



Aston Business School

BIRMINGHAM UK

**Advancing Community  
Operational Research education  
for improving learning relevance  
and community engagement**

**OR65 University of Bath, UK  
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# Agenda

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- **Introduction**
- **Background**
- **Method**
- **Results**
- **Discussion**
- **Conclusions**



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# Introduction

- This work explores Community Operational Research (**Community OR**) **education** in Business and Management (BAM) for **learning outcome development** and strengthening **community engagement**
- Community OR education has gained little attention, in general, but also in incorporating **novel pedagogies** to **teaching practice**
- There is an opportunity to learn by experience in **real-world community settings** while **increasing learning** and **disciplinary relevance**
- The aim is to create **Community OR-based learning experiences** for this purpose.

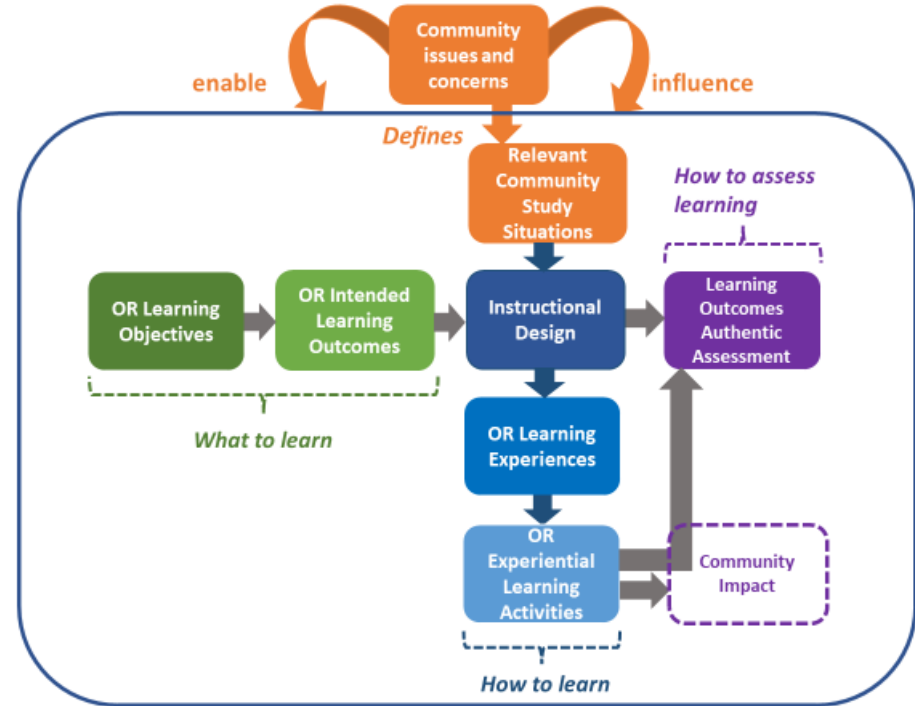


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- **Some considerations about OR and Community OR**
  - OR has worked almost exclusively with hierarchical organizations (Rosenhead, 2009; Jackson, 2004)
  - Community OR is mostly research and knowledge exchange-based (see Herron, 2003).
- **The current focus of Community OR**
  - Particularly on **non-hierarchical social groups** for decision-making and problem solving
  - Enabling social groups to **reach agreement** on their shared problems
  - Tackling the **complex overwhelming predicaments**, rather than efficiency questions (Rosenhead, 1993, 2009).
- **Community OR education**
  - **Few examples** have been document in education so far (see, for instance, Hovmand, 2017; Pinzon-Salcedo and Torres-Cuello, 2018; Salinas-Navarro and Rodriguez Calvo, 2020; Vilalta-Perdomo et al., 2022).

# Method

- A framework for pedagogical design based on **constructive alignment**, **authentic assessment**, and **active learning** (Biggs and Tang, 2009; Wiggins, 1990).
- Students approaching **complex community problems** to gain **understanding /awareness** of Community OR **relevance**, enhancing their **interest** and **motivation**.
- Equipping **students with valuable citizenship skills and knowledge**.
- Highly appreciated to involve **students as knowledge producers** (Neery, 2020).



Adapted from Biggs and Tang (2009)

## BN2205 Business Operations Excellence (Work in Progress)

- The aim is to **improve the survival and competitiveness** of local businesses
- Students have preferably chosen local business to carry out their projects (2021-2022)
- Looking at the dynamics of communities and business **beyond traditional efficiency/productivity measures**
- Incorporating **problem structuring methods** such as the Rich Picture, Root Definitions, and CATOWE
- Learning activities attuned to **Kolb's experiential learning**
- Creating **live application cases**
- **Authentically assessing** problem-solving learning outcomes, citizenship commitment, motivation, interest and learning relevance



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- **Main findings:**
  - Students as problem solvers in real-world community contexts
  - A framework for pedagogical design attuned to contemporary educational developments in Higher Education
  - Addressing first-hand situated issues for students
  - Advancing Community OR teaching by expanding mechanisms for community engagement.
- **Limitations and challenges:** Regarding the identification of appropriate projects/businesses, the development of community engagement, data collection barriers, while also keeping uniform student participation.
- **Future work:** The development of further learning experiences on contemporary community challenges for local businesses and other social groups.

# Conclusions

- Community OR making use of Learning and Teaching activities to ***spread the Community OR word***
- **Communities as enablers** of teaching and learning activities
- Students undertaking **reflective and hands-on learning** on communities for Business & Management
- A framework for pedagogical design to develop further **Community OR-based learning experiences**.



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