

Delivering

Automated Materials Handling for Staff and Patrons

Carole Williams

“You’ve made libraries cool again!” “Wow- super techie—we’re fascinated by the book return!” With enthusiastic comments like these from our visitors, the staff at Charleston County Public Library (CCPL) knew that we were delivering patron engagement while providing an effective book return system. Thanks to county residents overwhelmingly approving a referendum to build five new libraries and renovate thirteen others. From June 2019–November 2020 Charleston County opened four new library branches, each with an Automated Materials Handler (AMH), and moved our support and administrative staff into a renovated Support Services building that now houses a 32-chute AMH central sorter with smart transit check-in technology. (Side note: Yes, I know what you’re thinking and yes, we did, we opened two of the new branches during the pandemic—definitely fodder for another article.) The branch AMHs have interior and exterior return windows and sit along a glass wall so patrons can watch their items ride the conveyor belts and drop into sorting bins. The staff side has an inductor for items being returned from or sent to other branches, so there is almost always something for the public to watch (see figure 1). Men, women, children, young and old enjoy watching the AMH and asking questions. Some patrons bring their out of town guests (even a nun visiting from Ireland) to see the AMH in action. This spontaneous interaction bolsters our connection with visitors and subconsciously reinforces the concept of “library as safe exploration.” A frequent question is “how does this work?” Our explanation of tags and coding is the perfect opportunity to suggest books, point out games, and promote upcoming classes. We follow a roving customer service model. Because an AMH is an efficient tool that checks in items and deposits them in pre-determined bins for easy shelving, we have freed up hours of staff time that can now be spent in the stacks, helping patrons find items and answering questions as needed.

Delivering an excellent AMH experience for staff has been more complicated. As befitting a port county, we went full steam ahead with new technology, new locations, and increased services. This required all staff to simultaneously learn new systems and change many of our in-house procedures while continuing with daily operations. Every detail, from how to sort for shelving to labeling shipments, needed to be re-examined. The biggest changes came with bringing the central sorter online.

Some of the changes were technical. For example, we use RFID tags as an identification number and place a matching barcode on each item. RFID is excellent technology; tagging all our items has completely changed and streamlined our process. Most items come pre-processed and the AMHs are set to only read the RFID. An unintended, but useful consequence is that we have become more aware of vendor processing errors where tags and barcodes don’t match. (Side note: We are working on some system-wide solutions to locate discrepancies between barcode numbers and RFID tags in the ILS; RFID is another topic entirely, so stay tuned.)

Carole Williams (williamscar@ccpl.org) is AMH and Self-Service Coordinator, Charleston County Public Library. © 2021.



Figure 1. Children returning books to the automated materials handler at a branch of the Charleston Public Library.

Another benefit of the AMH is that our Library Collections Acquisitions and Technical Services (LCATS) department realized that as they processed new orders, they could now send those items out daily instead of waiting to accumulate enough individual branch materials for a separate shipment—a win for patrons (new materials every day) and LCATS (storage space.) The unexpected twist: our adult, YA, and children’s librarians are accustomed to receiving new materials separately from returns so they can familiarize themselves with the titles before the items are shelved. With the central sorter, new items go out daily mixed in with the rest of the daily shipment. Spine tape makes it is easy for circulation staff to separate the new adult items, but we still needed a solution for Children and YA. After several sort changes and many discussions, we went old school, recycling used paper into book flags. The flagging doesn’t cause a problem with the AMH, is quick for technical services to place in each new book and is easy for circulation to spot and put aside at the receiving location.

Some of the changes were electrical. Only the four new branch locations and Support Services facility have an AMH, while the other fourteen branches check in items by hand. We added a Tote Check-in Server (TCS) system to the central sorter. This feature creates a manifest of the items in each crate. Branches can now receive the contents of each crate by entering a 4-digit barcode instead of scanning individual items. An unintended consequence to our new internet-dependent system that we had not anticipated was electricity. The coast has frequent thunderstorms that can

cause power outages and flooding. If the power is out, there is no way to sort or receive the items in delivery. Luckily this doesn't happen often, and so far, power has been restored quickly.

Some of the changes were physical. Our Delivery drivers also process the shipment when they return each day. In their previous workflow, most of the shipment was delivered to the downstream libraries. The parts of the shipment that they did process had printed routing slips placed in each item, so staff could all be sorting the shipment at the same time. Now their department has become Logistics, which is a more encompassing title and better covers the wider variety of tasks the staff have added to their day. In addition to delivery and mail duties, Logistics also manages and maintains the AMH and TCS equipment, troubleshooting problems that arise, scanning barcodes, and processing an average of 3000 items daily with the AMH. Most of the shipment is now coming through the central sorter—staff handle an average of 157 crates each weekday, moving items from Support Services and to/from branches. We have electric forklifts that hold three crates at a time to help with the increase in physically shifting the crates. Now one person inducts the shipment while others scan and stack the crates on the loading dock. This procedure is much faster than the previous paper slip method and processing is usually finished in a couple of hours.

Other changes were mental and emotional. New locations, renovations, technologies, and procedures can be exciting, but can also lead to change fatigue. Fortunately, everyone retained their job this past year, but in order to operate a new branch built in a previously unserved community, we had to reassign staff from locations closed for renovation. CCPL's vision is for our library to be the path to our cultural heritage, a door to resources of the present, and a bridge to opportunities in the future. We are doers, creators, servers, and teammates, not only to the community, but to our coworkers. We are all in for our shared vision, but whew. . . some days we all experience mental eye rolling and collective sighs of "another change?" Our Director's mantra is "we are the calm." And it is true. By fall we will have three of the renovated branches reopened, three more under renovation and another staffing shift. With some grace and encouragement to one another, we will handle whatever comes next.