WEBINAR SERIES
GLOBAL ALLIANCE FOR INTER- AND TRANSDISCIPLINARITY

UNDERSTANDING AND ADVANCING TRANSDISCIPLINARY COLLABORATIONS: DEFINITIONS AND SKILLS

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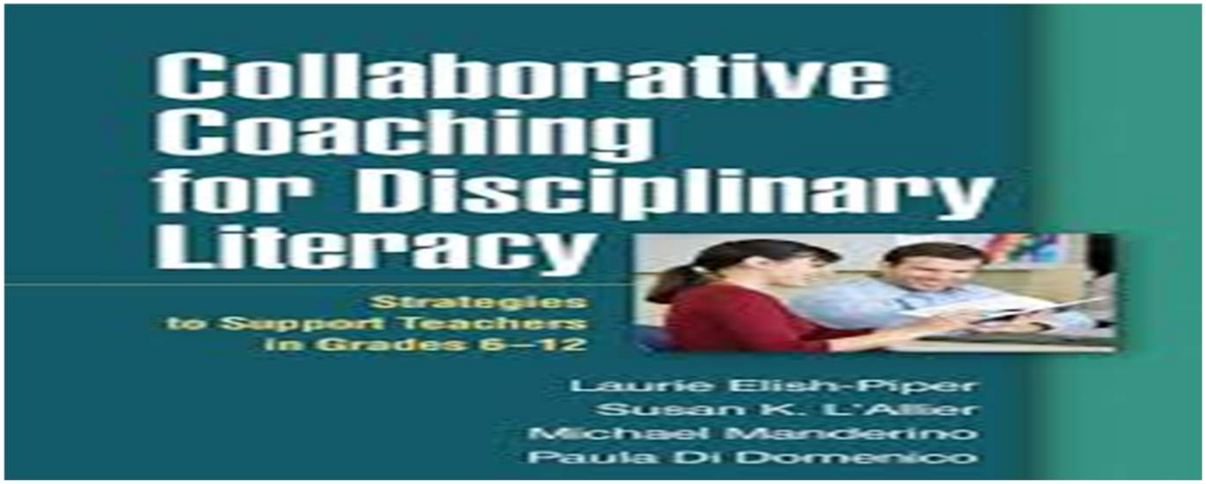
INTRODUCTION

❑Why is Disciplinary collaboration in research important?

- Research collaboration plays a vital role in addressing complex global challenges.
- Addressing most pressing development issues require diverse expertise from multiple fields.

❑Different disciplinary collaboration models are:

- Monodisciplinary
- Interdisciplinary,
- Multidisciplinary,
- Transdisciplinary, and
- Cross-disciplinary



MONODISCIPLINARY COLLABORATION

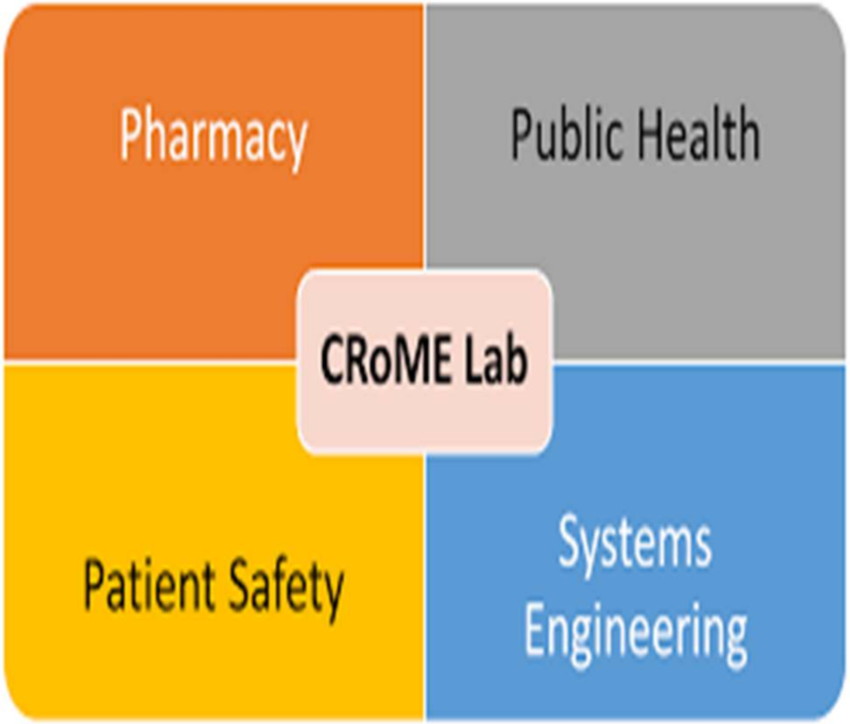
- Research within a single discipline.
  - Deep expertise in a specific field.
  - Limited cross-disciplinary interaction.
- For example, an atmospheric scientists studying CO_2 emissions.

MULTIDISCIPLINARY COLLABORATION

- Different disciplines work in parallel on a common problem.
  - Collaboration without integration of methods.
  - Each discipline retains its boundaries.
- Example (Climate Change);
  - Meteorologists study weather patterns.
  - Economists analyze carbon pricing.
  - Sociologists assess policy impact.

INTERDISCIPLINARY COLLABORATION

- ❑Integration of knowledge and methods from multiple disciplines.
  - Shared research framework.
  - Greater synergy among disciplines.
- ❑Example (Climate Change);
  - Combining climatology, environmental science, and social sciences to develop adaptation strategies.



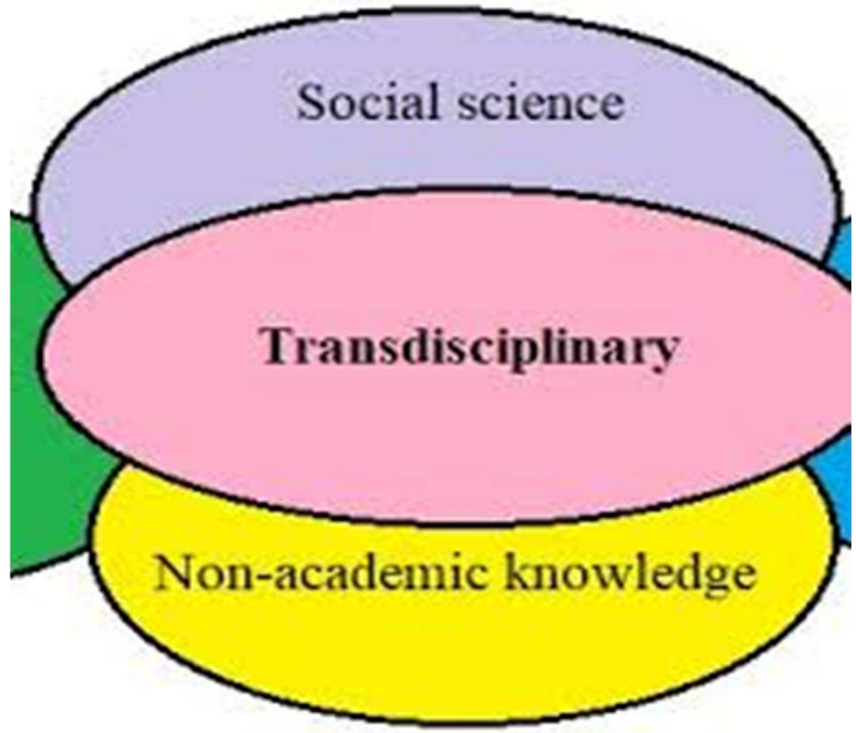
TRANSDISCIPLINARY COLLABORATION

Beyond disciplines, integrating academic and non-academic knowledge.

- Co-creation of knowledge.
- Involvement of policymakers, communities, and industries.

Example (Climate Change);

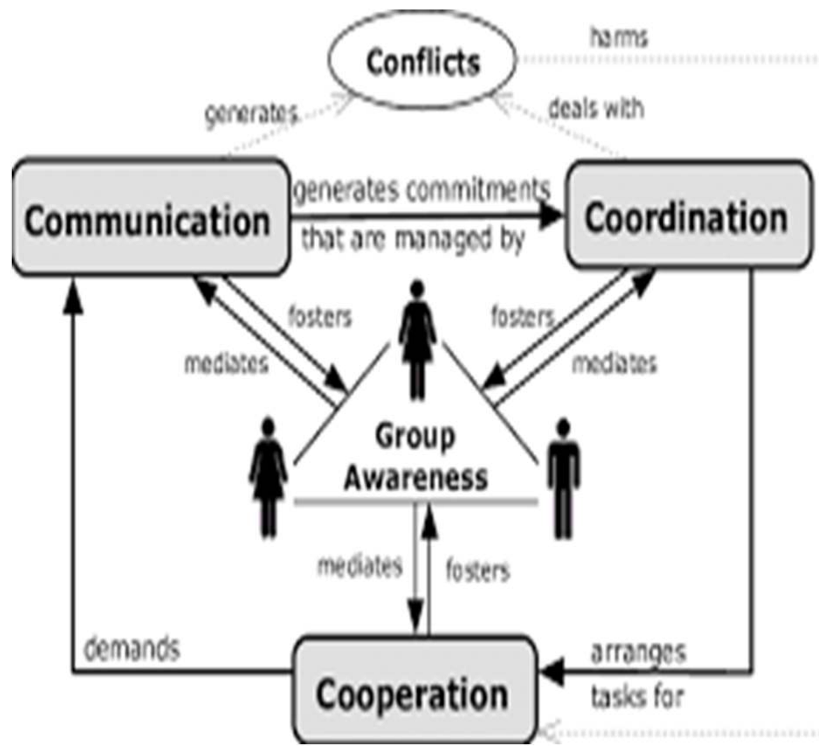
- Scientists, farmers, and policymakers co-developing sustainable agricultural practices.



COMPARING COLLABORATION MODELS

❑Analogy for Understanding Differences-

- Monodisciplinary: Apple (single focus).
- Multidisciplinary: Fruit Bowl (separate but together).
- Interdisciplinary: Fruit Salad (mixed but distinct).
- Transdisciplinary: Smoothie (fully blended knowledge).



STRENGTHS AND CHALLENGES OF EACH APPROACH

- Monodisciplinary - Deep expertise but limited scope.
- Multidisciplinary - Broader perspectives but lack of integration.
- Interdisciplinary - Integrated knowledge but requires effort.
- Transdisciplinary - Real-world impact but complex collaboration.

CONCLUSION & KEY TAKEAWAYS

- Monodisciplinary research is best for deep scientific discovery, while multidisciplinary research broadens perspectives but does not integrate them.
- Interdisciplinary research combines knowledge from different fields, leading to innovative solutions.
- Transdisciplinary research extends beyond academia, ensuring practical impact by involving communities and policymakers.
- The choice of collaboration model depends on the research goals, resources, and desired level of integration.

NEXT DISCUSSION

- How can these collaboration models be applied in your research?
- Listen to the next speaker/presenter