

2026/04/17

Seeing Your Own Story: The Learning Impact of a Sudbury Regreening Documentary

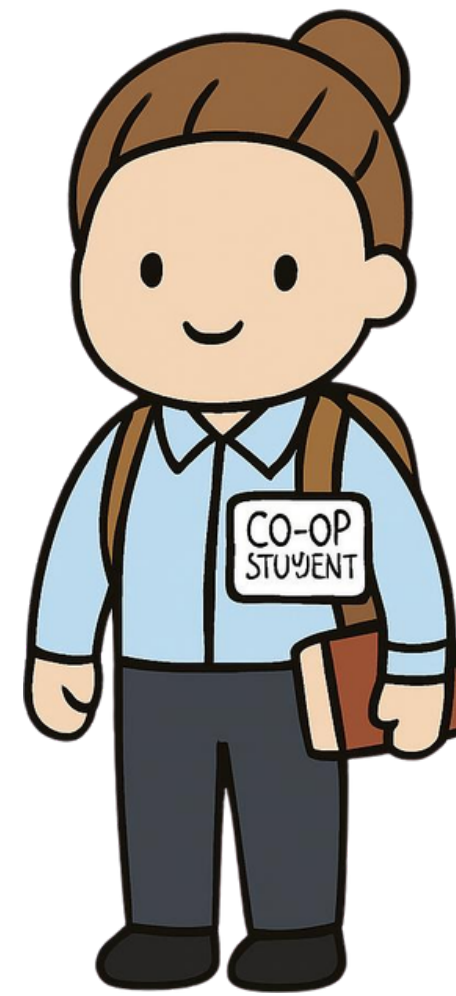
Glede (Yirui) Zhang

Science Communication Student





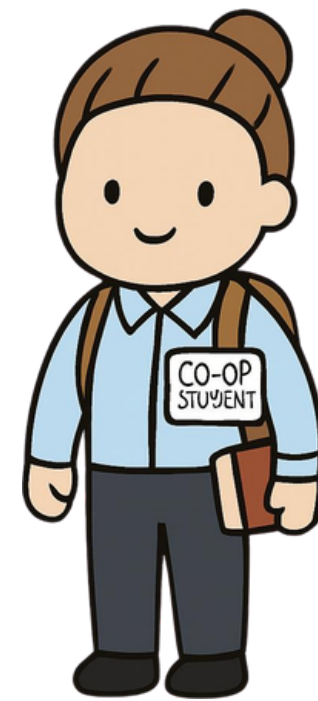
Research scientist



SNOLAB student



Research scientist

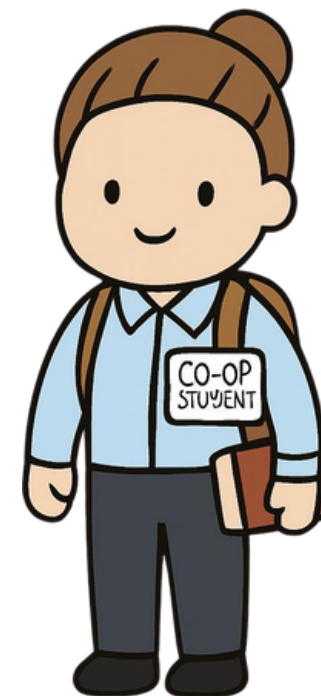


SNOLAB student

Residents of Sudbury



Research scientist



SNOLAB student

Residents of Sudbury

PLANTING HOPE

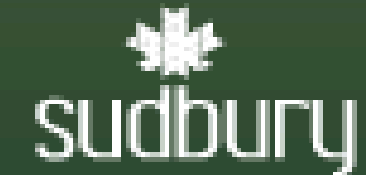
A REGREENING STORY

FILM PROUDLY SUPPORTED BY



Federal Economic Development Agency for Northern Ontario

Agence fédérale de développement économique pour le Nord de l'Ontario



Learning impact of 'planting hope'—a place-based documentary about Sudbury's greening efforts



Files

Zhang major research project 2025.pdf (1.19 MB)

Date

2025-07-28

Authors

Zhang, Yirui "Glede"

Publisher

Laurentian University Library & Archives

Abstract

This study explores the learning impact of a newly released place-based environmental documentary titled 'Planting Hope' by measuring audience perceptions of the film. Produced by Science North, this film showcases how Sudbury has been transformed from a land severely polluted by traditional mining into a flourishing, eco-innovative region over the past five decades, through the collaborative efforts of local communities, experts, government agencies, and Indigenous advisors. Based on constructivist learning theory and guided by concepts of environmental storytelling and place identity, this study takes the communication objectives of the film as a reference framework to examine how audiences process and personalise environmental information embedded in local stories in the informal science learning context, namely, actively watching a documentary on environmental themes. The study employs a mixed-methods approach, collecting data from 18 Sudbury adult residents through a digital questionnaire combining closed- and open-ended questions. Descriptive analysis of the quantitative results reveals overall trends in audience emotional responses and knowledge recall. From the researcher's unique perspective, thematic analysis of the qualitative data categorises more nuanced responses into four key themes: emotional resonance, knowledge retention, identity affirmation, and prospects for the local future. This research concludes that this film not only successfully communicates the essential science and community collaboration involved in Sudbury's greening project, which aligns with the film's intended communication goals, but also deepens some viewers' connection and sense of belonging to Sudbury.

Keywords

Sudbury, Regreening, Science communication, Informal learning, Constructivist learning, Place-based, Environmental documentary, Identity

URI

<https://laurentian.scholaris.ca/handle/10219/4412>

Collections

Science Communication - Major Research Papers

Content

1 Reflexivity of the research

2 Background: the film
“Planting Hope”

3 Research gap and question

4 Method and justification

5 Result and finding

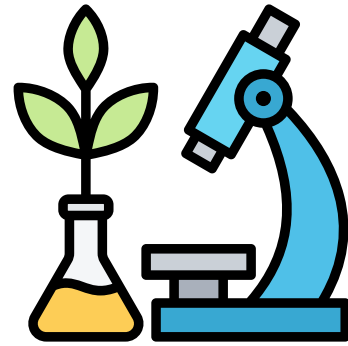
6 Limitation and suggestion

7 Conclusion

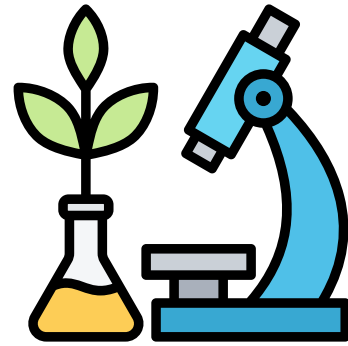
Reflexivity in this research



Reflexivity in this research



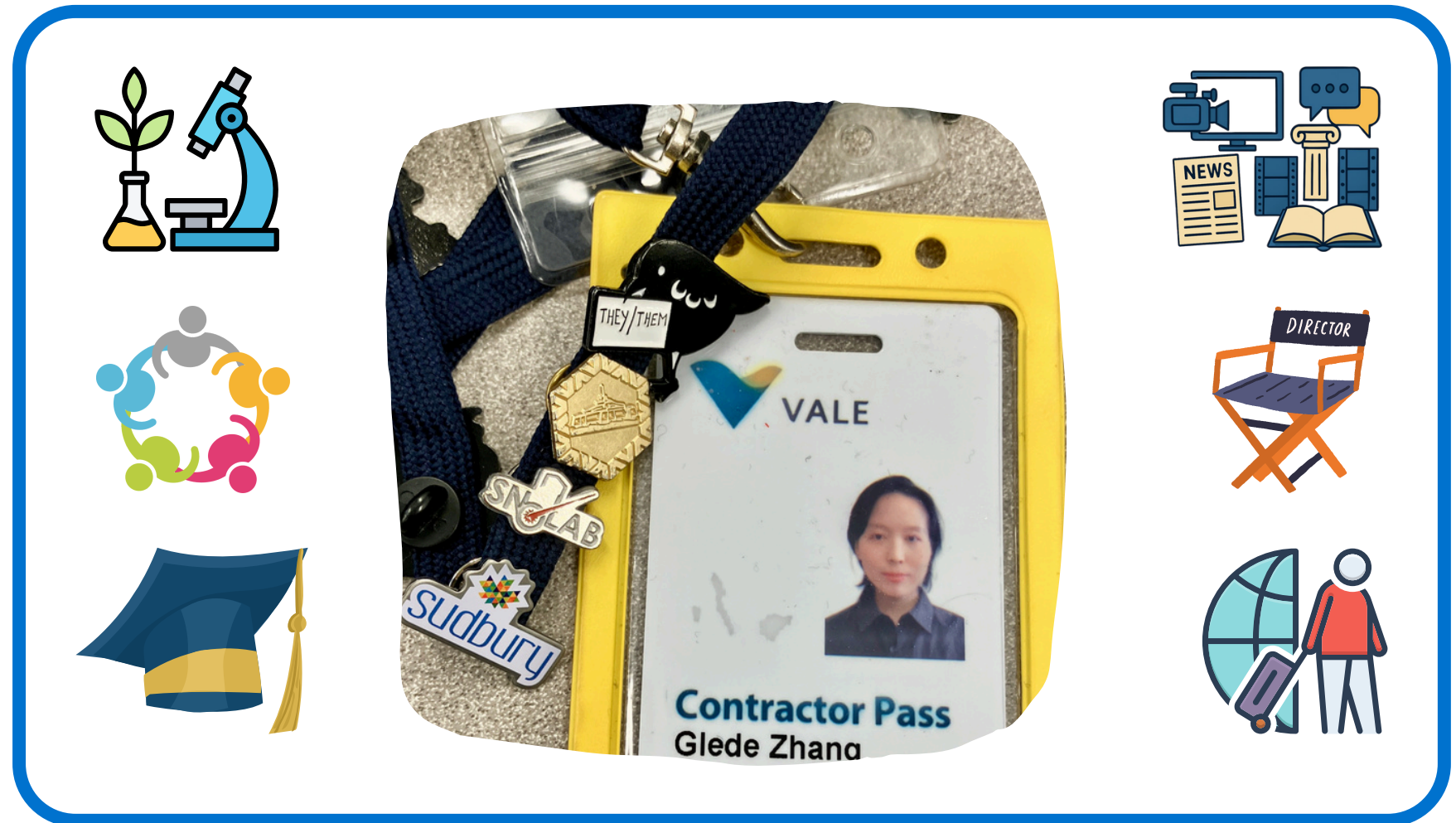
Reflexivity in this research



Reflexivity in this research



“Reflexivity”



PLANTING HOPE

A REGREENING STORY

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Communication goals



**Celebrate Sudbury's recovery
& honour collaboration**



Inspire hope for the future

PLANTING HOPE

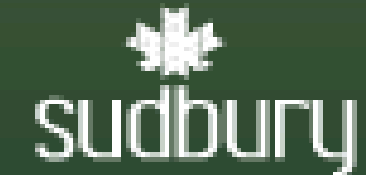
A REGREENING STORY

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économique pour le Nord de l'Ontario



Present literature



Storytelling

emotional resonance

Facts

Place-based
narratives

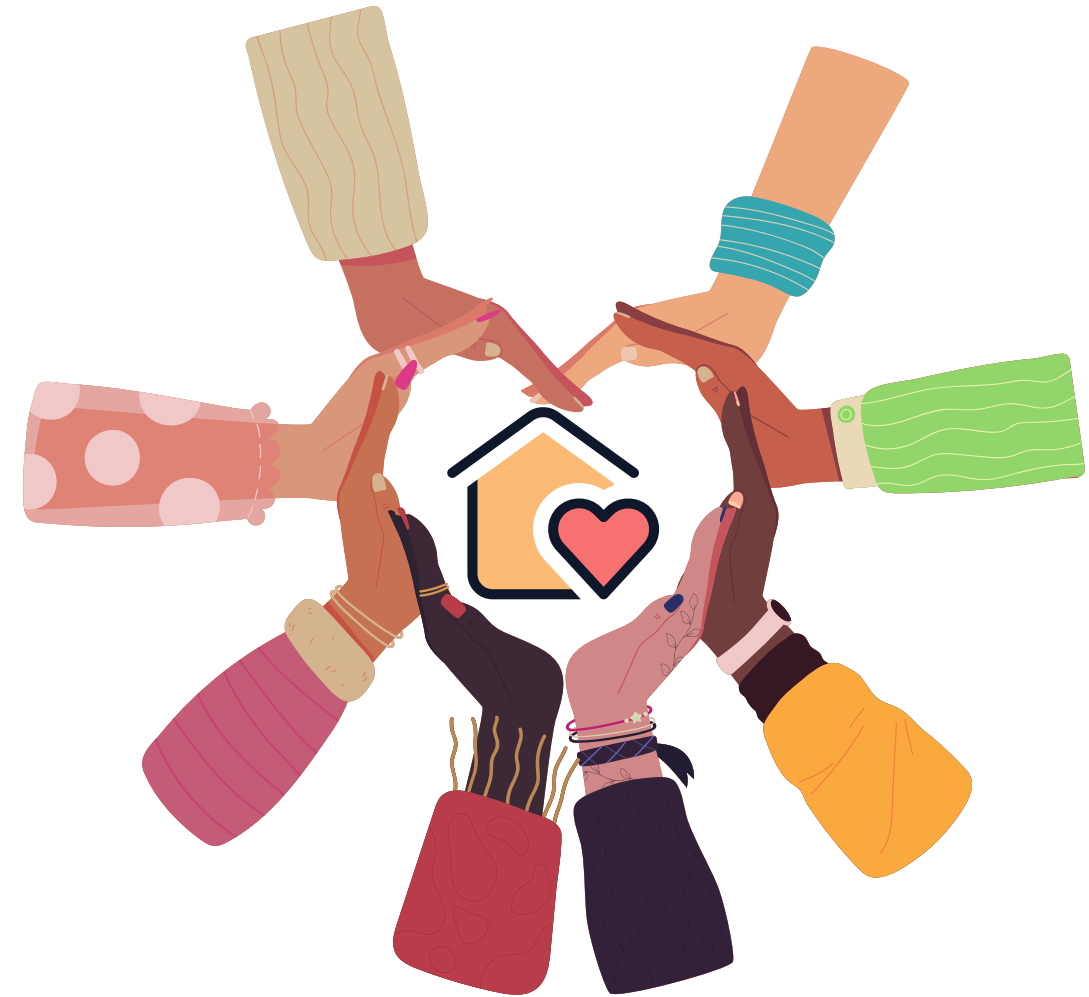
make science relevant

Everyday
life

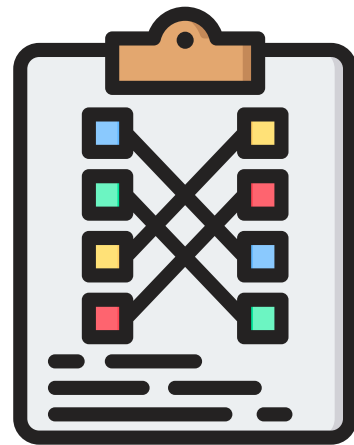
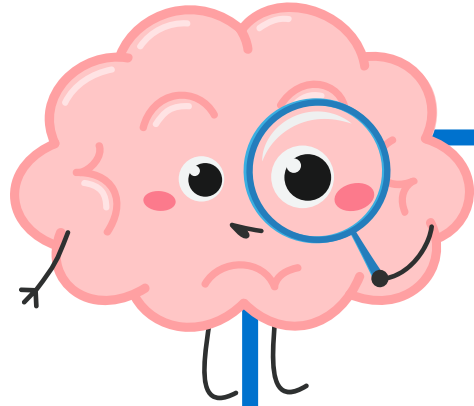


Long-term behavioural change

Research gap



Research question

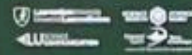


What meanings do Sudbury audiences construct from watching ‘Planting Hope’?

How do their perceptions align with the film’s intended communication objectives?

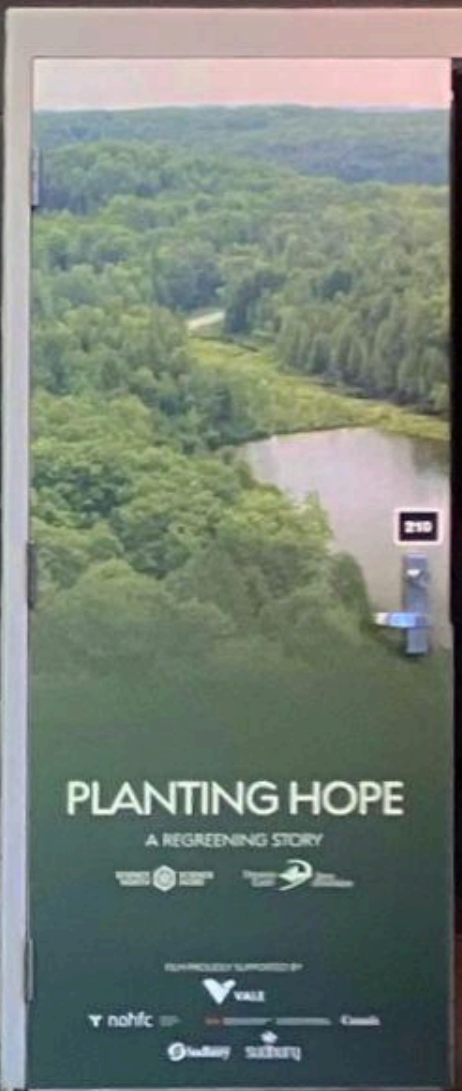
PLANTING HOPE

Do you currently live in Sulbury?
Are you about to watch or have you already watched "Planting Hope"?
Do you have 5-10 minutes to participate in a research study today?
Scan this QR code to access the online questionnaire, or to talk to the researcher Yifan Zhang with the name tag.
Each participant will receive a free coffee / tea from our cafe as a thank you for your willingness of participation.
This study has been reviewed and approved by the Laurens University Research Ethics Board. Study #1002021. For more information, contact 0800228000.



Station with a laptop and a sign.

Théâtre



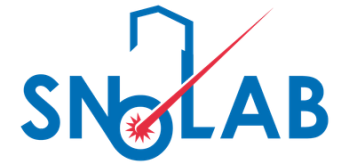
Thea

Recruitment criteria



-  Adults currently living in Sudbury

Recruitment criteria



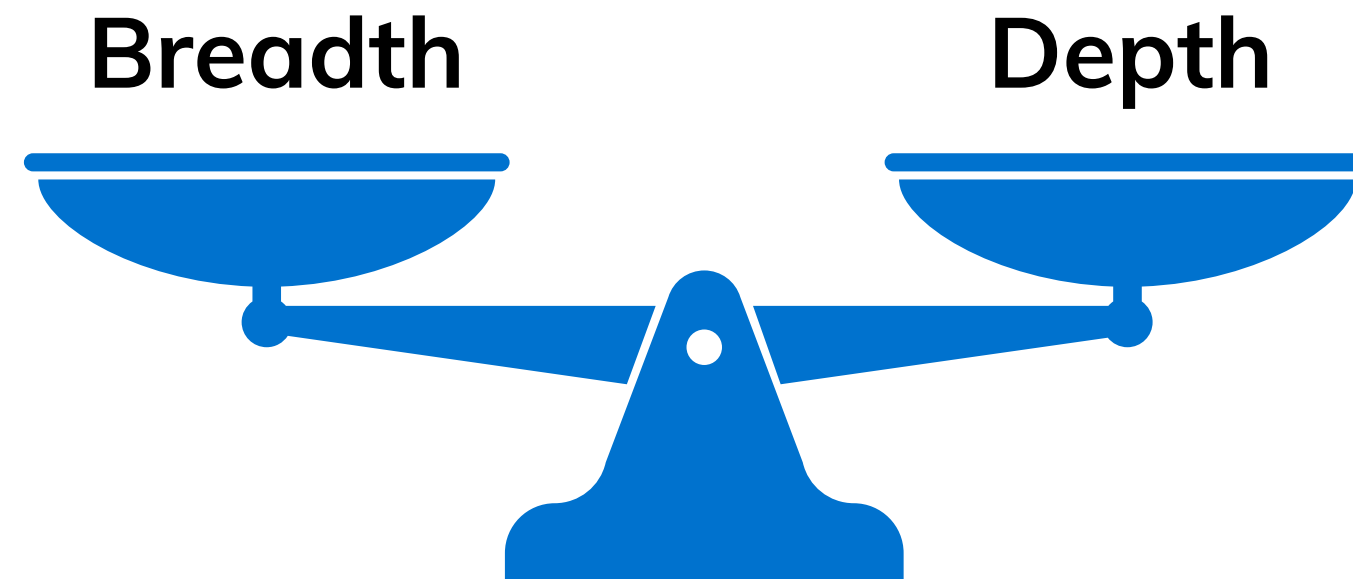
- ✓ Adults currently living in Sudbury
- ✓ Be at where I collected data when I collected
- ✓ Have watched “Planting Hope”
- ✓ Willing to fill the survey

Recruitment criteria

- ✓ Adults currently living in Sudbury
- ✓ Be at where I collected data when I collected
- ✓ Have watched “Planting Hope”
- ✓ Willing to fill the survey

“Convenience sampling”

Mixed-methods design

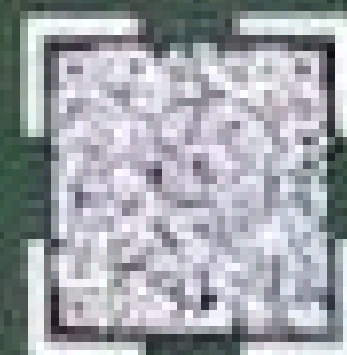


- ✓ Broad patterns
- ✓ More nuanced and personal meanings

Planting Hope?

Do you have 5-10 minutes to participate in a research study today?

Scan this QR code to access the online questionnaire, or to talk to the researcher: **Firsi Zheng** with the name tag.



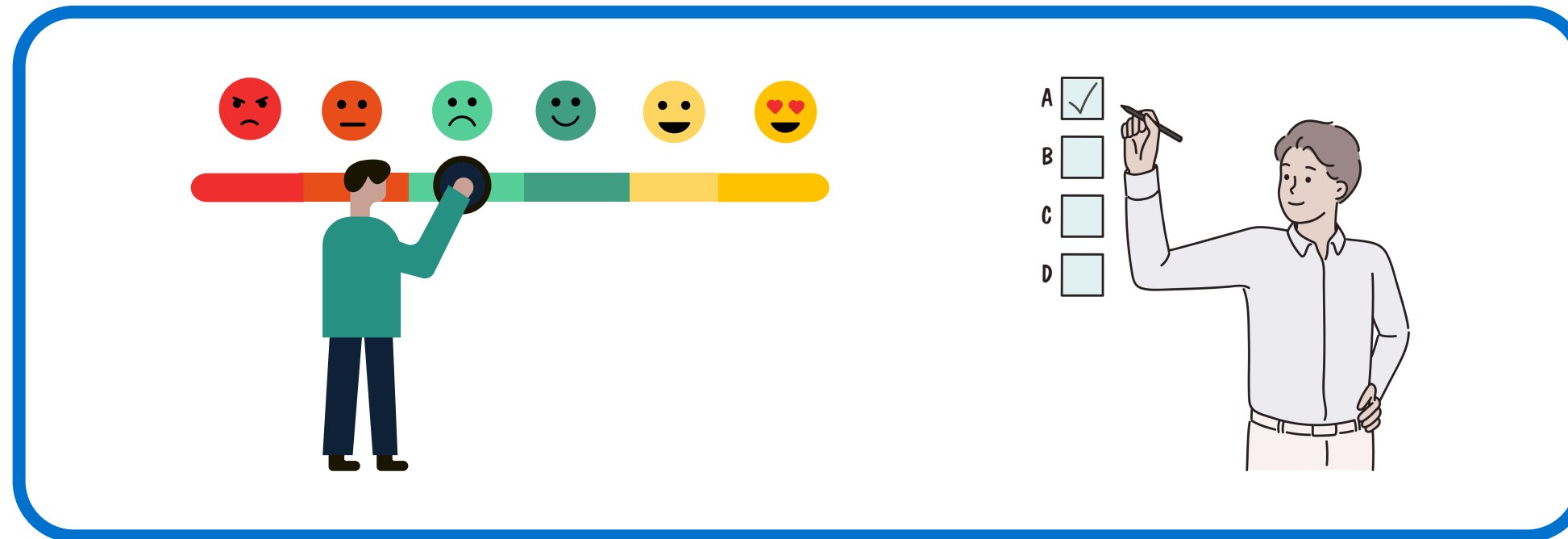
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Survey design

5 closed-ended questions



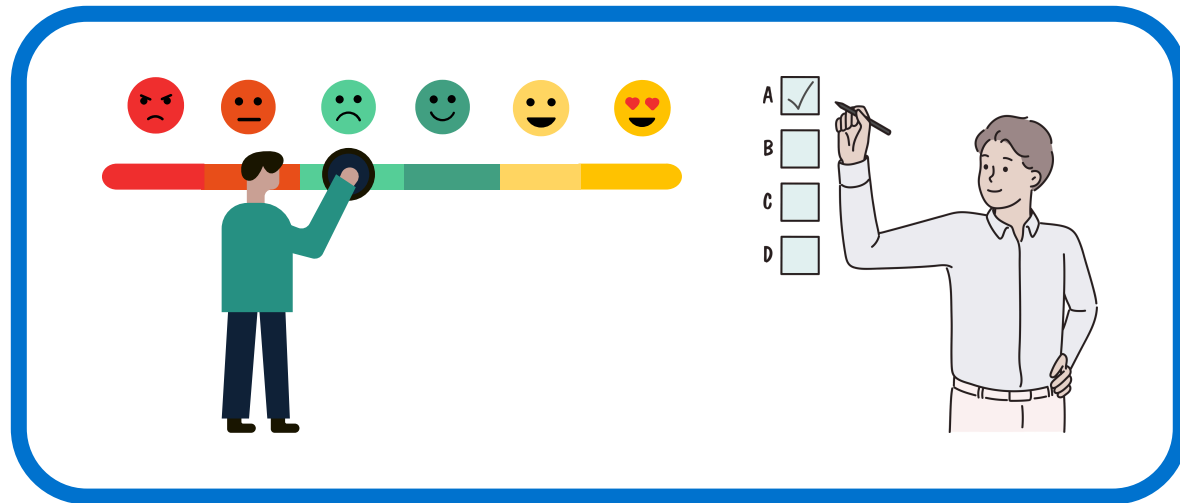
2 open-ended questions

Feeling

+

Impression

Data analysis



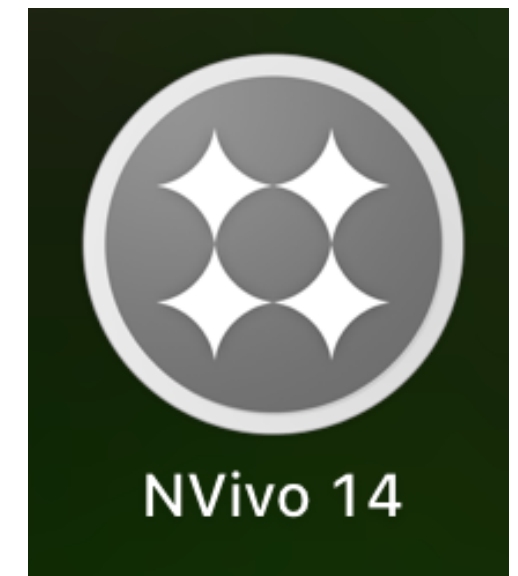
Descriptive analysis



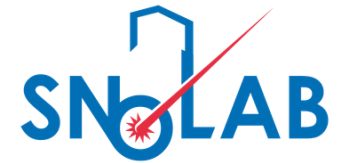
Feeling

Impression

Thematic analysis



Braun and Clarke's framework



- 1 Familiarization**
- 2 Coding**
- 3 Generating themes**
- 4 Reviewing themes**
- 5 Defining themes**
- 6 Writing up**

Braun and Clarke's framework

- 1** Familiarization
- 2** Coding
- 3** Generating themes
- 4** Reviewing themes
- 5** Defining themes
- 6** Writing up

“Reflexive thematic analysis”

Clipboard

Item

Organize

Visualize

Name

- ✓ Affirming Local Identity through Environmental Storytelling
 - > Knowledge that Supports Identity Construction
 - Community Pride
 - Newcomer Identity Alignment
 - Recognition of Indigenous Communities
 - Social Familiarity and Cohesion
- ✓ Direct Feedback on the Film
 - Mixed Emotions
 - Positive Feedback to the Film
 - Slight Frustration
- ✓ Faith in Sudbury's Future
 - Change Takes Time
 - Confidence in Sudbury's Future
 - Hopeful & Optimistic
 - Recognition of Potential by Newcomers
- ✓ Knowing and Caring for Sudbury's Environment
 - Environmental Awareness
 - Historical Knowledge of Local Environmental Change
 - Human Impact on Nature
 - Inspired to Contribute to the Environment
 - Learning about Regreening Methods
 - Signature Species of the North
 - Visual and Narrative Impression

IMPORT

Data

- > Files
- File Classifications
- Externals

ORGANIZE

Coding

Codes

Cases

Notes

Sets

EXPLORE

Queries

Visualizations

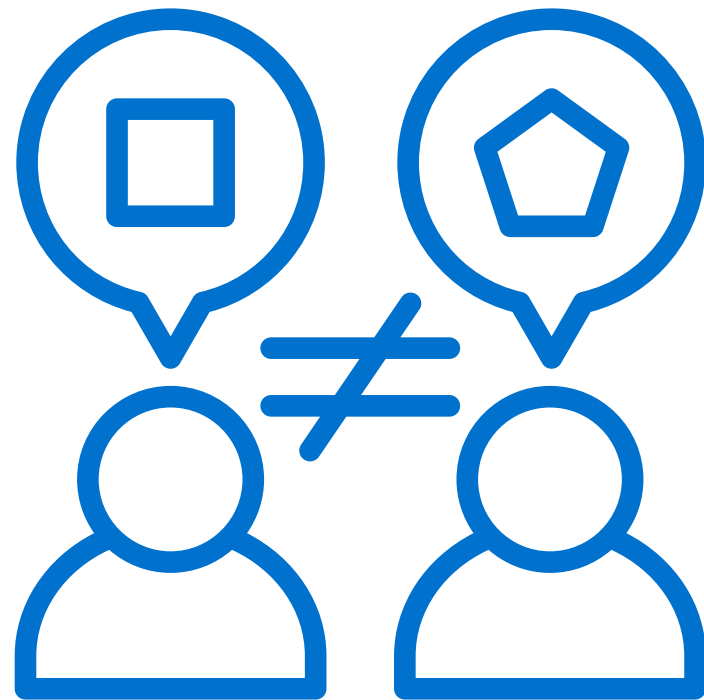
Affirming Local Identity
through Environmental
Storytelling

Direct Feedback on the
Film

Faith in Sudbury's Future

Knowing and Caring for
Sudbury's Environment

“Coding”



 Careful

 Individualized

“Reflexivity”

Example: “local identity”



Example: “local identity”

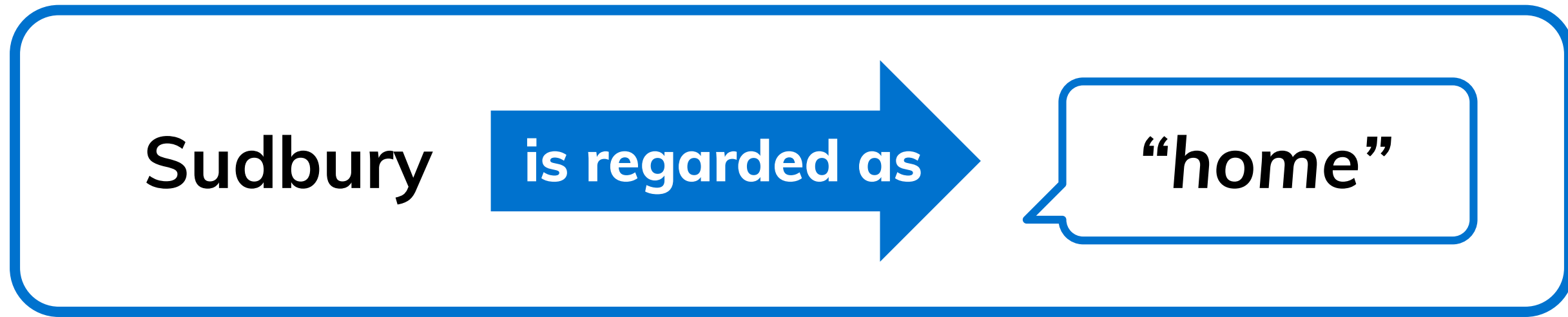


“
As a newcomer...
”

Example: “local identity”



Example: “local identity”



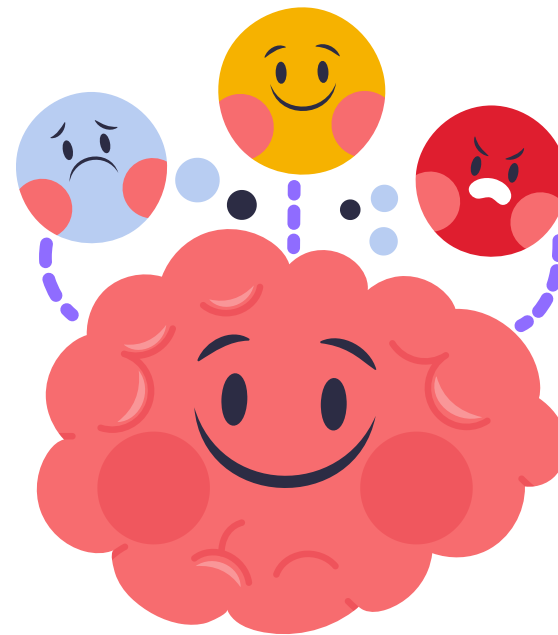
“Local identity”

- ✓ Psychological ownership
- ✓ Community pride
- ✓ Acknowledging the contributions of indigenous peoples

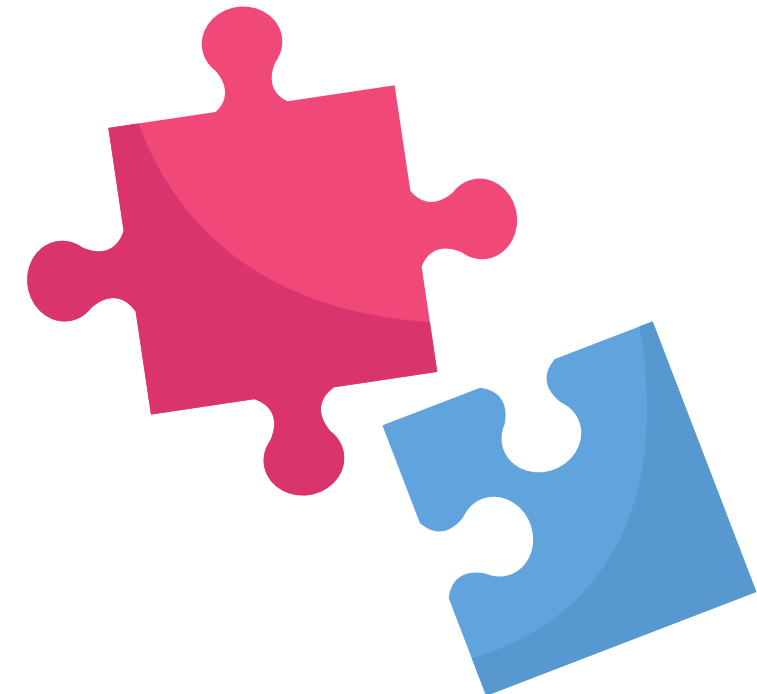
Result and finding



What they learned

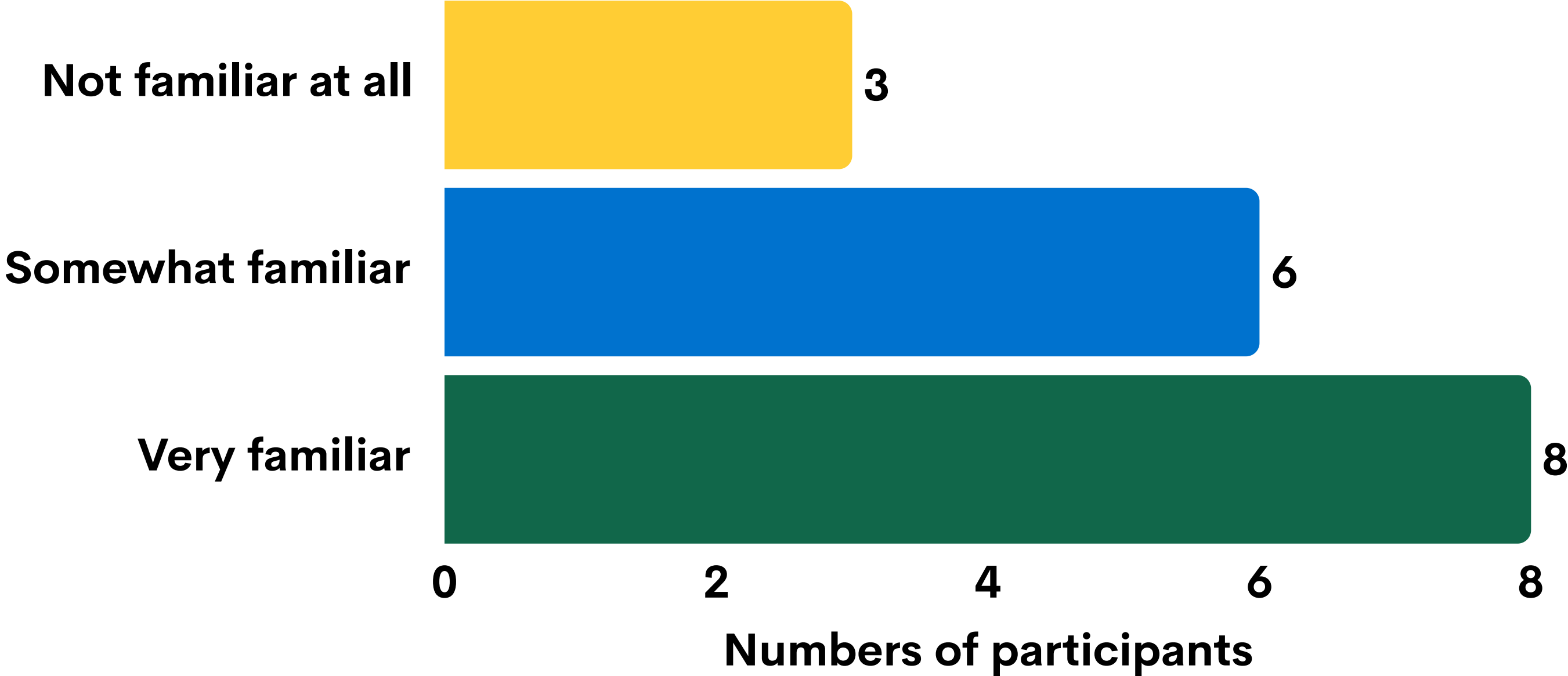


What they felt

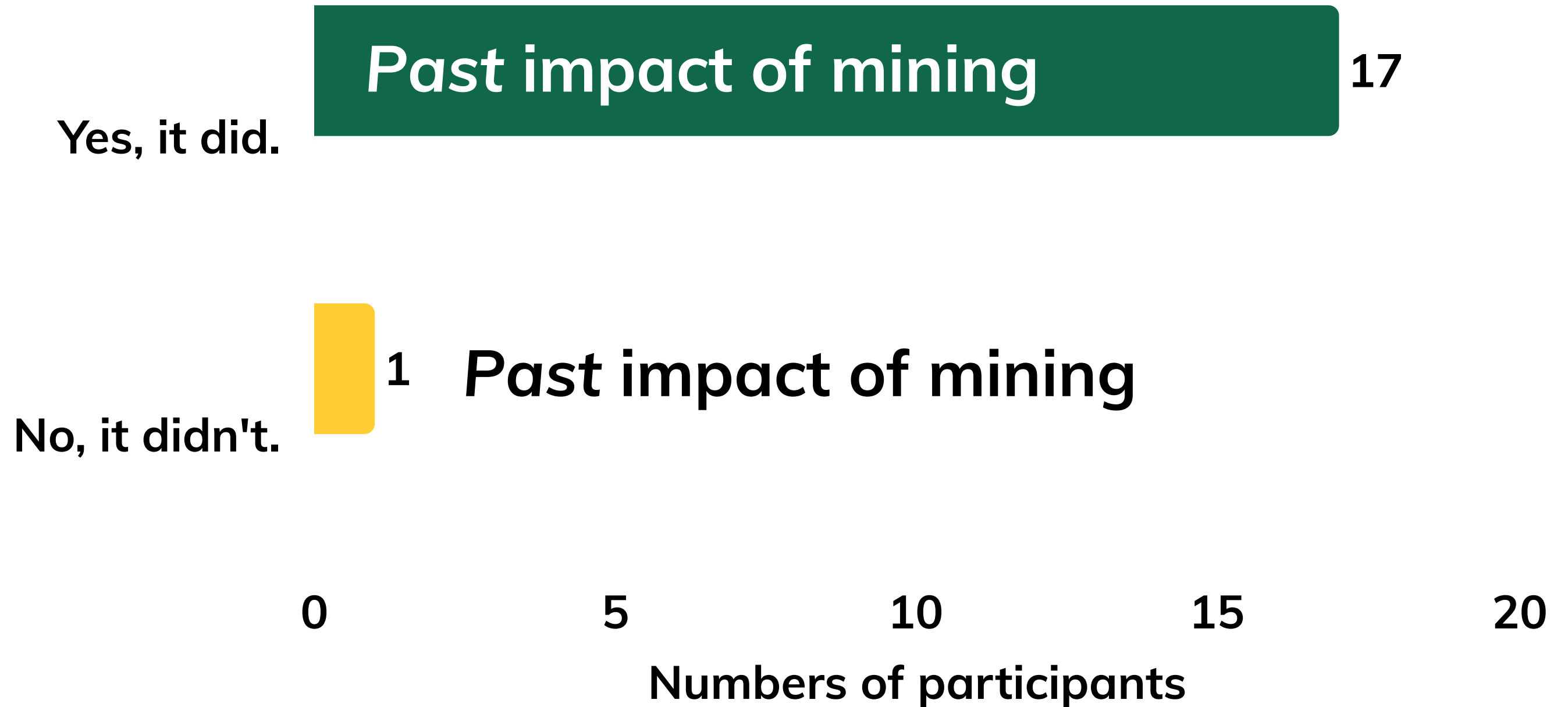


How they connected

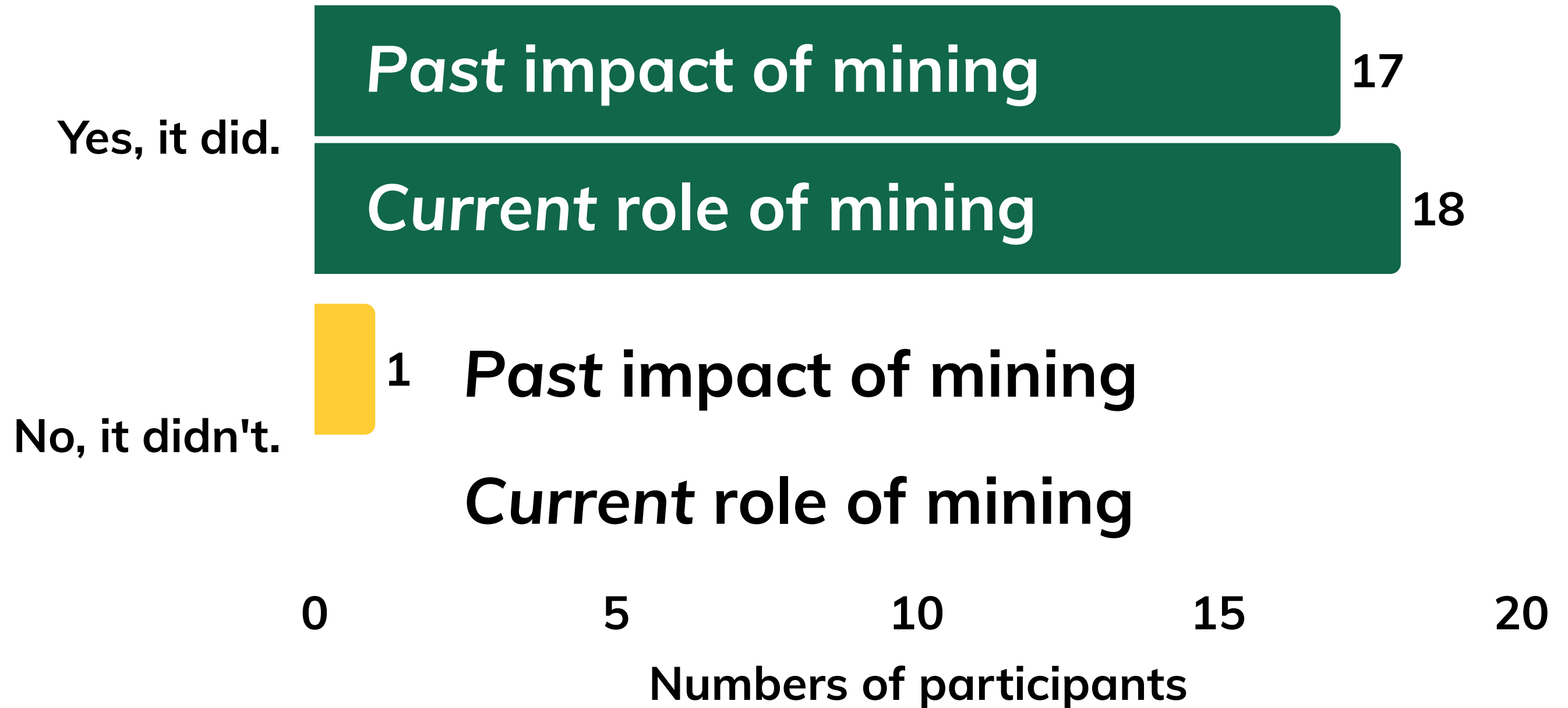
Audiences' prior familiarity



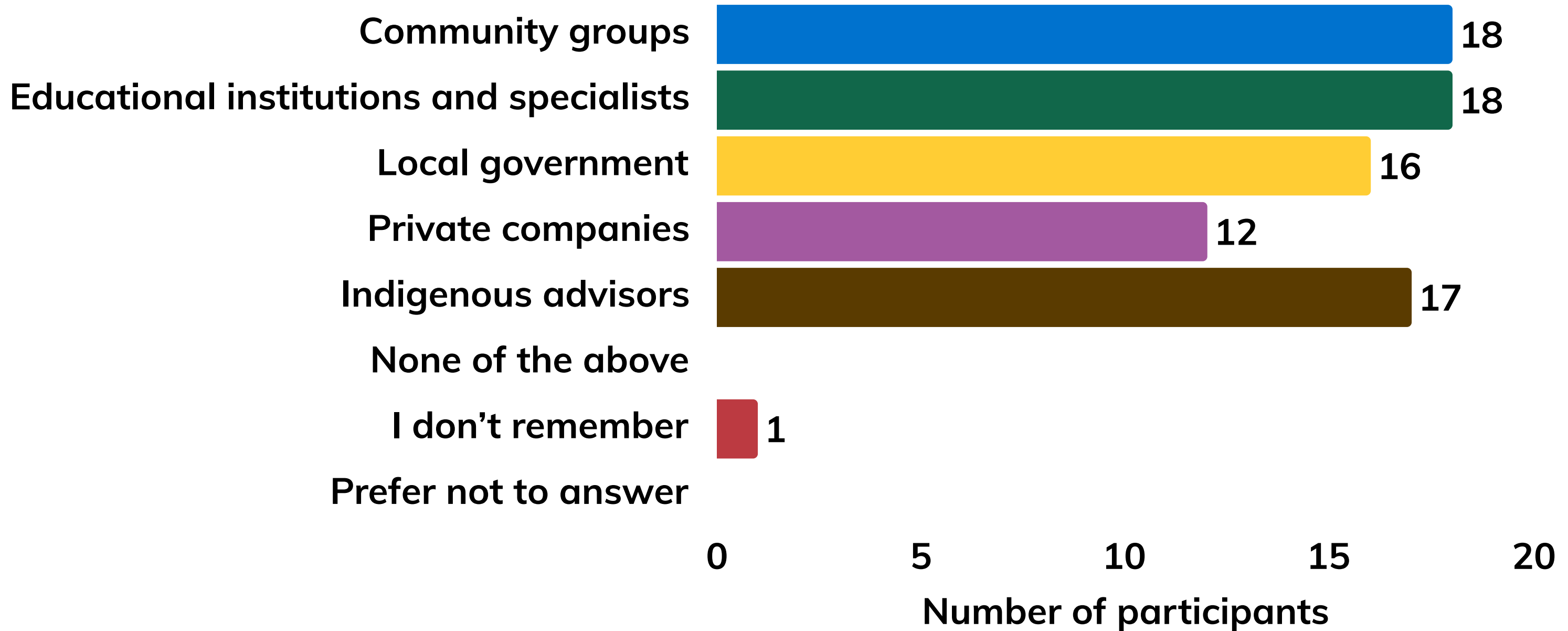
What the audiences learned



What the audiences learned



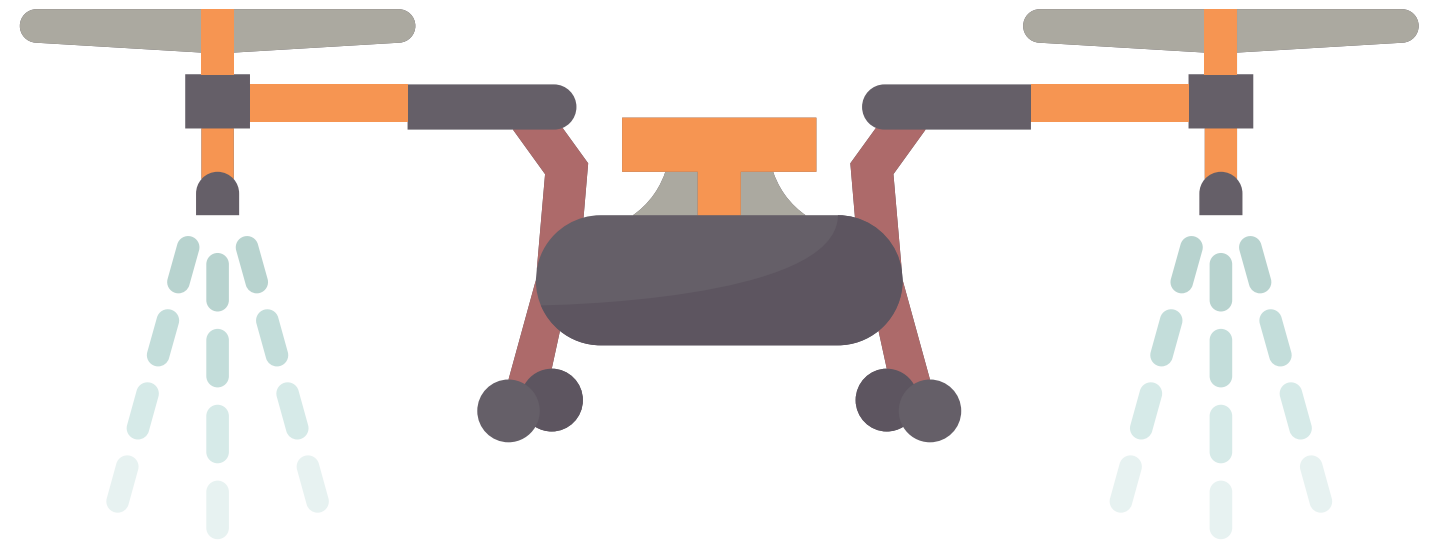
What the audiences learned



What the audiences learned



Planting trees

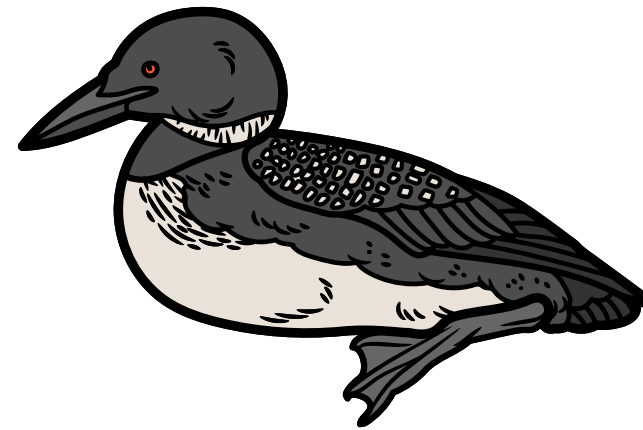


Spreading limestone

What the audiences learned



**Time-lapse footage of
tree growth**



Loon



**Jane
Goodall**

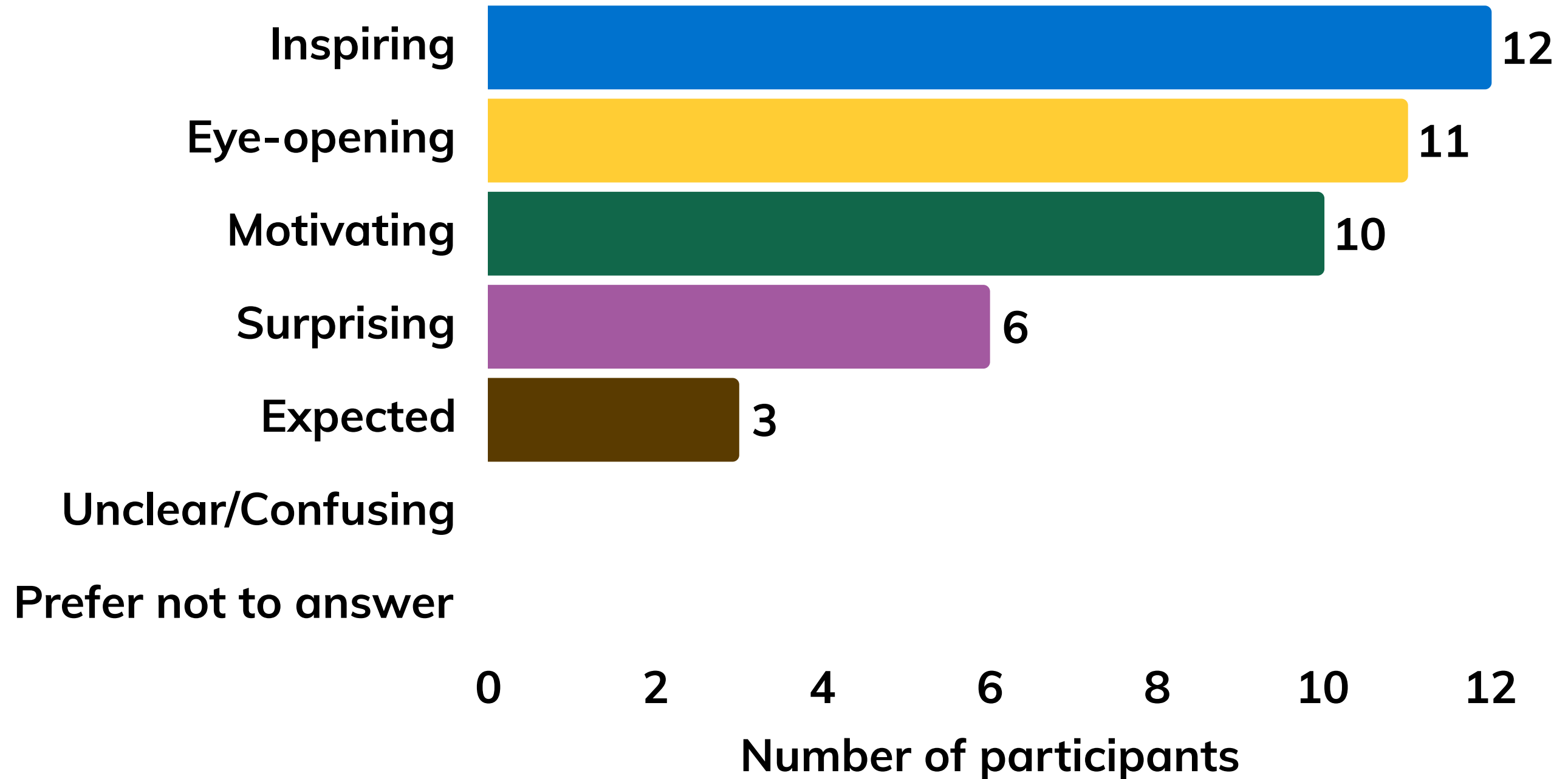
What the audiences learned

“

*Just like culture and traditions,
nature needs to be protected.*

”

What the audiences felt



What the audiences felt



“Mixed emotions”



“Slightly frustrated”

How the audiences connected

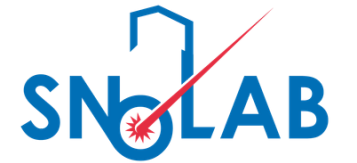
— Identity, place, and future



Sudbury residents

How the audiences connected

— Identity, place, and future



“

*[The] future for my grandkids
looks brighter.*

”

How the audiences connected

— Identity, place, and future



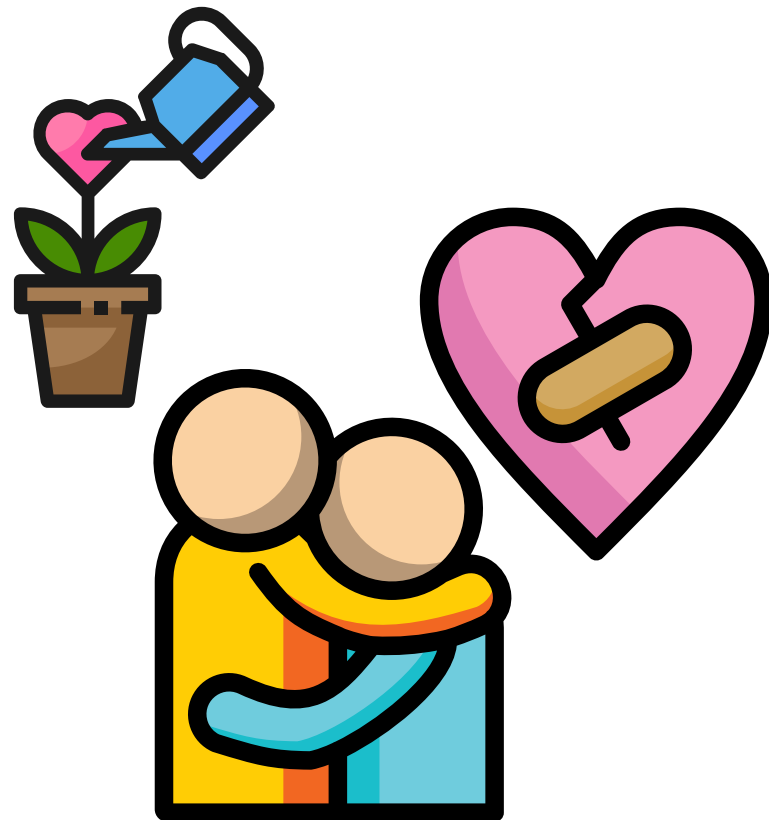
- ✓ Recognizing own life experience in Sudbury
- ✓ Expressing psychological ownership
- ✓ Demonstrating intergenerational commitment to Sudbury

“Planting Hope” Local audience

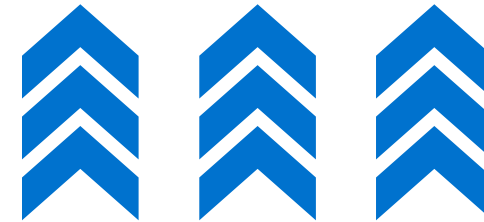
Sudbury

How the audiences connected

— Identity, place, and future



Resilience



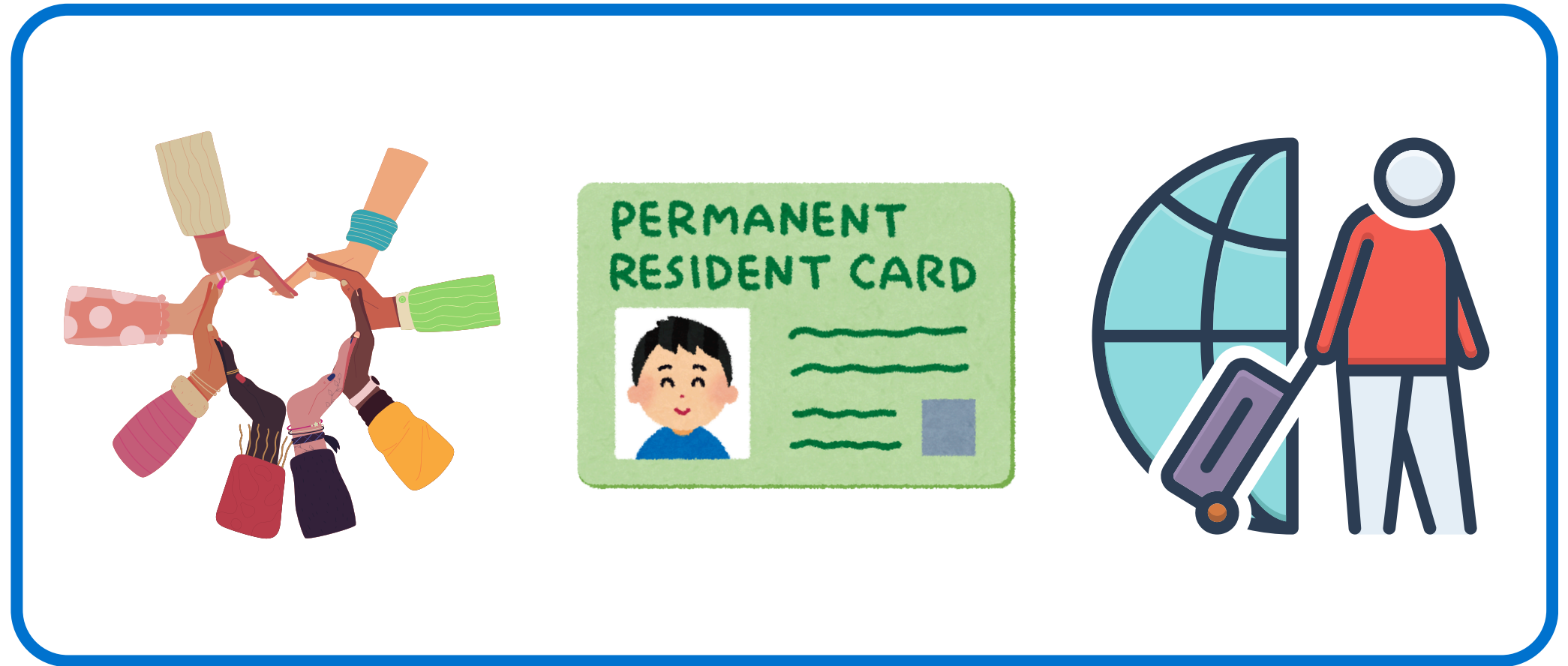
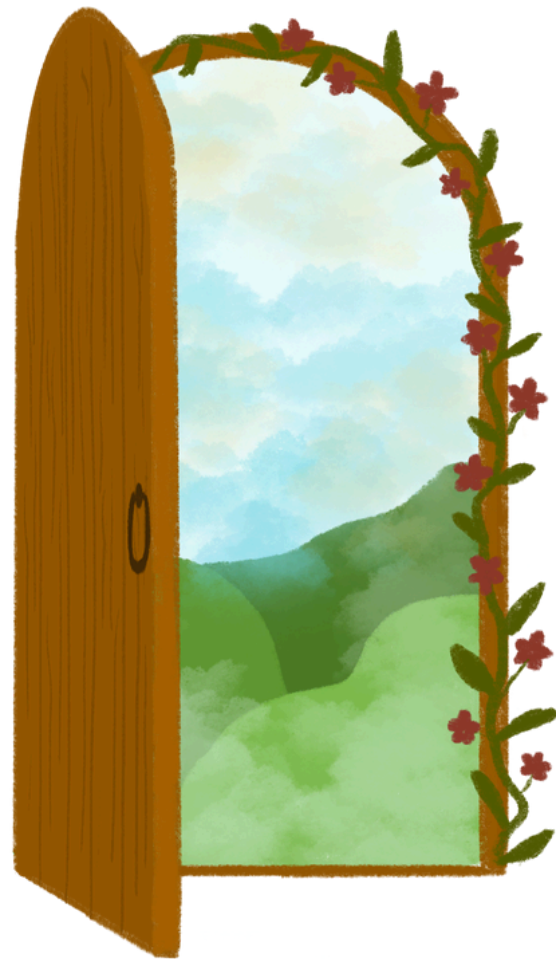
Psychological resource



Long-term engagement

How the audiences connected

— Identity, place, and future



Limitation and suggestion



Survey format

Limitation and suggestion



Sampling

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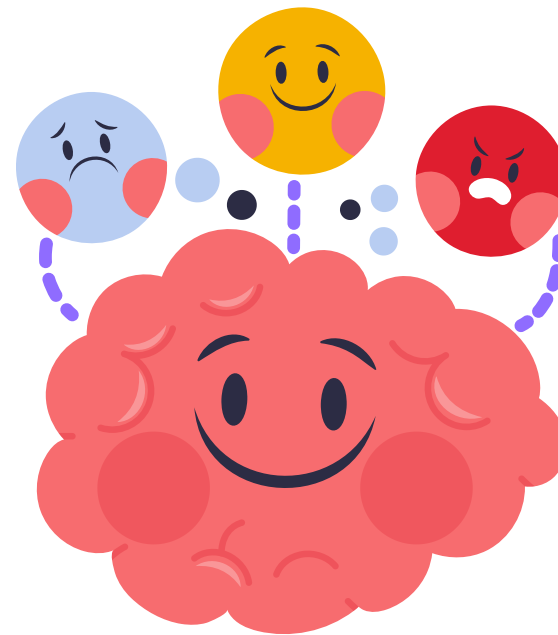
6 Limitation and suggestion

7 Conclusion

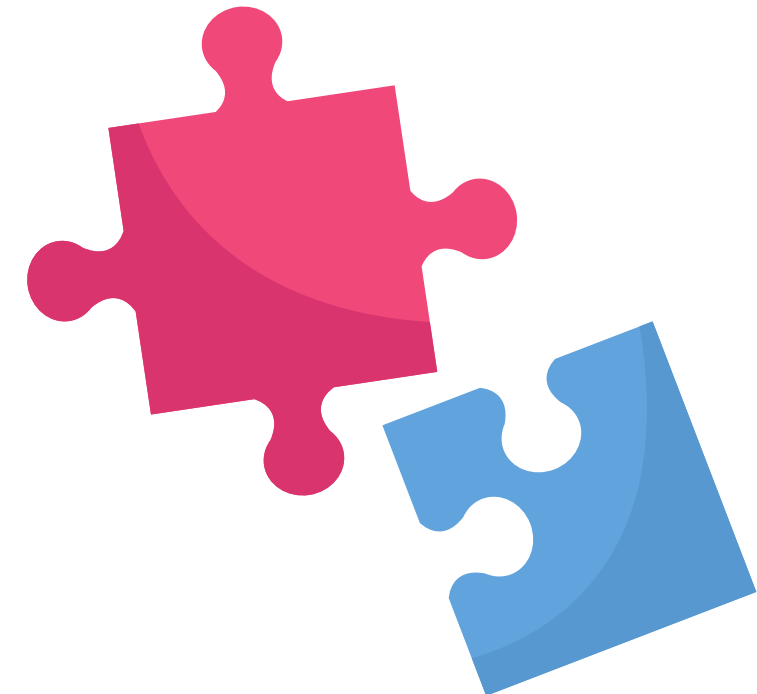
Result and finding



What they learned



What they felt



How they connected

PLANTING HOPE

A REGREENING STORY



Inform audiences



Build long-term relationships



Encourage behaviours

Limitation and suggestion



Survey format



Sampling

PLANTING HOPE

A REGREENING STORY

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Collaboration

