional resonance. Allowing groups to sync-up with each other, forming a matrix - a social brain. Another example includes findings from experiments where the 'assembly bonus effect' is present. Where the group will always outperform its best member, but the average intelligence of the group is not the key indicating factor to group success. The key component being sensitivity. Where the group ensures it looks after its own members and that everyone gets the opportunity to speak, where talking and turn-taking is distributed fairly.

This indicates that open communication, sharing, and empathising are key to successful collaborative projects. Applying this to the art and design classroom would mean breaking students into smaller groups and distributing students with higher emotional intelligence across groups evenly, and building in self-monitoring tasks to ensure talking and turn-taking are evenly distributed, where everyone's comments are listened to and considered. This would mean that during an art project pupils would need to allow visual input from everyone, so that every member feels valued. Ensuring metacognition is directed towards the team, evaluating and reflection. The aesthetic outcome of the art produced will be secondary until collaboration is normalised enough that it becomes the classroom culture.

Peer Feedback

Peer feedback is intimately linked with peer- and self-assessment, providing a pathway for rapid understanding and cognitive growth. Black et al (2004) feel they have located the primary problem for students. Getting them to see briefs as a list of tasks that need to be completed, and criteria as a spectrum in which they fall. That comprehending this would quickly restructure their schema, allowing for increased understanding and the ability to move learning forward swiftly. Boon (2018) agrees

and claims students who are actively involved in verbal and written peer feedback can apply their understanding to assessing work against criteria - earlier.

Soep (2005) discusses her experience of following young artists working on community-based collaborative art projects. Her experience saw young people working in a constant cyclic motion between critique and assessment. Stating that although not initially obvious, critique and assessment have a naturally symbiotic relationship, both of which make the intangible '*concrete*'. Her research concluded that for collaborative art projects to succeed, every individual in the group needs to provide input into each area, that jobs should *not* be divided up and distributed, that everyone needs to participate in multiple roles and hold themselves accountable. The projects should matter to everyone enough that they carry the burden of the project and that everyone and everything is up for discussion, scrutiny, and transformation, including the criteria itself.

Newman (2020) claims that for collaborative environments to work, people "*...must not exercise 'false generosity',*" however there is a balance according to Boon (2018) who appreciates that thoughtless feedback discourages others from offering ideas. This can impact learning and place strain on relationships. Mercer (2013) expands on this by stating although Explorative Talk is hard to accomplish, even with the right circumstances in place, students need to abide by certain guidelines to feel safe enough in their groups to challenge their peers. These conditions are paramount for any affective development and/or effective learning to take place.

Gast (2008) provides a neat set of strategies and visual aids for teachers to follow. Explaining that critical thinking skills encompass reasoning, evaluating, analysing, problem-solving and decision making and like Soep (2005) believes that these are never-ending and cyclic, but with each undulation a refinement occurs. Boon (2018) suggests using prompts, checklists and criteria and that the teacher needs to model '*how to assess work*', and reflection and discussion time should be given after receiving feedback so that responses and problem-solving can develop. He states that guidance should encourage hypothesising, evaluating, and reasoning. Mercer (2013) also discovered through investigation that successful collaborative learning effects children's "*reasoning - appropriation, co-construction, and transformation.*"

In conjunction with explicit guidelines and dialogue from supporting adults, resulting in student's metacognition and self-regulation being enhanced by four components: co-operative group work, self-explanation, self-assessment, and debriefing.

Boon (2018) thinks that effective peer assessment can drive learning forward, even with students who have previously disagreed, provided ongoing dialogue is taking place. That negative criticism received from a peer holds more value *because* it comes from a peer and not a teacher.

This leaves the teacher in a new role where they can watch and reflect, conducting an exploration, rather than the giver of information. This highlights the *need* for peer feedback as a key teaching component in every classroom. In the art and design classroom this could be in the form of critiques, discussion and assessing each other's work against briefs and criteria.

Conclusion

Collaborative projects, in secondary art and design education, have the potential to promote affective development and effective peer feedback, however certain considerations and supports need to be provided along with rigorous planning, and constant modelling. Explorative talk needs to be the 'classroom culture' as well as a strong sense of safety. Guidance and frameworks need to be in place to support students as well as breakdowns of briefs and criteria. Modelling practice assessments and other preparatory activities would also be essential.

Groups are certainly vulnerable to competitive mentality, groupthink and other group phenomena that is damaging to collaborative progress, however I am also inclined to believe in the profound creative force and feedback loop that a group mind can create, once reciprocal resonance is achieved, where it becomes its own organism. This is very exciting! But can key stage 3 students realistically achieve this?

I believe that with clear instructions students will eventually overcome negative instincts, especially if the teacher uncompromisingly prioritises and awards students problem-solving, reasoning and negotiation skills. Encourages questioning and respectful criticism. Another way to prepare for this is to carefully consider groupings,

providing each group with a similar, average median CAT's score and ensuring that there is at least one student who possesses high emotional intelligence in each group. This is harder to secure since many schools, my own included, do not consider emotional intelligence during admission and/or assessments.

Creating a bond between groups, where they feel responsible for one another, could create a sense of trust, which could allow for students to listen to negative feedback and criticism – seriously considering and reconsidering what their peers have said, leading to reasoning, justification, disagreement, and change. But is this achievable considering the substantial teacher support that would be needed during these fraught periods? I am not convinced that it is with current class sizes. Fostering an environment where these uncomfortable feelings are tolerable for all could have a huge impact on affective development, effective feedback leading to socio-cognitive restructuring and learning.

I would argue that this is a long-term endeavour and am sceptical that this can be achieved with a borrowed class during a one-term project, however I am keen to apply my best efforts to investigate this scenario.

References

- Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2004). Working Inside the Black Box: Assessment for Learning in the Classroom. *Phi Delta Kappan*, 86(1), 8–21. <https://doi.org/10.1177/003172170408600105>
- Boon, S. (2018). *Using peer assessment as an effective learning strategy in the classroom*. My College. https://my.chartered.college/impact_article/using-peer-assessment-as-an-effective-learning-strategy-in-the-classroom/
- Gast, G. (2008, July 19). *Effective questioning and talk in art and design* | NSEAD. Www.nsead.org. <https://www.nsead.org/resources/curriculum/the-art-of-challenge/art-and-design-effective-questioning-and-talk-in/>
- Mercer, N. (2013). The Social Brain, Language, and Goal-Directed Collective Thinking: A Social Conception of Cognition and Its Implications for Understanding How We Think, Teach, and Learn. *Educational Psychologist*, 48(3), 148–168. <https://doi.org/10.1080/00461520.2013.804394>
- Mercer, N., & Dawes, L. (2013). The Value of Exploratory Talk. In N. Mercer & S. Hodgkinson (Eds.), *Exploring talk in schools : Inspired by the work of Douglas Barnes* (pp. 1-18). SAGE Publications Ltd. <https://doi.org/10.4135/9781446279526> (Original work published 2008)
- Mercier, H., & Sperber, D. (2011). Why do humans reason? Arguments for an argumentative theory. *Behavioral and Brain Sciences*, 34(2), 57–74. <https://doi.org/10.1017/s0140525x10000968>
- Newman, T. (2020). Collaboration is Uncomfortable. *International Journal of Art & Design Education*, 39(4), 788–794. <https://doi.org/10.1111/jade.12323>
- Soep, E. (2005). Critique: Where Art Meets Assessment. *Phi Delta Kappan*, 87(1), 38–63. <https://doi.org/10.1177/003172170508700109>
- Topping, K. (2017). Peer Assessment : Learning by Judging and Discussing the Work of Other Learners. *Interdisciplinary Education and Psychology*, 1(1). <https://doi.org/10.31532/interdiscipeducpsychol.1.1.00>