Notes and Updates

* American University, The NASA Space Grant Consortium, and the District of Columbia Public School System have collaboratively joined resources to introduce the exiting discipline of Data Science to teachers, students, and staff of the District of Columbia Public School System. A major objective is to extend exposure of Data Science to underserved student populations as well as the general student populations of the neighboring public school system.
* Key program initiatives are:
  + Offer matriculation opportunities to teachers of the DCPS system so that they can take 6 graduate credit hours (two courses) in Data Science that features R Programing
  + Offer summer and ongoing Professional Development to teachers and staff of DCPS system
  + Provide onsite dual enrollment experiences for students of the DCPS system at American University so that they can take Introductory Data Science courses
* The program originated through the effort and energy of Dr. Jane Wall who was assisted by Dr. James Dickens (both of American University). Dr. Nathan Harshman (the director NASA Space Grant Consortium) was also a key contributor to development of the joint Data Science inclusion effort.
* The key DCPS point and contact person for the program is Gabriel Cartagena (The Director of Mathematics and Computer Science for the DCPS system)
* The program support team at American University has grown to a number of eleven; that includes faculty members and college administrators.
* Currently (Spring semester 2021) Six public school teachers are taking the course DS 612 Introduction to R programing. Teachers are assigned to faculty advisors who offer additional support as needed. (Midterm reports indicated that the teachers were performing extremely well in the course. They are scheduled to take the second course DS 613 in the Fall semester of 2021.
* The first Data Science/R programing Professional Development for teachers and staff of the DCPS system is scheduled for the third week of July (12 – 14) this summer; 15 – 20 DCPS teachers and staff members are expected to participate
* The Professional Development will be delivered by AU faculty and AU Data Science Graduate students. (Graduate students have already expressed excitement about becoming involved with the effort)
* The Professional Development experience will feature and focus on a formal Introduction to Data Science and as well as an Introduction to elements of R programing.
* Plans are now underway to organize a dual enrollment experience for two or three DCPS students for the fall semester of 2021.
* Program collaboration partners also include UCLA and the Globe organization. The insight that these groups provide is highly beneficial for they are also currently involved with efforts to integrate Data Science into secondary education.
* Grant Writing and other efforts to maintain funding and support are now underway so that the program has a sustainable impact long term.
* The AU/DCPS/NASA Space Grant Consortium’s Data Science outreach effort to the DCPS is also documented in a recent article in the CHANCE journal:

The Data Science Public Schools Outreach Project: An Initiative for Diversity and Inclusion in Statistics CHANCE Volume 34, March James Dickens