



# Miro in Music's Wild West

Maslisa Zainuddin, Department of Art, Design and Media, Sunway University

Mohd Firdaus Mohd Anuar, Department of Art, Design and Media, Sunway University

Dr Andrew Brian Filmer, Department of Film and Performing Arts, Sunway University

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## 1. Chamber music as the Wild West in the learning of music

Benjamin Zander once quipped that his role of orchestra conductor is the “last bastion of totalitarianism” in the civilised world.<sup>1</sup> As it turns out, there are areas in Western classical music where a legacy of hierarchical structures remains solidly dominant.

In chamber music, roles are often pre-determined even before performers meet for their first rehearsal. The string quartet has long been known for this,<sup>2</sup> with the crown on the first violinist. Many quartets are named after this leader, and they disband when this one member leaves or dies.<sup>3</sup> There's even a name: the leader is the *primarius*. Even when some quartets break the mould and have rotating leadership, critics assume the first violinist is in charge.<sup>4</sup>

This poses a real problem in education if one student learns to lead while the rest exclusively learn to follow. This hierarchical vestige of a bygone era creates the challenge of democratising the collaborative process. This is where Miro comes in. The infinite zoom user interface, though seemingly chaotic and messy allows a space for participants to express

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<sup>1</sup> 14th Annual Wharton Leadership Conference

<https://knowledge.wharton.upenn.edu/podcast/knowledge-at-wharton-podcast/boston-philharmonics-benjamin-zander-tapping-into-the-art-of-possibility/>

<sup>2</sup> Since composer Joseph Haydn, the “Father of the String Quartet”, built its foundations in the 18th century.

<sup>3</sup> A clear example is The Stross-Quartett, named after Wilhelm Stross. Upon his death, the quartet ended, and was reformed as The Märkl Quartet two years later – named after the new first violinist, Josef Märkl, who was previously the second violinist.

<sup>4</sup> The Emerson Quartet famously has no primarius, and the violinists switch places with different pieces. Nonetheless, the first violinist is still called a primarius by critic Charles Downey: <https://ionarts.blogspot.com/2008/11/emerson-quartet-concludes-shostakovich.html>



themselves individually. The need to wait for their turn to speak is eliminated – an issue that still persists in other real-time formats like vertical text messaging applications.

Due to this flexible collaborative nature, each participant can literally create a space for themselves and participate in equal measure, limiting dominance and promoting engagement. One of the present authors had recently explored the use of pre-recorded videos and recalibration of instant messaging.<sup>5</sup> These had the benefit of structure but with limited flexibility, and Miro was seen as an opportunity to juxtapose these features to facilitate engagement.

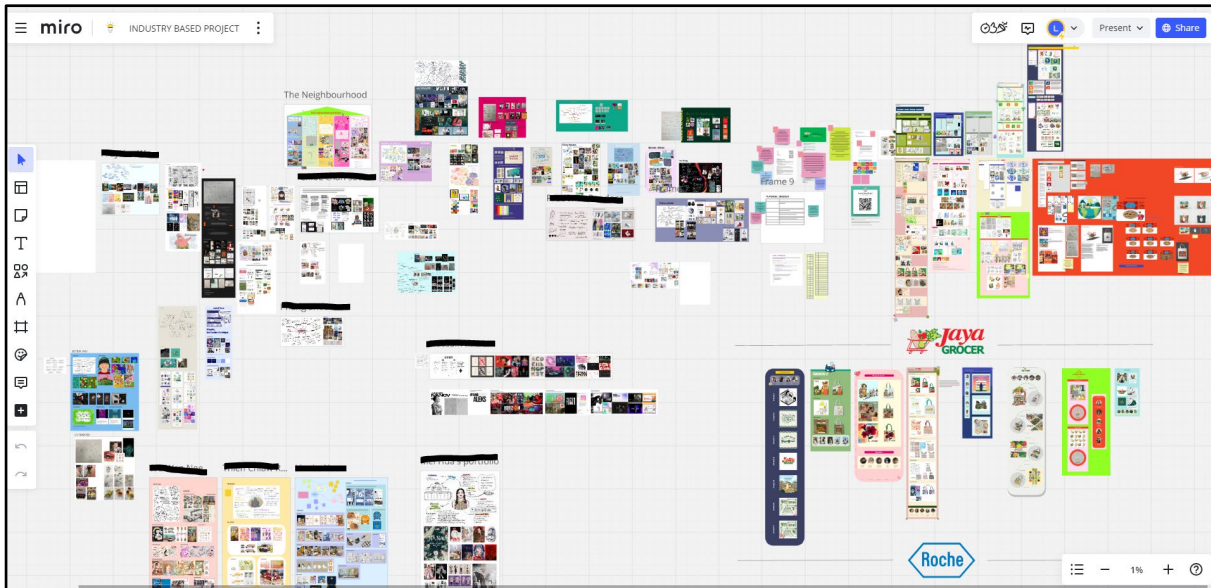
## 2. Miro in this new frontier

Miro is an online collaborative whiteboard platform designed to facilitate team brainstorming, planning, and project management through intuitive visual tools. At Sunway University's art and design programme, the use of Miro was introduced during the 2020 Covid-19 pandemic and remains in active application. Thus, it has applied both when all classes were online, and now in blended learning strategies. As we will see in Section 3, this latter approach has now been applied in the field of music.

Figure 1 may look like a city planning map at a glance. However, it is in fact a community of thoughts; a lattice of creative ideas and processes. Each 'block' is an avenue of thought which have been 98% student-led, based on prompts.

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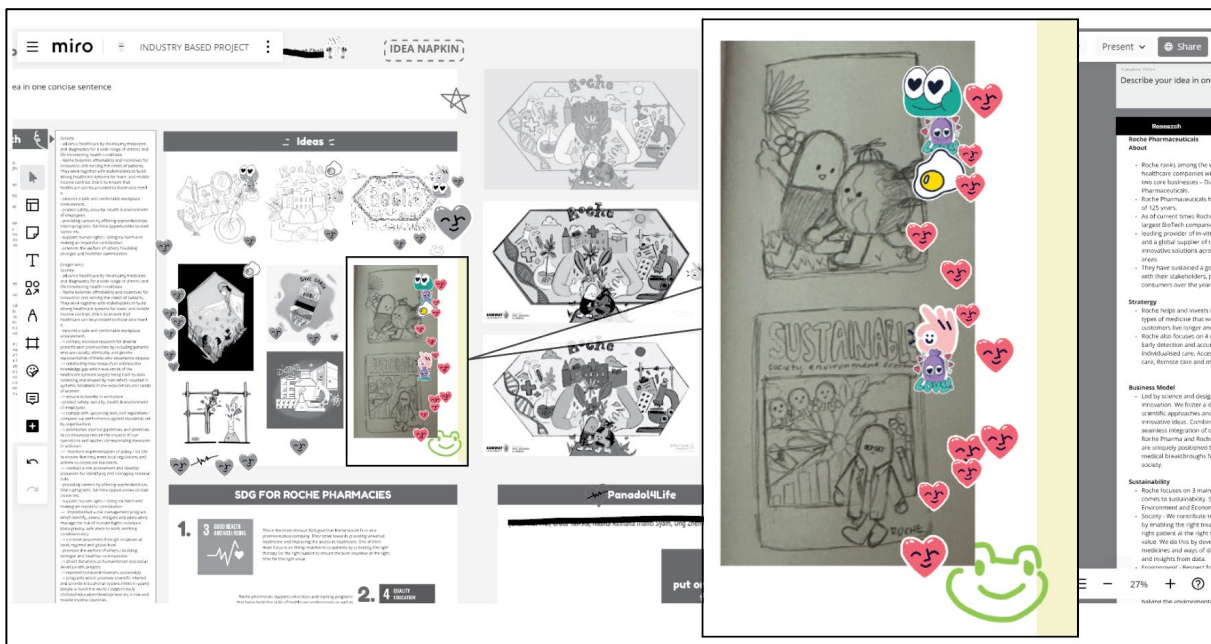
<sup>5</sup> Filmer Andrew, Sulwyn Lok, "Breaking Free: Transcontinental Collaboration in the New Digital Landscape", Performers(') Present International Artistic Research Symposium 2023.



**Figure 1: An overview of a Miro online whiteboard space**

Instructions and scaffolding exercises such as mind mapping, idea dumping, sketching and visual referencing are on one infinite digital canvas. This organic, creative process can be done individually or in teams. Structured pathways for creative exploration and discussions enable students to share and visually organize their thoughts and ideas in an accessible manner. If there's chaos – it's organised chaos.

Zooming into the canvas; Figure 2 shows how idea selection can be conducted online through anonymous voting systems using icons rather than the usual digital metered systems.

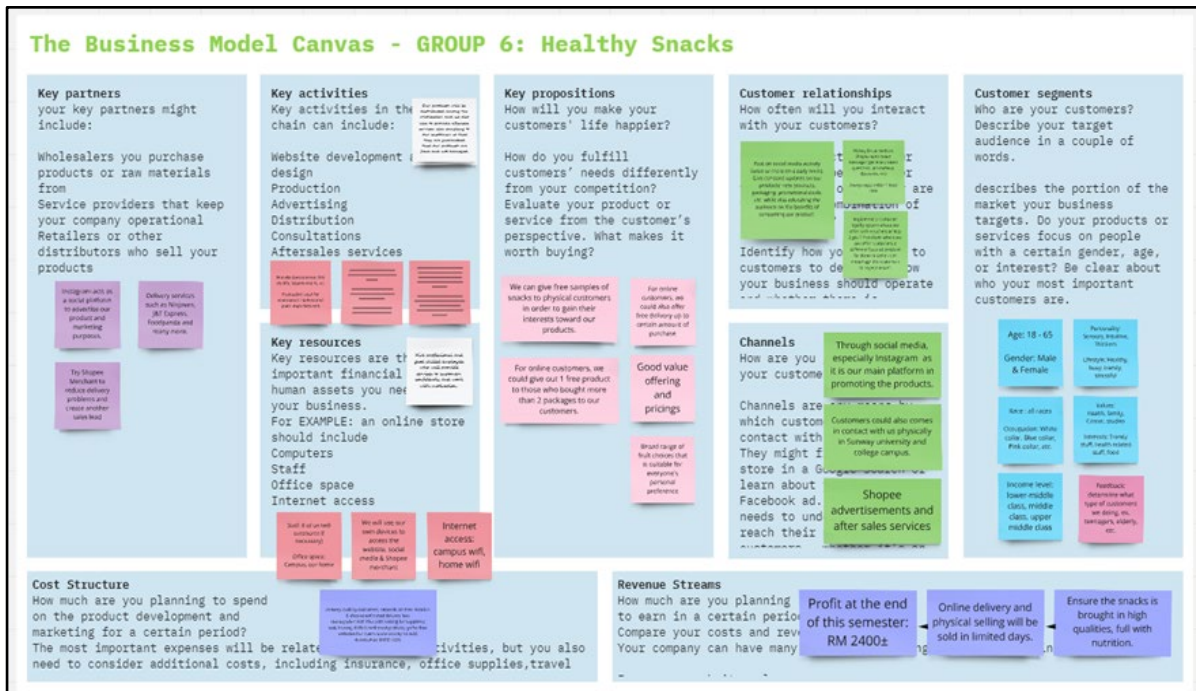


**Figure 2: Real-time online voting using icons for anonymous idea selection**



## 2.1 Integrating Miro into Chamber Music Pedagogy: A Perspective from Art and Design

Miro’s application in the world of art and design is established; there are over 250 pre-designed, free-to-use templates for mind-mapping alone. Additionally, there are over 600 templates for business strategies and planning, further highlighting the extensive use of Miro. One such template was used for art and design, shown here in Figure 3.



**Figure 3: Business Model Canvas on Miro used to assist group brainstorming session**

The use of Miro in collegiate music teaching however, is a completely uncharted territory. The specific features of Miro provide a distinct opportunity to inculcate collaboration in underdeveloped areas in the education of music, with flip-able PDF documents, videos, external URLs and audio links.

This approach is expected to spur active participation and enhance critical thinking and subject comprehension (Zainuddin & Anuar, 2022), reflecting constructivist theories by Piaget (1977), Vygotsky (1978), and Dewey (1998). The success in the art and design programme was supported by the student’s positive feedback, with 80% endorsing their educational journey. 73% satisfaction rate in instructional quality was reflected in the metrics, 77% recognised the substantial intellectual engagement, with 11% uptick in the contentment relative to the pre-Miro class.



### 3. The Experiment

The Miro experiment was dual pronged: one for undergraduate students and the other for professional performers. Both of these had real outcomes – the professional performers were gearing up for a public performance,<sup>6</sup> and the student group for a workshop facilitated by a visiting professional string quartet.<sup>7</sup> The professional group were comprised of senior educators with association to Sunway University staff and students, and so they understood the aims of the project in exploring the capabilities of the platform for both music making as well as within tertiary education.

Miro was used in a blended fashion: participants would engage with online interaction, meet for music rehearsals, discuss the next stage of Miro, then engage online again. The Miro board can be viewed here:

<https://miro.com/app/board/uXjVKap2rHY=/>

For the professionals, the first stage set up for discussion three selected published recordings of a piece in their concert programme. Each musician had the opportunity to play each of these roles:

- Ask a question
- Respond to a question
- Moderate responses and negotiate an outcome

This was used to prepare for their first rehearsal, during which recordings were taken for the second stage. In the second stage, Miro was used to discuss these recordings and discuss ways in which they could move forward. The design expectation was to see whether the online platform changed or affected the decision-making process of a well-established ensemble.

The student ensemble had a more basic introduction to the platform at the first stage, being asked to do two things:

- Basic analysis, and
- A statement of preferences for music interpretation leading to the first rehearsal

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<sup>6</sup> *Schumann: Music, Legacy, and a Life* (concert), Anjung Trio, Bentley Music Academy Recital Hall, 11 May 2024.

<sup>7</sup> Concordia Quartet Malaysia Tour, 27-30 June 2024.






The design expectation was to see if the online platform affected the balance of participation in decision-making. This was for a group of students that had a range of introversion-extroversion inclinations within the context of group discussions and collaborative decision-making.

This rehearsal was also partially supervised, and the result of this supervision was the second stage of using Miro. At this stage, each student musician was given a specific and tailored task to resolve a specific complication. An example is provided here:

**Cello and viola**

Using your own recording and/or a YouTube selection, recommend articulation of slurred dots from bar 62. Discuss below.



**Figure 4: Second stage, student ensemble, task provided by supervisor for two selected students to solve a specific issue**

## 4. Analysis/Discussion

There were interesting observations from the use of Miro by two generations of musicians:

### 1. Balance of Responses

Professionals' responses had parity of length and depth, while the student ensemble had considerable differences in quality of responses. One student followed along with the music notation, pointing out specific areas to work on, while one student neglected to respond at all in the first stage. Extroverted students remained extroverted – but there was significant increase in participation from introverted students contrasted to the usual classroom settings. There was no noticeable change for the professionals with regard to level of participation.

### 2. Method of Responses

Students had the initial tendency to observe passively, with responses being factual but without including a personal preference, despite a direct invitation to do so.



Professionals were quite the opposite: while the instruction was just to pose a question, the questions seemed to embed a view, for example, “Will this style be acceptable in a chamber music setting?”

### 3. Initiative

The professionals coloured within the lines throughout the process. In contrast, student musicians took the initiative to go beyond the instructions in the second stage. One musician used additional tools to write in additional instructions, seen here in red:

## Step 3: Follow-up after first

### Violin 1 and Cello

Alyssa: record your section here and upload it for Timmy to rehearse to. Use the sticky notes to discuss.

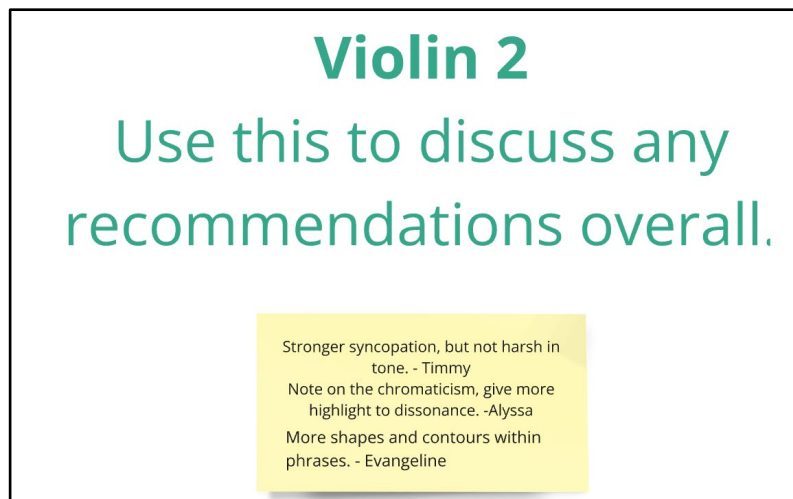
The musical score shows four staves. The top staff is for Violin 1, starting at measure 48. It features a melodic line with dynamics *f*, *dim.*, and *p*. Red annotations include 'N', 'v', and 'B' with arrows pointing to specific notes. The second and third staves are for Cello, with dynamics *f* and *fz*. The bottom staff is for another instrument, possibly a double bass, with dynamics *f* and *p*. The word 'arco' is written above the second and third staves. Two yellow sticky notes are placed below the score.

V1 Recording  
[https://drive.google.com/file/d/14A9In\\_8imNpA6ol\\_DkZ0VmgjRf2Gp/view?usp=drivefs](https://drive.google.com/file/d/14A9In_8imNpA6ol_DkZ0VmgjRf2Gp/view?usp=drivefs)

Perhaps you can look at my bowing for cues, to help prep for the entry.  
 - Alyssa

**Figure 5**

In another example, within the section designated for the second violinist, both the first violinist and the cellist decided to add comments:



**Figure 6**

## 5. Takeaways

Both music and art and design thrive when there is structure vis-à-vis a level of accessibility and flexibility. The observations of students' first use of Miro indicated this very pairing of attributes: while the second stage was clearly structured, students went beyond the script to contribute in ways that a supervisor did not anticipate. This ability to juxtapose a sense of order with the freedom to improvise breaks down the hierarchical legacy, as the experiment was initially targeted to explore.

This mixed marriage of having a framework without losing one's sense of extemporization is at the heart of creative work – in being both work and being creative.

The authors are building templates for musical collaboration to explore this research endeavour further, and yet young people may branch out beyond what is “templated”. Our task then is to open the door, and provide the freedom for them to explore where to trek beyond the threshold of the doorframe.

## References

- Dewey, J. (1998). *The essential Dewey, volume 1: pragmatism, education, democracy* (Vol. 1). Indiana University Press.
- Piaget, J. (1977). *The development of thought: Equilibration of cognitive structures*. (Trans A. Rosin). Viking.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.





Zainuddin, M., & Anuar, M. F. M. (2022). Innovative Technologies for Multidisciplinary Design Teaching and Learning in Higher Education.