

Ready to Code Phase II: Embedding RtC Concepts in LIS Curricula

American Library Association

Office for Information Technology Policy

In January 2017, ALA's Office for Information Technology Policy will launch *Ready to Code Phase II: Embedding RtC Concepts in LIS Curricula* (RtC Phase II), a year long project building on work accomplished through the 2016 *Libraries Ready to Code: Increasing CS Opportunities for Young People* project (RtC Phase I). RtC Phase II is also supported by Google Inc.

Summary of Ready to Code Phase I

RtC Phase I aimed to increase the capacity of youth librarians to design and implement CS learning experiences that introduce the fundamentals of coding and foster computational thinking skills. It introduced core concepts that help define the contribution libraries can make to extend the national and local investments already made in promoting CS opportunities for the nation's youth. RtC concepts include: libraries are core organizations to expose youth to computational thinking through coding; learning through libraries can positively influence youth and their community's perceptions of who can code; librarians can connect coding to youth interests opening pathways for youth to pursue CS education; and youth should have access to coding activities that promote computational thinking wherever they have opportunities to learn.

RtC Phase I identified several themes that should be addressed to increase the capacity of librarians to provide and/or facilitate coding programs through libraries while also increasing the pool of libraries that provide coding opportunities for youth. In particular, RtC findings suggest creating opportunity for librarians to develop deeper facilitation and teaching skills grounded in computational thinking design is a critical area for additional work. Through such opportunity, librarians will be better equipped to provide coding activities for youth that 1) increase exposure to and interest in coding, 2) change perceptions of who codes and increase affinity to coding activities among non-dominant youth, 3) build foundational computational thinking skills, and 4) help youth connect coding to non-computer science specific domains.

Ready to Code Phase II Key Concepts

RtC Phase I findings recommend focusing action on programs in Library and Information Science (LIS) schools for youth librarians. A critical path to addressing gaps in library capacity at scale is to infuse pre-service and in-service youth programs in LIS curricula with RtC concepts such that librarians develop an understanding of the importance of these concepts for youth throughout their learning journey. Further, pre-service and in-service librarians need access to coursework that prepares them to design and implement youth learning programs that will ensure library coding activities include RtC concepts which are the basis of ensuring libraries are "ready to code."

Ready to Code Phase II consists of three main parts 1) Form LIS Faculty cohort that will redesign their tech/media courses, 2) LIS faculty cohort pilots the newly redesigned tech/media

courses at their institutions, and 3) Synthesis of results and disseminate models of courses nationally. Faculty and their students will provide input throughout the project to the project team through faculty documentation, regular virtual meetings, a survey, student products, and other outreach mechanisms. This input will provide content for the final synthesis and recommendations for scaling in other LIS institutions.

Part I: The goal of Part 1 is to share what we have learned from the Phase 1 of RtC with a cohort of LIS faculty, and work with them to incorporate RtC concepts into their their tech/media course that will be taken by pre-service librarians planning to pursue a public library position in youth services or in-service librarians pursuing certification programs to learn new skills.

Part II: The goal of Part II is for faculty to pilot these courses at their institutions, solidify their syllabi and course activities, and be ready to model their syllabi to the rest of LIS institutions.

Part III: The goal of Part III will be to review these model courses created by the LIS faculty cohort, assess their effectiveness to infuse RtC core concepts, and disseminate these models widely.

Project Findings

A RtC researcher will synthesize all project findings and materials produced by faculty as well as select artifacts produced by students and generate a final report. The synthesis will focus on the effectiveness of the models in incorporating RtC concepts into curricula and develop recommendations for scaling the effective models across LIS institutions. Additionally, the RtC team will also package the model syllabi as case studies that will be shared via ALA's youth divisions and ALISE channels. Finally, the synthesis will make recommendations for building continuing education programs for in-service librarians.

Embedding RtC concepts in LIS education will exponentially increase the potential reach and impact of library coding programs that foster computational thinking among youth. In addition, successfully re-envisioned LIS programs for youth librarians will extend the ability of libraries to increase access, exposure, and interest in CS, especially among non-dominant youth.

For more information please contact:

Marijke Visser
Associate Director
Office for Information Technology Policy
American Library Association
mvisser@alawash.org

Mega Subramaniam, Ph.D.
Associate Professor
Associate Director Information Policy and
Access Center (iPAC)
College of Information Studies
University of Maryland
mmsubram@umd.edu