

**Institution Name:** Illinois Institute of Technology, Paul V. Galvin Library

**Institution Characteristics:** The Illinois Institute of Technology is an engineering-focused university with a large international student population. The Paul V. Galvin Library is the primary library on campus, and serves both undergraduate and graduate students. The student body of IIT is roughly 6000 FTE while the staff at Galvin Library is 22 FTE.

**CARLI Counts Participants Name and Job Title:** Kristen Weischedel, Digital Resources Management Librarian

**Project Name:** Coding as Information Literacy: A Case Study

**Abstract:** In this study, we explore the benefits of teaching coding as a tenant of information literacy and its impact on student success and retention.

**Motivations for the Project:** With the increased need of computer literacy for professional success, the library has sought ways to contribute to said success. The importance of these skills are outlined in the Illinois Tech strategic plan, and a coding workshop would help further these initiatives. (IIT Strategic Plan, p. 20) Furthermore, the library strategic plan reaffirms these priorities, with Service & Teaching listed as a top strategic priority. (Library Strategic Plan, p. 4) Moreover, in 2021, Illinois Institute of Technology is set to open a new College of Computing, which demonstrates the importance of this work to the university. Thus, the purpose of this project is to investigate the impacts of coding workshops offered via the library, and should it be successful, advocate for similar programming to increase the academic success of our students.

Over the past decade, the research on coding and librarianship have targeted children and public library spaces or librarians themselves, rather than in an academic setting as a compliment to students' coursework. While many libraries have taken to adopting digital literacy strategies, in the published literature, this has not extended to coding literacy.

**Partners and Stakeholders:** In this exploratory study, the future College of Computing, Student Affairs, Student Success Committee, and library are all stakeholders. The Office of Institutional Information will be a partner in obtaining data.

**Inquiry Question:** How does coding instruction affect the academic success of participants?

**Study Participants/Population:** The workshops will be open to all students, however, we anticipate that undergraduate students will be the primary beneficiaries.

**Methods of Data Collection and Analysis:** A survey of participants will be conducted after the workshop. From this survey, de-identified A numbers (unique student and staff ID numbers) will be collected, which will be used to collect anonymized GPA, retention, and graduation rates of students. These figures will be compared to the general population with help from the Office of

Research. These surveys will also ask for feedback on the workshop itself, and the anticipated effectiveness. This data will be compared across sessions and semesters, to gauge the effectiveness.

**Findings:** Due to the disruption caused by the COVID-19 pandemic, there are no findings at this time.

**Use of Findings:** These findings will be used to improve library services, including but not limited to the allocation of staff time, resources, and the types of services provided by Galvin Library.

**Next Steps and Other Results:** When the campus reopens, these workshops will continue, the data will be collected, and analyzed appropriately.

**Additional Reflections:** Based on the surrounding literature, projects like this have not been implemented or studied on a grand scale. There is the chance to implement and assess this new learning opportunity.

**Timelines:** Unfortunately, due to the COVID pandemic, the timeline for this project is uncertain. Once implemented, data will be collected throughout the semester, and analyzed upon completion of the semester. This has the potential for long term tracking, and seeing how long the benefits of this type of instruction lasts.

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