



KENNESAW STATE
UNIVERSITY
 BAGWELL COLLEGE OF EDUCATION



INTERACTIVE RESEARCH METHODS LAB

**Application for the Regents’ Teaching Excellence Award for
 Department or Program**

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November 29, 2022

Dr. Denise Domizi
Director, Teaching and Learning Excellence
University System of Georgia

Dear Dr. Domizi and Awards Selection Committee:

I am pleased to nominate the Interactive Research Methods Lab (IRML) in the Bagwell College of Education for the Regents' Teaching Excellence Program Award. Since its establishment in 2019, this program has distinguished itself locally and globally. This application details the many ways in which innovation, student engagement, and continuous improvement permeate the program.

The program's main goal is to support innovative, effective, and ethical research designs. The lab uses Hopscotch, a web-based tool and theoretical model that helps students and faculty generate research designs in an interactive fashion. Hopscotch is a critical tool in promoting and supporting High-Impact Practices, particularly undergraduate research, capstones, and community engagement. The tool has tapped into a critical need worldwide and has become extremely successful, supporting over 100,000 students, scholars, and community leaders both in Georgia and around the world. The success of the Hopscotch model has spawned specialized versions, in particular Hopscotch4SoTL, developed in collaboration with Kennesaw State University's Center for Excellence in Teaching and Learning to support the Scholarship of Teaching and Learning. In addition, IRML was designed with affordability in mind, and it has created a number of Open Educational Resources that have been disseminated globally.

Students credit IRML with their academic confidence and success, as demonstrated by one student: "I also grew a newfound interest and connection to scholarly articles that relate to the inner workings and intersectionality of Black female educators. Working in the lab reaffirmed my belief that I will never stop learning. In fact, I will be starting my master's degree next fall and plan to continue to engage in research. I know I am capable of conducting research because of my time in the Interactive Research Methods Lab."

Our community partners see the opportunity provided by IRML. For instance, Dr. Kamau Bobb, Director of STEM Education Strategy at Google and formerly of the USG, calls IRML "transformational" and "inspiring" in democratizing computing skills for all students. The Interactive Research Methods Lab is making a difference in student learning and opening opportunities previously unattainable for them. Kennesaw State University is excited about its success and proud to submit it for consideration for the Regents' Teaching Excellence Program Award.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ivan Pulinkala'.

Ivan Pulinkala, Ed.D.
Provost and Senior Vice President for Academic Affairs
Professor of Dance

OFFICE OF THE PROVOST

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Narrative Statement

Purpose & Philosophy: The Interactive Research Methods Lab¹ (IRML) was officially launched in November 2019, at the Bagwell College of Education. The lab offers an innovative space providing students, faculty, staff, and the public with personalized instruction and practical experience in generating exceptional research design. The IRML provides a transdisciplinary intersection that supports and promotes excellence in research learning and practice. Dedicated to advanced, inventive designs of inquiry, IRML's commitment extends to ensure that the vocabulary of the research world does not prohibit advanced research understanding. This, coupled with engaging technologies focused on user experience, creates democratic, open-access to the most complex, modern research theories through simplified, targeted design.

Goals of the IRML: In order to promote, support, and recognize excellence in teaching and in service to students, faculty, and the public, the Interactive Research Methods Lab was founded with four overarching goals:

- Provide students, faculty, and the public with innovative, interactive Open Educational Resources (OER) to learn and teach research methods.
- Offer students, faculty, and the public an interactive, accessible framework for the development of high quality well-informed research designs.
- Build capacity in educational research by developing and nurturing a university-wide community of individuals engaged in educational innovation and research.
- Serve as a model for institutions committed to best practice in comprehensive, groundbreaking research education.

Key Strategies Highlights: To achieve the previous goals, members of the Interactive Research Methods Lab have purposefully developed an integrated set of initiatives organized around our main stakeholders (students, faculty and the community):

Student & Faculty-Facing Initiatives: Development of OER to promote high-impact practices based on the personalization of learning, the promotion of out-of-class activities to enrich the curriculum, the advancement of diversity, the use of frequent, timely, and constructive feedback, and the public demonstration of competence. To do so, the Interactive Research Methods Lab provides undergraduate and graduate students with curated resources for each of the nine steps proposed by the Hopscotch Model², a theoretical model and a web-tool developed by members of the lab to help the interactive generation of core qualitative, quantitative and mixed-methods research designs. Previous resources are offered: a) through the Interactive Research Methods

¹ <https://irml.kennesaw.edu/>

² <https://hopscotchmodel.com/>

Lab Library³ developed in close collaboration with KSU's Library; b) as part of the Hopscotch's website, and; c) as part of the augmented reality resources that face-to-face and distance users can leverage when using the physical and virtual spaces offered by the IRML⁴.

Moreover, members of the IRML also provide active support to enable faculty to use the innovative forms of pedagogy (e.g. high-impact practices, critical thinking, collaborative learning) and technology (e.g. use of OER and augmented reality resources) that are promoted in and by the lab to better learn research methods. Faculty interested in integrating the resources and interactive framework offered by the lab can collaborate with the lab methodologists in the co-development of personalized lesson plans⁵ tailored to the particularities of their courses and the needs of the students taking them. In the last two years, the lab and or its resources have been included in seventeen courses (9 undergraduate and 8 graduate ones) across campus.

Since the inauguration of the lab in fall of 2019, \approx 1,000 students have engaged in working on their research assignments, capstone proposals, and doctoral dissertations, and 100 faculty have incorporated the lab, its resources, and/or the Hopscotch framework to enrich their courses for the promotion of an inquiry culture among students. Thus, contributing to the prosperity of our students.

Professional Development-Facing Initiatives: Designed to serve students, the lab has grown to captivate university, health, policy, education, and community leaders. The professional development offered by the IRML team is guided by the promotion and demystification of data-driven decision-making practices by providing others with an interactive toolkit to help them learn research methods and generate research designs that will allow the analysis and improvement of their daily practices. Since its inauguration, the lab has offered more than 25 methodological workshops for faculty and students; hosted 15 research writing days; facilitated the work of over 20 different research teams; hosted 30 full-day retreats with school districts, NGOs, corporations, and public organizations; developed versions of Hopscotch to be used by teachers⁶ and faculty doing Scholarship of Teaching and Learning⁷; facilitated the development of over 2,000 research designs; and generated \approx \$1M in grants and contracts.

Community-Facing Initiatives: The lab serves as a model for institutions committed to best practice in comprehensive, groundbreaking research education. Because of this, over 100,000 scholars, students, and community leaders from 165 countries have

³ <https://libguides.kennesaw.edu/IRML>

⁴ https://irml.kennesaw.edu/instructional-resources/virtual_tour.php

⁵ https://irml.kennesaw.edu/instructional-resources/lesson_plans.php

⁶ <https://hopscotchmodel.com/4-teachers/>

⁷ <https://hopscotchmodel.com/4-sotl/>

virtually visited and/or used Hopscotch, the IRML's core open-access tool, for the development of research designs. The lab has broken the barrier of academic function with its accessible purpose and determination to support others as they thoughtfully engage in problem solving and inquiry. Leaders from many spheres have utilized the lab and its team for guidance, collaboration, and improvement (i.e. UL Solutions; Georgia Department of Education; Metro Atlanta Chamber of Commerce; Google; Cobb County School District; The Georgia Aquarium; United Way of Greater Atlanta; Atlanta Mayor's Office, etc).

Assessment and Continuous Improvement: The IRML is committed to excellence in the development of communities and resources that support faculty, staff, and student engagement with research; assessment measures are embedded in training, tools, and engagement experiences, and utilized to evaluate overall lab quality. The physical and virtual spaces, resources, and experiences are measured through quantitative and qualitative protocols. Data collected through surveys, community conversation, observation, and targeted issue analysis continually inform, direct, and inspire the ongoing process of close commitment to quality and innovation.

The IRML emerged from the assessed need for local and virtual community connected to educational research. As such, there is a deep commitment of the lab to function as a space of ongoing assessment of current needs, interests, and resources for continual improvement. With primary focus on excellence in research, the lab serves as a responsive catalyst continually identifying needs through multiple measures and working to create exceptional responses to those needs. An iterative and adaptable approach is used to select activities, ensuring the needs of college faculty, staff, and students are held paramount. Universities and communities are now using the lab as a model of best practice, and creating branches at their own universities. Award-winning research and external partnerships are points of pride. The lab continues to engage in active, ongoing assessment so that it can remain committed to excellence in research, understand current needs, and integrate innovative practices.

Summary: As a university that has transformed in scope and degree offerings, the lab provides a space that each member of the community has equal access to understand how research is designed and conceptualize what it looks like in practice. With deepest respect for and appreciation of the university support, the lab embodies what is meant by student centered and research-driven at the foundational level. The IRML remains dedicated to excellence in service to students, faculty, staff and local and global community.

FACT SHEET

Creation: The Interactive Research Methods Lab was formally launched in the Bagwell College of Education in Fall 2019, a little less than a year after Kennesaw State University was recognized by the Carnegie classification as a doctoral university with high research activity, or an R2 university. The lab offers a physical interactive space located in rooms 403 and 404 of the Bagwell Education Building, as well as a virtual interactive space. Both spaces are intended to help users (students and faculty) develop well-informed research designs.



Leadership: The IRML is formed by a diverse (2 male and 9 female faculty, 3 of them Latinx, 2 Asian, 1 Black, and 5 white) and interdisciplinary group of eleven faculty (3 full professors, 7 associate professors, and 1 assistant professor), a graduate education librarian, a grants & special projects manager, and a varying number of graduate research assistants (depending on active grants and projects).

Teaching

- 1,000+ students & 100+ faculty have used the IRML.
- 17 courses across campus have used the IRML
- ≈2,500 Research designs have been generated using Hopscotch.
- The IRML has hosted two editions of the “Bagwell College Student Scholars Expo” in 2021 & 2022.
- The last 4 recipients of the “Bagwell College Outstanding Dissertation Award” used Hopscotch as the methodological basis for their dissertations.

Professional Development

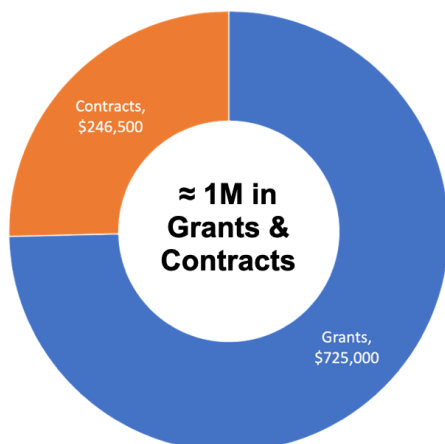
The IRML has hosted:

- 25 Methodological workshops
- 16 Research Consortium Write Days
- 30 full-day retreats with school districts, NGOs, corporations, and public organizations.
- The IRML has hosted the inaugural edition of the Bagwell College Research Week (October, 2022) with 75+ contributions from faculty, graduate, and undergraduate students

Partnerships

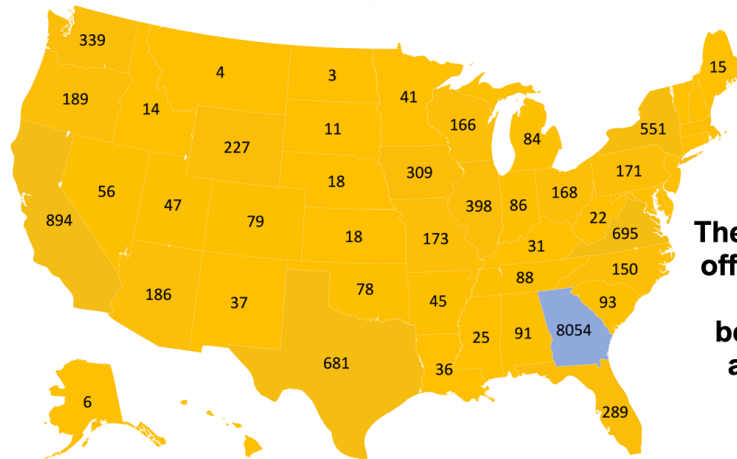


Grants & Contracts

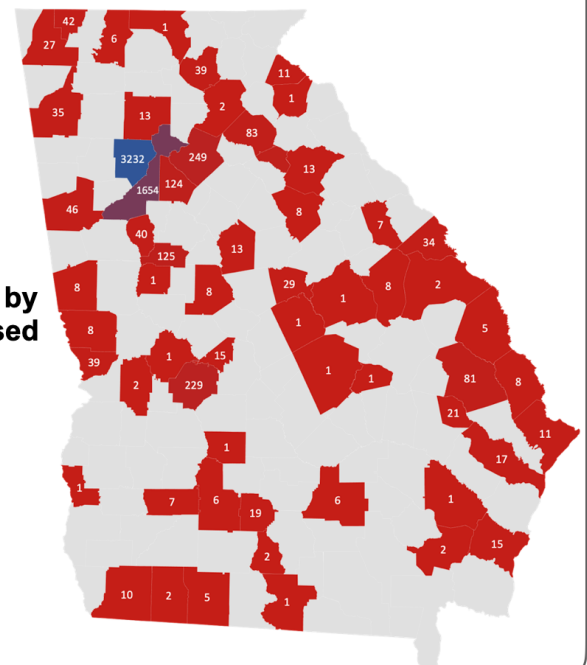


“Glocal” (global & local) Impact of the IRML

Hopscotch | ≈ 100,000 users in 200 different countries
IRML’s 360 Virtual Tour | ≈ 6,200 users in 50 different countries



The resources offered by the IRML have been used in all 50 states



The resources offered by the IRML have been used by 8,000+ users in 76 counties in Georgia

Collection of Evidence: Innovative Teaching Resources Developed in the IRML
IRML's Virtual Space: The Interactive Research Methods Lab offers an open-access virtual space with a number of OER that can be accessed by students anytime-anywhere. Among them, it is worth mentioning its 360 virtual tour¹ (see figure 1) that provides students and faculty with augmented reality (AR) interactive self-paced resources that accompany the process of generating well-informed research designs.



Figure 1: 360 Virtual tour of the IRML

The 360 virtual tour has already been used by 6,000 users in 53 countries all over the world. 4,965 out of the 6,000 users have accessed the interactive resources offered from thirty-eight different cities/locations in the state of Georgia (see figure 2).

The walls of both the physical and the 360 virtual tour of the lab offer interactive AR content that describes the purpose of the step, directs users to watch brief overview videos about each topic, provides scaffolded resources, and asks users to respond to a culminating question (e.g., “Are you ready to define your research topic?”). The answers, provided in both textual and multimedia fashion, are collected on a virtual “wall” by the Metaverse system. User responses are then projected on the main screen in the IRML, thereby promoting active discussion and reflective thinking about the methodological choices being made.

¹ https://irml.kennesaw.edu/instructional-resources/virtual_tour.php

6,000 users of the IRML's 360 Virtual tour in 53 countries



4,965 users of the IRML's 360 Virtual tour in Georgia

City	Users	City	Users	City	Users
Kennesaw	2,636	Jefferson	11	Hamilton	3
Smyrna	934	Macon	10	Pelham	3
Alpharetta	833	Chickamauga	9	Monticello	3
Dallas	103	Ball Ground	9	Milledgeville	3
Lawrenceville	94	Albany	8	Rome	2
Athens	45	Mount Berry	6	Crawford	2
Lithonia	37	Cumming	6	Eatonton	2
Peachtree City	36	Toccoa	6	Evans	2
Riverdale	30	LaGrange	5	Wrens	2
Savannah	30	Columbus	5	Statesboro	2
Carrollton	23	Warner Robins	5	Brunswick	2
Dalton	18	Augusta	5	Summerville; Franklin;	
McDonough	17	Blairsville	4	Chatsworth; Waleska;	
				Bainbridge; Thomaston;	14
				Forsyth; Hiawassee; Tifton;	
				Valdosta; Royston; Douglas;	
				Nahunta; Hinesville	

Figure 2: 4,965 Users of the IRML's 360 virtual tour in Georgia

Interactive open-access Lesson plans: Lesson plans have been co-developed in collaboration with the instructors of the seventeen undergraduate and graduate courses that are currently using the IRML or its resources. The co-design of each lesson plan involved at least one member of the IRML and one faculty member who would be teaching the lesson. The complete co-design process for each lesson plan takes approximately two weeks, including both face-to-face and virtual collaborative work. The generated open-access lesson plans are intended for audiences in a variety of graduate (i.e., EDRS 9100 Advanced Qualitative Research Methods , EDL 9330 Comparative Education , EDRS 9300 Conceptual Frameworks & Research Design) and

undergraduate courses (i.e., HS 4900 Senior Capstone in Human Services, ARCH 4117 Thesis Preparation, ART 6020 Methods, Theory, & Criticism) and student organizations (i.e., Black Teachers Matter, Pláticas con Maestr@s). Table 1 summarizes a set of five lesson plans that have been co-developed and implemented across colleges. The open nature of the lessons contribute to the affordability of the courses.

Title	Level, College & Course	Description & Link
Developing Students' Mathematics Identities and Belongingness	Undergraduate Bagwell College of Education	Lesson plan co-developed with Dr. Lateefah Id-Deen (Associate Professor of Elementary Mathematics Education. Kennesaw State University). The aim of the lesson plan is to help undergraduate students to collaboratively develop a research design to study how to better design mathematics lesson plans attending to students' mathematics identities and belongingness. Link to lesson plan ² .
Bachelor of Architecture Thesis Preparation	Undergraduate College of Architecture and Construction Management ARCH 4117 Thesis Preparation	Lesson plan co-developed with Drs. Arash Soleimani (Professor of Architecture) and Edwin Akins (Chair of the Architecture Department) with the aim of assisting students in the development of the research designs for their Bachelor theses. Link to lesson plan ³
Human Service Capstone	Undergraduate WellStar College of Health and Human Services HS 4900 Senior Capstone (Bachelor of Science in Human Services)	Lesson plan co-developed with Dr. Darlene Rodriguez- Schaefer (Associate Professor of Social Work and Human Services) with the aim of helping undergraduate students to collaboratively reach a deep understanding of the key elements that should be included in methodologically-sound research designs. Link to lesson plan ⁴
Developing a Visual Representation of your	Graduate Bagwell College of Education	Lesson plan co-developed with Dr. Iván Jorrín (Professor of Educational Research at Kennesaw State University) with the aim of helping students to collaboratively develop a

² <https://view.genial.ly/5f33ff38921efb0d782d6a1b>

³ <https://view.genial.ly/624f2471625aad0012d040a5>

⁴ <https://view.genial.ly/5f43f5297dca940db04cfe03>

Conceptual Framework	EDRS 9300 Conceptual Frameworks & Research Design	visual representation of the key elements of the conceptual frameworks for their dissertation studies. Link to lesson plan ⁵
Methods, Theory, & Criticism	Graduate College of the Arts ART 6020 Methods, Theory, & Criticism	Art 6020 is a research methods course developed by Dr. April Munson (Professor of Art Education) that uses both Hopscotch and the resources offered by the IRML across its modules.

Table 1: Summary of lesson plans co-developed across colleges

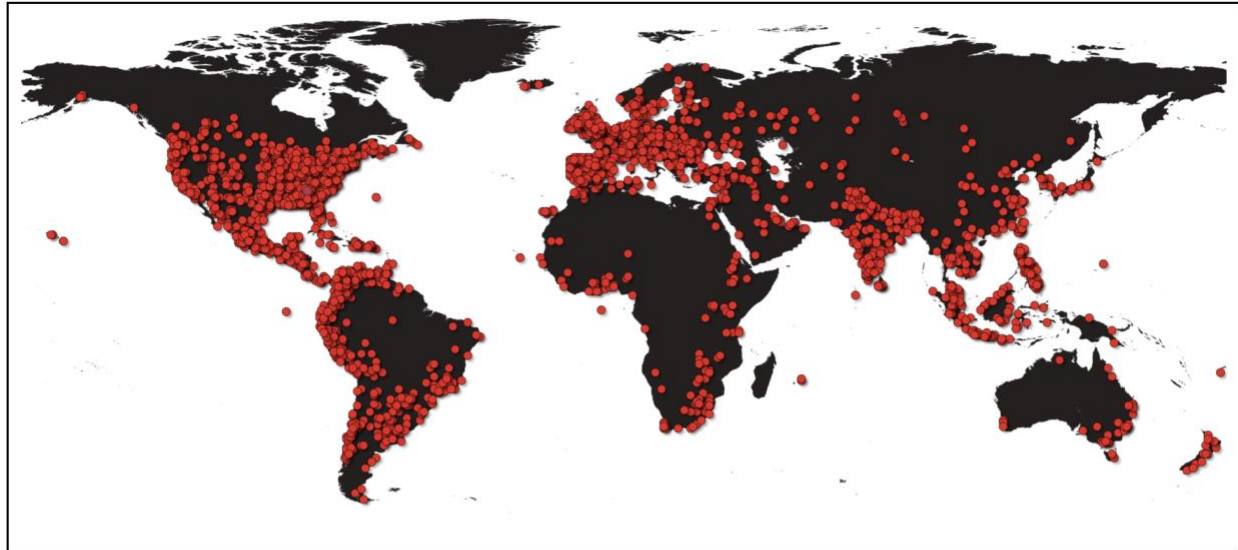
A detailed description of the process followed in the co-development of lesson plans in the IRML is described in the following article that was published in a special issue of EDUTEC International Journal in 2020: Jorrín-Abellán, I. M., Vasquez, A., & Gaines, R. E. (2020). Co-designing Research Methods Lesson Plans in the Interactive Research Methods Lab. *Edutec. Revista Electrónica De Tecnología Educativa*, (74), 51-71. <https://doi.org/10.21556/edutec.2020.74.1797>

Hopscotch: A key resource of the IRML is Hopscotch; the theoretical model and webtool used in the lab to help students generate their research designs in an interactive fashion. As represented in figure 3, Hopscotch has been used not only by students and faculty at KSU, but globally. So far the webtool has over 100,000 users from 200 countries. Moreover, it has been used by 16,699 individuals in all 50 states of the country, as well as by over 8,000 users in 76 counties in Georgia. Figure 4 shows the 2,331 complete designs that have been generated using Hopscotch. Moreover, it also shows the over 1,000 users of the two newly developed versions of Hopscotch: Hopscotch 4-Teachers and Hopscotch 4-SoTL. The aim of Hopscotch 4-Teachers⁶ is to provide teachers with a tool to assist them in designing a thorough inquiry process to promote the systematic collection, analysis, examination, and interpretation of data to inform practice and policy in educational settings. The aim of Hopscotch 4-Scholarship of Teaching and Learning⁷ (SoTL) is to provide faculty with a tool to assist them in designing a thorough inquiry process to promote the development of a SoTL design. The tool has been developed in collaboration with the Center for Excellence in Teaching and Learning (Kennesaw State University) and has been used extensively by faculty pursuing excellence in their teaching practices.

⁵ <https://view.genial.ly/5f89ab34b7ebc30d1464607a>

⁶ <https://hopscotchmodel.com/4-teachers/>

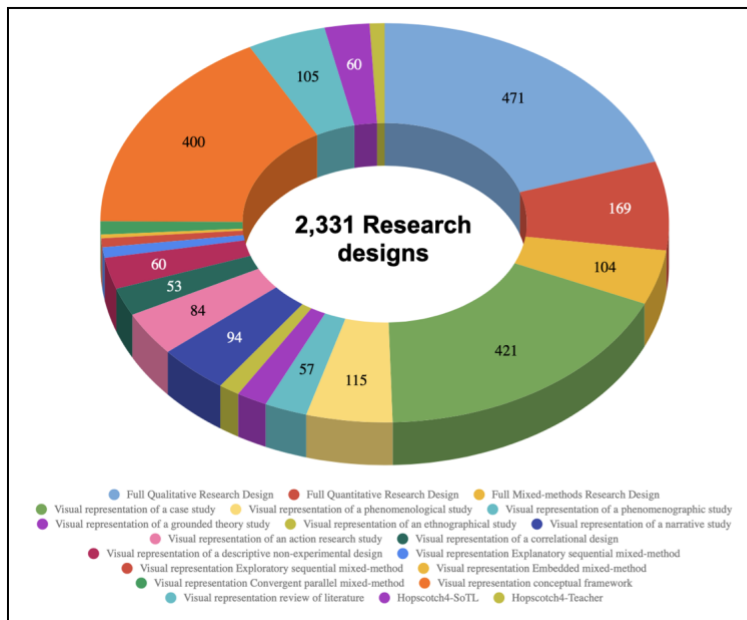
⁷ <https://hopscotchmodel.com/4-sotl/>



No.	Country	Last Visit	Percent & Number of Visits
1	United States	Wed Nov 2, 2022 18:19:51	36.29% 16,699
2	Spain	Wed Nov 2, 2022 14:16:08	13.46% 6,192
3	Indonesia	Tue Nov 1, 2022 20:56:29	5.59% 2,570
4	Colombia	Wed Nov 2, 2022 16:11:26	4.46% 2,050
5	Peru	Wed Nov 2, 2022 14:29:55	4.20% 1,934
6	Ecuador	Tue Nov 1, 2022 22:01:50	3.61% 1,661
7	United Kingdom	Tue Nov 1, 2022 13:02:35	2.32% 1,069
8	India	Wed Nov 2, 2022 13:18:05	2.22% 1,021

No.	Subdivision	Last Visit	Percent & Number of Visits
1	Georgia	Wed Nov 2, 2022 18:19:51	49.34% 8,239
2	Florida	Wed Nov 2, 2022 17:09:09	6.23% 1,040
3	California	Sat Oct 29, 2022 15:26:19	5.43% 907
4	Virginia	Tue Nov 1, 2022 12:45:35	4.26% 712
5	Texas	Sun Oct 30, 2022 19:41:04	4.20% 702
6	New York	Fri Sept 23, 2022 18:44:42	3.30% 551
7	Illinois	Wed Nov 2, 2022 14:15:53	2.41% 402
8	Washington	Mon Oct 31, 2022 14:30:40	2.38% 398

Figure 3: Distribution of users of Hopscotch



Hopscotch 4-Teachers

Hopscotch 4-SoTL

Over 1,000 users of the newly developed versions of Hopscotch

Figure 4: Research design generated using Hopscotch & Users of new versions

Collection of Evidence: High-Impact Student Learning Experiences

Table 2 shows examples of the high-impact practices that are promoted in the IRML with the aim of ensuring student success. Teaching excellence through innovation, affordability of the learning resources, as well as the promotion of diversity, equity and inclusion are structural pillars of the experiences promoted by the IRML.

Personalization of teaching and learning	Members of the IRML collaborate with faculty interested in using the lab in their courses, in the co-development of personalized, interactive, and open access lesson plans tailored to the particularities of their courses, and the needs of the students taking them. Check examples ⁸
Out-of-class activities	The IRML offers workshops and discussion sessions to complement what undergraduate and graduate students learn in their formal courses. For instance, each semester our graduate librarian offers a series of literature review webinars for doctoral students who are working on their research proposals.
Experiences with diversity	The IRML has promoted the development of personalized lesson plans deeply focused on diversity issues that are affecting the teaching profession. Good examples can be found in the following lessons plans: -Developing Students' Mathematics Identities and belongingness ⁹ . -Black Students Matter ¹⁰ .
Frequent, timely, and constructive feedback	The Hopscotch framework helps students develop well-informed research designs using an interactive and recursive process that is mediated by the extensive feedback provided by faculty to the evolving versions of the research designs they generate using Hopscotch.
Public demonstration of competence	Two editions of the Bagwell College Students Scholars Expo have been hosted in the IRML in Fall 2021 and 2022 ¹¹ . 25 Students (15 graduate and 10 undergraduate) have publicly shared their research studies.

Table 2: Examples of High-impact practices promoted in the IRML

These high-impact practices have not only be conducted in the Bagwell College of Education. Figure 5 offers a summary of the courses and initiatives across campus that have adopted the resources developed in/by the IRML.

⁸ https://irml.kennesaw.edu/instructional-resources/lesson_plans.php

⁹ <https://view.genial.ly/5f33ff38921efb0d782d6a1b>

¹⁰ <https://view.genial.ly/5f43f4e648c0c40d909ffba6>

¹¹ <https://bagwell.kennesaw.edu/research/research-week.php>

In formal Graduate Courses	In formal Undergraduate Courses	Diverse Student groups
<p>Bagwell College of Education EDSM 8901 Trends and Issues in Secondary and Middle Grades Education: Introduction to Applied Capstone Project</p> <p>EDL 9330 Comparative Education</p> <p>EDRS 9300 Conceptual Frameworks & Research Design</p> <p>EDRS 8100:Qualitative Research I</p> <p>EDRS 8200:Quantitative Research I</p> <p>EDRS 9100 Advanced Qualitative Methods</p> <p>EDRS 9200 Advanced Quantitative Methods</p>	<p>Honors College HON 1100 Introduction to Honors Education</p> <p>College of Architecture and Construction Management ARCH 4117 Thesis Preparation</p> <p>Wellstar College of Health and Human Services HS 4900 Senior Capstone (Bachelor of Science in Human Services)</p>	<p>Bagwell College of Education</p> <p>Black Students Matter (Undergraduate Research Group)</p> <p>Mathematics Identities and Belongingness Group (Undergraduate Research Group)</p> <p>Pláticas with Latinx Students</p> <p>Bagwell Ambassadors</p>
<p>College of the Arts ART 6020: Methods, Theory, & Criticism. MA in Art & Design. College of the Arts</p>	<p>Vertically Integrated Project RES 4000 Supporting Multilingual, Immigrant-Origin Students</p>	

Figure 5: Summary of courses that have adopted the resources developed in the IRML

Both faculty and students are asked to voluntarily fill out a survey after having formally used the IRML. Figure 6 offers a few examples of the very positive comments that are usually shared after experiencing first-hand the innovative nature of the lab.

Student Evaluative Comments	Faculty Evaluative Comments
<p>Research is a messy process- love to have a new approach to interacting with it and better my skills.</p> <p>The class was invaluable in directing us towards an understanding of literature review.</p> <p>The lab was filled with helpful resources</p> <p>Very user-friendly and informative</p> <p>Major strengths of this course (EDRS 9300) are the Hopscotch Model and the IRML. It also really helps that the instructor is well-versed in research methods and deeply understands both qual and quant research. It's vital to take this course, with this professor.</p>	<p>My students indicated to me they wish they had come to the lab sooner. I will keep this in mind when I teach future classes as this can help them as they move through our grad programs.</p> <p>The technology is incredible, members of the lab took time to work with our students. Our students were very engaged, and I think they understand their research design well now.</p> <p>The IRML's space is fantastic - it feels like the researcher is immersed in the experience. Additionally, the expertise of the RCC faculty members is incredibly helpful. My study is much stronger after utilizing the RCC and the IRML in particular.</p>

Figure 6: Summary of comments offered by students and faculty after using the IRML

Collection of Evidence: Impact on Student Learning

Tables 3 and 4, present examples of the deep impact that the IRML is having in our graduate and undergraduate students.

Testimonial from Dr. Tiffany Post, former doctoral student
<p><i><u>“The IRML - aka The Magic Lab - was instrumental in the completion of my dissertation and is a place that I have suggested to many students from KSU and other USG institutions alike. [...] The IRML is where I truly honed my research capabilities and built my confidence as a researcher. Indeed, due to it (and its creator of course), I feel as confident in my expertise in research methods as I do in my content area. It deserves all of the rewards and should be replicated across more institutions.”</u></i></p>
Testimonial from Dr. Michael Bennett, former doctoral student
<p><i>“While my coursework was winding down, I had one more opportunity to take a class with Dr. Abellan (founder of the IRML). This course would prove to be very challenging as it was the preview course for submitting my dissertation proposal. But I was adrift. While I knew what I wanted to pursue in my study, I had no idea how I was going to structure my study. Dr. Abellan announced that we would be meeting in a voluntary night session in the newly-created Interactive Research Methods Lab (IRML). <u>What I didn’t know was it would be that night when my entire academic career would change.</u> [...] The evening began as normal and we were working within the space, surrounded by interactive models of research designs, and augmented reality codes that provided tutorials and the walls that could be written on. At the end of the class, we stood to present our work for feedback. I slowly walked to the front of the class and then...IT happened. <u>For the first time, I saw my research design, my study, I saw it all. It was that moment when I knew I was going to make it.</u>”</i></p>

Table 3: Testimonials from graduate students

Testimonial from Jaia Isbell. Former undergraduate student and fourth grade teacher at Sarah Smith Elementary School
<p><i>“While a senior at Kennesaw State University (KSU), I had the honor of working on Dr. Id-Deen’s research team where we conducted and engaged in research at the undergraduate level. Dr. Id-Deen’s research study on the cultivation of belongingness in the mathematics classroom gave me the opportunity to find new meaning in the term research while at KSU. <u>Working alongside like-minded individuals in the IRML research lab provided me the space to share my ideas and learn from similar shared</u></i></p>

experiences. When I first started, I had no idea what conducting research can look like. I was also intimidated by the process because it seemed so difficult. However, the simplistic steps of the research process outlined in the lab was very helpful. I also grew a newfound interest and connection to scholarly articles that relate to the inner workings and intersectionality of Black female educators. Working in the lab reaffirmed my belief that I will never stop learning. In fact, I will be starting my Master's degree next fall and plan to continue to engage in research. I know I am capable to conducting research because of my time in the Interactive Research Methods Lab."

Table 4: Testimonial from an undergraduate student

The three excerpts presented above highlight the game-changing nature of the learning experiences that undergraduate and graduate students have in the IRML.

Another example of the impact that the practices promoted by the IRML are having in better preparing our students, can be seen in the fact that the last 4 recipients of the “Bagwell College Outstanding Dissertation Award¹²” used Hopscotch and the resources offered by the lab as the methodological basis for their dissertations:

- Dr. Adib Shakir (2021 BCOE Outstanding Dissertation Award)
- Dr. Osman Khan (2020 BCOE Outstanding Dissertation Award)
- Dr. Rebecca Myers (2019 BCOE Outstanding Dissertation Award)
- Dr. Leslie Purreau (2018 BCOE Outstanding Dissertation Award)

Collection of Evidence: Impact on Faculty

Faculty across campus have also benefited from using the lab. Table 5 summarizes the testimonial of a Mathematics Education faculty who has extensively used the IRML for research purposes.

Testimonial from a faculty member in the Bagwell College of Education

"Having been in the IRML for Write Days and seen demonstrations of the lab, I was captivated by its capabilities. Honestly, I was at first intimidated to seek services in the lab. I wondered if my research skills were strong enough to even participate in the process. However, what I found was that working with a methodologist and the lab facilities simplified the process and made my work easier. Designing the study in collaboration with the IRML lab and staff allowed me to sail through the Institutional Review Board (IRB) process and begin my data collection quickly. Once I had data, I

¹² <https://digitalcommons.kennesaw.edu/outstandingBCOE/>

worked with IRML faculty to use the qualitative data analysis software, Atlas ti, for analysis. Although I had used the software before for previous research, our methodologist helped us use the power of the software way beyond the level I had used it with previous research. We are still analyzing data but have already had success with disseminating our work. We have presented at one national conference and have been accepted to present at two other national conferences in January and February, 2023. We have a paper under review to present at a premier conference in education in April, 2023, and a book chapter under review for a book to be published by Information Age. We will be working on 3 peer-reviewed journal articles in the upcoming year. Ultimately, we plan to write a book about this project. I credit most of the success of our collaboration with IRML and its founder, Dr. Iván Jorrín Abellán. I recall the first time I sat in the first version of the IRML for a demonstration of its capabilities. The people in the room were nearly speechless. This, from a very vocal faculty! One person finally spoke and said, “this is just next level.” That was a perfect description of what we saw. It was not unlike seeing the first commercials for the iPhone—“there’s an app for that.” When it comes to teaching research, “there’s an IRML for that.” Whether you award IRML or not, I encourage you to find out more about it. Come for a tour!”

Table 5: Testimonial from Dr. Wendy Sanchez. Professor of Mathematics Education. Department of Secondary and Middle Grades Education

The impact that the lab is having on faculty can also be derived from the professional development activities that are continually offered. Table 6 shows a brief summary of some of the professional development activities that have been developed for faculty.

Type	Examples
Methodological workshops	<ul style="list-style-type: none"> -Workshop on the Creation of Research Profiles¹³ (4/02/2021) -Workshop on the Creation of Research Profiles¹⁴ (2/19/2021) -Workshop on the Creation of Research Profiles¹⁵ (10/21/2022) -Create your Digital Commons SelectedWorks profile¹⁶ (ongoing self-paced workshop) -Create your faculty web page using Omni Update¹⁷ (ongoing self-paced workshop)

¹³ <https://view.genial.ly/605f380aec182f0d797f0caf>

¹⁴ <https://view.genial.ly/602e70ddb84c220da30953aa>

¹⁵ <https://view.genial.ly/63507aa499e82c00146ec81c>

¹⁶ <https://view.genial.ly/5fdf8f4f27bf8b0d62c27504>

¹⁷ <https://view.genial.ly/5fdf8d97b818e30d5b60bff4>

	<ul style="list-style-type: none"> -How to Create your Google Scholar profile¹⁸ (ongoing self-paced workshop) -How to create your ORCID profile¹⁹ (ongoing self-paced workshop) -How to create your Research Gate profile²⁰ (ongoing self-paced workshop)
<p>Facilitation of the work of research teams in the Bagwell College of Education</p>	<p>Research Teams 2021:</p> <ul style="list-style-type: none"> -Research Team: Belonging: Beyond Fitting In: Drs. Ann Bennett, Darolyn Flaggs, Alison Hedrick, Amy Hillen, Belinda Edwards, Wendy Sanchez -Research Team: STEM for Justice: Drs. Belinda P. Edwards, Michael Dias, Laurie Brantley-Dias, Tiffany Roman, Mars Berwanger, Amanda Barrett -Research Team: Personalized Learning Research: Drs. Dabae Lee, Laurie Dias, Yeol Huh -Research Team: CT for Teacher Education Research Team: Drs. Yi Jin; Jason Harron, Selena He <p>Research Teams 2022:</p> <ul style="list-style-type: none"> -Cyclical Graduate Program Improvements: Drs. Megan Adams, Rachel Gaines, Anete Vasquez, and Corrie Tuttle -Black Women School Leaders Research Collective: Drs. Sheryl Croft, Chinasa Elue, Brandi Hinnant-Crawford, Miyoshi Juergensen, and Tamela Thomas -Teacher Emotions, Stress, Coping & Attrition (TESCA): Drs. Rachel E. Gaines, Mei-Lin Chang, and Kristen C. Mosley -The Higher Education and Student Affairs (HESA) Research Team: Drs. Jennifer Wells, Nicholas Clegorne, Chinasa Elue, and Cara Ray

Table 6: PD offered by the IRML

In the IRML, we define quality in terms of the development of communities and resources that support faculty, staff, and student engagement with research methods education. We have intentionally allowed the activities in IRML to grow organically, allowing the lab, itself, to serve as an ongoing assessment of current needs, interests,

¹⁸ <https://view.genial.ly/5fdf8e7e27bf8b0d62c274fd>
¹⁹ <https://view.genial.ly/5fdf8e0827bf8b0d62c274fb>
²⁰ <https://view.genial.ly/5fdf8eeb27bf8b0d62c27501>

and resources. This iterative and adaptable approach to our selection of activities, ensuring the needs of College faculty, staff, and students are held paramount.

For example, when our members expressed an interest in internally sharing and disseminating their scholarship, and the scholarship produced in collaboration with their students, we created a Research Week²¹. The inaugural edition of this week-long celebration of research (October 24th to 28th, 2022) included an exciting array of panel sessions, showcases and keynotes, providing faculty and students with an opportunity to share and discuss their research interests, agendas, and initiatives.

Collection of Evidence: Community Impact

The IRML has evidenced significant impact on internal, local, state, national and global communities. Committed to best practice, the lab currently serves as model of excellence inspiring action at other institutions. Two branches of the lab are actively being constructed at Universidad del Rosario (Colombia) and KSU's College of Computing and Software Engineering. Four additional versions are being negotiated or under development in collaboration with universities and/or research teams in Spain, Morocco, Uganda, and Brazil.

Schools districts are also deeply interested in using the resources and interactive framework offered by the lab to promote innovative teaching and learning practices. Proof of this can be found in the retreats offered in the last months with teachers and administrators: Cobb County's Office of School Leadership Team (6/14/2022); Fulton Leadership Academy (7/22/2022); Cobb County's School District Division of Teaching & Learning (8/30/2022); Supervisors, Advanced Learning at Cobb County School District (9/16/2022); Rockdale County Public Schools (9/27/2022); Cherokee County Science, AP Capstone, and ELA teachers (10/10/2022), etc. Moreover, the IRML has signed a partnership with the Georgia Department of Education to help develop a rubric for the new teacher induction program to be implemented this year statewide. Table 7 shows testimonials from community partners that have experienced the value offered by the IRML.

Testimonial from Dr. Sally Creel. S.T.E.M. and Innovation Supervisor. Cobb County Schools. Division of Teaching and Learning

"We are very excited about the potential impact of this emerging partnership between Cobb Schools and the IRML using HOPSCOTCH for Students. Our initial conversations have been around using HOPSCOTCH with students conducting

²¹ <https://bagwell.kennesaw.edu/research/research-week.php>

advanced academic research in our STEM Schools. The practices pioneered in the IRML will be invaluable in improving the quality and validity of our student research projects. Dr. Abellan has arranged for multiple departments from Cobb Schools to visit the lab and experience HOPSCOTCH firsthand. This inclusive approach and willingness to partner is so refreshing. This is a game changing collaborative open-source approach that ensures these resources are available to ANYONE looking to conduct research. I am unaware of any other university applying this method. Most other programs would be looking to monetize the resources."

Testimonial from Dr. Heather Bilton. Teacher Induction Specialist for the Georgia Department of Education

"Under the leadership and guidance of Dean Epps and Dr. Jorin-Abellan, the IRML Hopscotch approach has been instrumental in guiding GTICP pilot process and continues to help the pilot districts and GaDOE, in collaboration with other state agencies, including the Governor's Office of Student Achievement, the University System of Georgia, the Georgia Professional Standards Commission, and Regional Education Service Agencies, think through best practices in research methodologies. The IRML has guided the GTICP pilot to thoughtfully engage in problem solving and inquiry to fit the challenges of providing an induction certification program that would be a fit for the myriad of school districts and their resources across Georgia. The assistance of IRML has been critical to ensure all thirty-eight school districts, which represent over 200 school districts in Georgia, be heard in the development of the GTICP."

Table 7: Testimonials from community partners

Finally, the IRML has recently signed contracts with prestigious corporations like Google and UL Research Institutes. The final two pages of this application package include two letters of support provided by these previous organizations.

Letter of Support from Google

Google LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043



Main 650 253.0000
Fax 650 253.0001
www.google.com

Oct 7, 2022

Iván M. Jorrín Abellán, Ph. D.
Interactive Research Methods Lab
Bagwell College of Education
580 Parliament Garden Way. Room BEB 403
Kennesaw, GA 30144

Dear Dr. Abellán:

Please accept this note in support of the Interactive Research Methods Lab's (IRML) nomination for the Regents' Teaching Excellence Award. While I'm offering support in my capacity at Google, I am a former Director of the STEM Initiative for the University System of Georgia. As such, I understand the prestige of this award and the catalytic significance of winning it.

Your introduction of IRML to me and my colleagues at Google made it clear that the premise and impact of the lab are transformational. As Google and our peers grow in metro-Atlanta, one of our key priorities is to democratize computing - to make this critical skill available to all students.

Your vision, and that of Dean Epps, of positioning IRML and the Bagwell School as key elements in the transformation of education in the region is inspiring. Your ability to harness and make public, research methods and innovative pedagogical techniques from around the world is a value add in the areas of teaching, learning and curricular development. That is not only a benefit to KSU and the USG, it is a benefit to the region.

In our interaction with campuses, your Hopscotch methodology and advanced operationalization of innovative pedagogical techniques is unique. The fact that you and your colleagues have intentionally made all of your resources open source demonstrates your commitment to democratic principles of education and clear alignment with the University System's mission, *to create it through research, transfer it through teaching and apply it through service.*

Google would strongly encourage PhDs studying at Kennesaw State University to apply for our internships (<http://www.google.com/intl/en/jobs/students/tech/internships/>). Further, Google will encourage our engineers and scientists to interact with the university through delivering technical talks, guest lectures and visits.

Dr. Abellán, on behalf of my colleagues at Google, we wish you and the IRML team the very best in pursuit of this award.

Sincerely,

A handwritten signature in black ink that reads "Kamau Bobb".

Kamau Bobb, PhD
Director, STEM Education Strategy

Letter of Support from UL Research Institutes



Discoveries in Safety™

October 11, 2022

Dear Selection Committee,

It is my pleasure to write this letter of support nominating the Interactive Research Methods Lab (IRML) at Kennesaw State University for the prestigious 2023 Regents' Teaching Excellence Award for Department or Program.

I am the director of the Office of Research Experiences and Education (OREE) and UL Research Institutes. I am also a former education researcher and evaluator. Immediately upon meeting Dr. Jorrín-Abellán, I was struck by the sound instructive approach that Hopscotch offers to students and educators on quality study design.

Because of the rigor and quality of the IRML and the Hopscotch tool, we launched a new collaboration with the IRML to understand the outcomes and impacts of our STEM education resource through the community collaborations with the fire service and teachers, and implementation in Cobb and Cherokee County middle schools. As part of this collaboration, members of Cherokee and Cobb Counties attended a workshop in the IRML lab to inform the data sources and stakeholders for the evaluation. This participatory approach to the evaluation lends a more robust understanding of the community model as it exists today and the ways it can be scaled in the future.

The technology, research practices and team at the IRML are innovative by nature and grounded in the highest quality educational science. Because of this, the IRML is an ideal partner with which to collaborate on the Xplorlabs community model evaluation and, I believe, makes them an excellent candidate for this award.

With great fondness and appreciation,

A handwritten signature in black ink, appearing to read 'Kelly Keena', written over a light gray grid background.

Kelly Keena, PhD
Director
Office of Research Experiences & Education

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