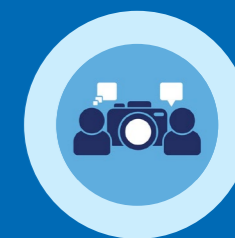


# Using Photovoice to evaluate impact of professional learning

## Illustration of practice: High school - Stage 6 Mathematics



### About this guide

This illustration of practice demonstrates Photovoice being used to evaluate the impact of Stage 6 Mathematics professional learning on student progress.

**School setting:** High school, Year 11 students.



### Step 1

#### Identify existing student need and relevant professional learning

**Identified student needs:** Stage 6 students underperforming in school-based assessments in HSC Mathematics. Analysis of student work samples and teaching artefacts identified a gap in students' awareness of strategies to solve problems, analyse and interpret data and make judgements about results.

**Goal:** To improve student's capacity to apply problem solving strategies to a range of contexts.

**Professional learning:** Stage 6 Mathematics professional learning

**Who:** Two Stage 6 Mathematics teachers

**Practice change:** Using the evidence-based strategy of teaching students to apply problem solving strategies to a range of contexts.

**i HIPL Element:** Professional learning is driven by identified student needs.



### Step 2

#### Identify students and gather initial data

##### Student selection:

Teachers will identify 4 students in each of the Year 11 classes, selected to represent diverse achievement levels and equity groups.

##### Establish the learning practice or strategy for students to focus on:

Teachers to allocate part of a lesson to explicitly unpack some of the key outcomes related to solving problems, analysing and interpreting data, and making judgements about results.

##### Photovoice round 1 - Term 1 Weeks 6-8

- Teachers to provide an iPad to students for the specified lessons and explain that students will:
  - Take photos that show the class engaging in solving problems, analysing and interpreting data and making judgements about results. What might this look like?
- Teachers save photos to a private MS Team channel set up for this process.
- Teachers to be released for one period to meet with students. In this session:
  - Students select 4 photos each that they think best captures 'problem solving' and explain choices:
    - Why did you choose this photo?
    - How does this represent what we have been learning?
    - How does this show effective teaching/learning?
  - Teachers use an online whiteboard to annotate the photos during the discussion and students group them into themes.
- Teachers save the record into the private Teams channel.

**i HIPL Element:** Professional learning is continuous and coherent.



### Step 3

#### Engage in and apply professional learning, gather and analyse data

##### Teacher professional learning:

Teachers will engage in professional learning about the Stage 6 Mathematics syllabus.

**Lesson application:** Year 11 Mathematics Standard 2, Term 2 Weeks 2 & 3 (4 lessons)

##### Photovoice round 2

- Students take photos in the lessons identified.
- Week 4 lessons, teachers to be released to meet with students (as for Photovoice round 1).
- Teachers meet to discuss the Photovoice round 2 data and identify some changes to application of the strategy.

**Lesson application:** Year 11 Mathematics Standard 2, Term 2 Weeks 5-10

##### Photovoice round 3

- Students take photos in Weeks 8 & 9 (4 lessons).
- Week 10 lessons, teachers to be released to meet with students as for Photovoice round 1 and round 2.
- Teachers collate findings with students from across the 3 rounds of Photovoice and develop a summary of the findings:
  - changes to practice identified
  - how these changes impacted student learning
  - suggestions for other staff to support changing practice across the faculty.

**i HIPL Elements:** School leadership teams enable professional learning; Collaborative and applied professional learning strengthens teaching practice.



### References

**Photovoice** - NSW Department of Education

**Using photovoice and participatory research to engage with young people** - Monash University

Ciolan, L. & Manasia, L. (2019) 'Reframing Photovoice to Boost Its Potential for Learning Research', International Journal of Qualitative Methods, 16, 1-15



### Step 4

#### Gather and analyse work samples, identify next steps

##### Collaborative analysis of data:

- Teachers involved analysed the photos, annotations and student summary as well as school-based assessments, work samples and teaching artefacts.
- Teachers developed a summary of key findings, evidence and suggested next steps.

##### Share findings and collaborative planning for the future:

- Teachers worked with head teacher Maths to develop a presentation to faculty and invited some of the students to share their learning through the process.
- Faculty members asked questions and worked together to identify next steps for practice change within the faculty across all Year groups.

**i HIPL Element:** Teachers and school leaders are responsible for the impact of professional learning on student progress and achievement.

