RESEARCH PROGRAM
Dr. Gibbons’s research focuses on developing and investigating efforts to cultivate organizational contexts that create and maintain strong school-wide professional learning structures that engage teachers in strengthening their mathematics teaching practice and provide students with important opportunities to engage in complex rigorous mathematical thinking. Her investigations contribute to a growing body of research that examines how the contexts in which teachers work can be organized to support their ongoing learning and development. This work is informed by a vision of teaching mathematics that includes eliciting and building on children’s thinking as they attempt to solve challenging tasks. She is passionate about developing schools where vibrant intellectual discussions stimulate children and adults.

Research component 1: Specifying instructional leadership practices of content-focused coaches and principals who support ambitious instruction
Several studies were conducted as part of an NSF-funded study examining how to support mathematics teachers’ development of ambitious and equitable instructional practices at scale (e.g., in several large districts). Two studies examined the practices of school-based middle grades mathematics coaches as they supported teachers in implementing an ambitious mathematics curriculum. A third study uncovered principal leadership practices that supported coaches and teachers to work effectively together.

Dr. Gibbons as also examined school leadership as part of university-school partnership studies funded by the Spencer and Gates foundations. These studies examined an innovative professional development design, “Math Labs,” that brought elementary teachers, coaches, principals, and mathematics educators together for a full day of job-embedded learning experiences. Working collaboratively, educators worked to develop shared visions for high-quality instruction and the improvement of teaching. Ongoing analyses include examining how principals and coaches develop and sustain school-wide supports for teachers’ planning, data use, and instruction. This study generated an empirically grounded framework explaining how school leaders work together to: develop goals and align visions, provide accountability and assistance, develop organizational routines, foster trust and risk-taking, facilitate common language to talk about learning and instruction, and provide high-quality curriculum and assessment tools.

Research component 2: Identifying tools and resources to support instructional leaders
Over the last several years, Dr. Gibbons has worked with other teacher educators to develop tools, routines, and resources for coaches to implement Math Labs in their own schools (e.g., see tedd.org). One of her analyses revealed an important organizational routine (the “Teacher Time Out”) that emerged during Math Labs at an elementary school and was later adopted school-wide to support teacher and school leader’s professional conversations about the work of teaching – changing a paradigm within coaching. As a result of that analysis, tools and resources were developed to support other coaches to introduce and make use of the routine in enacting professional learning supports for teachers. I am also engaged in design-based research that examines how coaches and principals can be supported to implement Math Labs in their own contexts. Currently, through work funded by EdVestors, Dr. Gibbons is collaborating with the Boston Public School Mathematics department to implement Math Labs in middle schools.

Biographical Sketch:
Dr. Lynsey Gibbons is an Assistant Professor of Mathematics Education at Boston University’s School of Education. Dr. Gibbons disseminates her work to research journals such as Elementary School Journal and Journal of Research in Mathematics Education, as well as practitioner journals such as Teaching Children Mathematics and Educational Leadership, so that practitioners can benefit from advances in research on professional learning. She was awarded Peabody College’s Otto Bassler Dissertation Award, NCTM’s Research and Practice Outstanding Publication Award, and was nominated for a postdoctoral mentorship award. Her work builds on her experience as an elementary teacher and school leader.