**Community building in instructor training**
**Renforcement de la communauté dans la formation des instructeurs**
(Org: **Carmen Bruni** (Waterloo), **Amenda Chow** (York) and/et **Fok-Shuen Leung** (University of British Columbia))

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**EMILY BRALEY**, Johns Hopkins University
*A Distributed Leadership Model for Course Design and Building Community within an Instructional Team*

Distributed leadership is a theoretical framework that has been applied to analyze teachers and their professional networks at both the K-12 and postsecondary levels. In this session I will present a structure based on a distributed leadership model that can be used to support course staff, and create space for multiple voices in course design. This model can build leadership capacity, let folks bring their strengths and expertise to course design and help create a teaching community within an instructional team. In this structure, community-building begins at a pre-semester orientation and is sustained through activities during weekly coordination meetings in the term.

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**JAMES CHARBONNEAU**, University of British Columbia
*Experiences In Instructor Development Through Paired Teaching*

Paired teaching (Stang 2017) is a collaborative model where two instructors are assigned to the same class with the intent of learning new teaching skills and pedagogical techniques while honing the ones that exist. Both instructors are responsible for all aspects of teaching, attend all classes, and both are given full credit for teaching. The most common pairing is a new faculty member with an experienced faculty member. New faculty get vital professional development and support while senior faculty get experience with mentorship and space to reflect on their own practice.

I will talk about my own extensive experience with paired teaching as a member of the Physics and Astronomy Department at the University of British Columbia. I will also share a very concrete tool "The Setlist" that arose from a paired teaching collaboration and has become the cornerstone of my teaching practice.

*Stang, J. B., Strubbe, L., Holland, T., and Sherman, S. B. (2017). Paired teaching: High-impact, low-cost professional development in evidence-based teaching for new faculty [O]. doi:http://dx.doi.org/10.14288/1.0363340*

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**MATTHEW COLES, KATIE FAULKNER AND JAYE SUDWEEKS**, University of British Columbia
*Incorporating sustained community building in graduate TA experience*

Over the past few years, we have focused on incorporating community building throughout the entirety of our graduate TA experience. We explore three stages of their development: on arrival, early in-service, and late in-service. In particular, we describe TA training, structured mentorship, TA check-ins and needs assessments, and systems for incorporating senior TAs in the running of community building activities. We are especially interested in community building components that are sustainable and reproducible so that these efforts can be long lived. We further comment on how to foster connection across different levels of the department, especially undergraduate TAs.

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**CAROLINE JUNKINS & JESSIE MEANWELL**, McMaster University
*Takeaways from MacPRIME: partnering with undergraduates to foster and sustain a mathematical learning community*

With growing interest in STEM fields such as Data Science and Financial Mathematics, enrollment in undergraduate Math and Stats programs at McMaster University has been increasing over the past several years. As numbers grow, how can we be more intentional about fostering and sustaining an effective learning community? In 2022, the Department of Mathematics and Statistics piloted a summer bridge program aimed to build community and prepare students for university. The McMaster

Peer-Run Inclusive Math Experience (MacPRIME) is a 4-week online program for incoming first-year Math and Stats students, developed and facilitated in partnership with upper-level undergraduates. In this talk, we will describe key takeaways from our development process, including:

1. Tailoring evidence-based teaching and learning strategies to a mathematically-inclined audience

2. Translating program objectives into interactive lessons using teacher.desmos.com

3. Setting up a sustainable ecosystem where undergraduates can move through the community from MacPRIME participants to instructors.

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**FOK-SHUEN LEUNG**, University of British Columbia
*Panel for Community Building in Instructor Training*

In this segment of our special session, we will look back on some of the ideas raised during the day. Through a semi-structured moderated discussion, we will invite speakers and participants to compare, contrast and assess those ideas, particularly with the goal of adapting some of them for community building in instructor training at our own institutions.

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**VANESSA RADZIMSKI**, University of the Fraser Valley
*A Team Teaching Model for Graduate Students' Development as Instructors*

Pedagogical training of mathematics graduate students is often disconnected from the actual experience of teaching, which can be time-consuming, logistically numbing and generally overwhelming for novice instructors. In this session, we discuss features of instructor training that support mathematics graduate students' pedagogical development, empowering them to focus on their students' learning and their own growth as teachers. Using self-reported experiences of mathematics graduate students who taught in a novel, team-teaching model, we describe three values built into the structure of the model and relate these values to previously identified obstacles to graduate students' pedagogical development. We argue that these values can be integrated into existing training models to support instructor development.

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**JASON SIEFKEN**, University of Toronto
*Active Learning and the Novice Instructor*

The multi-section Linear Algebra I at the University of Toronto is structured as an "active learning" class. It is coordinated and instructors are provided with detailed lesson plans and in-class worksheets for every day of class. Though active learning is new to most instructors, they express a uniform willingness to try teaching in an active learning style—but the novices' teaching is far from perfect. This talk will outline the structure provided to Linear Algebra I instructors as well as discuss some of the common difficulties they encounter and potential solutions.

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**CHELSEA UGGENTI**, University of Waterloo
*Training graduate teaching assistants on active learning*

One important and, at times, overlooked component of instructor training is the training of our graduate students in their roles as graduate teaching assistants. Although decades of research into evidence-based active learning activities are regularly shared between and practiced by instructors, this is not always introduced to our graduate students. Since some graduate students will be instructors someday, it is crucial that they are aware of and learn effective pedagogical practices like active learning early in their careers; these early teaching experiences tend to establish enduring teaching skills and approaches.

A workshop on active learning techniques in the mathematical and statistical sciences was developed for graduate teaching assistants from those fields at the University of Western Ontario. A survey study of graduate teaching assistant perceptions about active learning before and after participating in the workshop was performed in September 2021 and September 2022. Learnings from this study are discussed.

**THOMAS WONG**, Heriot-Watt University
*Fostering Global Teaching Teams in a pandemic.*

The pandemic created opportunities for us to reflect and develop new effective teaching collaborations. With campuses in UK, Dubai, and Malaysia, cross-campus teaching teams became a necessity at Heriot-Watt University to address the pedagogical and technological challenges required to teach effectively in this new medium. Within courses, we leveraged this opportunity to develop strong collegial collaborations and student-led initiatives that provides a sustainable teaching/mentoring model as we transition to a post-pandemic world.