

Lesson Plan

AR & VR LESSON PLAN

Van Gogh In VR

Learning Area	Visual Art	Kit	VR/AR Creation Kit + Lumination Learning Lab
Year Level	Years 7 & 8	Duration	2x 60 minutes Lesson

Introduction/Description

Experience and recreate Van Gogh's art in an immersive manner using virtual reality (VR) and other digital tools.

Learning Intentions

By the end of this lesson, students will:

- 1) Explore and respond to the experience of learning about Van Gogh's artwork in a new medium of Virtual Reality (VR);
- 2) Develop and practise digital creation skills using augmented and virtual technologies; and
- 3) Create and manipulate visual conventions by using traditional art as inspiration for a modern interpretation.

Task Summary

Students will explore various Van Gogh paintings in VR and reflect on the impact of being able to view traditional art in a new way. They will then create new pieces using augmented technology and collaborate on a bigger piece using virtual reality.

Preparation

Assumptions:

- 1) Students have some background in using VR technologies (both Handheld Virtual Reality [HHVR] and Immersive Virtual Reality [IMVR]), including proper VR Safety practices and how to scan QR codes of VR experiences and view them on the headsets, as well as how to set-up and put away devices. If not, the teacher may want to run a couple of introductory sessions and VR safety briefing ahead of this lesson.
- 2) Students are familiar with the app, Tilt Brush, and basic concepts of VR painting. If not, the teacher may wish to run a separate lesson exploring this app using the IMVR/Lumination Learning Lab.
- 3) Students may or may not have been exposed to Vincent Van Gogh's art prior to this lesson.
- 4) Students are familiar with using student digital notebooks. Otherwise, the teacher may need to allocate some time to explain this in class.

Additional Preparations:

- 1) Make sure that all apps on the IMVR and mobile devices are installed and/or updated.
- 2) Teachers are recommended to test the apps before running this lesson.
- 3) Make sure the IMVR and mobile devices are fully charged and operational.
- 4) Watch the recommended videos before the lesson to make sure they're appropriate for your site.
- 5) Download and review the teaching materials included in this lesson.
- 6) Make a copy of the student digital notebook for distribution to the students.
- 7) Students will be assigned in small groups, depending on the number of students and technology available. Ideally, each IMVR station would have no more than 3 students at a time - one person on the headset, while two others can be their partners.
- 8) Assign the small groups with a rotation schedule. Here's a suggested schedule:

Rotations	Station 1 (HHVR - Viewing Van Gogh In VR)	Station 2 (Augmented Digital Creation)	Station 3 (IMVR - Collaborative Painting in VR)	Station 4 (Reflections)
1	Group 1	Group 2	Group 3	Group 4
2	Group 2	Group 3	Group 4	Group 1
3	Group 3	Group 4	Group 1	Group 2
4	Group 4	Group 1	Group 2	Group 3

Resources

- **Teaching Materials** (included):
 - [Van Gogh In VR: Teaching Deck](#)
 - [Van Gogh In VR: Student Digital Notebook](#)
- **IMVR Apps**
 - [Tilt Brush](#)
 - [The Night Cafe: A VR Tribute to Vincent Van Gogh:](#)
(Optional)
- **VR Videos**
 - [The Starry Night: Stereo VR Experience](#) (2.32)
 - [Starry Night & Night Cafe: VR Immersive Experience](#) (4.43)
 - [Van Gogh's Room In VR](#) (1.30)
 - [Van Gogh - Bedroom in Arles VR Experience](#) (4.18)
- **VR 3D Models (via Sketchfab)**
 - [The Starry Night 3D Model](#)
 - [Bedroom In Arles 3D Model](#) ([Downloadable](#))
 - [The Starry Night 3D Model](#) ([Downloadable](#))
 - [Cafe Terrace at Night](#) ([Downloadable](#))
- **Apps**
 - [Google Arts & Culture](#) (on mobile devices)
 - Google Slides or Microsoft Powerpoint (on student laptops)
 - [Sketchfab](#) - For downloading 3D models and/or saving student creations.
- **Videos**
 - [Art Attack - Turning Starry Night Into VR using Tilt Brush](#) (3.26) (included in the teaching deck, Slide 13)
 - [Art Attack - Bedroom in Arles Into VR using Tilt Brush](#) (3.48) (Optional)

- **Other Resources**

- Handheld Virtual Reality (HHVR) headsets
- Mobile devices
- Immersive Virtual Reality (IMVR) headsets / Lumination Learning Lab
- Presentation screen (for showing teacher deck)

- **More Optional Resources**

- [Starry Night in Augmented Reality](#)

Other Learning Areas

- English
- Digital Technologies

Learning Sequence

1

Introduction
(10 mins)

With the [Teaching Deck](#) up on the screen, ask students: "What do you know about Vincent Van Gogh?" Get some students to share in the class. After a few responses, share some information about Van Gogh (Slide 2). Then, ask the students "Which famous paintings of Van Gogh are you familiar with?" After getting some responses, share some of Van Gogh's popular paintings (Slide 3). Continue discussion with some of these questions:

- What were Van Gogh's favourite subjects to paint? (landscapes, portraits, still life, interiors)
- What style? (post-impressionism) What colours? (yellow, blue, orange)

If students have been previously exposed to Van Gogh and his work, the teacher can shorten this introductory part and just do a quick review of prior knowledge.

2

Stations
Introduction
(2 mins)

Tell students that you will be exploring Van Gogh's paintings in a new way in this lesson by stepping into his painting using virtual reality (VR). Explain that there will be four different stations (Slide 4) - Station 1 is HHVR, Station 2 is Digital Creation using augmented technology, Station 3 is a collaborative painting station using IMVR and Station 4 is a reflection station where they need to complete their reflections using their [student digital notebook](#). Explain what materials they will need in each station. Get students to launch their digital notebook on their laptop or tablet device to refer to. Do a quick VR safety reminder (Slide 5).

Before letting students do the hands-on section of the stations, spend some time explaining the different stations:

3

(3 mins)

Station 1 (Slides 6 & 7): To access the VR experiences, students need to scan the QR codes or type the URLs on the slide. The QR codes are also available on Pages 5 & 8 in their notebooks.

4

(5 mins)

Station 2 (Slides 8 to 11): If students haven't used Google Arts & Culture 'Play' function before, you can run the step-by-step tutorial in this teaching deck. Explain that they can choose a portrait, interior, or still life as a subject. They will add their digital creations and reflections on Pages 10 & 11 of their notebooks. You can tell students that they can duplicate Page 10 if they decide to do more than one subject matter.

5

(5 to 8 mins)

Station 3 (Slides 12 & 13): Do a quick review of using Tilt Brush. Tell the students that for this station, they will work in their small groups. Together, they will choose one of Van Gogh's paintings as inspiration for their VR painting. For inspiration and ideas, the teacher can show the video, '[Art Attack - Turning Starry Night Into VR using Tilt Brush](#) (3.26)' (Slide 13). Ask students what sort of digital brushes they can use (Possible answers: digital oil, markers, stars, etc). The group will only create one (1) VR painting together and they need to collaborate and explain their process of creating their work.

For this lesson, each group may be given 5 minutes per station, if the teacher wishes to give everyone a turn in a 60-minute lesson. Otherwise, they may be given 10 to 15 minutes per station and let them know that they will get a turn on the other stations in the next lesson. If the lesson time is longer than 60 minutes, then rotations may go for longer.

As an extra video, the teacher can also show '[Art Attack - Bedroom in Arles Into VR using Tilt Brush](#) (3.48)' (optional).

If students are familiar with Sketchfab and they have available accounts, they can

save it to Sketchfab. If not, just make sure to save on the Tilt Brush app.

6

(2 mins)

Station 4: (Slide 14) Remind students what they need to do in the digital notebook. Give any additional instructions (e.g., email submissions, upload to Google Classroom or Microsoft Sharepoint, deadline for submission, etc).

7

(20 mins)

Show the rotation schedule and explain how it would work (Slide 15) Start rotations once each station has been explained. Depending on how long the lesson is and/or how much time the teacher allocated for each station, there may be just one or two rotations for this lesson. Remind students to save their work.

While the students are working in their stations, the teacher can visit each station to make sure that the students understand the task. Provide additional guidance and feedback when necessary.

8

Debrief/
Wrap-Up (5
to 10 mins)

Allocate a short debrief or wrap-up session at the end of the lesson to check how many tasks the students managed to complete during the lesson. You can show Slide 16 for a quick class reflection/feedback. If this is going to be part of an assessment, the teacher may wish to show students the assessment rubric.

Remind students to put away the devices properly for the next class.

9

PART 2
Introduction
/ Review
(5 to 10
mins)

Do a quick review from the previous lesson, asking students what they remember about each station and what they still need to complete. Get students back into their groups.

10

Stations
Continuation
(40 mins)

Show Slide 15 for the Stations Schedule. Ask students to return to their assigned stations and continue the work that they need to complete. The teacher may continue to move around the different stations for additional guidance and feedback to each group.

11

Conclusion
(5 to 10
mins)

Get students to complete the tasks required at the end of the lesson. Provide some time for viewing each other's work and a short class wrap-up discussion on what it's like to create using VR tools compared to using traditional media. What are the similarities and differences? What do they like more? Why? What would they do differently?

If there are opportunities to 'exhibit' student work, they may be able to be given the chance to keep building on their creation.

Assessment Rubric

If the teacher is using this as an assessment task, here's a suggested rubric:

Assessment Rubric: Exploring Van Gogh's Artwork through Virtual Reality and Digital Creation

Criteria	Level 1	Level 2	Level 3	Level 4
Exploration and Response to VR Experience	Student minimally explores and responds to the experience of learning about Van Gogh's artwork in VR.	Student partially explores and responds to the experience of learning about Van Gogh's artwork in VR.	Student adequately explores and responds to the experience of learning about Van Gogh's artwork in VR.	Student thoroughly explores and responds to the experience of learning about Van Gogh's artwork in VR, showing deep reflection and insight.
Digital Creation Skills	Student minimally develops and practices digital creation skills using augmented and virtual technologies.	Student partially develops and practices digital creation skills using augmented and virtual technologies.	Student adequately develops and practices digital creation skills using augmented and virtual technologies.	Student proficiently develops and practices digital creation skills using augmented and virtual technologies, producing innovative and effective results.
Visual Conventions and Inspiration	Student minimally creates and manipulates visual conventions by using traditional art as inspiration for a modern interpretation.	Student partially creates and manipulates visual conventions by using traditional art as inspiration for a modern interpretation.	Student adequately creates and manipulates visual conventions by using traditional art as inspiration for a modern interpretation.	Student expertly creates and manipulates visual conventions by using traditional art as inspiration for a modern interpretation, producing a unique and compelling interpretation.
Overall Performance	Level 1	Level 2	Level 3	Level 4
Achievement of Learning	Student minimally achieves the learning outcomes of exploring and	Student partially achieves the learning outcomes of exploring and	Student adequately achieves the learning outcomes of exploring and	Student proficiently achieves the learning outcomes of exploring and responding to the

Outcomes	responding to the VR experience, developing and practicing digital creation skills using augmented and virtual technologies, and creating and manipulating visual conventions.	responding to the VR experience, developing and practicing digital creation skills using augmented and virtual technologies, and creating and manipulating visual conventions.	responding to the VR experience, developing and practicing digital creation skills using augmented and virtual technologies, and creating and manipulating visual conventions.	VR experience, developing and practicing digital creation skills using augmented and virtual technologies, and creating and manipulating visual conventions.
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Collaborative Piece in Virtual Reality	Level 1	Level 2	Level 3	Level 4
Collaborative Piece	Student minimally participates in the creation of the collaborative piece using virtual reality.	Student partially participates in the creation of the collaborative piece using virtual reality.	Student adequately participates in the creation of the collaborative piece using virtual reality.	Student proficiently participates in the creation of the collaborative piece using virtual reality, demonstrating effective collaboration and contributing to a high-quality final product.

Modifications

Adaptations

Offer video responses as an option for students who may have challenges in writing text.

If schools don't have Tilt Brush, IMVR headsets, and/or Lumination Learning Labs, Station 3 and collaborative painting tasks may be omitted.

Extension Ideas

If there's extra time, the teacher may opt to show The Night Cafe VR app as another IMVR station. And, possibly show other optional resources too.

If there's an opportunity to exhibit student work, students may be encouraged to keep building on their work. Their work can then be saved on 'Sketchfab' and viewed via the HHVR devices. Or, they may be re-loaded on Tilt Brush and viewed via the IMVR devices.

Curriculum Connections

Australian Curriculum v.9	NSW Curriculum	Victorian Curriculum
<p>Year 7 & 8 - Visual Arts</p> <p><u>Exploring & Responding</u> investigate ways that visual conventions, visual arts processes and materials are manipulated to represent ideas, perspectives and/or meaning in artworks created across cultures, times, places and/or other contexts (AC9AVA8E01)</p> <p><u>Developing Practices & Skills</u> experiment with visual conventions, visual arts processes and materials to develop skills (AC9AVA8D01)</p> <p><u>Creating & Making</u> select and manipulate visual conventions, visual arts processes and/or materials to create artworks that represent ideas, perspectives and/or meaning (AC9AVA8C02)</p> <p>Specifically, these elaborations:</p>	<p>Stage 4 - Visual Arts</p> <p><u>Practice</u> 4.1 uses a range of strategies to explore different artmaking conventions and procedures to make artworks</p> <p><u>Conceptual Framework</u> 4.2 explores the function of and relationships between artist – artwork – world – audience</p> <p><u>Frames</u> 4.3 makes artworks that involve some understanding of the frames</p> <p><u>Resolution</u> 4.6 selects different materials and techniques to make artworks</p>	<p>Levels 7 & 8 - Visual Arts</p> <p><u>Explore and Express Ideas</u> Explore visual arts practices as inspiration to explore and develop themes, concepts or ideas in artworks (VCAVAE033)</p> <p><u>Visual Arts Practices</u> Experiment with materials, techniques, technologies and processes in a range of art forms to express ideas, concepts and themes in artworks (VCAVAV035)</p> <p>Develop skills in planning and designing art works and documenting artistic practice (VCAVAV036)</p> <p><u>Present and Perform</u> Create and display artworks, describing how ideas are expressed to an audience (VCAVAP037)</p>

<p>transforming an analog visual artwork into a series of digital versions using digital tools such as software, visual art processes and materials; evaluating and selecting the most successful transformation, and documenting the steps to create a procedural text using appropriate visual arts terminology</p> <p>and</p> <p>creating a series of Augmented Reality digital assets that represent distinct textures; for example, placing assets within a space to communicate concepts that explore blocking some areas and revealing others</p>		
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Cross-Curriculum Priorities	Capabilities
<ul style="list-style-type: none"> ☒ Aboriginal and Torres Strait Islander Histories and Cultures ☒ Asia and Australia's Engagement with Asia ☒ Sustainability 	<ul style="list-style-type: none"> ☑ Literacy ☒ Numeracy ☑ ICT Capability ☑ Critical and Creative Thinking ☑ Personal & Social Capability ☒ Ethical Understanding ☒ Intercultural Understanding