



# Collaborating for a Changing Future in Education

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# Collaborative learning:

To collaborate in teaching for the future we, as teachers of the future, must be ready and organized to become:

- ✓ Information accumulators
- ✓ Developers
- ✓ Predictors
- ✓ Curriculum professionals
- ✓ Research-active problem-solvers

Keywords: Collaboration, Innovation, Confidence

# Contents:

- ✓ Collaboration as a Teacher for future education
- ✓ Changing classroom environment
  - ✓ (Flipped Classrooms/Online sessions)
- ✓ Innovation and use of new technology
  - ✓ (Applied application-based projects)
- ✓ Building confidence of learners
  - ✓ (Ako teaching, group work, self learning )



# Flipped classrooms:

# Kahoot!

- ✓ Resilience and Thinking skills:
  - ✓ (Quizzes, tests or Kahoot)

<https://create.kahoot.it/details/mechanisms-and-dynamics-of-machinery/316d8b51-6154-4d2f-8f96-dafe1c8d62e1>

- ✓ Communication Skills and Attitude:
  - ✓ (making pairs/groups)
- ✓ Lesson plans; small groups or individually; open discussions

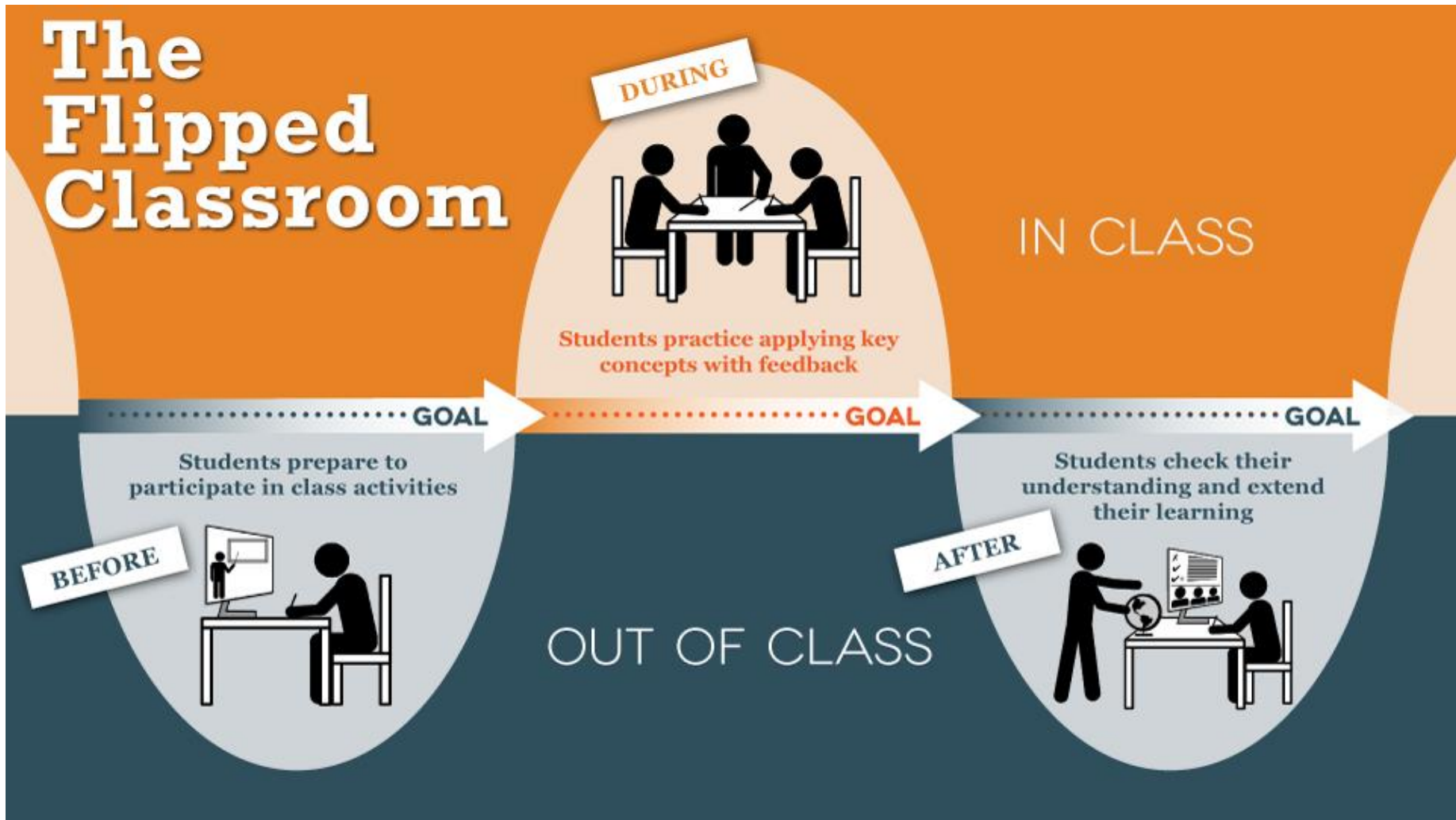


# Flipped classrooms:

- Three main things we can focus on:
  - ✓ **Content:** To show objectives of the class using multimedia.
  - ✓ **Process:** The activity that the students will do and the form class discussions will take.
  - ✓ **Product:** Questionnaire for the day that shows progress through the lesson.



# The Flipped Classroom



Source: <https://info.umkc.edu/unews/students-and-staff-convey-mixed-feelings-on-flipped-classrooms/>

# Ako teaching and learning, group work:

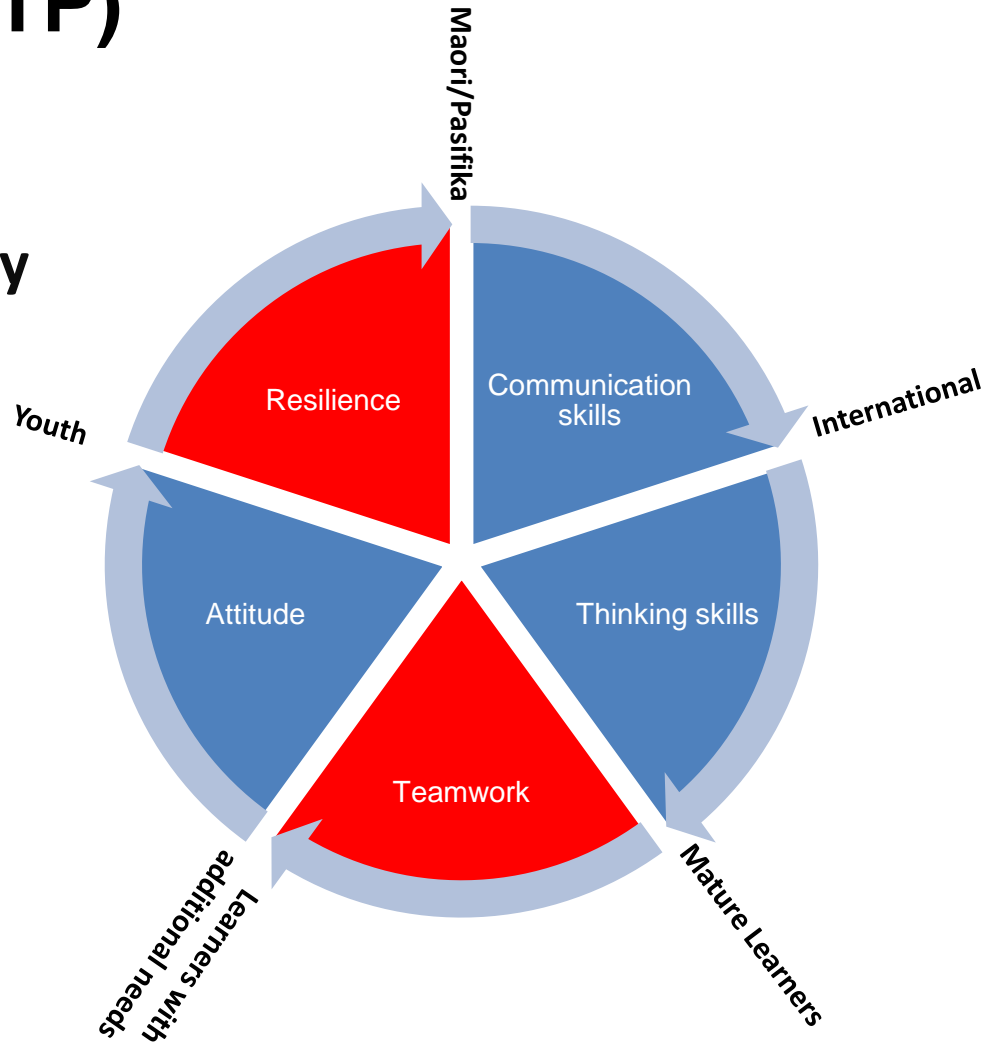
Working in groups with students of different cultures, contributing and participating in the task and getting engaged in problem solving, they will build connections with each other (Ko Koe).

So, to make sure all learners actively participate in their group we can implement a few strategies to improve their teamwork....

- Set clear goals for the task.
- Build up trust and prompt communication.
- Clearly outline roles and responsibilities.
- Establish team processes.
- Use scaffolding (with the native language).
- Establish flexible group norms.

# Introduction to educational wheel (Discovered in the group: ATTP)

## Working with Diversity



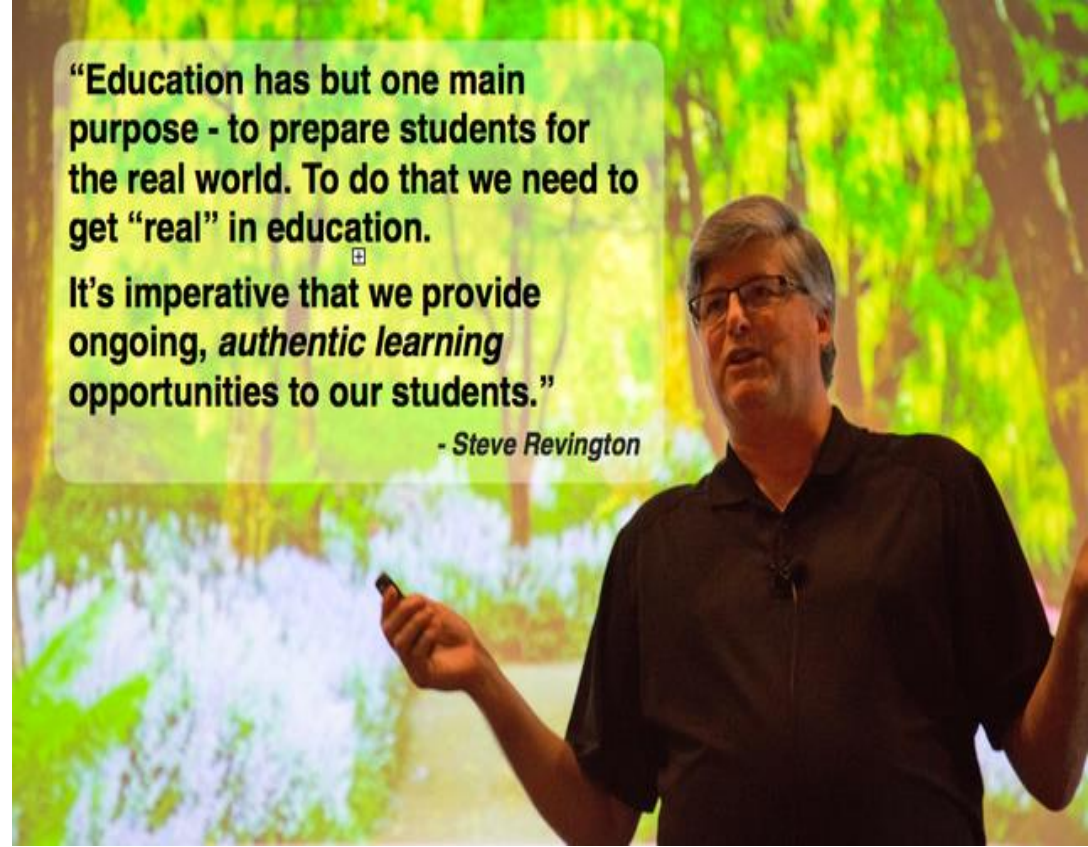


# Prepare students for Real World Applied Application:

“Education has but one main purpose - to prepare students for the real world. To do that we need to get “real” in education.

It's imperative that we provide ongoing, *authentic learning* opportunities to our students.”

- Steve Revington



Activity given to learners based on new IDE (Integrated Development Environment) and technology so that learners can prepare themselves for industries and challenges based on Real World Environment and requirements.



# Encouraging learners for projects based on real world applications:



Encouraging learners “You can make strategy” and build their confidence.

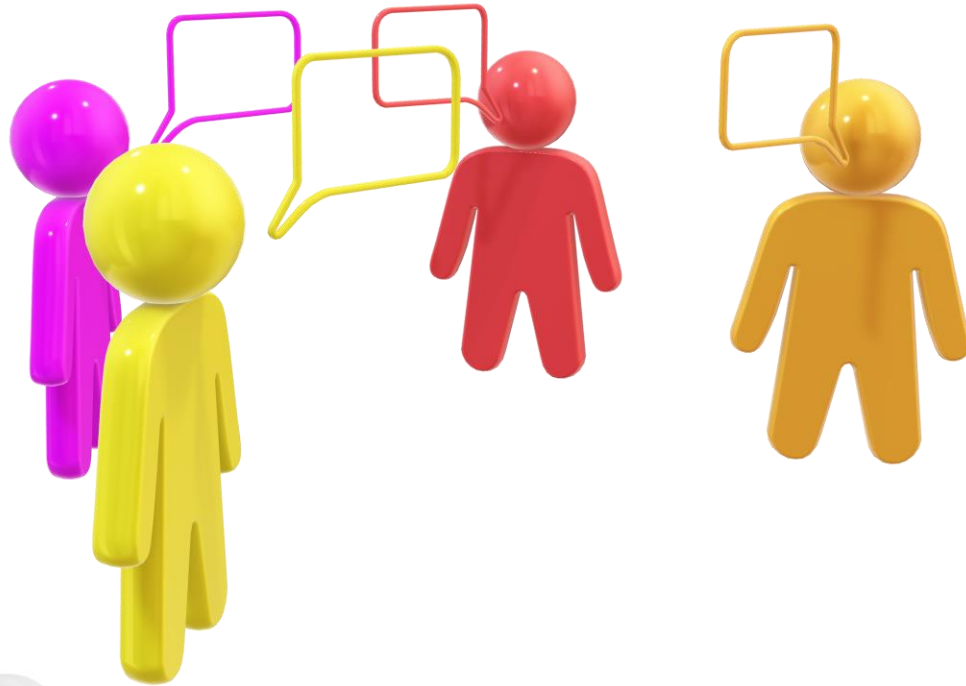
Whakaaro whanui – Challenge, Confidence and Innovation

# Conclusion:

We believe using these resources and strategies of learning and teaching, we will be able to “FACILITATE LEARNING IN A WAY THAT HELPS STUDENTS TO DISCOVER MEANING AND BECOME INDEPENDENT, SELF-MONITORING, REFLECTIVE LEARNERS AND HELP IN IMPROVING FUTURE EDUCATION”

- Conflict determination.
- Use of real-world problems.
- Use of technology.
- Organising and Planning Skills
- Decision-Making.
- Problem-Solving.
- Feedback Skills.

# Motivation is the key to success...



# 2-Way Student and Tutor Interaction



# Our Nine AAEE Publications in three years:

Auckaili, Amar and **AL-Rawi, Mohammad** (2020) [Literature review: Effective teamwork and team diversity in engineering education.](#) Australasian Association For Engineering Education AAEE 2020, Sydney, Australia , 6-9 December, 2020.

Chand, Praneel and **AL-Rawi, Mohammad** and Khanna, Jai (2020) [Utilizing digital assessment strategies for theory & practical work in mechatronics.](#) AAEE 2020, Sydney, Australia , 6-9 December, 2020

Khanna, Jai and **AL-Rawi, Mohammad** and Chand, Praneel (2020) [Implementing project based learning and tools to develop employability skills for early tertiary learners in engineering education.](#) AAEE 2020, Sydney, Australia , 6-9 December, 2020

Kumari, Sarla and Ariyaratna, Thilanga and **AL-Rawi, Mohammad** and Ross, Joseph (2020) [Enhancing Active Learning in Challenging World: Simple Strategies.](#) AAEE 2020, Sydney, Australia , 6-9 December 2020.

Daniel, Scott and **AL-Rawi, Mohammad** and Pearson, Ashlee and Symes, Mark and Goldfinch, Tom (2019) [WORKSHOP: Stop lecturing about active learning: integrating good teaching practices into AAEE conference sessions.](#) AAEE 2019, Brisbane, Australia , 9-11 Dec 2019.

Khanna, Jai and **AL-Rawi, Mohammad** and Kumari, Sarla (2019) [Incorporating effective teaching pedagogies to improve learning and teaching approaches globally.](#) AAEE 2019, Brisbane, Australia , 8-11 December, 2019.

**AL-Rawi, Mohammad** and Lazonbay, Annette and Khanna, Jai and Kumari, Sarla and Moridnejad, Maryam (2019) [Assessing Group Project for Fluids Power and Advanced Fluid Mechanics Paper.](#) AAEE 2019, Brisbane, Australia , 9-11 December, 2019

Kumari, Sarla and **AL-Rawi, Mohammad** and Khanna, Jai and Moridnejad, Maryam (2019) [Motivation and Engagement: Māori and Pasifika learners.](#) AAEE 2019, Brisbane, Australia , 9-11 Dec 2019

**AL-Rawi, Mohammad** (2018) [Reflecting on our own learning: incorporating diverse worldviews into teaching and learning activities.](#) AAEE 2018, Hamilton, New Zealand, 9-12 Dec 2018.

*Ngā Manaakitanga*

