



Computers to Youth 8.0

A New Approach to Mobile Electronics Reuse

Draft Proposal 1.13.20

CU's experience with redistributing computers for reuse dates to 2002, when the U.S. EPA funded the Environmental Center to develop opportunities across Colorado. Since then, CU has gained recognition for upcycling surplus computers to bridge the "digital divide", which exists when students are deprived of computer access to help them reach college.

The need is greater than ever:

- Colorado faces upcoming shortages of college graduates in STEM fields;
- students still enter college under-prepared with personal computing and access, which is often compounded by rising college costs;
- affluent students acquire new phones seasonally, and could at least donate "old" ones;
- a recent operational review at CU found new bins, more locations, centralized at the GROC for pick-up
- state and national campaigns are underway and need support to educate consumers to wipe and unlock phones;
- international reuse certification standards, best practices, and organizations are emerging for guidance as well as supportⁱ.

The CU Environmental Center proposes a multi-part Mobile Electronic Device (MED) Recovery Campaign to meet these needs. It brings old friends and colleagues together with a new group of eager college and high school students to continue to deliver benefits to CU's many publics.

The ECenter's prior experience in this field, strong partnerships with campus departments, and access to capital funding are great assets. The Wireless Alliance is a vital partner in the program by virtue of being one of the country's largest cell phone recyclers, with new local facilities, founded by CU alumni, with a long-standing operational relationship with CU Recycling. Together, the program is bound to succeed as early as Spring Semester, 2020, when a workplan can be finalized, funding plan activated, and programming tested.

Program Elements

1. New centralized collection system

- additional custom containers are sited at new locations including Housing and the Bookstore
- CU staff monitor, collect, and deliver mobile electronic devices (MEDs) to GROC for scheduled collection by the Wireless Alliance
- a portion of the unlocked MEDs from Wireless Alliance are returned for redistribution through Computers to Youth

2. Bi-annual outreach effort to reclaim old phones

- helps students who want to earn cash from selling their phone at staffed kiosks and drop-offs
- enables students who want to donate their phone to a deserving student
- campus-wide promotion around the need to unlock phonesⁱⁱ
- fieldtrips to CU's and Wireless Alliance facilities
- education around responsible electronics use and consumer support for producer responsibility and state and national right to repair campaignsⁱⁱⁱ

3. Redistribution through Computers to Youth 8.o

- assistance from the Wireless Alliance: field trips, campus lab set-up assistance, unlocked MEDs^{iv}
- involvement by HS faculty and college enrollment campaigns who support their students to visit CU to build, own, and use for college^v
- immersive experience at CU for small groups 3-5 of high school youth
- phones provided by the Wireless Alliance are tested, wiped, and bundled with PIPs and other apps.
- mentored by CU students who receive stipends/PIPs
- revised curriculum based on C2Y 2.0 - 7.0 series. Updated for mobile platforms.
- special case, cover, and pop-up provided



Goals/Outcomes

1. Computer literacy and achievement in STEM (Science, Technology, Engineering, and Math)

- ✓ students will be able own a mobile electronics devise (MED) that they recondition.
- ✓ students will be able to identify and understand key components, functionality
- ✓ optimize settings, install applications, configure open source and low-cost internet access

2. College achievement

- ✓ students will visit CU's campus, interact with student mentors, learn the benefits of higher education
- ✓ student's can express a knowledge of their mentor's background, path to college, and career aspirations
- ✓ students will learn how to gain access to resources that will help get them a higher education, consistent with statewide college campaigns

3. Environmental, community involvement

- ✓ students will know when and where to repair and ultimately recycle their MED.
- ✓ students will adjust their MED settings to help use less energy
- ✓ students will become fully capable of PIPs^{vi}
- ✓ students will learn of other ways to help the environment and take these instructions back to their schools and communities
- ✓ program will be documented for improvement, recognition, and case study promotion

4. CU Student development

- ✓ internships will be available to develop the program as early as Spring semester 2020
- ✓ funds will be raised to pay college student mentors who learn MED upcycling, teach from C2Y curriculum
- ✓ possible employment base for Wireless Alliance, other tech company recruitment
- ✓ PIPs points will be earned by CU interns, mentors, and volunteers for the program

ⁱ International R2 Certification Group: [Sustainable Electronics](#)

ⁱⁱ The recovery process and need for proper disposal for reuse or recycling [April, 2019 media coverage:](#)

ⁱⁱⁱ [Campaigns to unlock phones:](#)

^{iv} [Colorado College Enrollment Campaigns](#)

<http://directory.coloradoscholarshipinitiative.org/>

^v [CU Office of Diversity, Equity, and Community Engagement \(ODECE\)](#)^v

^{vi} [Positive Impact Points](#) - are earned and redeemed for verifiable daily life behaviors that benefit the planet, community and personal health.