

Leveraging Assessment & Evaluation for Student Success

Working Smarter Not Harder

Webinar will begin at 4 p.m. Eastern

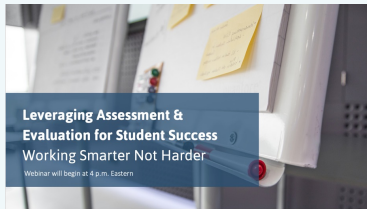


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Materials



Slides



Additional Resources



Recording



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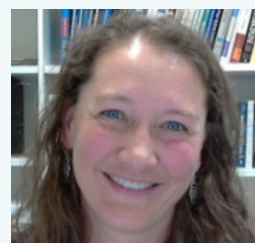
Introductions



Lyssa
Wilson Becho



Robin
Datta



Amy
Gullickson



Arlen
Gullickson



Mia
Chen



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Behind the Scenes



Lori
Wingate



Megan
Zelinsky



Kelly
Robertson



Erika
Sturgis



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Special Thank You



Karen
Leung



Carolyn
Williams-
Noren



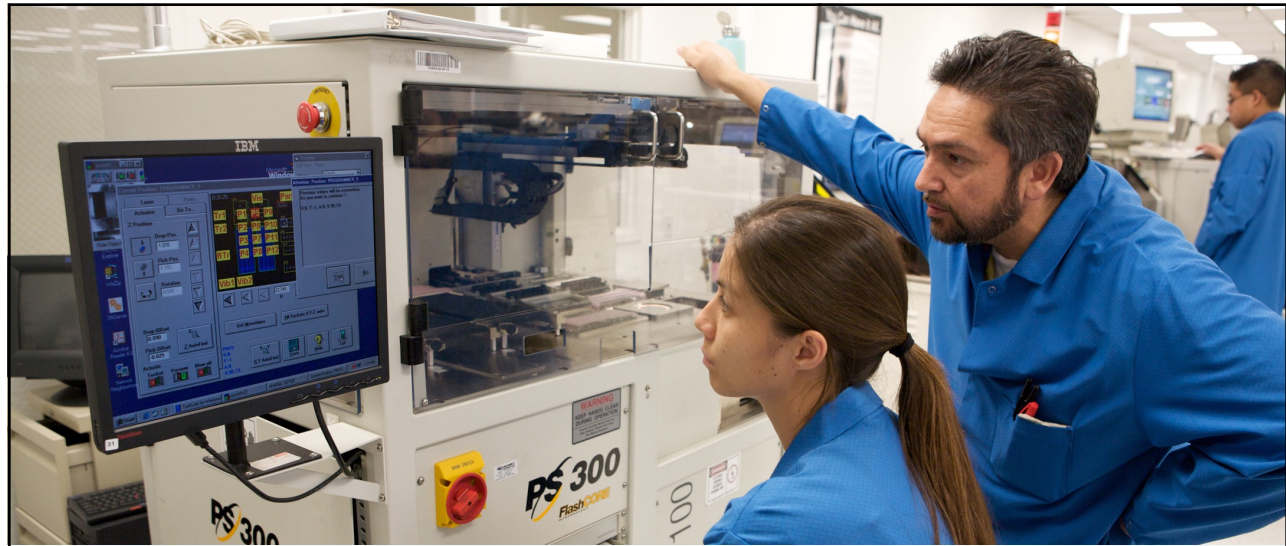
Tom
Pensabene



Rick Polanin and
Michael Fox
from Weld-Ed
(NSF Grant # 1400351)



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Advanced Technological Education Program

www.nsf.gov/ate





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Leveraging Assessment & Evaluation for Student Success: Working Smarter Not Harder

Formative Assessment for ATE (FAS4ATE)
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 This project is supported by the National Science Foundation under Grant No. 1853472. Any opinions, findings, and conclusions or recommendations expressed in this presentation are those of the authors and do not necessarily reflect the views of the National Science Foundation.

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Agenda

- What did we learn from you?
- Why assessment?
- How does assessment work in the life of PD?
- What is FAS4ATE doing with assessment?
- How might you action what you learned today?
- What's next for FAS4ATE and how can you get involved?

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EDMONDS COLLEGE **Land Acknowledgement** **THE UNIVERSITY OF MELBOURNE**



Aboriginal people fishing and camping on Merri Creek (in what is now Melbourne, AUS). Takver (user:tirin) Original artwork by Charles Troedel, 1864, Public domain, via Wikimedia Commons



Native American Tribes of Michigan
<http://www.native-languages.org/michigan.htm>






US Dept of Arts and Culture: Native Land
<https://usdac.us/nativeland>

Native Digital Land
<https://native-land.ca/>

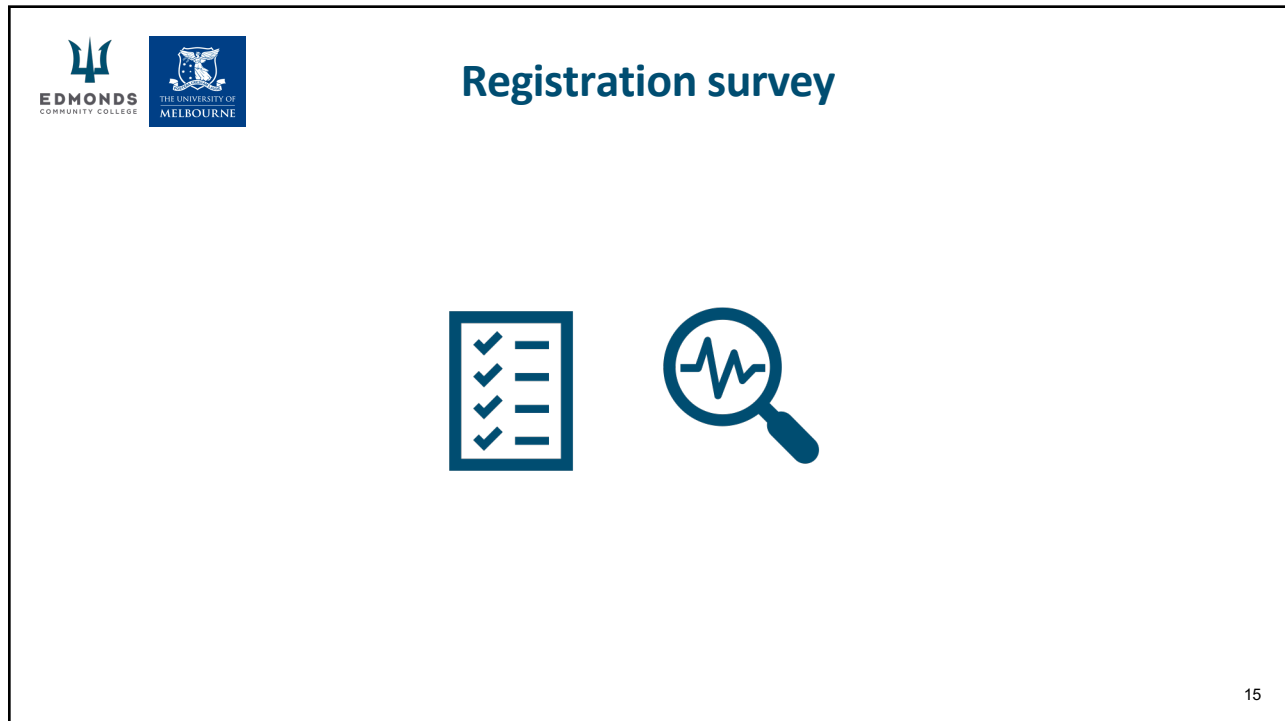
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EDMONDS COMMUNITY COLLEGE **THE UNIVERSITY OF MELBOURNE** **Data and consent**



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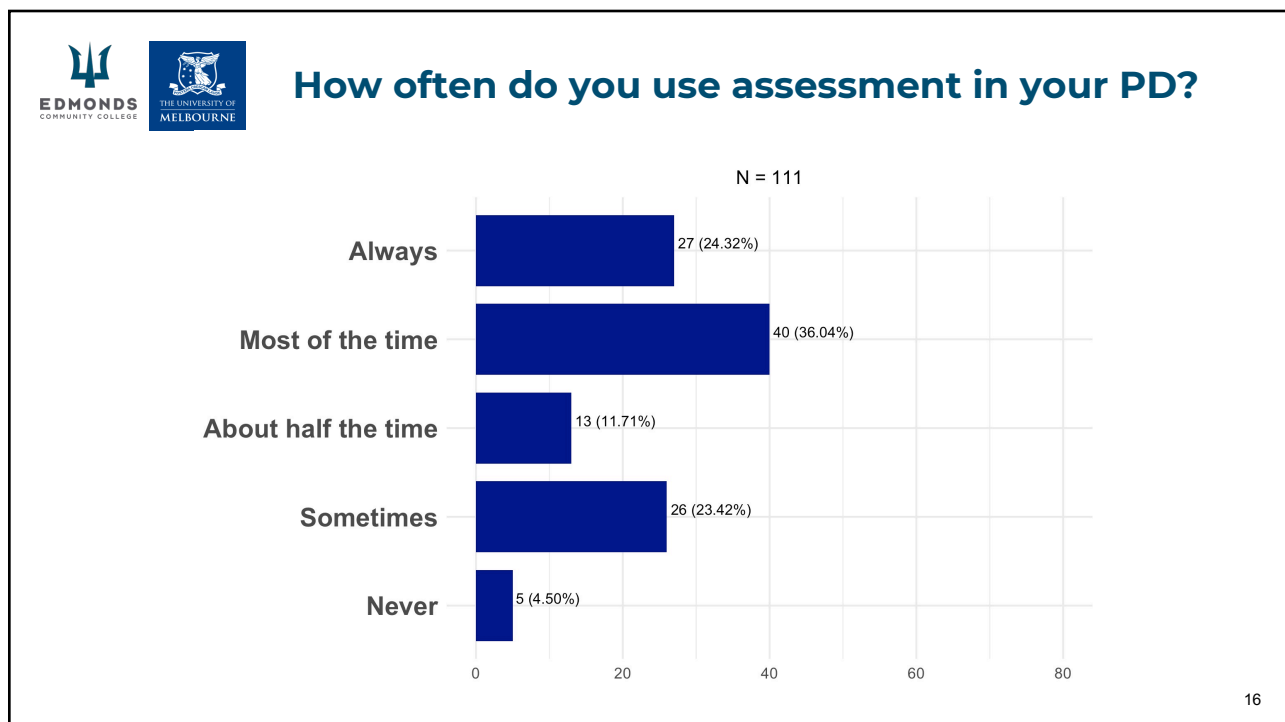
EDMONDS COMMUNITY COLLEGE THE UNIVERSITY OF MELBOURNE

Registration survey

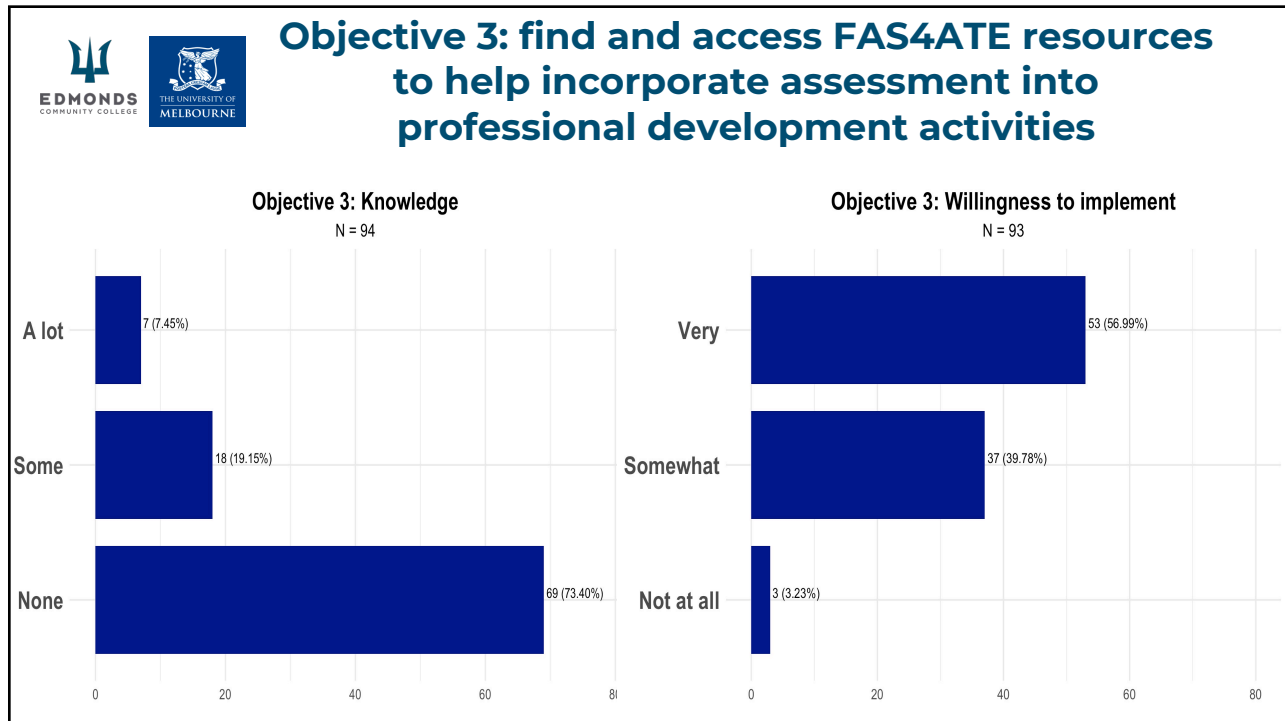


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How did your survey responses change our webinar plans?

e.g. e.g. e.g.

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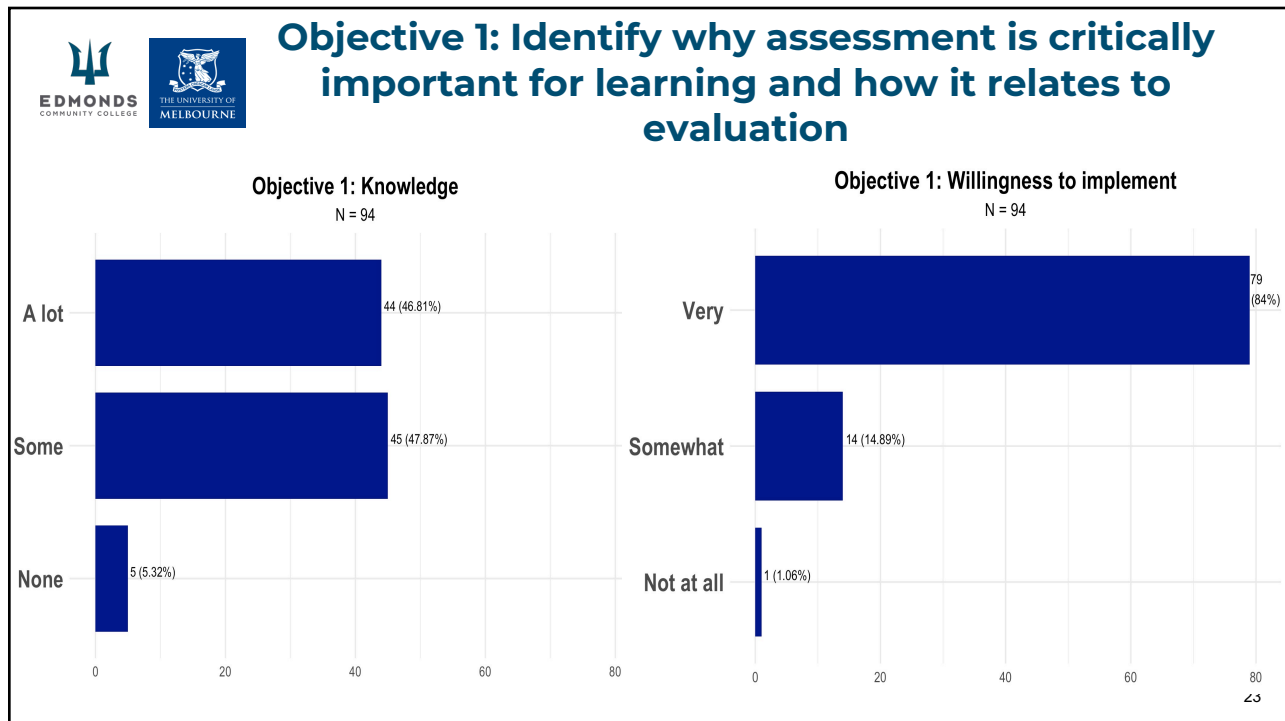







Why assessment?

What it is and why it matters in professional development. [Shifting the paradigm.]



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  **What is Assessment?**



Assessment




Erwin, 1991

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  **Our approach to assessment: a paradigm shift**


Old
Teachers and evaluators




Students

New


Evaluators




Teachers



Students





The learner's learning



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  **What are our principles?**

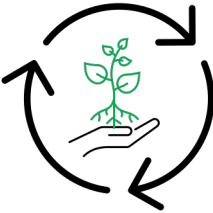





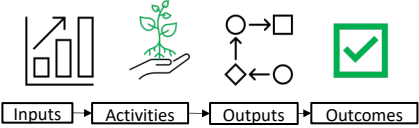




Image courtesy of <https://www.catch.com.au/brand/willow-silk/>

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  **Assessment and Evaluation**

Assessment **Evaluation**





Erwin, 1991

Stake, 1977



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Assessment and Evaluation



Assessment

Erwin, 1991





Evaluation

Stake, 1977


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What does this look like in practice?

Old Metallurgy course registration



Name

School

Contact details

New registration

The primary learning objectives of our PD program are listed below. For each, please indicate the level of your interest, knowledge and willingness to use the content in your home classroom:

- **Interest** in this specific objective.
- **Current knowledge** regarding it.
- **Willingness** to incorporate this learning objective in whole or part into your own teaching.

The objectives below will help you ensure this module will meet your learning needs

Learning Objective 1: Explain the atomic arrangement for various metals and the implications of the arrangements on metal properties.

Please rate your INTEREST in this learning objective

none

some

much/strong

Please rate your CURRENT KNOWLEDGE in this learning objective

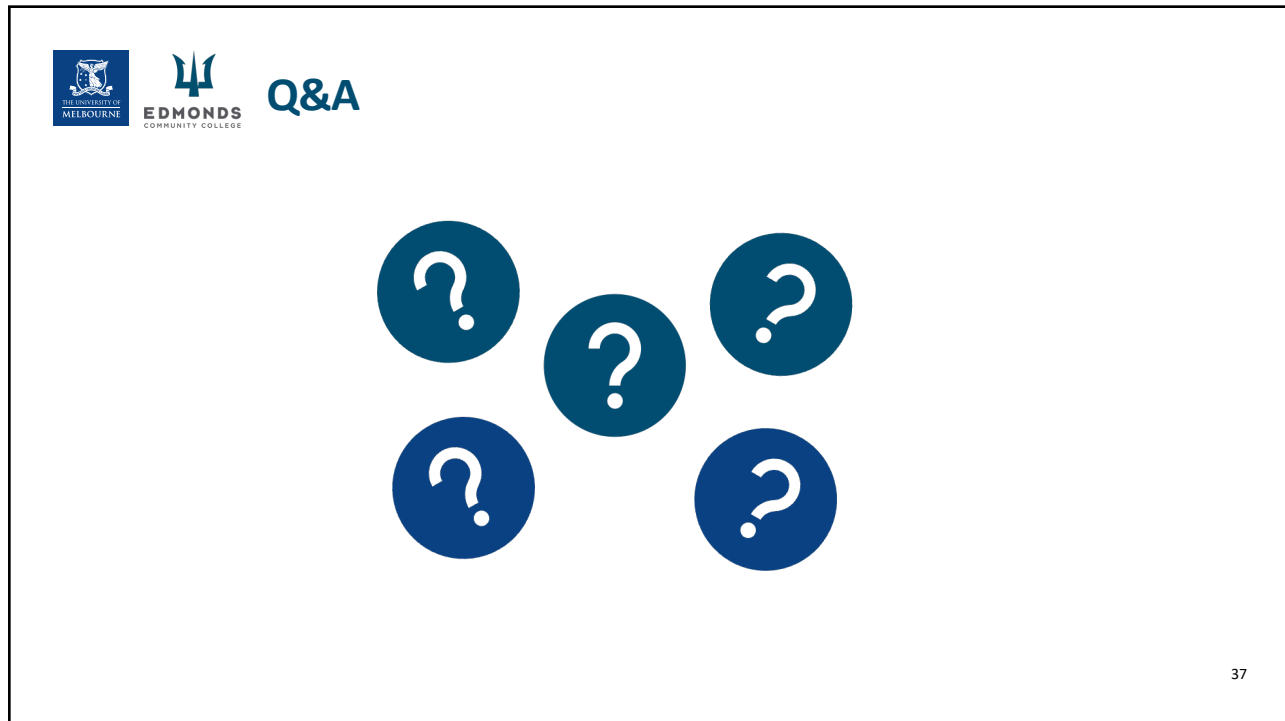
none

some

much/strong

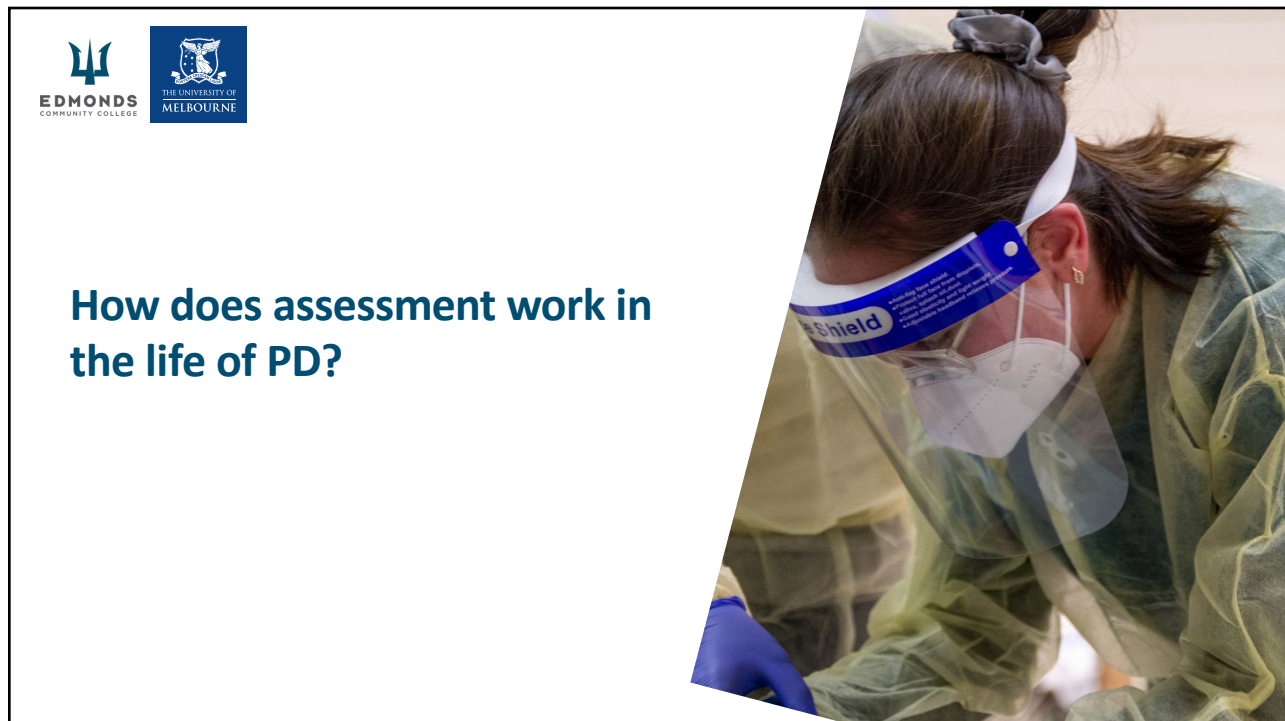
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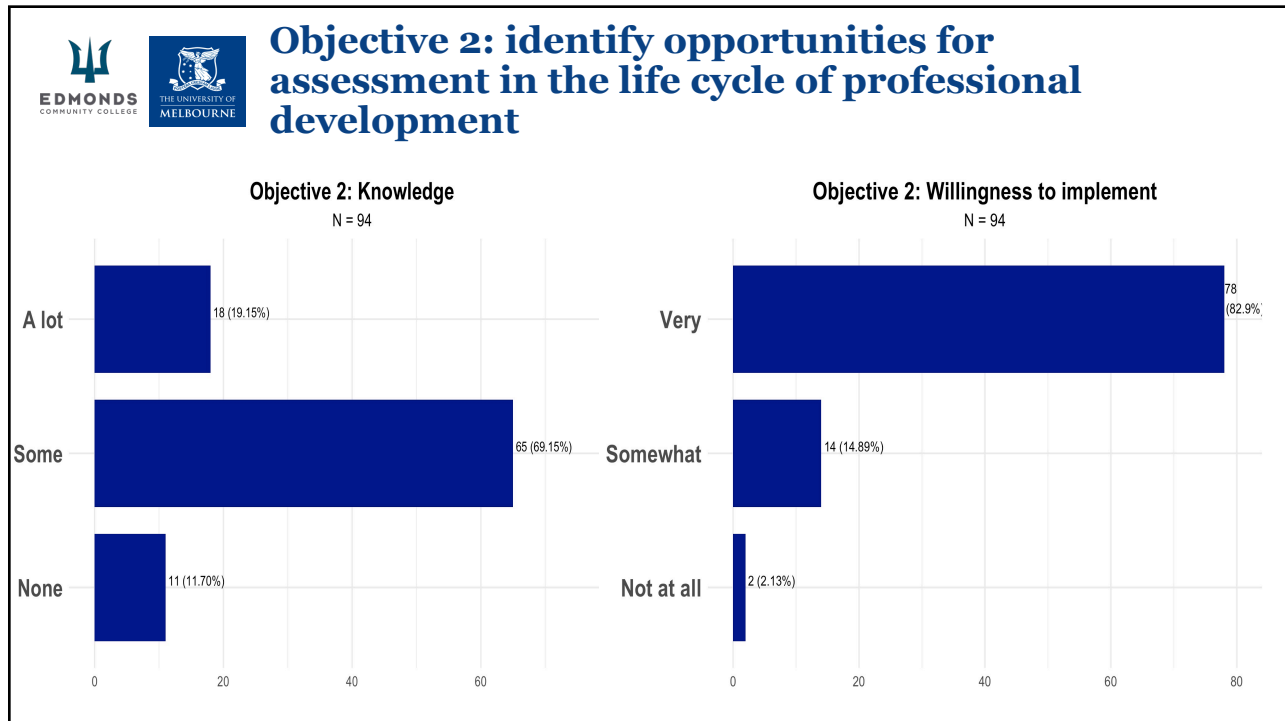
The slide features the logos for The University of Melbourne and Edmonds Community College in the top left corner, followed by the text "Q&A". In the center, there are five dark blue circular icons, each containing a white question mark. The icons are arranged in a loose cluster: two in the top row, one in the middle, and two in the bottom row.

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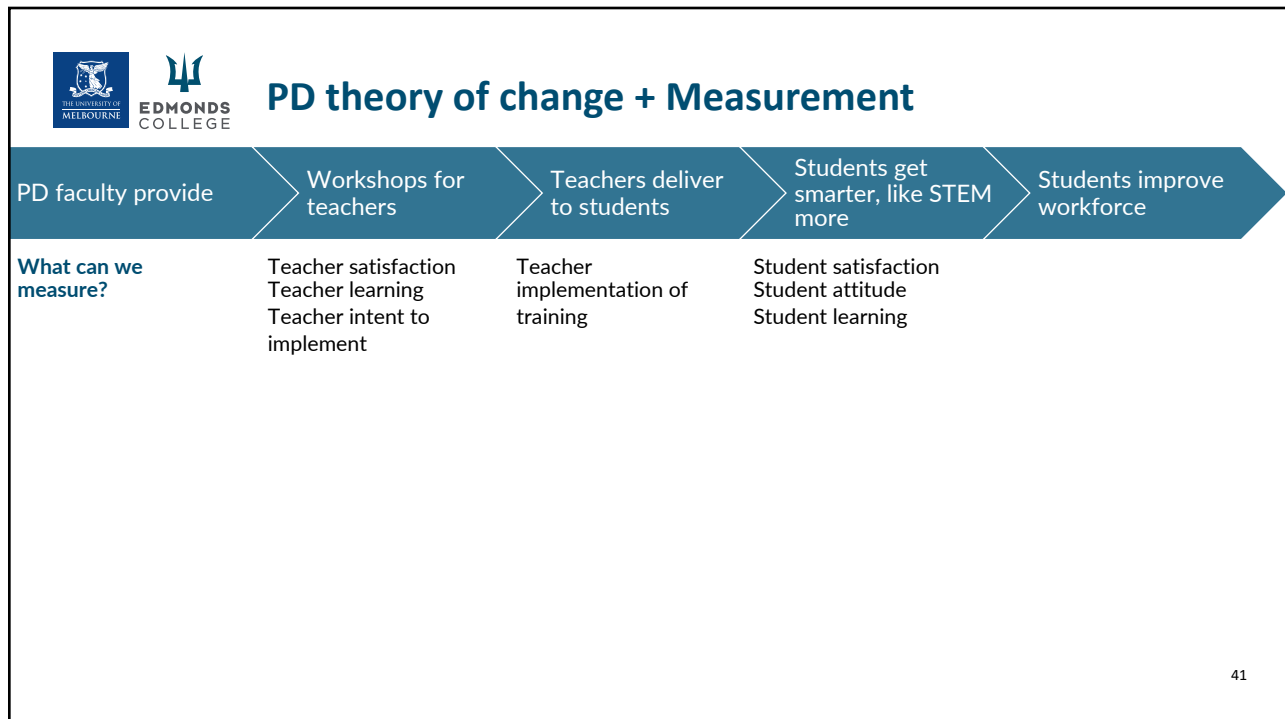


The slide features the logos for Edmonds Community College and The University of Melbourne in the top left corner. The main text on the left reads "How does assessment work in the life of PD?". On the right side, there is a photograph of a healthcare worker wearing a green protective gown, a white face shield, and a white surgical mask. The worker is looking down, and the photo is tilted slightly to the right.

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  **PD theory of change + Measurement**

PD faculty provide → Workshops for teachers → Teachers deliver to students → Students get smarter, like STEM more → Students improve workforce



To be able to measure, what do we need to do?



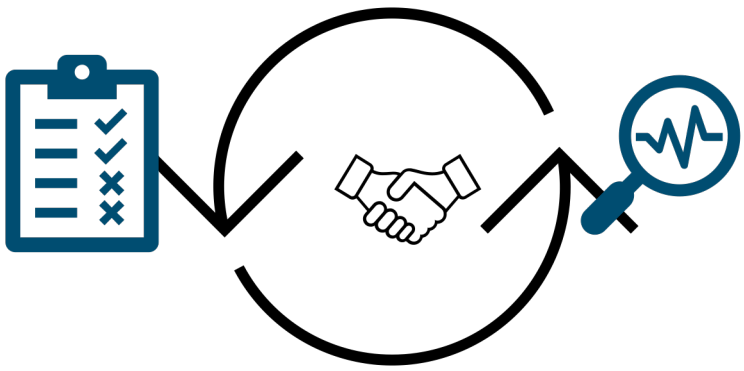
StichinTimeHoops on etsy.com

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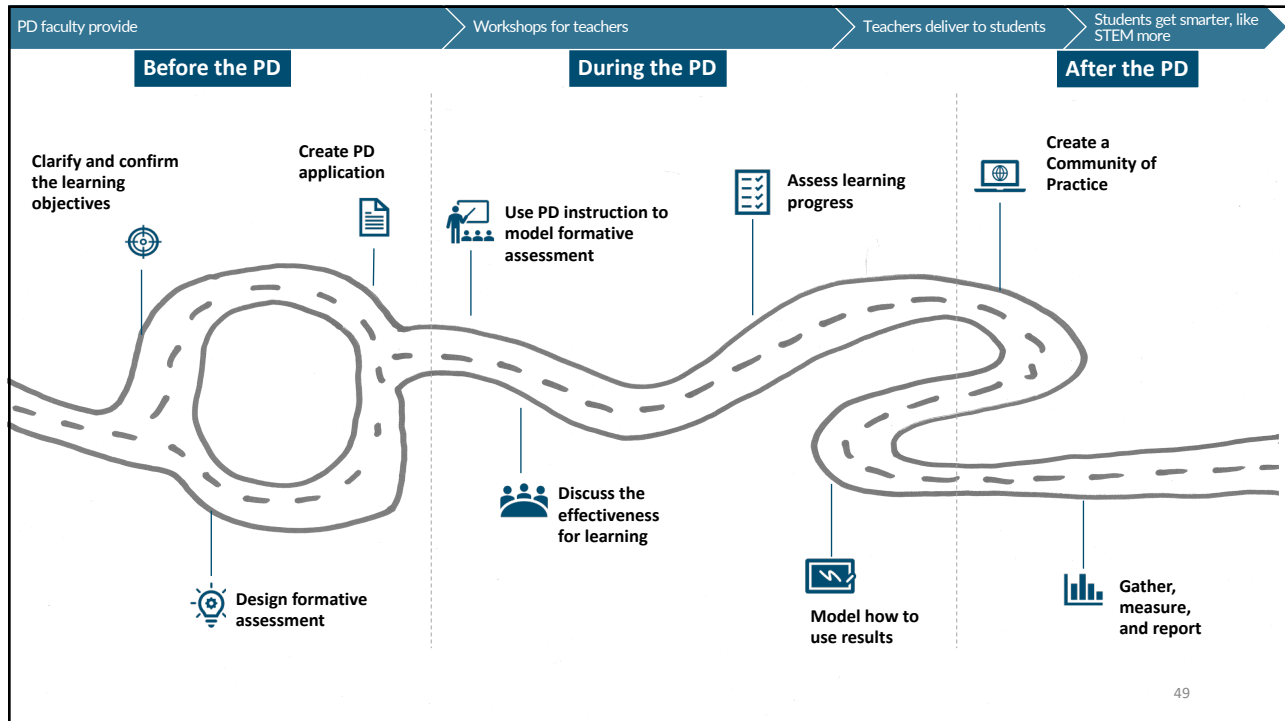
  **What is FAS4ATE doing about it?**

PD faculty provide → Workshops for teachers → Teachers deliver to students → Students get smarter, like STEM more → Students improve workforce



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MELBOURNE

What is FAS4ATE doing with assessment?

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What is FAS4ATE doing with assessment?


PD faculty provide

Workshops for teachers

Teachers deliver to students

Students get smarter, like STEM more

Students improve workforce



The Professional Development Formative Assessment System (PD-FAS)

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PROFESSIONAL DEVELOPMENT APPLICATION TEMPLATE



Contents

- Outcomes 1
- Why should you care? 2
- Introduction 2
- Template 3
- Information statement 3
- Application form with additional data collection 3
 - 1. Applicant Contact Information 3
 - 2. Professional Development Curriculum Fit 3
 - 3. Current use 3
 - 4. Learning Objectives 4
- Program Evaluation Expectations 5
- Appendix A Example Use of Information Statement 6

Outcomes

By reading and using the template you will be able to:

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University of Melbourne
Master of Evaluation
(fully online)

EDUC90719
Developing Evaluation Capacity

Clarify and confirm the learning objectives

Design formative assessment

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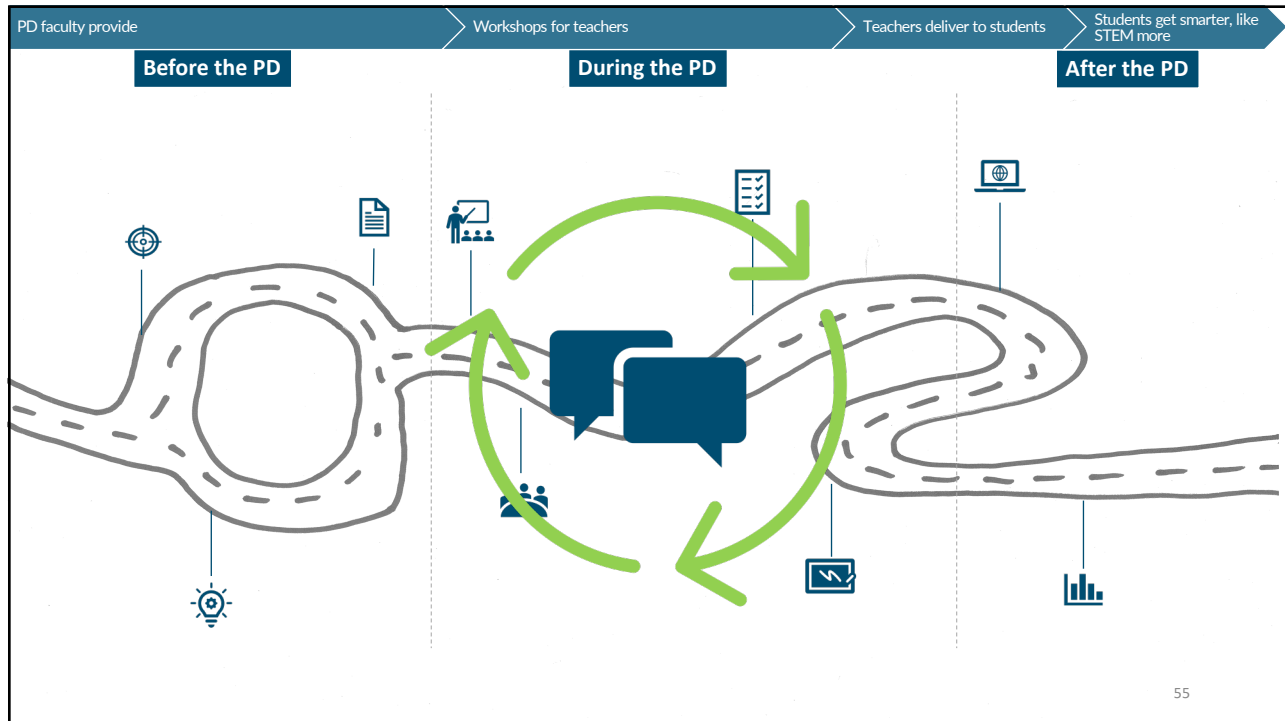
Weld-Ed projects

Original

Weld-Ed Metallurgy Module

American Welding Society
Instructors Institute

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SAMPLE PROFESSIONAL DEVELOPMENT APPLICATION TEMPLATE



Guides for integrating assessment and evaluation throughout Professional Development

Guide for analysing for deep and surface learning


Guide for developing learning objectives


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Result: Metallurgy registration

Original 



Name
School
Contact details

Revised  



Weld-Failure Example

During your welding career, you may have seen different types of weld failures. We are interested in the types of failures you have encountered. The failures may have been a simple size or appearance failure, or a major crack or catastrophic failure. Because you are registering for welding metallurgy, try to provide an example of a material related failure rather than a design failure.


In a few sentences, please provide a description of the failure, the type of material, and the welding process used or the weld. Some of the examples provided will be used in class discussion.


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Result: Instructors Institute Pre-Post

Original 



No questions



Revised  



Research question: How do AWSII participants view different types of learning? How does that change after the AWSII?


- a. How do you think you learn best? (please circle your top three)
 - a. by doing
 - b. by reading
 - c. through lecture: video recording
 - d. through demonstration/examples: video recording
 - e. through lecture: live in person
 - f. through demonstration/examples: live in person
- b. How do you think your students learn best? (top three)
 - a. by doing
 - b. by reading
 - c. through lecture: video recording
 - d. through demonstration/examples: video recording
 - e. through lecture: live in person
 - f. through demonstration/examples: live in person
- c. Please provide an example of how you understand how well a student has learned some knowledge or skill. (text response)
- d. Check any of the following that you are familiar with:
 - a. Bloom's Taxonomy
 - b. SOLO Taxonomy
 - c. Formative assessment
 - d. Backwards design
 - e. Behaviorism
 - f. Constructivism Schema
 - g. Transitional

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  **Result: Follow up for Instructors Institute**


Original  **Revised** 

 **Standard evaluation survey**

Opportunity to Participate in a follow up study
We are going to try to gather some data about your use of what you learned at the Institute during the fall semester. If you are interested in participating, please follow this link <https://www.surveymonkey.com/r/AWSII>, or click on the QR code.



2021 AWS Instructors Institute Lesson Plan Assignment


Introduction
Lesson plan development is the key to assuring efficient and effective student learning.



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  **Q&A**



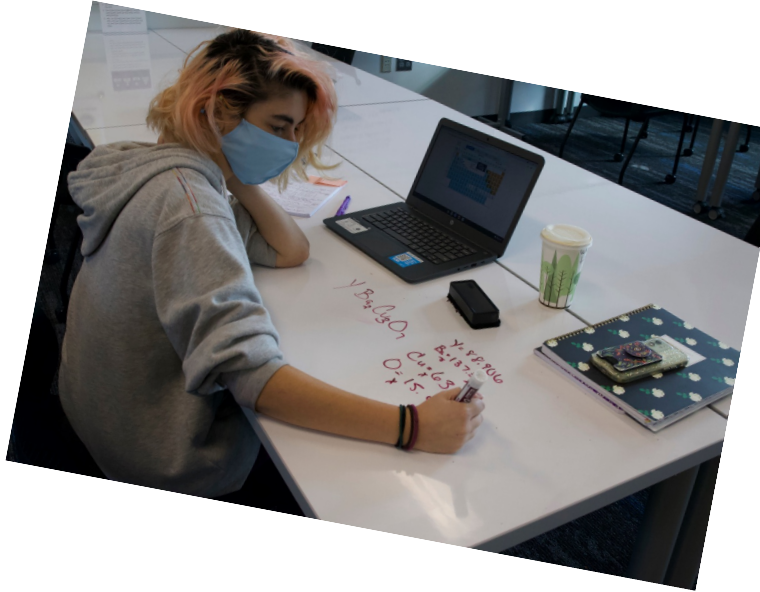
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Over to you


How will you action what you learned today?




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Reflect and report



2 Minutes



Chat box



What's something you learned?

Does it matter to you? Why?


What changes (if any) will you make in your practice as a result?

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A couple quick changes you could make



Only the learner can learn!










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LEVERAGING ASSESSMENT & EVALUATION FOR STUDENT SUCCESS: WORKING SMARTER NOT HARDER

This project is supported by the National Science Foundation under Grant No. 1853472 (continuing development of Grant No. 1349079). Any opinions, findings, conclusions, or recommendations expressed in this report are those of the participants and do not necessarily represent the official views, opinions, or policy of the National Science Foundation.

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FAS4ATE = ASSESSMENT & EVALUATION HAND IN HAND

Assessment: "...the systematic basis for making inferences about the learning and development of students." (Erwin, 1991)



Evaluation: "...to fully describe and fully judge" a whole educational program, including student learning. (Stake, 1977)

At FAS4ATE, we enable professional development (PD) programs to integrate assessment and evaluation. Our tools help ensure that participating teachers exchange information about their learning with the PD instructor to discover how PD can help their learning, and their students learning. They then take this exchange of information back to their classrooms and use formative assessment to help boost their students' learning. This creates better learning, and data for evaluation and reporting.

WHAT DOES FAS4ATE HAVE ON OFFER?

- ① Introduction to the Professional Development Formative Assessment System
- ② PD Evaluation Checklist
- ③ IP-PD Evaluation Checklist (short version)
- ④ Pre-assessment: Design and Use
- ⑤ PD Application Template
- ⑥ Guide for Developing Learning Objectives
- ⑦ Guide for Learning Objectives to Analyze Deep and Surface Learning
- ⑧ Summary Sheet of Pedagogies Suited to Types of Learning

We have developed a range of resources to support assessment and evaluation throughout the PD lifecycle (Figure 1). To access any of the tools online, hover your mouse over the name of the tool in Figure 1 and follow the directions to access the link. If that fails, use the tinyurl at the bottom of the next page to register and

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What's next for FAS4ATE?



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What's next? FAS4ATE3

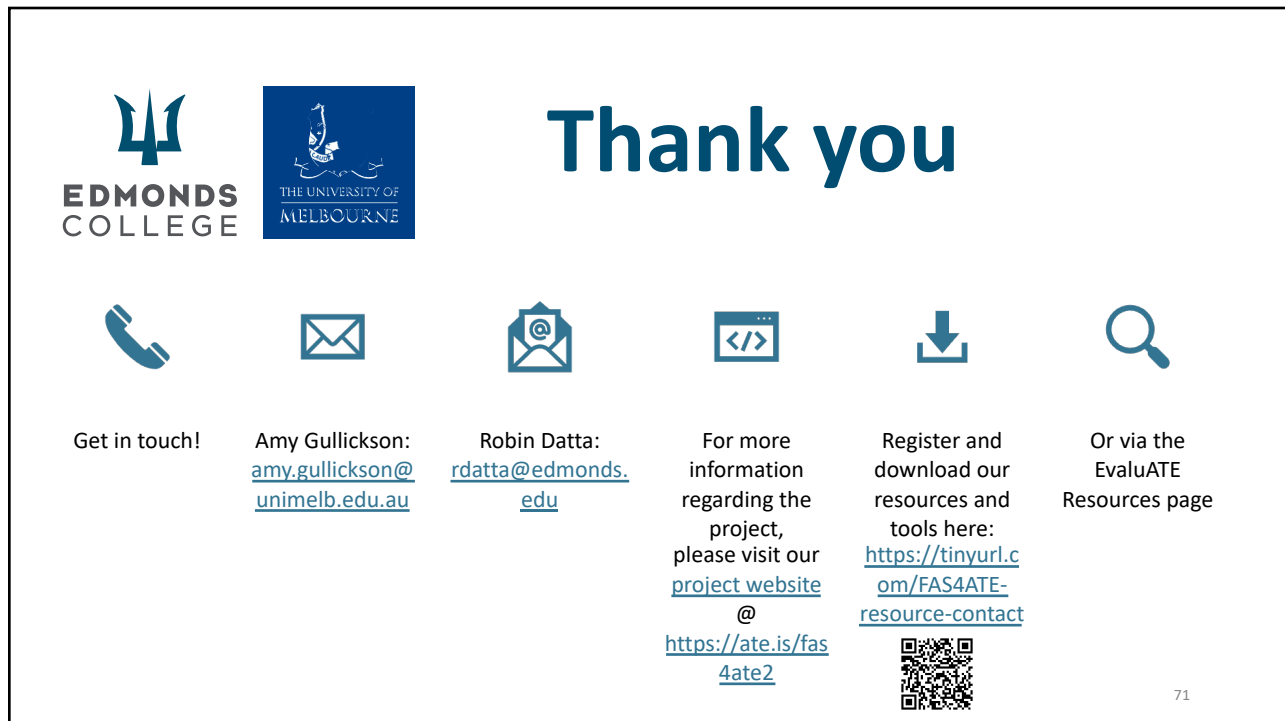


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The slide features the logos of The University of Melbourne and Edmonds Community College in the top left. The title "Who are we looking for?" is centered at the top. Below the title are five blue icons: an airplane, a lightbulb, a network diagram, an atom, and a magnifying glass over a pulse line. A QR code is located in the bottom left corner, and a URL <https://tinyurl.com/FAS4ATE-resource-contact> is at the bottom left. The number "70" is in the bottom right corner.

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The slide features the logos of Edmonds College and The University of Melbourne in the top left. The title "Thank you" is centered at the top. Below the title are six blue icons: a telephone, an envelope, an envelope with an @ symbol, a code editor icon, a download arrow, and a magnifying glass. Below each icon is text: "Get in touch!", "Amy Gullickson: amy.gullickson@unimelb.edu.au", "Robin Datta: rdatta@edmonds.edu", "For more information regarding the project, please visit our [project website](https://ate.is/fas4ate2) @ <https://ate.is/fas4ate2>", "Register and download our resources and tools here: <https://tinyurl.com/FAS4ATE-resource-contact>", and "Or via the EvaluATE Resources page". A QR code is in the bottom right corner. The number "71" is in the bottom right corner.

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References

Erwin, T. D. (1991). *Assessing student learning and development : a guide to the principles, goals, and methods of determining college outcomes* / T. Dary Erwin ; foreword by Peter T. Ewell. Jossey-Bass.

Stake, R. E. (1977). The countenance of educational evaluation. In A. A. Bellack & H. M. Kliebard (Eds.), *Curriculum and evaluation* (pp. 372–390). Berkeley, CA: McCutchan.

Photos courtesy of

Edmonds College and University of Melbourne

Chia head image courtesy of <https://www.catch.com.au/brand/willow-silk>

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Feedback Survey



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Connect with a coach

evalu-ate.org/coaching

KEITH **AMY** **LOLA**

A dark blue horizontal banner at the top of the slide contains the text 'Connect with a coach' in a large, white, sans-serif font, and the URL 'evalu-ate.org/coaching' in a smaller, white, sans-serif font below it. To the right of the banner is a circular icon with the letter 'E' and a curved arrow. Below the banner, three circular headshots of individuals are arranged horizontally. Underneath each headshot is their name in a bold, blue, sans-serif font: 'KEITH', 'AMY', and 'LOLA'. The background of the slide is a light, blurred image of hands holding a white cup.

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