Culinary Literacy and Community Education Partnerships: Opportunities Assessment

Fayetteville Public Library



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Executive Summary

The purpose of this white paper is to provide an overview of opportunities for expanding community culinary literacy by including a full-service teaching kitchen, daily deli, and public commissary in partnership with educational partners and community benefit organizations.

Educational partnerships with the Fayetteville School District and the Northwest Arkansas Community College (NWACC) Brightwater Center for Culinary Education provide an innovative and easily accessible opportunity for high school students to engage with the Fayetteville Public Library. The forthcoming commercial kitchen will serve as an experiential learning laboratory where high school students can earn community college credits through NWACC's IGNITE program, which is already facilitating similar programs with the Rogers and Bentonville school districts, respectively.

This paper also identifies aspirational models for culinary literacy programs currently operational in public libraries within the United States, with a spotlight and case study focused on the Free Library of Philadelphia's Culinary Literacy Center.

Additionally, the scope of this paper includes exploring the potential connections for creating a closed loop food system on site, whereby a portion of the Fayetteville Public Library's food service procurement needs can be served by fresh produce grown on site in ADA raised beds and/or a production greenhouse. Examples of regional organizations utilizing one or both of these models include:

- Brightwater's greenhouse and garden partnership with Cobblestone Farm;
- Samaritan Community Center greenhouse and production farm;
- Tri Cycle Farms production farm and planned greenhouse;
- Fayetteville Public School's production greenhouse at the high school;
- The University of Arkansas Agricultural Farm and Food Science program.

Another unique opportunity for leveraging local food production circularity can be in the form of purchasing guidelines that prioritize procurement contracts with the agricultural community partners listed above. The Fayetteville Public Library is also well positioned to facilitate a truly closed loop system by incorporating on-site composting operations that can transform kitchen scraps and post-consumer food waste into a beneficial soil amendment to FPL gardens/landscaping.

This paper identifies potential stakeholders within the culinary education, urban agriculture, and hospitality sectors, respectively. These sector cohorts will be instrumental to developing a full feasibility study and business plan for the Fayetteville Public Library going forward.

The Fayetteville Public Library:

Past, Present, and Future

FPL of the Past - Local Leadership and Investment

A group of citizens led by the University of Arkansas librarian Julia Vaulx established the Fayetteville Public Library in 1916. The library originally occupied two rooms of the Washington County Courthouse basement, and operated on a budget of \$840.15 in its first year. With community support, the library moved to a cottage at East Avenue and Meadow Street, and in 1937 settled in the City Administration building, where they remained for 25 years. The library grew significantly under the leadership of Irene D. Galloway, who became head librarian in 1935. A



dedicated fundraiser, Galloway used her "Library Chat" column in the Fayetteville Democrat to solicit "benefactions" and to educate the community about the library's resources.

The Fulbright Library

Planning for a new library began with donations by residents like former director Julia Vaulx, who bequeathed \$1,000 to the building fund upon her death in 1955, and by Gilbert Swanson, who donated a site on East Dickson Street, then valued at \$35,000, in memory of his mother-in-law, Roberta Fulbright. In July 1959, the City of Fayetteville assumed ownership and operation of the library, and in November of the same year passed a \$225,000 bond issue to fund a new building.

Architect Warren Segraves, a native of Fayetteville, designed a two-story building of brick, steel, and glass that opened the library to views of its beautiful site on the southern edge of the Washington- Willow historic district. The building was constructed, furnished, and its grounds landscaped for just over \$300,000. Senator J. William Fulbright and over 1,000 guests dedicated the new library on June 4, 1962.



In 1966 the Fulbright Foundation presented the library with \$13,500 to buy land east of the site for an expansion. In May 1970 the 3,200 square-foot addition costing \$90,000 opened for service. In December 1989, the City of Fayetteville purchased the property to the west (a medical office building designed by Warren Segraves) for use by the Fayetteville Public Library.

The project, completed in 1992, joined the two buildings and

resulted in a 31,500 square foot facility housing the Fayetteville Public Library, Ozark Regional Library System headquarters and the Talking Books service. On July 1, 1999 the Washington County Library System was established as a result of the dissolution of the two-county Ozark Regional Library System. In 1999, the Talking Books service was split between the Fort Smith Public Library and the Arkansas State Library and the space was converted into a twelve station computer center funded by the Bill and Melinda Gates Foundation. In late 2000, when the Washington County Library System moved to its own facility the space was converted for staff and FPL Foundation use.

On October 1, 2002, a referendum to establish a 1 mil city library tax was approved by 85% of the voters. On May 20, 2003 the Fayetteville City Council approved ending the inter-local agreement with the Washington County Library System and establishing the Fayetteville Public Library as an independent city library beginning January 1, 2004.

FPL of Today - a 21st Century Library

On August 15, 2000, Fayetteville citizens overwhelmingly (75%) approved a 1% 18-month sales tax to help fund a new main library. A capital campaign, chaired by Ann Henry, was undertaken to raise funds to complete the project and endow operations.



Jim Blair announced a \$3 million donation on February 27, 2002. The building was to be named Blair Library in honor of Mr. Blair's late wife, Diane Divers Blair, grandmother and aunt. Groundbreaking was held April 27, 2002 and construction commenced in June. A topping out ceremony was held September 13, 2003. Substantial completion of the \$23.3 million 88,000 square foot Blair Library in September 2004 was followed by a month of opening celebrations beginning October 8, 2004. The building's architect is Jeffrey Scherer, FAIA, Meyer, Scherer, Rockcastle, LTD.

In 2005, the Fayetteville Public Library wins the coveted national Library of the Year award sponsored by Library Journal and Thompson/Gale Publishers, given annually to the top library in the country. The award was given for outstanding service to the community, ahead of the Seattle Public Library and many other prominent libraries.

Sustainability and Community Engagement

The building was the first in Arkansas to be registered with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program. Blair Library was

award the LEED-Silver (NC) certification in the fall of 2006. The building was paid for in cash and is debt-free.

In 2006, the library was named an American Landmark Library by TravelSmart newsletter. The library was cited by the New York Times in its travel section. Also in 2006, a millage increase that would ensure predictable stable funding was defeated by 219 votes.

During that summer, the library celebrates its 90th birthday, and in December 2006, the library receives a silver certification from the U.S. Green Building Council for its use of environmentally-friendly strategies in building and operating the library.

In the spring of 2007, FPL kicked off The Big Read, a program from the National Endowment for the Arts that encourages cities to read and discuss one book. Fayetteville was one of only 72 cities selected to participate in this program, and received a \$20,000 grant to carry out this effort.

The library received a National Endowment for the Humanities Challenge Grant for a proposal entitled "A Richer World, A Deeper Community" in 2007. It is given to only seven institutions annually and is a 5-year grant with a 3:1 match by NEH. The grant will establish a \$2M Humanities grant to permanently fund materials and programs.

FPL received an IEEE grant for Solar Bug Tug program. In 2008, a youth component of the national solar boat race hosted in Fayetteville and it was featured on cover of Fayetteville, Springdale & Rogers Street Guide, 1st edition, Rand McNally & Company.

In 2009, the library was named Best Library in NWA by *Citiscapes* readers' poll; runner up for Best Architecture/Best Building and was selected to serve as one of four case studies in a national study funded by the Institute for Museum and Library Services and conducted by the University of Washington on the social, economic, personal, and professional value of free access to computers at public libraries.

Also that year, FPL was one of nine libraries out of 515 nationwide to receive the International City County Management Association Grant for Public Library Innovation (in partnership with the Bill and Melinda Gates Foundation) for a project entitled "Solar Test Bed."

By 2010, Mayor Lioneld Jordan was named "Political Winner" by *Library Journal* and Youth Services Manager Lolly Greenwood received the Ann Lightsey Children's Librarian Award from the Arkansas Library Association. Also, the library was named Best Library in NWA by NWA Media and *CitiScapes Metro Monthly* readers' polls. A Chamber of Commerce GreeNWAy certification was attained and the library was featured in Urban Libraries Council's publication *Partners for the Future: Public Libraries and Local Governments Creating Sustainable Communities.* In 2011, FPL's Solar Test Bed Project receives an Environmental Award from Altrusa International of Fayetteville, Inc. and was named Employer of the Year by Life Styles, Inc. One of the highlights that year was being listed as one of 10 best libraries to tour by *USA Today*.

In 2013, the Fayetteville Library Board of Directors approved a 2030 Master Plan presented by Meyer Scherer & Rockcastle, LTD, recommending expansion of the Blair Library to meet the community's library needs of the future. The library board also made an offer to purchase four acres located south of the library for future expansion.

The library partnered with the University of Arkansas, Fayetteville Public Schools, the Fayetteville Public School Education Foundation, and the Fayetteville Montessori School to organize and host True Lit: Fayetteville Literary Festival sponsored by the Friends of the Fayetteville Public Library. Award winning children's and young adult author, Jack Gantos, was the keynote speaker at area schools and the library. The four-day festival featured a stellar lineup of regional authors and writing workshops for all ages.

The library again partnered with the Fayetteville Public Schools to issue an "internet only" library card or FPL i-Card to 9,942 students, K-12. With their FPL i-Card, students can access the library's online resources via the FPL website. FPL eResources include online tutoring, homework help, language instruction, and access to research databases, as well as free downloadable ebooks, magazines, and music. The FPL i-Cards gave students access to digital materials even if they have fines or restrictions on their traditional library accounts.

FPL of Tomorrow - a Library for the Future

The idea of expanding Fayetteville Public Library has been in the making for many years. Thanks to the continued support of Fayetteville residents, the expansion is now under way with the demolition of the former City Hospital building. Learn about some the key milestones that got us to this point as well as next steps in the process.

On August 9, 2016, Fayetteville voters approved two millage increases that will go toward operating expenses and funding the library's expansion proposals:

- 1.5 mills for operation and maintenance of the current and expanded library
- 1.2 mills for bonds to pay for the construction of a library expansion

As part of the millage vote, voters approved \$26.9 million of the \$50 million library expansion budget. This leaves approximately \$23 million to privately fundraise to complete the project. In July 2017, the Fayetteville Public Library finalized the \$2 million purchase of the former City Hospital property from Washington Regional Medical Center, officially clearing the way for expansion of the library on the four-acre property. One year later, the Fayetteville Public Library officially began the expansion project with a demolition kickoff event at the former City Hospital property on Tuesday, July



17 at 9 a.m. Fayetteville Mayor Lioneld Jordan, along with members of various Fayetteville Public Library boards, participated. Demolition work on the property will take approximately three months followed by grading and site preparation through the end of this year.

Construction of the Fayetteville Public library's 80,000 expansion is set to begin in March 2019. This phase of the project is set to take between 16-18 months.



The Vision

The \$23 million Beyond Words Capital Campaign will almost double the size of the library, adding an additional 82,500 square feet and renovating existing space in order to provide increased access to flexible uses of and a greater collection of spaces within the Fayetteville Public Library.

But it's how that new space will be used that brings life to the building. That includes more space for children to grow and develop; with more resources and dedicated programming space for hands-on learning and exploring... And a re-imagined teen space to help bridge the gap from adolescence to adulthood; an opportunity to become more independent in their creation of ideas and their own self-development.

Creative programming draws crowds both big and small. An adaptable multi-purpose space will create the right atmosphere for any size gathering – from intimate gatherings to audiences of 700 or more. Likewise, a teaching kitchen will provide catering opportunities for the multipurpose room while also nourishing the mind. Our partnership with local schools will teach students how to be responsible food preparers and food growers.

FPL is pushing boundaries to become a place where visitors can make items and not merely take them. The Innovation and Maker space will provide a foundational education and the basic tools for those who want to explore a new field of study or entrepreneurial enterprise.

Innovative use of outdoor space will allow the library to engage the natural world around us and take the learning environment outside.

Current National Library Service Research:

Pew Research Center

Webjunction/Crossroads

Pew Research Center:

In September of 2015, the Pew Research Center released a report on "Libraries at the Crossroads", in which their findings surmise that many Americans say they want public libraries to:

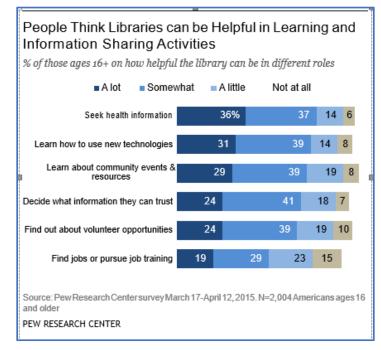
- support local education;
- serve special constituents such as veterans, active-duty military personnel and immigrants;
- help local businesses, job seekers and those upgrading their workforce skills;
- embrace new technologies & provide services to help patrons learn about high-tech gadgetry.

At the same time, the survey finds that the share of Americans who report using a library has ebbed somewhat over the past several years, though it is too early to identify a definitive national trend. Compared with Pew Research Center surveys from recent years, the current survey finds those 16 and older a bit less likely to say they have visited a library or bookmobile in-person in the past 12 months, visited a library website or used a library's computers and internet access.

Many believe libraries should be pathways to economic opportunity, especially when it comes to providing resources for business development, jobs search and enhancing workforce skills

These are new questions that Pew Research Center has not previously asked, and they indicate that there is a notable share of the public interested in a somewhat expanded mission for public libraries to contribute to the economic advancement of people and communities.

Nearly three quarters of those ages 16 and over think libraries help for seeking health care information and learning new technologies in these areas. Women, older adults (ages 65 and over) and Hispanics are particularly likely to think libraries help "a lot" in both areas. With respect to learning about health care information, 43% of those ages 65 and older say libraries help "a lot" and 44% of those whose annual household income is \$30,000 or below also think this. Some 42% of Hispanics and older adults say libraries help people learn new technologies a lot, as do 38% of those whose income falls below \$30,000 per year.

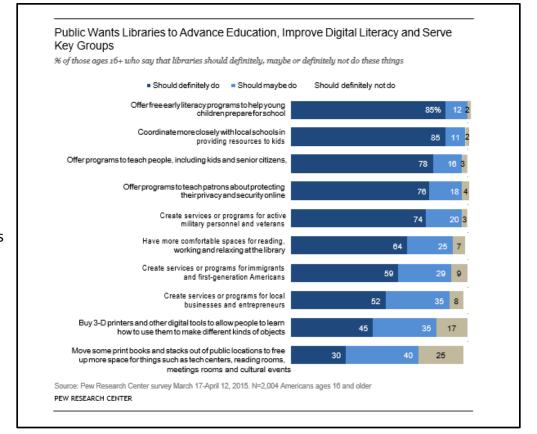


Additionally, when thinking about libraries' role in helping people find a job or pursue job training, Hispanics, African Americans and low-income Americans are especially likely to say that libraries help a lot. Compared with the 19% of all those ages 16 and older who say libraries help "a lot" with job search or workforce skills:

- 34% of Hispanics say this;
- 26% of those who live in households with annual incomes under \$30,000 say this, and;
- 28% of African Americans say libraries help "a lot" in the job search and workforce skills arena.

Many see libraries as places of learning and pursuing knowledge. Pew Research Center's April 2015 survey explored those themes and took an expansive view by asking people how they see libraries as vehicles for economic opportunity and inclusion of various groups that have drawn particular attention from librarians. This scope of inquiry provides insight into how the public sees the library not just as an institution that has a history in their community, but also whether they see libraries as places that might serve groups particularly affected by technological or other cultural changes.

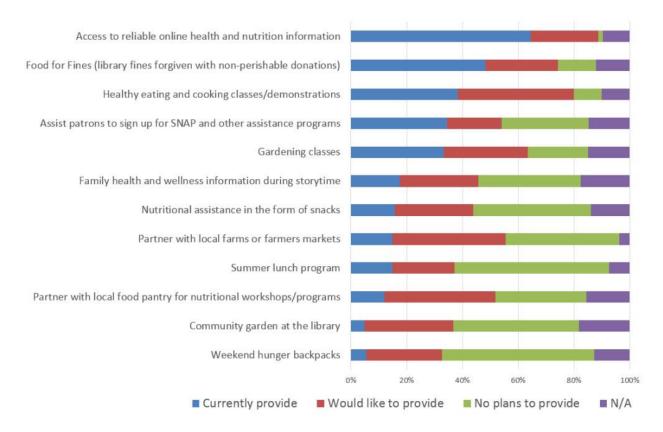
This chart summarizes how Americans ages 16 and older think about changes libraries should consider going forward. The survey asked people to consider "some new things public libraries could do to change how they serve the public."



Webjunction/Crossroads Poll:

Nearly 60 different libraries and state library agencies from across the United States responded to a 2015 Webjunction/Crossroads survey of programming for nutritional assistance/education and healthy eating programs.

The graph below indicates the summary of responses to a question about which of the listed services or programs responding libraries currently provide or hope to provide in the future:



Community partnerships making a difference

A good number of respondents reported to have found ways to grow community partnerships & creatively meet practical challenges they encounter. Some libraries reported they serve food through **Meals on Wheels**, or other nutritional assistance programs such as the **USDA's summer lunch programs** (see Lunch at the Library, for example) – often with help from their county schools. Many of these libraries make sure they meet their local county health department's guidelines by using a community partner with a commercial kitchen, or by ensuring that all snacks served are commercially wrapped.

Healthy eating workshops and classes

Many respondents reported actively promoting health literacy and nutritional programming through interactive demonstrations and classes. One library offers a **healthy breakfast workshop** to its Girl Power group that teaches why healthy breakfast is important, and gives ideas on how to make their own – they even build themselves a "breakfast banana split" to enjoy during the program. Another library has a **Cooking Up Literacy** program for children where kids learn how to make healthy snacks. And one library hosted a **Gluten Free Cooking** workshop with an outing to the local supermarket for a tour of GF foods.

Highlights of other practical and creative programs

"Every October we do a 'Place at the Table' series, once a week programs that highlight local food issues and opportunities. The series culminates with a Community Picnic event celebrating National Food Day. We partner with our local university nutrition program, the county health department and local growers."

"We have a community produce exchange stand in the summer. Patrons and staff bring in excess bounty from their gardens and others are free to take what they want. The stand is located in our lobby."

"As a state agency, we provide statewide databases to all residents. We have offered database workshops in the form of webinars (both live and archived) on planning holiday meals and recipes, as well as how to stay healthy over the holidays. We also provide grants where libraries can focus on wellness and spend grant money to partner with other agencies and local groups, create kits of materials, provide speakers on the above topics, etc."

"We partner with the Northern Kentucky Health District to educate our customers on <u>5-2-1-0</u> (To significantly reduce childhood obesity). We are part of the awareness campaign, as well as programs for parents. In addition, we partner with our local food pantry to bring the Mobile Foodbank to one of our locations."

Providing nutritional assistance

Nutritional assistance programs – such as backpacks for hungry kids to take home over the weekends, or offering summer lunches – were most often cited as being programs that libraries weren't planning on implementing. As one respondent mentioned, "We don't have facilities to cook/warm up/clean up/serve/store 'lunch,' or other food programs." The practical challenges of infrastructure, meeting health department regulations, and limited staffing often make this kind of programming difficult.

At the top of the wishlist are healthy eating and cooking classes, followed by partnering with local farms or farmers markets. One library's already cooking up new ideas: "There is a community garden in our community. We have thought of doing a seed exchange and perhaps we could work with the local garden group on this project."

In looking at the full list services that libraries would like to provide in the future, here are the responses in order:

- 1. Healthy eating and cooking classes/demonstrations
- 2. Partner with local food pantry for nutritional workshops/programs
- 3. Partner with local farms or farmers markets
- 4. Community garden at the library
- 5. Gardening classes
- 6. Family health and wellness information during storytime
- 7. Nutritional assistance in the form of snacks
- 8. Access to reliable online health and nutrition information
- 9. Food for Fines (library fines forgiven with non-perishable donations)
- 10. Weekend hunger backpacks
- 11. Assist patrons to sign up for SNAP and other assistance programs
- 12. Summer lunch program

Community Engagement Regarding Food Systems Program Inclusion: Fayetteville Public Library Staff Ideas Public Comments

Input from Fayetteville Public Library Staff

In the 2013 survey of Fayetteville Public Library staff, conducted by Meyer, Scherer & Rockcastle, Ltd./Library Planning Associates, the following are incubator ideas from staff regarding their thoughts and specific ideas relating to culinary and public health literacy as a formal programming initiatives of the FPL expansion:

- How-to garden/cooking classes for kids and adults
- Seed library
- FPL's own healthy restaurant that uses produce from the garden
- Restaurant also to be used in conjunction with the garden as a teaching tool (from seed > to plant > to food > to table)
- Healthy cooking classes
- Demonstration/catering kitchen
- Outdoor equipment rentals: bicycles, gardening tools, canoes/kayaks, sporting equipment
- Home: baking/cooking gadgets, sewing machines/sergers and accessories
- Create a garden space that would include a cutting garden
- We could create our own flower arrangements and displays for programming, events, etc.
- Have a children's garden
- Create a composting facility
- Two café spaces: one full-service and one coffee shop
- Maybe have one accessible to patrons when library is closed
- Have a catering kitchen and equipment, along with serving dishes, etc. for catering events
- Partner with local workforce educational organizations to provide job retraining, skill development, job search, resume writing help, ESL and Spanish classes
- Roof top or landscaping garden. Could function as a community garden or produce could be sold at the Farmer's Market by Friends of the Library to raise money for projects
- Full service restaurant and bar on campus
- Orchard of apple trees grown on our "green roof". Apples used to be an important crop grown in Northwest Arkansas and we could re-introduce to the area by having trees where patrons and families in need could come pick and eat while here
- Community gardens could occupy a space on the new footprint to bring the community to FPL to work the land and sell produce at the Farmer's Market. We are already starting a seed catalog in partnership with the non-profit.
- Interactive garden for kids

Input from Fayetteville Community:

In their 2013 survey, Meyer, Scherer & Rockcastle, Ltd./Library Planning Associates collected hundreds of public comments. The following are the comments relating to culinary, gardening and/or public health literacy as potential programming ideas for the FPL expansion:

1) Build a test kitchen with an affiliated massive food, drink, and cooking library. Create a classroom space in order to teach cooking classes. Let's face it, it's likely never going to happen through Ozark Natural Foods. 2) Build a full-blown performing arts space that is not affiliated with any corporate sponsorship (Mitchell, Walton, Tyson, Hunt, P&G, et al.). 3) Offer more social programming not professional networking stuff - for adults.

More planting/seasonal on roof areas.

More services and activities like the free yoga class and free classes and workshops on health and wellness topics.

Study space near fountain or waterfall Offer more food options at Arsagas

The library could have programs for older adults, hands-on learning for children and adults

As the community needs things, adapt.

Have outside adult events in the garden, coordinated with the botanical gardens, maybe with a brown bag lunch. More childrens events outside.

More community resource - classes

LOVE the yoga class: more yoga and mind/body programs, please. Expanded hours (Friday, Saturday night and all day on Sunday). More programs for adults and young professionals on weekends -- not networking or business programming but "date night"-type social activities, such as learn a ballroom dance. cooking classes. art classes. Italian for travelers. etc.

ORGANIC EATERY THAT IS INEXPENSIVE AND DELICIOUS. CLIMBING WALL. COOKING CLASSES. SPLASH PAD. COCKTAIL LOUNGE.

Larger eating area

I would love to see the library become a host of more public meetings, input sessions, skill sharing, workshops, films, roundtable discussions, and more. Many of these things already happen at the library, but the Walker Room is really the only place available for events like this. I love the library and I think it already serves many great purposes, but I think it could host more events.

Large outdoor seating area/garden

The Fayetteville Public Library Response to Staff and Community Input: Expanding Culinary Training and Workforce Development through Strategic Educational Partnerships

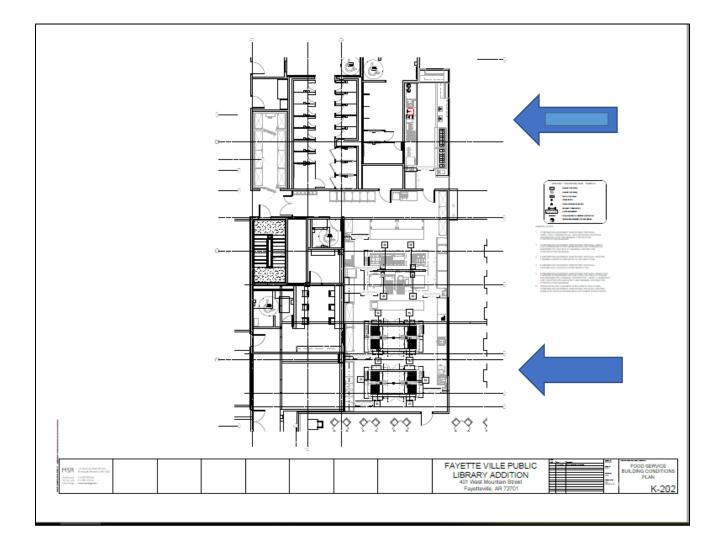








In response to staff and community feedback + innovative workforce development needs, the Fayetteville Public Library expansion includes the development of a professional teaching kitchen that will serve as a formal learning environment for culinary training and the deli, which will include locally grown and prepared menu options at affordable price points.



FPL Teaching Kitchen:



The teaching kitchen will be an accredited culinary classroom and laboratory for Fayetteville High School students who wish to earn advanced credits for the Northwest Arkansas Community College's Brightwater Center for the Study of Food certificate program. Additionally, the teaching kitchen can also serve as an innovative Culinary Literacy Center that is:

- a food preparation area for the deli kiosk
- an anchor for afterschool/summer culinary health programs with k12 students
- a family-based culinary learning environment for healthy cooking classes
- logistics space for catering prep to serve auditorium events
- special topics culinary workshop (fermenting, cheesemaking, bread, etc.)
- an innovation incubator for emerging food entrepreneurs
- a certified commercial kitchen for lease to independent caterers/community groups
- a food recovery staging area where surplus food items from auditorium/ catering events are safely stored for rapid re-distribution via community food security partners

Professional Culinary Instruction and Workforce Development

Seasonality, healthy choices, locally-sourced procurement, and food waste reduction are each & all national food system priorities that we are seeing reflected by regional chefs and consumers as priorities in Northwest Arkansas. The culinary arts scene is a rapidly growing industry in our region and an opportunity for workforce development that anticipates a subsequent increase in demand for emerging culinary professionals well informed about and prepared to proactively participate in and lead our region in food system sustainability.

The Brightwater Center for the Study of Food campus is an academic division Northwest Arkansas Community College that, per their program literature, is "hyper-localized and holistic, traversing the entire food experience from crop to cuisine." Brightwater's programming offers culinary education and experience previously only acquired through apprenticeship & offers students a dynamic educational experience in Culinary Arts, Artisanal Food, Pastry & Baking, etc, through a combination of technical skills, broad industry knowledge, and specialty cultural exposure.

Additionally, the Brightwater program is a culinary education partner of the Goldring Center for Culinary Medicine at Tulane University, which provides fusion programming that combines the studies of nutrition, nursing and culinary arts, allowing students to study food through the lens of wellness.

Currently, both Rogers and Bentonville participate in an early college experience (ECE) program for culinary arts students at the high school level through the IGNITE professional studies program, an accredited ECE track in partnership with Northwest Arkansas Community College. In those scenarios, Rogers and Bentonville high school culinary students utilize the



teaching kitchen at the Brightwater Center for Food Studies as their classroom.

IGNITE Culinary Arts gives students a platform to discover new interests and talents that happens through a curriculum that teaches students the fundamentals of the safe preparation and proper presentation of food. Students will work in the world-class culinary kitchens of Brightwater to learn food safety, knife skills and classic cooking techniques while being provided real-world experiences in entrepreneurship and sustainability.

While Fayetteville High School does currently offer a Food Safety and Nutrition course through the Family and Consumer Sciences department, the logistics of FHS students traveling from Fayetteville to Bentonville and back for daily classes are neither feasible nor pragmatic for participating in the ECE Culinary Training track in this form.

To address this challenge and facilitate both the capacity and equipment needs for offering a truly professional culinary training experience in Fayetteville, the Fayetteville Public Library is in the co-development phase of charting an ECE Ignite Culinary Training program with the Fayetteville School District and the Northwest Arkansas Community College Brightwater Center for Food Studies.

The Fayetteville Public Library teaching kitchen has been purposefully designed in such a way that it can host approximately 16 students per session in order to serve as an accredited culinary classroom and laboratory for Fayetteville High School students who wish to earn advanced credits for year one of Northwest Arkansas Community College's Brightwater Center 2 year Study of Food certificate program.

Year two Brightwater Students will also have an opportunity to engage in FPL food services program through internship opportunities with the expanded deli, in-house catering events, and/or community based healthy cooking/culinary literacy classes in the teaching kitchen. According to a recent study by the Brookings Institute (2017), "work-based career and technical education programs can motivate students to attend school more frequently and be more engaged, and therefore improve core academic skills." (https://www.brookings.edu/research/whatwe-know-about-career-and-technical-education-inhigh-school/)

The developments of these professional training programs can help close the academic achievement gap as it relates to economically disadvantaged, under-engaged, and minority students when compared to the general student body, which is the Fayetteville Public School's 2018-2019 District Goal #1.

Additionally, high school career education and technical training is an opportunity to help students focus on college and career readiness in order to increase the graduation rate by 5 percent, which is the Fayetteville Public School's 2018-2019 District Goal #2.



Fayetteville High School IGNITE Course Structure:

Beginning in the 2020/21 school year, Fayetteville High School IGNITE students would take FDST 1013 Food Safety the first 6 weeks in the fall and then take FDST 1023 Foundations the next 12 weeks in the fall. Students would sign up to take both classes. These two courses must be taken together in sequence in order for a student to take the next two courses, 1003 Food Systems and 1103 Culinary Nutrition, which will be offered in the spring semester.

There will be a minimum of 16 students enrolled in both classes. The teacher for this course will be provided by and paid for by NWACC. This teacher is fully certified to teach both proposed courses.

PROGRAM PILLARS:

- Systems-based approach
- Inquiry-based learning
- Entrepreneurship and Community
- Safety and Sanitation
- Cost Control and Waste
- Professionalism and Communication

Program Costs:

NWACC tuition cost for each course is \$90 (\$180 total cost for these two courses).

All students will be required to have knife set for both classes. The estimated cost of this set is \$250. It is anticipated a classroom set of knives will be purchased in advance and checked out to students in these classes so they will not have to bear this cost.

A lab fee of \$265 to include the food and cooking materials will also be needed for the FDST 1103 Culinary Nutrition course, per NWACC requirements.

Students in both courses will be required to purchase a cooking uniform: Black chef coat--\$36 Shoes (close-toed, non-skid)--\$22 Black chef pants--\$35 Apron--\$12 Hat (cloth tie on covers) Skull Cap--\$10

Fayetteville IGNITE Class One: First 6 weeks of Fall Semester

FDST 1013 Food Safety - The aim of this course is to instruct students in the proper methods and procedures regarding food safety. This course will provide students with the knowledge of safety and sanitation practices in the foodservice and hospitality industries. Through, assignments and quizzes students will apply the information of the course. Students are encouraged to take the National Serve Safe Certification exam, which is absolutely independent from course grades. Students who want to participate in the Culinary Arts program should take the ServSafe test based on the ServSafe certification curriculum from the National Restaurant Association and is a required course for accreditation by the American Culinary federation.

COURSE OUTLINE:

- History of Hygiene and Sanitation
- Best Practices of Sanitation
- Food-borne Illness and Prevention
- Indicators of Food Spoilage
- ➢ HACCP Principles
- Cleaners and Sanitizers
- Waste Disposal and Recycling

COURSE OBJECTIVES:

- Identify microorganism which are related to food spoilage and food-borne illnesses; describe their requirements and methods for growth;
- List and describe symptoms common to food-borne illnesses and list various ways these illnesses can be prevented;
- Demonstrate acceptable procedures when preparing potentially hazardous food to include time/temperature principles;
- List the major cause's food spoilage and define food spoilage indicators;
- Recognize sanitary and safety design and construction features of food production equipment and facilities (i.e. NSF, UL, OSHA, ADA, etc.);
- Review Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. Discuss right to know laws.

Fayetteville IGNITE Class Two: Second 12 weeks of Fall Semester

FDST 1023 Foundations - This course introduces basic food preparation knowledge and skills, recipe conversions and measuring techniques. Also included is instruction in the operation of commercial food service equipment and consideration of the history and value of food to society. The course consists of a lecture and lab component, both of which are competency driven.

COURSE OUTLINE:

- Kitchen Tools and Equipment
- Knife Skills, Sanitation and Safety
- Food Science and Culinary Nutrition
- > Prepare different types of Meats, Grains and Vegetables
- Spices, Herbs, and Special-Needs Diets

COURSE OBJECTIVES:

- Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety techniques;
- > Define and describe the effects of heat on food and the methods of heat transfer;
- Identify, evaluate and use herbs, spices, oils and vinegars, condiments and marinades and rubs;
- Perform, demonstrate and evaluate the fabrication tasks with meat, poultry, seafood and variety of meats;
- Identify, prepare and evaluate a variety of fruits, vegetables, starches, legumes and grains using the basic cooking methods;
- Utilize standard weights and measures to demonstrate proper scaling and measurement techniques to perform yield conversions and demonstrate the process of recipe costing;
- Calculate and forecast purchase and preparation requirements based on a product yield on cooking, fabrication and intangible waste factors;
- Calculate food costs and percentages, performing calculations using current technology (i.e. Computers, calculators, POS).

FDST 1003 Food Systems - The supermarket has become has become the last stop in an increasingly complex global food system, spurring a growing movement to re-regionalize the food system. This course will examine key economic, social, demographic, environmental, and ethical issues that currently shape our system of food production, distribution, and consumption. Through texts and research, students will examine how food is grown, processed, transported and distributed, reviewing along the way the federal, state and local policies that shape how those foods are consumed. Students will gain an understanding of how animals and plants are raised for food, as well as how food labels and food claims are made on packages and in advertising. Group projects trace a variety of food products and provide an in-depth look at environmental impacts, animal welfare, human health and labor practices that make up the food system. The course will also cover the effect of international trade and immigration policies, exploring the concept of food sovereignty in the United States and around the world.

COURSE OUTLINE:

- > Types of Contemporary Agriculture
- Genetically Modified Organisms
- Global Agricultural Trade
- Food Waste
- Obesity and Food Deserts
- Dynamics of Agrarian Labor

COURSE OBJECTIVES:

- Identify and analyze elements of the food system using interdisciplinary, participatory, and stakeholder approaches, identifying specific issues with sourcing and supply chains;
- Define the impact of policy on agriculture, food systems, and human and environmental health;
- Participate effectively in a group of learners, applying skills to community-oriented projects related to the local food system;
- Understand the breadth of careers in the food and agriculture sectors;
- > Articulate the scope of the food system in terms of sourcing and supply chains.

<u>Textbook:</u> FDST 1003 Food Systems – Northwest Earth Institute, *Hungry for Change: Food, Ethics and Sustainability,* 2011

Fayetteville IGNITE Class Four: Second 12 weeks in the Spring Semester

FDST 1103 Culinary Nutrition – This course will examine the basic principles of nutrition, including their application to food preparation, menu planning and a healthy lifestyle. Attention is given to providing nutritionally-balanced and attractive meals. Menu planning using sound nutritional guidelines is stressed. The concept of creating menus while focusing on food allergies, intolerances, preferences and restrictions is also introduced. This course provides culinary and nursing students with the knowledge base of diet, lifestyle, nutrition and how they relate to well-being and disease. Material is covered from the food-first perspective with an eye toward the practical aspects of what customers and patients face day-to-day when trying to make substantive change in their lives. The focus is on teaching about food: how to cook, what to eat, and how to help people improve their diet - and thereby, their health.

COURSE OUTLINE:

- Nutrition Standards and Tools
- Carbohydrates and Proteins
- Fats and Oils
- Water and Beverages
- Vitamins, Minerals and Phytochemicals
- Planning Healthful Menus
- Healthful Cooking Techniques
- Serving Guests with Special Health Needs

COURSE OBJECTIVES:

- Identify nutrients and their sources, functions, digestion, and metabolism;
- Explain healthy cooking, food storage and preparation techniques; analyze and modify recipes for healthier yet flavorful food production;
- Evaluate and prepare diets and menus in accordance with dietary guidelines and restrictions;
- Discuss marketing of healthy menu options;
- Discuss nutrition and food choices over the life span;
- Analyze food labeling, including mandatory nutrition labeling;
- Describe special dietary needs.

Internship Opportunities for all 2nd Year Brightwater Culinary Students:

3 RIGHT WATER

COURSE SYLLABUS Internship- FDST 2903 01W

Term: Spring 2021 CRN: 22383 Credit Hours: 3.00 Duration: Jan 12- May 03, 2021 Course Meeting Location: Open

Course Description

This course provides the opportunity to gain experience in the culinary, baking, and/or hospitality workforce through a 16-week internship program at desired location. Student should reach out to desired location prior to registration of this course. Pre-internship packet and internship agreement should be sent to course instructor prior to registration. Internship should relate to personal goals of student.

Program Learning Outcomes

Experience	Performs work duties at internship site to gain experience in culinary, baking, and/or hospitality Applies experience to a future workplace environment	
ProfessionalismAttends work at internship site with little to no attendance discrepancies Cooperates with host supervisor regarding schedule		
Network	etwork Builds relationships within the food industry Expands student network	
Entrepreneurship Develops, organizes, and manages a business venture with host supervisor (or		

Course Learning Outcomes

At the conclusion of this course, students should have the ability to:	The course learning outcomes will be verified by one or more of the following assessments:
Perform work duties specific to student internship establishment	Supervisor Final Evaluation
Applies culinary, baking, and hospitality knowledge gained from Brightwater to internship site	Supervisor Final Evaluation
Prepare a final portfolio showing personal progress made within internship at desired location	Final Portfolio
Upload weekly journals reflecting weekly job duties	Weekly journals
Provide final evaluation forms and proof of logged hours to instructor upon completion of course	Supervisor Final Evaluation, Student Final Evaluation, logged hours

Grading Criteria

As an online course, it is the responsibility of the student to keep up with weekly journals and logged hours. Student will upload 15 journals throughout the 16 weeks. Journals will be due 11:59 p.m. every Sunday evening. Journals will be available from Sunday at 12:00 a.m. until the following Sunday at 11:59 p.m. when they are due. It is up to student to keep journals consistent with hours worked.

Mid-semester, instructor will conduct **one** site visit where student will lead instructor through internship establishment and show instructor weekly job duties performed. It is the responsibility of the student to schedule mid-term evaluation in **Success Planner** at a time that works for student, internship supervisor, and course instructor.

Supervisor Final Evaluation, Student Final Evaluation, logged hours, and Final Portfolio are due by end-of-course date (TBA).

Weekly journals are due every Sunday at 11:59 p.m. Weekly journal is not necessary if student did not work in a given week. Provide N/A in journal entry for exemption. If student does not input N/A, student will receive a 0. Estimated grading categories, point values and percentage distributions are below:

Internship Course Grading Criteria – 16 Weeks					
Grading % Based Upon Maximum Points Awarded					
Grading Category	Multiple	Points	%		
Weekly Journals	10 points X 16	160	35%		
Midterm Evaluation		50	11%		
Final Portfolio		100	21%		
Supervisor Final Evaluation		50	11%		
Student Final Evaluation		50	11%		
Logged Hours (240 minimum)		50	11%		
Total:	460		100%		
Grading Scale / Course Evaluation Methods A=90-100, B=80-89.9, C= 0-79.9, D=60-69.9, F=0-59.9 Refer to <i>Student</i> <i>Learning Assessment Rubric</i> for course evaluation methods.					

Course Overview

All weekly coursework due Sundays 11:59 p.m.

Week	Day-to-Day Content	
1	Weekly Journal	
2	Weekly Journal	
3	Weekly Journal	
4	Weekly Journal	
5	Weekly Journal, Schedule midterm site visit with Chef Brittany in Success Planner	
6	Weekly Journal	

7	Weekly Journal
8	Weekly Journal
9	Weekly Journal
10	Weekly Journal
11	Weekly Journal
12	Weekly Journal
13	Weekly Journal
14	Weekly Journal
15	Weekly Journal
16	Final Portfolio, Student Final Evaluation, Supervisor Final Evaluation, logged hours (240 minimum)
	due

Course Grading Scale

The grading scale below will be used for this course.

90-100	А	Excellent
80-89	В	Good
70-79	С	Average
60-69	D	Lowest Passing Grade
0-59	F	Fail

Campus Student Resources

Technical Support

Technical support is provided by the Student Technology Helpdesk and by the Distance Learning Department. Please contact the Student Helpdesk at 479-619-4376 or <u>studenthelpdesk@nwacc.edu</u>

Students on the Bentonville campus may also visit Burns Hal Room 1214. Support may also be obtained from the Distance Learning Department at <u>dl@nwacc.edu</u>

Academic Support

Students can find information about academic support resources, including an Academic Calendar with official dates, under the button labeled Academic Support on the left side of your computer screen in the Canvas content box of this course.

Disabilities Services

Any student who feels she or he may need an accommodation based on the impact of a disability, please contact the Disability Resource Center at <u>disability@nwacc.edu</u> or by phone at (479) 986-4076. The Disability Resource Center coordinates reasonable accommodations for students who have documented disabilities.

Once your registration with the office is complete, the Disability Resource Center will contact me electronically to communicate what accommodations are appropriate in your case, and you should follow up with me privately to discuss how we will meet those specific needs collaboratively.

The Disability Resource Center office is located in Room 114 on the first floor of the Student Center.

Student Handbook

The Fayetteville Public Library Response to Staff and Community Input: Expanding Culinary Literacy Programs



Case Study Spotlight – Free Library of Philadelphia

Aspirational Examples

Case Study Spotlight:

Culinary Literacy Center Free Library of Philadelphia

Opened in 2014, the Free Library of Philadelphia's **Culinary Literacy Center** is



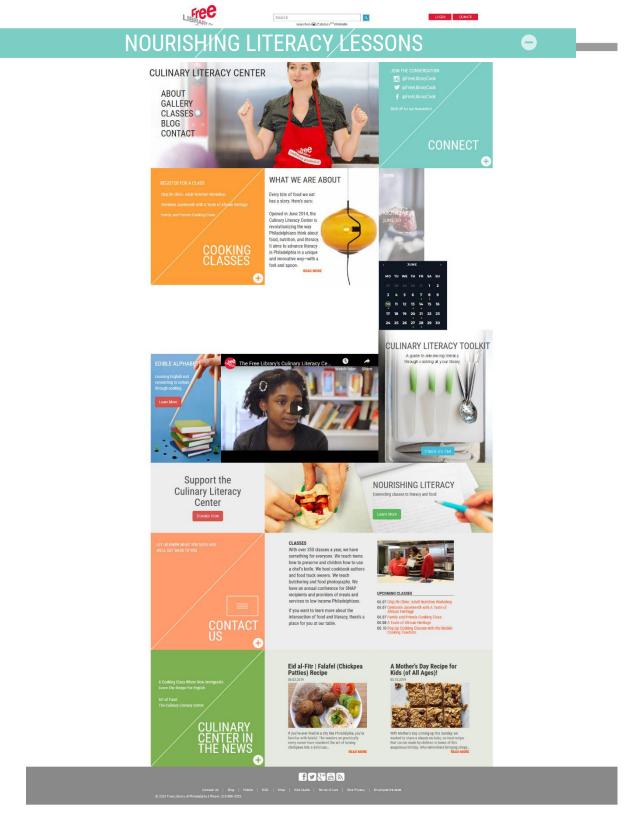
revolutionizing the way Philadelphians think about food, nutrition, and literacy. It aims to advance literacy in Philadelphia in a unique and innovative way—with a fork and spoon.

FLP defines Culinary Literacy both as learning how to cook and learning literacy through cooking. There are multiple literacies we teach through the context of cooking: math, reading, writing, science, technology, health and nutrition, cultural, historical, and more. The possibilities are endless!

The Culinary Literacy Center is a commercial-grade kitchen that serves as a classroom and dining space for Philadelphians. We are more than just a cooking school. Teachers can bring students to our hands-on lab, where we teach math via measuring, reading via recipes, and science via seeing what pops out at the end of the cooking process. Chefs of all ages can experiment with new foods, new tools, and new ideas via:

- classes that are open to the general public as well as those geared toward non-native English speakers, class trips from local schools, and adult literacy students. We even offer classes for families;
- classes that cover topics from knife skills to how to cook vegan soups and stews, from how to butcher an animal to demonstrations by guest chefs;
- multi-class series on cooking healthy meals with your family and a series that teaches about ancestral foodways, recipes, and traditions;
- programs that tie in with other library initiatives like One Book, One Philadelphia, Author Events, and the exciting exhibits that the Free Library offers.

Per the FLP's website, they offer a wide range of programs for eaters of all interests and tastes with kitchen classes range from Meatless Mondays to Fish Without Fear, butchering demonstrations to salad how-tos. Free and low-cost public programs teach consumer skills that help parents make recipes fit their families' needs and emphasize nutrition and health literacy to help with disease prevention. Screenshot of the FLP's Culinary Literacy Center's webpage:



Examples of Classes Offered at FLP's Culinary Literacy Center

Nourishing Literacy is a unique opportunity for students to learn through cooking in the Library's state-of-the-art kitchen classroom. Through handson cooking activities, students explore math, science, writing, and other academic areas. In Nourshing Literacy, students learn to make nutritious, delicious food, and they gain practical culinary skills they can use for a lifetime, such as:

Seeds That Feed (Pre-K – 1st grade)

Can you eat a rainbow? In Seeds That Feed students will ponder this big question and more as they learn about edible plant parts and their functions. In the kitchen students will learn how to prepare a rainbow-colored plant-



The Nourishing Literacy program gives children the opportunity to experiment with new foods, new tools, and new ideas.

part pasta dish, why we follow directions when we cook, and how to make their healthy meals colorful.

Flavor-Focused Kitchen Science (2nd – 4th grade)

In her book Starting from Scratch, author Sarah Elton reminds us that when we cook, we are conducting science. "When we heat up our ingredients,"" Elton tells us, "we are causing chemical and physical reactions in them. Quite simply, we're transforming matter from one state to another."" In Flavor-Focused Kitchen Science, students get to become scientists as they learn about transforming matter through pickling. In the kitchen classroom they will get to try their hands at quick pickling while they learn about fermentation, food safety, and proper handwashing technique.

Faces of Food (5th – 8th grade)

How does the food we eat get to our table? In Faces of Food, students will explore this big question and more as they learn about the jobs and workers that make up the food system. In the kitchen students will learn about mise en place and try their hands at a variety of restaurant jobs as they work together to prepare, cook, eat, and clean up a delicious plant-based meal.

Examples of Classes Offered at FLP's Culinary Literacy Center (cont):



Edible Alphabet is a free English Language Learning (ELL) program offered by the Free Library's Culinary Literacy Center. The mission is to teach English language and literacy skills through hands-on cooking projects. Students will learn vocabulary and grammar, as well as practice listening, speaking, reading, and writing in English while cooking a new delicious recipe every week.

Edible Alphabet offers students a chance to improve their English skills while cooking new recipes and eating delicious foods. Here is a great story about the program:

Trading schoolbooks for cookbooks

By Sadie Goering - Aug 7, 2018



Chana masala is one of six popular recipes featured in the Edible Alphabet curriculum. (Culinary Literacy Center)

Sharing food is a communal practice that transcends cultures. Though cuisine and preparation style can vary, the act of coming together with friends and family for a meal is universal.

The Edible Alphabet program, run out of the Culinary Literacy Center at the Free Library of Philadelphia, harnesses the universality of food to help immigrants and refugees improve their English literacy. The center has a commercial-grade kitchen — equipped with burners, convection ovens, refrigerators, and stainless steel work tables — that doubles as a classroom.

"Cooking is the vehicle through which students are learning, practicing, refining and expanding their literacy in English," said Lindsay Southworth, who teaches the class.

Learning through food

Created in 2015, the free course is offered to nonnative English speakers in the Philadelphia area and welcomes students of all levels of English proficiency. Every class has one culinary instructor and one language teacher, who collaborate to make cooking exercises both educational and delicious.

Class typically begins with an interactive warmup, where students converse and review key language concepts from the week before. After a reading- and writing-based activity or game, the day's recipe is announced, new vocabulary is introduced, and food preparation begins.



Students are grouped so they can't speak their native languages. (Culinary Literacy Center)

"Even though we have varying levels of English proficiency in the class, students work together, they're excited, we have a sense of community," Southworth said. "That helps bridge the gap between some people who might have pretty advanced levels of English and some people who may be beginners."

More than cooking and learning English, the curriculum also integrates a library skill each week. One activity involves learning about the employment resources and business

opportunities available at the library. Interested students sign up for one-on-one appointments with career counselors.

Hoping to expand

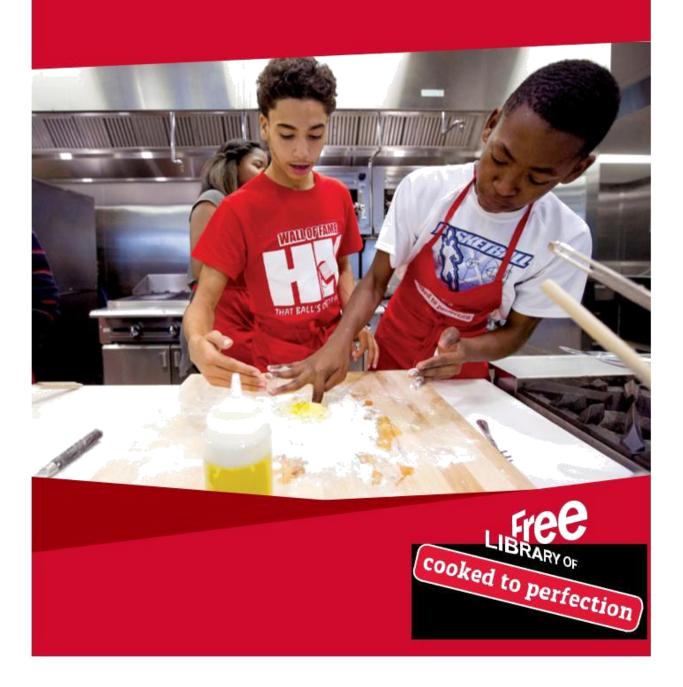
Program coordinators have developed "kitchen carts" and "kitchens in a box" that hold the necessary supplies to host a class. Efforts are being made to expand the program to smaller library branches across Philadelphia, making the class more accessible to the wider English-language-learning community.

"One of the things that makes cooking a really interesting and engaging vehicle for an Englishlanguage-learning class is that people are coming together around a communal table, sharing food," Southworth said. "It's an important experience across all different cultures and language groups. It brings people together."

https://share.america.gov/trading-schoolbooks-for-cookbooks/

culinary literacy

A Toolkit for Libraries



Inspiration and Origin

The Culinary Literacy Center is the first kitchen-classroom in a public library in the United States of America. The Culinary Literacy Center was the brainchild of the President and Director of the Free Library of Philadelphia, <u>Siobhan Reardon</u>. It was built as part of renovations to the Parkway Central

The mission of the Free Library of Philadelphia is to advance literacy, guide learning, and inspire curiosity. Library, the flagship location of the Free Library. The mission of the Free Library of Philadelphia is to advance literacy, guide learning, and inspire curiosity. Under the visionary leadership of Ms. Reardon, the Free Library has committed_to supporting its mission through innovation and creativity.

The Culinary Literacy Center was created with the understanding that cooking and eating are educational

acts. According to Ms. Reardon, <u>Library Journal's</u> <u>2015 Librarian of the Year</u>, "Nothing is more literacy-based than cooking. It is all basic literacy, math, and science. It is tactile learning, and it is social." Food and cooking present many opportunities to advance literacy: reading a recipe and understanding the vocabulary of the ingredients and cooking tools, knowing the math of measurements and how to scale a recipe up or down, studying the science of cooking and growing



food, understanding the connection between our health and the food that we eat, and exploring culture and history through cuisine. With 54 neighborhood libraries throughout the city, the Free Library of Philadelphia is the heart of every Philadelphia community. Cooking and eating provide ample opportunity to build and sustain community. The Culinary Literacy Center brings Philadelphians of all backgrounds together to learn and have fun around a shared experience.

The mission of the Culinary Literacy Center is to advance literacy through food and cooking around a communal table. We are a center in the Free Library that serves Philadelphians of all ages, from pregnant mothers and preschool students to senior citizens, and we function as a unique gateway to the library.

A Note from the Culinary Literacy Center Administrator

Since opening the Culinary Literacy Center in June 2014, libraries and community centers from around the country and world have contacted us to learn how to bring culinary literacy to their communities. We are thrilled to be sharing our story, and this toolkit, with library leaders and innovators.

The answers we give now are different from the ones we gave in the beginning and reflect our own journey. The early days of the Culinary Literacy Center involved a lot of throwing pasta at the wall to see if it stuck, which meant trying so many different things out. We knew what it meant to be librarians, but weren't so sure about how to open a cooking school or a restaurant, which was what it felt like we were doing some days. We were inventing what it meant to do culinary literacy programming in a library. It was exciting and a little terrifying. The biggest difference between now and then—besides the size of our staff—is that now we rely much less on our partners to determine what our programming looks like. We found our voice. We defined our mission.

DEFINE THE MISSION: That is the best piece of advice I have to give when speaking with the people who contact us to learn about how to open a kitchen in their library. I ask people to tell me: What is it you want to do? Why do you want to bring culinary life fact to poppeon bunity? Who are you hoping to serve? Once you know that, you can begin to identify programs to create, organizations with which to partner, materials to share, library resources to tie in. I can, and will, tell anyone who wants to know what it cost to build the space, how many mixing bowls and spoons to have on hand, the quantity of towels you'll need each week, how to order food, what kinds of organizations make the best partners. You'll find much of that in this toolkit. It will be inordinately useful to have insight on the logistics of running the Free Library's Culinary Literacy Center, the hows of the program. My challenge to you is to think strategically on the whys. For us, the answer is to advance literacy through food and cooking around a communal table. By that, we mean learning through cooking and learning about cooking, which is how we define culinary literacy. It means using the cooperative nature of cooking to build community. It means being a space that elevates hands-on, project-based learning, that celebrates diversity, that is open and inclusive. I look forward to hearing what culinary literacy programming means to you.

Cheers, Elizabeth Fitzgerald, Administrator, Culinary Literacy Center, June 2017

Advocacy: Making the Case for Culinary Literacy

Cooking is a vehicle for strengthening math skills.1 A plant-based diet can improve health.2

Using data to support statements like those above can strengthen your proposal and help you get the support you need from your library's administration and board. To help make the case for how culinary literacy programming can advance literacy, improve community health, and support your library's mission, please consider the following benefits.

Advancing Multiple Literacies

At the Culinary Literacy Center, we advance multiple literacies through cooking. In our <u>Edible</u> <u>Alphabet</u> class, students learn English in our kitchen classroom. In her book *How to Bake Pi*, <u>Dr</u>. <u>Eugenia Cheng</u>, a theoretical mathematician, explains math concepts through cooking. Library users can <u>read nutrition labels</u>, mix <u>math and cooking</u>, and explore the <u>science of cooking</u>. There is also the importance of a community-based understanding of <u>food literacy</u>. Your program can guide learning about the <u>hands that feed us</u>, cultural <u>foodways</u>, <u>environmentally</u> <u>sustainable eating</u>, and <u>food insecurity</u> in your community. What will your visitors learn in your library's culinary literacy program?

Improving Community Health

Find information about your community's health needs and let what you learn guide your programming. Look for government resources like the Centers for Disease Control and Prevention's <u>Nutrition, Physical Activity, and Obesity: Data, Trends and Maps</u>—which provides information about the health status and behaviors of Americans, state-by-state, via clickable maps, charts, and tables—and Eurostat's <u>Health in the European Union – facts and figures</u>, which provides recent statistics on health in the E.U., focusing on areas like health status, health determinants, and health care. For a global perspective, explore the World Health Organization's <u>Nutrition Landscape Information System</u>, the <u>Global Nutrition Report</u>, or the <u>Institute for Health Metrics and Evaluation</u>. Zoom in, if data is available, to look for local information about your city. We use the City of Philadelphia's <u>Community Health</u> <u>Explorer</u>, which includes important indicators like low-to-no walkable access to healthy foods and Philadelphians living in poverty.

1. The calculus of do(ugh)nuts. cheng.staff.shef.ac.uk/misc/cheng-doughnuts.pdf

2. Vegetarian Diets Linked to Lower Mortality. nih.gov/news-events/nih-research-matters/vegetarian-diets-linked-lower-mortality

Fundraising

Building the Culinary Literacy Center cost a total of \$1.2 million dollars. The funds for this construction project were procured from a public–private venture combining contributions from the City of Philadelphia with a robust fundraising campaign from the Free Library of Philadelphia Foundation. The Foundation continues to raise money for Culinary Literacy Center programming through grants, sponsorships, private donations, ticket sales, and program fees.

While many of the programs at the Culinary Literacy Center are free, we charge a small feefrom \$5 to \$35 per person—for some programs, which goes toward covering the cost of ingredients and other program materials.

Nutrition, health, and food access are currently popular subjects for grant funding. We have been successful securing funding from small family foundations. For your program, look for funding through local grocery-store chains and hospitals. Check out larger, regional, and national corporate foundations. Ask your library friends' group or a local politician's office to invest in your culinary literacy programming.

Space and Equipment Options

What kind of space and tools will you need for your culinary literacy program? Here are kitchen space and equipment options for three different budgets.

1. Commercial-Grade Kitchen

Our culinary kitchen and classroom space is approximately 1,700 square feet. Our restrooms and locker area is an additional 250 square feet; the office is 200 square feet; and the terrace, where we have a small container garden of herbs, is approximately 800 square feet.

Our commercial-grade equipment includes 16 burners, 4 convection ovens, 2 salamanders (cheese melters), a grill top, a walk-in refrigerator, 4 reach-in refrigerators, a freezer drawer, an ice maker, and a large prep table at the front of the classroom that has a sink and 4 of the burners on it. There is also a scullery, or dishwashing room.

The classroom area seats 36 people at 9 high stainless-steel work tables. We have three cameras that feed to a large-screen TV at the front of the classroom, giving every one of the 36 seats a view to what the instructor is doing. We often use the camera's zoom feature, so students in the back of the room can see the details of a small culinary technique, like the dicing of onions. Technological capabilities also include a sound system and the capability to record programming and to stream a live feed.

2. Mobile Kitchen Unit

Libraries across the U.S. are exploring culinary literacy programming using mobile kitchens. The Camden County Library system in New Jersey uses a mobile kitchen in its <u>Books and</u> <u>Cooks</u> program. The kitchen is complemented by a collection of books about nutrition, healthy eating, and consumer literacy. Camden County transports the kitchen to its eight neighborhood libraries and other community locations to demonstrate cooking techniques and recipes. The San Francisco Public Library rolls the <u>Biblio Bistro</u> out to farmers' markets and library branches for culinary literacy programming. The Culinary Literacy Center has recently purchased a <u>Charlie Cart</u>, a mobile kitchenclassroom that comes with kitchen tools and a hands-on, multidisciplinary nutritioneducation curriculum for children.

3. Kitchen in a Box

You do not need a commercial-grade kitchen, or even a mobile kitchen unit, to offer culinary literacy programming in your library. If your budget is tight, the only things you need are a table, an outlet, running water, and the most basic cooking tools. Ideally, you would have meeting-room space. We use a Kitchen in a Box to offer culinary literacy programming at our neighborhood libraries throughout the city of Philadelphia. All of the kitchen tools, including an electric skillet and an immersion blender, fit inside of a large lidded plastic storage bin, which we can transport through our interlibrary mail system. The cost of a deluxe Kitchen in a Box kit is approximately \$800 for a fairly exhaustive list of equipment, listed below. We have also worked successfully with a smaller, less robust inventory list, which cost approximately \$350 to compile.

Kitchen in a Box Equipment List

(units per kitchen)

10	cutting mats		
1	sharp chef's knife		
-	sharp oner s kine		
6	green lettuce knives		
0	green lettuce knives		
1	big heat safe spoon		
1	food scissors		
1	colander		
3	sets of measuring cups		
3	sets of measuring spoons		
5	Sets of medsaming spoons		
1	can opener		
2	quesadilla cutters		
2	questania catters		
1	tong		
1	tong		
1	tong		
1	tong spatula		
1	tong		
1	tong spatula		
1 1 1	tong spatula potato masher liquid-measuring cup		
1 1 1	tong spatula potato masher		
1 1 1 2 1	tong spatula potato masher liquid-measuring cup whisk		
1 1 1	tong spatula potato masher liquid-measuring cup		
1 1 1 2 1	tong spatula potato masher liquid-measuring cup whisk		
1 1 1 2 1	tong spatula potato masher liquid-measuring cup whisk		
1 1 1 2 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet		
1 1 1 2 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet		
1 1 1 2 1 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet citrus juicer		
1 1 1 2 1 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet citrus juicer		
1 1 2 1 1 1 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet citrus juicer egg suitcase		
1 1 2 1 1 1 1 1 1	tong spatula potato masher liquid-measuring cup whisk electric skillet citrus juicer egg suitcase		

3	sets of peelers	
3	sets of paring knives	
1	set of knife covers	
1	grater	
2	bench scrapers	
2	half sheet baking pan/sheet	
2	metal spoons	
2	small rolling pins	
20	butter knives	
20	metal forks	
20	spoons	
1	pitcher	
1	tablecloth	
1	extension cord	
1	canister of sanitizing wipes	
1	bottle of cleaning spray paper towels	

Safety

One of the biggest concerns with any cooking program is safety. People have questions about giving knives to the public and how we keep from contaminating the food we prepare and eat. We take safety very seriously at the Culinary Literacy Center. Here are some of the safeguards we employ to protect our visitors and our staff.

City Government Licenses and Certifications

The Culinary Literacy Center is certified by the city of Philadelphia's Department of Public Health as a Demonstration Kitchen. We are licensed for Food Preparing and Serving by the Philadelphia Department of Licenses & Inspections. We are subject to routine, unannounced food-facility inspections conducted by the Environmental Health Services division of the Department of Public Health. Most inspections occur once a year, and inspectors stress the prevention of foodborne illness and the education of our staff on proper food-handling techniques. At the end of the inspection, the sanitarian gives us a report that itemizes any food-safety violations and explains how to correct them. Environmental Health Services has the authority to order an establishment closed if it poses an imminent health hazard. Our kitchen also follows stringent fire codes, to help ensure a safe environment for cooking with industrial-grade equipment. Contact your local fire department to better understand what it means to be in compliance with the fire codes in your area. Philadelphia provides this instruction manual that serves as a guide to permits and licenses related to opening a stationary food business in the city of Philadelphia. Contact your city government to learn more about the laws and regulations around opening a kitchen classroom in your library.

ServSafe

To support our compliance with health regulations, to be informed food handlers, and to help keep our community safe, the staff members of the Culinary Literacy Center are all ServSafe certified. <u>ServSafe</u> is a training program developed by the National Restaurant Association that offers food- and alcohol-safety training and certification exams. All of the Culinary Literacy Center's staff members are certified at either the ServSafe Food Handler or ServSafe Manager levels. We are moving toward a policy of having all of our instructors certified as Food Handlers, which costs \$15.

Food Safety

Proper handwashing technique is the most important way to prevent the spread of germs to others. Practicing as well as teaching this technique is the backbone of our programming. Our kitchen has three designated handwashing stations, and when we offer programs in our neighborhood libraries, we make sure people wash their hands or use gloves, so that we minimize the potential for cross-contamination as much as possible. There are <u>four important steps to avoiding food poisoning</u>: cooking to the right temperature, washing hands and surfaces often, refrigerating food properly, and avoiding cross-contamination by separating raw meats from other foods. Public libraries must also know <u>how to report a foodborne disease outbreak</u>. Visit the Centers for Disease Control and Prevention's <u>BusinessPulse Food Safety</u>, as well as the U.S. Department of Health and Human Safety's <u>Foodsafety.gov</u> as starting points for food-safety standards.

Knife Skills

We promote knife safety by teaching knife skills. We believe in giving people, children included, the best tools for the job, and we instruct them in the proper way to use them. We regularly offer knife-skills classes at the Culinary Literacy Center, and <u>books about</u> using and caring for knives are available to check out.

At the Culinary Literacy Center we give chefs' knives to children ages 10 and up. We use butter knives and lettuce knives for younger children and often have children use their hands to tear and break produce into smaller pieces. We have found that box graters, vegetable peelers, and the blades on plastic wrap dispensers are "hidden sharps"; we have had more injuries with those items than with the knives. We use a special perforated red bin to store dirty knives, to keep our dishwasher safe. We have three first-aid kits in the kitchen, and our staff knows the proper procedures for handling an injury, including whom to contact in the building. We encourage you to work with your library's security or safety department to develop safety procedures for your culinary literacy program.

Food Allergies

In our programs we avoid many of the <u>major food allergens</u> designated by the Food Allergen Labeling and Consumer Protection Act of 2004, like nuts and shellfish, whenever we can especially in our children's programs. We ask participants about food allergies before classes and encourage people with life-threatening food allergies to bring along an Epinephrine Auto-Injector. Additional training on how to address food allergies is available via <u>Servsafe</u>.

Food Procurement

When you think about ingredients for your programs, you will need to consider factors like cost, feasibility, and the values your library's mission upholds. At the Culinary Literacy Center, we get our ingredients in two ways: We either ask our food educators and instructors to purchase food supplies, and then we reimburse them; or we purchase the ingredients ourselves.

When we purchase our own ingredients, we usually use a food-delivery service like <u>Instacart</u>, <u>Fresh Direct</u>, or <u>AmazonFresh</u> [or the Farmers Market]. For programs that need a large quantity of ingredients, we have found that ordering cases of food at wholesale prices saves money. We have used the <u>Common Market</u>, a "mission-driven distributor of regional farm products" that "strives to strengthen small and family-owned farms while simultaneously improving food access and public health."

Community Partners

The staff members of the Culinary Literacy Center are librarians and library assistants, not chefs. We are not usually the instructors for our programs. Instead, we partner with organizations around Philadelphia with similar missions to find our food educators, and we often find our audiences for programs for special populations in the same way. We suggest conducting an <u>environmental scan</u> of the food- and culinary-education programming in your area. Look for culturally competent organizations whose mission aligns with your institution's and that have registered dieticians and other food educators on staff. An added cost savings with such partnerships is that often the partnering organization will pay their staff members to do outreach, so the library does not always need to provide an honorarium or fee.

Inside the U.S., we recommend connecting with your local <u>Cooperative Extension</u> office, part of more than 100 land-grant colleges and universities that have a mission to "bring vital, practical information to agricultural producers, small business owners, consumers, families, and young people." Reach out to local hospitals, healthcare providers, and nonprofits that are doing work in food access, food justice, community gardens, nutrition, and health. Outside of the U.S., find out if your local culinary school, college, or university has an office of community outreach or a continuing education department you can partner with. The Culinary Literacy Center has worked with a number of community partners to provide programming, including the following:

- OLDWAYS Their A Taste of African Heritage program is one of our most popular series. The success of this free class at the Culinary Literacy Center led to Philadelphia being a hub for this Oldways program, which highlights "a way of eating based on the healthy food traditions of people with African roots."
- <u>C-CAP</u> The Careers Through Culinary Arts Program is "a national nonprofit that transforms the lives of disadvantaged youth through the culinary arts and prepares them for college and careers in the restaurant and hospitality industry." Our current kitchen manager is a C-CAP student and graduating high school senior.
- GREATER PHILADELPHIA COALITION AGAINST HUNGER This organization "strives to build a community where all people have the food they need to lead healthy lives." The Coalition Against Hunger "connects people with food assistance programs and nutrition education; provides resources to a network of food pantries; and educates the public and policymakers about responsible solutions that prevent people from going hungry." Each year we partner with them to present the <u>Good Food for All</u> conference.

Programming

We have vibrant and diverse programming at the Culinary Literacy Center, which often focuses on community engagement and civic dialogue, as well as health and nutrition literacy. Our programs fall into two categories: public programs and programs for special populations.

Public Programs

Public programs at the Culinary Literacy Center are open to everyone. They cover a wide range of topics and take on a variety of formats, including cookbook-author events, food photography, cheese tasting, preserving and pickling, butchering demonstration, knife skills, ancient Roman/French/Filipino cuisine, and a culinary seed swap. For a list of current and past Culinary Literacy Center events, please visit our Eventbrite page.

While some classes are free, we charge a fee for a majority of our public programs, ranging from \$5 to

\$35. Funds raised through our public programs go directly toward the costs associated with our programs for special populations. In addition to keeping our fees low, we further promote accessibility by reserving a portion of free tickets for low-income Philadelphians who are eligible for the <u>Supplemental Nutrition Assistance Program</u> (SNAP). We also offer our colleagues at the Free Library a 50% staff discount for our programs.

We suggest reaching out to your local culinary community to find program ideas and instructors. Ask a local chef to come and lead a class. Email a cookbook author or publisher to schedule an author event. You can also lead programs yourself. Start small. Lead a program on something you know how to do really well in the kitchen, or find a <u>model of a program online</u> and adapt it for your community.

In addition to one-time programs, the Culinary Literacy Center hosts special events, like our annual conference on food insecurity, <u>Good Food for All</u>. In partnership with the Coalition Against Hunger, we have welcomed truly extraordinary keynote speakers for this conference, including <u>Linda Tirado</u>, <u>Karen Washington</u>, and <u>Saru Jayaraman</u>. As a part of <u>Archives Month Philly</u>, our <u>Food from the Archives</u> gave more than 15 local cultural institutions the opportunity to showcase their food-related objects and materials, which brought more than 200 visitors to learn about food through primary sources.

Programs for Special Populations

Programs for special populations are targeted for specific groups that receive inadequate resources and services in our community. We work with partner organizations that serve these special populations and that are committed to cultural competency, so that we can offer programs that effectively deliver services designed to meet the social, cultural, physical, and linguistic needs of all participants. The Culinary Literacy Center's programs for special populations are part of the Free Library's broader <u>commitment to diversity</u>, <u>equality</u>, and inclusion, which builds on a longstanding foundation of libraries as welcoming community spaces. Our current programs for special populations include the following:

NOURISHING LITERACY is our school-visit program, offering students and teachers food-based lessons both in the Culinary Literacy Center and at their school that support classroom curriculum. Nourishing Literacy helps students make deeper connections between cooking, literacy, food, and nutrition. Nourishing Literacy was created by the Culinary Literacy Center and <u>Honeypie Cooking</u>.

EDIBLE ALPHABET is an English-as-a-second-language course for new Americans that also connects students with the Free Library. Edible Alphabet allows students to improve their English-language and interpersonal skills in a non-traditional classroom space that brings people from all over the globe to the table. The curriculum for Edible Alphabet was created for the Free Library of Philadelphia by Language ConnectED.

<u>COOKABILITY</u> is a program for people who are visually impaired to learn and share about food and cooking. The Culinary Literacy Center works with a chef instructor, who is himself legally blind, to offer hands-on cooking classes that incorporate adaptive and accessible approaches to buying and growing food and meal preparation for home cooks with limited vision.

<u>CHOW DOWN ON WELLNESS</u> is a plant-based cooking class for military veterans designed to promote healthy eating habits and teambuilding in a relaxed social atmosphere. Health professionals have found that cooking in a social atmosphere can be therapeutic. This class explores all the health benefits of cooking together.

<u>COOKING WITH CONFIDENCE</u> is a beginner cooking class designed for adults with disabilities. Participants cook and eat together in a joyful, inclusive kitchen classroom and share in lively conversation around a communal table.

Resources

BOOKS

Brown, Leanne. 2015. Good and Cheap: Eat Well on \$4/Day.

*Good and Cheap is freely available online as a full-text PDF at leannebrown.com.

Additionally, organizations that support people in need are eligible for a <u>special bulk discount of \$5.19</u> per copy with free shipping.

Cheng, Eugenia. 2016. How to Bake n: An Edible Exploration of the Mathematics of Mathematics.

Chevat, Richie and Michael Pollan. 2015. The Omnivore's Dilemma: The Secrets Behind What You Eat.

Elton, Sarah and Jeff Kulak. 2014. Starting from Scratch: What You Should Know About Food and Cooking.

Jayaraman, Sarumathi. 2013. Behind the Kitchen Door.

Katzen, Mollie. 1999. Pretend Soup.

McCallum, Ann and Leeza Hernandez. 2011. Eat Your Math Homework: Recipes for Hungry Minds.

Menzel, Peter and Faith D'Aluisio. 2008. What the World Eats.

Ruhlman, Michael. 2010. Ratio: The Simple Codes Behind the Craft of Everyday Cooking.

Sampson, Sally and Carl Tremblay. 2013. Chopchop: The Kids' Guide to Cooking Real Food with Your Family.

WEBSITES

<u>ChopChop Kids</u> – an innovative nonprofit organization whose mission is to inspire and teach children and families to cook real food together

Foodsafety.gov - the gateway to food safety information provided by U.S. government agencies



Food Safety for the Restaurant Industry - information for businesses from the CDC

Foodspan – a free, downloadable high school curriculum that highlights critical issues in the food system and empowers students to be food citizens, developed by the Johns Hopkins Center for a Livable Future

<u>Four Steps to Food Safety</u> – information for the general public from the Centers for Disease Control and Prevention

<u>Institute for Health Metrics and Evaluation</u> – an independent population health research center at the University of Washington that provides rigorous and comparable measurement of the world's most important health problems and evaluates the strategies used to address them

<u>Nutrition, Physical Activity, and Obesity: Data, Trends, and Maps</u> – an interactive database from the Centers for Disease Control and Prevention that provides information about the health status and behaviors of Americans, stateby-state, via clickable maps, charts, and tables

ServSafe – food and alcohol safety training and certification exams created by the National Restaurant Foundation

<u>Science & Cooking</u> – an edX course from Harvard University in which top chefs and Harvard researchers explore how cooking can illuminate basic principles in physics and engineering



Aspirational Models of Culinary Literacy, Library Kitchens and Cooking Programs



Examples from WebJunction's <u>Health Happens in Libraries</u> resource page:

- Healthy Foods Competition Heats Up at Crandon Public Library
- <u>St. Charles Parish Library Address Food Insecurity with Personal Support.</u>
- <u>Kitchen Creations at the Library</u>, a presentation from the 2013 <u>Big Talk From Small</u> <u>Libraries Conference</u>, with Lee Schauer, director at the Rock Springs Public Library in Wisconsin.
- WebJunction/Library Journal webinar, <u>Culinary Literacy: A Library Recipe for Cooking Up</u> <u>Literacy and Community</u>, with Elizabeth Fitzgerald, Culinary Literacy Specialist
- <u>Meadowridge Library Kitchen</u> at Madison Public Library.
- From the Hartford Public Library in Connecticut, two kitchens, the <u>Kitchen at Hartford</u> <u>Public Library and the Kitchen at Billings Forge</u>, with cafés and a farm-totable catering business that offers job skills training and high-quality employment opportunities.
- In the <u>Social Library</u> series, the Napa County Library is featured for their <u>Pozole Contest</u>, the Suwannee River Regional Library System for their <u>Recipe Exchange</u>, and the Fair Lawn Public Library for their <u>Recipe Club</u>.
- How To Start a Baking Club at the Library, School Library Journal, 3/21/17

Additional ideas from the Library Think Tank facebook group:

- For potential caterers in your community who don't have kitchens of their own,
 and they might be willing to volunteer to teach a class or two.
- Class in canning or preserving taught by a local expert.
- For others who could teach classes (in addition to local Extension Office), high school or community college cooking programs (students or teachers), and local grocery stores or restaurants frequently have someone who will come in and do cooking demos.
- Inventory the people with cooking skills in your area... bread person? pie maker?
 Someone who does pickles or jam? If you think they could do a program (or even if you think they could tell you about what they do and you make it more "class-friendly" (think of those celebrity chefs who have their mothers on the show) I think you should give that a try.
- Make dog biscuits for a local shelter (partner with the shelter for a read to dogs program).
- Check in with folks at the farmers market and any local cultural societies (e.g. Scandinavian association)
- A program on preparing freezer meals for the crockpot.
- Cooking with teens the big issue was what to do while things cooked, leaving us to either only make very simple and quick dishes or figure out something to keep them busy. Now, we do "Dinner & a Movie" so we can have the kids prepare their own supper (meatloaf & mashed potato, personal pizzas, lasagna & garlic bread, etc.), then we stick it in the oven & go start a movie. I serve while they watch, and use volunteers & any stragglers to do final cleanup.
- Invite dietitians from local grocery stores or hospital nutritionist to do programs.
- Local cookbook authors.
- A class on How to Clean the Oven.

Options for the 1.3 acres at the South End of Parcel B:

Greenhouse

Production Garden

Guest House

Closed Loop Systems: Circular Economics

A closed loop system is one in which you contain all of your outputs and convert them into resource inputs. The US Chamber of Commerce Foundation describes it this way:

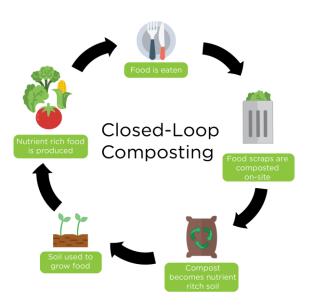
The current linear "take-make-waste" economy, highly successful in delivering economic development throughout the 20th century, is no longer viable for continuing progress in the 21st century. Commerce and production processes in large part follow this linear model, which has been that products and their component resources are eventually discarded as waste.

The concept of a "circular economy" has emerged as an alternative to that linear model. Also known as "closed-loop" or "cradle-to-cradle," a circular economy is a restorative model that decouples economic growth from natural resource use, and emphasizes longevity, reuse, and recycling. All resources and energy are renewable and regenerative, all durable resources are endlessly cycled back into supply chains, and waste does not exist.

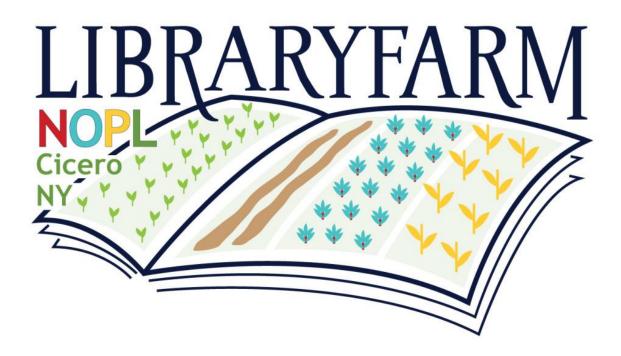
Circular economy models will also play an important role in the private sector's ability to meet the United Nation's Sustainable Development Goals (SDGs). Circularity directly supports SDG 12 – Ensure sustainable consumption and production patterns. This goal is concerned with sustainable management and efficient use of materials, environmentally sound management of chemicals and waste, and decreasing waste generation and food waste while increasing reuse and recycling. Circular economy models can also indirectly support other SDGs, such as decent work and economic growth (9), and protecting life under water and on the land (14&15) by creating innovative

techniques to materials through the economy and keeping those materials out of the ecosystem.*

In this context, circularity involves leveraging surplus food resources into food recovery donations, repurposing into value-added deli items, and/or on-site composting programs. remaining from programs in the teaching kitchen, deli, event catering, &/or guesthouse visitors can be composted on site at the Fayetteville Public Library and turned into a resource that nourishes the soil around the Fayetteville Public Library.



Aspirational examples: Library Production Gardens



https://www.nopl.org/services/spaces/library-farm/

The LibraryFarm is an organic community garden located on the grounds of the <u>Northern Onondaga</u> <u>Public Library at Cicero</u>. The mission of the LibraryFarm is to provide a place for our community to grow, share, and learn about food literacy and sustainable gardening. At the LibraryFarm, half of the area is dedicated to the Community Garden; the other half is dedicated to the LibraryFarm Plotters – our individual gardeners.

Library to Farm to Table

Public libraries increasingly offer food production programs



Claudia Alstrom, president of the Adult Library Garden Club at Sacramento (Calif.) Public Library's Rancho Cordova branch, teaches children about vegetables in the Read and Feed garden. Photo: Sacramento (Calif.) Public Library

Patrons are rolling up their sleeves and getting dirty with the offerings cropping up at public libraries across the country—farms, gardens, orchards, and food-literacy classes, to name a few—and librarians say the grow-it-yourself movement is only expanding.

For some libraries serving vulnerable populations, food-producing gardens and nutrition initiatives are born out of necessity. Others have launched programs to advance the causes of sustainability and education.

When David Mixdorf was named director of the South Sioux City (Neb.) Public Library in 2009, he was well positioned to establish the library's first community garden. Mixdorf grew up on an organic farm and has worked the land in one form or another his entire life. "We've saved seeds in my family for years and years," he says.

In 2009, the library was already giving out seeds to patrons. Within Mixdorf's first year as director, he established the community garden on nearby private property donated by the library's Friends group.

Mixdorf says it was a practical addition to the library's traditional services, as many area residents are blue-collar workers who live in food deserts, where grocery stores lie far away and nutritional food options are scarce. He says his library's extensive program has come together through a mix of volunteers and residents paying the city \$10 to \$15 annually for the garden plots. "The majority of them get used every single year," he says.



Patrons at the South Sioux City (Neb.) Public Library can check out canning equipment. Photo: South Sioux City (Neb.) Public Library

The program has grown steadily and now consists of two gardens with a combined 60 plots; an orchard with more than 200 apple and fruit trees, berry bushes, beehives, and a section for native prairie flowers; and roughly 20 classes a year on gardening, canning—yes, you can check out canning equipment from the library—and grafting, among other subjects.

Mixdorf says the library donated 9,000 pounds of produce grown on its premises last year through South Sioux City's volunteer-run Voices for Food program.

Food literacy and access to healthy meal options are also pressing issues in Sacramento,

California, according to Jill Stockinger, supervisor of the Rancho Cordova branch of the city's library system.

"Over 60 percent of children in schools in our neighborhood are under the poverty level and qualify for free breakfast and lunch programs," she says, noting that more half of the children in the community are obese.

The first Read and Feed Teaching and Demonstration Garden was launched at the library system's Colonial Heights branch in 2011 with a \$13,000 grant from the Junior League of Sacramento. A second garden was built at Rancho Cordova the following year, Stockinger says. Both areas that the branches serve are considered food deserts.

Rancho Cordova serves 600 children annually, and roughly 400 parents "who watch and sometimes help," according to Stockinger. More than 100 children and adults attended the library's March Feed and Read program, according to Stockinger.

Additionally, the library has partnered with the California-based Food Literacy Center—which offers food education programs in California public schools—to provide monthly healthy-eating

classes at the Rancho Cordova branch. Testimonials from parents have bolstered the library's programming efforts, Stockinger says.

"One parent said, 'My child had never eaten broccoli before, but he grew it and now he wants to eat it."

While some food production and nutrition programs have developed out of a need to make food more accessible, others are a result of patrons simply wanting to learn more about growing their own food.

Jill Youngs, manager of the Cicero branch of the Northern Onondaga (N.Y.) Public Library, says her organization's LibraryFarm program was started about five years ago "because it was fun."

About 35 to 50 "plotters," as they are called, run the library garden as volunteers, she says. "It's very organic," Youngs jokes. "It depends on who shows up and with what tools."

She says patrons in her community have a general commitment to sustainability, but the program has also resulted in the donation of "well over 200 pounds of fresh produce" to local food pantries.

"Some people don't have the space [for their own garden] and some people just want to learn," Youngs says. The library has strengthened its program by adding classes such as "Beekeeping 101," "Putting Up Your Harvest," and "Organic Pest Control."

Youngs, as well as her counterparts in Sacramento and South Sioux City, says she is frequently contacted by other library administrators across the country looking to start their own food-producing gardens.

How Library Gardens are Growing Communities in Georgia

January 26, 2018



A local branch staff member waters the library's Tower Garden, a self-sustaining, vertical, aeroponic system that has become an unlikely cornerstone of Gwinnett County Public Library's STEM programming. (Photo Credit: Gwinnett County Public Library)

Project Snapshot

Project Name: <u>Homegrown Gwinnett</u> Grant Log Number: <u>SP-02-16-0013-16</u> Year Awarded: 2016 Grant Program Name: Sparks! Ignition Grants for Libraries Recipient: Gwinnett County Public Library

"These Tower Gardens have compelled each of our 15 branches to reach out to their communities, learn what their communities need, and through gardening and the resulting produce, serve underrepresented populations across the country. The Homegrown Gwinnett initiative demonstrates that our libraries can serve our communities beyond books." – Meg Wilson, Norcross Branch Manager, Gwinnet County Public Library

It all started with the Bronx Green Machine some 800 miles away in an inner-city classroom, where a local teacher introduced Tower Gardens to his class. The resulting <u>NPR story (link is external)</u> caught the attention of Library Branch Manager Meg Wilson, in Norcross, Georgia, who also happened to know someone in the "Tower Garden" business. What occurred in the 12 months after Wilson heard that story still amazes staff and patrons of <u>Gwinnett County Public</u> Library (link is external).

In less than 12 months, the investment in Tower Gardens and the system-wide Homegrown Gwinnett program created a popular program that aligned the Georgia library system with unlikely community partners and further solidified the library's role as a community catalyst.



Tackling Tough Issues through Gardening

"A Table of Abundance" is a local branch program that provides herb samples produced by the Tower Gardens. These samples were used in discussions of healthy eating. (Photo Credit: Gwinnett County Public Library) When Wilson and her team started conducting research on Tower Gardens—self-sustaining, aeroponic gardens that grow vertically using water and minerals to feed the plant—they discovered that there was much more need in the community than they had thought.

"One of the things we found when we were conducting research ahead of our grant application is that Gwinnett County has a lot of food deserts," said Charles Pace, Executive Director of GCPL. "There is a lack of good nutrition education and a high rate of obesity. Knowing that, we saw these towers as educational tools aimed at all ages to solve some of these health issues the county was facing."

The towers, which were implemented in all 15 of Gwinnett County library branches, became a resource for teaching county residents how to have proper relationships with food.

"The community as a whole has benefitted from these Tower Gardens," said Pace. "They really have had a universal appeal."

Sparking STEM/STEAM Programs in Gwinnett

Through their <u>IMLS Sparks! Ignition grant (link is external)</u>, which offers special funding opportunities through the IMLS <u>National Leadership Grant program</u>, Homegrown Gwinnett's 15 Tower Gardens provided 183 separate programs in STEM and STEAM, early literacy, and culinary literacy, while creating and strengthening crucial community partnerships.

"In each library, the garden itself has become a high-profile, attention grabbing means to an end," said Wilson. "They allowed us to increase our STEM and STEAM programming for all ages, and also compelled each branch to reach out to their communities and provide produce and other education through the towers."



Chef Amanda Manning uses fresh produce from the branch's Tower Garden in a library culinary literacy program. Known for her work with the Atlanta Botanical Gardens, Manning incorporated Tower Garden herbs into each dish. (Photo Credit: Gwinnett County Public Library)

In one year, virtually every community group served by the library system benefitted from Homegrown Gwinnett. Many home school groups, scout troops, preschool and special needs classes discovered the basic steps for growing a seed and the process of gardening. Programs were developed for Hispanic and Asian library users, showing how to use herbs and plants to prepare a variety of salsas, and gardens became part of English language classes by using the towers to teach food vocabulary. The <u>Teen Chopped (link is external)</u> Competition was a fan favorite, engaging teens to compete in culinary competitions using ingredients from the Tower Gardens.

The science behind the Tower Gardens wasn't the only inspiration for literacy activities at the 15 branches. Using the gardens' visual appeal, branches also taught photography and art classes, tapping into the participants' senses and engaging their imaginations to create works of art.

"We haven't found an audience that hasn't been engaged with Homegrown Gwinnett and these Tower Gardens," said Barbara Spruill, Division Director of Grants and Community Partnerships at Gwinnett County Public Library. "It has allowed us to make new friends and partnerships on many different levels."

Addressing Food Security



Teen volunteers help package fresh produce harvested from the Tower Garden to distribute to a local food co-op. Many of GCPL's branches chose to donate produce to specific food pantries or food coops in the community. (Photo credit: GCPL)

"One of the more important partnership extensions resulting from the Tower Gardens was staff participation in the Gwinnet Coalition's Food Subcommittee," said Spruill. "The group helped us track different organizations' programs to address food insecurity and helped us think of ways that our Tower Gardens could supplement those programs."

Working with the Food Subcommittee further alerted the library to the needs of families and seniors residing in extended-stay hotels. Many branches take gently used books weeded from their collections to these hotels, as well as to local food co-ops. Along with the donated books, the library will also provide storytimes to the area food pantries or co-ops. Some of the fresh produce donated to Senior Services was

used in the Meals on Wheels service.

Additionally, the Gwinnett County Food Services Program Coordinator partnered with the library to coordinate system-wide, monthly donations of produce for a senior lunch program at a local community center, raising awareness of the Tower Gardens and library services.

A library staff member tries her hand at handpollinating during a Tower Garden program. Many branches hope to incorporate hand pollination to broaden the variety of plant and herbs produced by the towers. (Photo Credit: Gwinnett County Public Library)



When the project was first envisioned, it was thought that gardening would be the only draw and only source of programming for patrons. But in one year, these towers have cast a wider net of engagement both inside the library and outside in the community. In fact, in the year since the towers were installed library programming attendance has increased by seven percent across the system.

"The programming has really knocked our socks off," said Wilson. "From a staff point of view, Homegrown Gwinnett has given each of our staff members the opportunity to be creative. They are able to identify their passions and satisfy those passions with these towers. There is really no end to the creativity."

When the grant concluded in late 2017, branches were asked if they wanted to keep their towers, and not one said no. Because of the self-sustaining nature of the towers, each branch has the opportunity to continue programming and donations while expanding tower structures and use. Some of those expanded features and activities include trying hand pollination, building upon culinary initiatives, or treating garden tiers like books and allowing patrons to check those tiers out for personal use.

"It has a lot of room to expand," said Wilson. "And it fits into our mission as a library to support information, education, and recreational interests of our patrons by establishing partnerships that broaden the scope of our offering."

In 2017, Homegrown Gwinnett received <u>Urban Libraries Council Honorable Mention: Healthy</u> <u>Produce and Fresh Ideas (link is external)</u>. In their entry, the library reported that tower garden programming engaged 2,183 people, all of whom, in some form or another, commented, "I didn't know libraries do things like this." Indeed!

Resources:

- Gwinnett Library Podcast with Meg Wilson (link is external)
- Central Minnesota Libraries Exchange Newsletter: Library Gardens (link is external)
- YouTube Video Recap: Teen Culinary Event: Chopped (link is external)
- Gwinnett Daily Post (link is external)

Growing Library Garden Programs

Libraries with Gardens

- <u>Let's Move Libraries</u>, a website collecting resources related to gardening in library programs, as part of movement-based programs:
 - Crehore, Mary P. 15 March 2017. "A Children's Garden at Avon Lake Public

Library," WebJunction. <u>http://www.webjunction.org/news/webjunction/</u> <u>childrens-garden-avon-lake.html</u>.

- Central Minnesota Library Exchange. 2017. Podcast on Library Gardens. <u>https://cmle.org/episode-eight-library-gardens/</u>.
- Teen Services Depot. 2015. Garden Club. Great resource on how to start one at your library. <u>https://teenservicesdepot.wordpress.com/2015/07/27/gardenclub/</u>.
- Kristi Bryant. 2015. Get Started Gardening at your Library. *Programming Librarian*. <u>http://www.programminglibrarian.org/programs/get-started-gardening-your-library</u>
- Rogers, Chris. 14 March 2017. "Seeds of Change: A Seed Library for All Ages," WebJunction. <u>http://www.webjunction.org/news/webjunction/se</u> <u>ed-library.html</u>
- Institute of Museum and Library Services (IMLS). 2009-present. Let's Move! Museums & Gardens. <u>https://www.imls.gov/issues/national-initiatives/lets-move-museums-gardens</u>
- Peterson, Jennifer. "Growing Library Garden Programs," WebJunction. <u>http://www.webjunction.org/news/webjunctio</u> <u>n/growing-library-garden-programs.html</u>
- Middle Country Public Library's <u>Nature Explorium</u> in New York. Learn all about this innovative garden in a WebJunction webinar, <u>Explore and Discover: Nature-Based</u> <u>Spaces and Activities at your Library</u>. See <u>Growing Nature Literacy in Libraries Resource</u> <u>Book</u> (pdf).
- <u>Westbank Community Garden</u> at Westbank Libraries in Texas rents out fourteen 8' x 8' organic plots to community members.



• Waterford Township Public Library in Michigan has transformed landscaping beds at the library into a <u>Children's Sensory Garden</u> and an active <u>Library Garden Club</u> maintains the space and provides programs.

Berkeley County Library

System in South Carolina hosts the <u>Sangaree Community Garden</u> which was developed through a Community Grant from Home Depot and with the support of the Sangaree Special Tax District. Check out the <u>photos of the creation of the garden</u> last June on Facebook.

- <u>Pizza Garden</u> at the Reisterstown Branch of the Baltimore County Public Library is a container garden including ingredients used in pizza, such as basil, onions, oregano, parsley and peppers.
- The Pine River Community Garden is at Colorado's Pine River Library, the <u>2014 Best</u> <u>Small Library in America</u>. (We covered their inaugural Zucchini Extravaganza in <u>Social</u> <u>Library 31</u>).
- <u>New River Library Community Garden</u> is at a Pasco County Library in Florida. There's a wonderful <u>Pay It Forward video</u> from the Tampa Bay Library Consortium explaining how the garden came about and is sustained.
- The Lonoke Lions Club and other volunteers built a <u>Children's Learning Garden</u> for the Marjorie Walker McCrary Memorial Library, in Lonoke, Arkansas.
- <u>Gilmer County Public Library</u> in Georgia hosts a <u>Demonstration Garden</u> in collaboration with the Master Gardener program, a volunteer training program with the University of Georgia Cooperative Extension.
- <u>Plain City Public Library</u> in Ohio is home to the <u>Community Garden Project</u> which started in 2010.
- The Olympia Timberland Library in Washington has a <u>Community Garden [that] Engages</u> <u>Homeless Patrons and Non-Profit Neighbors</u>.
- The JMG Cody Children's Library in Wyoming is part of a national campaign with <u>Junior</u> <u>Master Gardeners</u>. See <u>blog post on WyomingLibraries.org</u>.
- <u>Read & Feed Community Garden</u> in Harrison Michigan. The mission of the garden is to help meet the basic needs of library patrons and the community at large. In meeting



those needs we strive to promote reading, encourage lifelong learning and increase library use. Excess produce will also be donated to the Stone Soup Project. Our goals include increasing access to fresh produce, teaching self-sufficiency skills, continuing to position the library as a community asset, and creating opportunities for physical health and education.

• <u>Salem-South Lyon District Library Gardens</u> in Michigan, maintained by 30 garden volunteers.

- Wayne County Public Library Summer Garden Program
- <u>Walkertown Public Library (Forsyth County) Community</u> Garden

• Beautiful Rainbow Cafe, a collaboration of the Gadsden City Schools, City of Gadsden, and Gadsden Public Library. See <u>Gadsden City High School program a tasty success</u>, 12/5/17

More Library Gardens in the News

Dig It! Library Gardens Sprout Up Coast-to-Coast (and

photo gallery), School Library Journal, August 2014

- The STEM Garden, Public Libraries Online, January 2016
- Library Garden Provides 'Rest Stop' for Monarch Butterflies, USDA Blog, December 2015
- Archive available from April 5 webinar <u>Food for Thought: building a better community</u> <u>through food</u>, from Washington State Library

Seed Library Examples and Resources

- <u>Seeds of Change: A Seed Library for All Ages</u>, by Chris Rogers, Spartanburg County Public Libraries
- <u>Seed Libraries: What They Are & How To Start One</u>, Syracuse University iSchools' Information Space, May 2012

- Caro Area District Library in Michigan hosts a <u>Seed Saving</u> and Lending Library Program including a <u>Home Grown Food</u> <u>Series</u>, with gardening classes, canning workshops, composting 101 and other classes of this nature. And just last month a local greenhouse donated their first square foot garden.
- <u>Michigan Seed Libraries</u> resources.
- Galena Public Library, Seed Lending Library
- The <u>High Plains Seed Library</u> in Wyoming. See <u>blog post on</u> <u>WyomingLibraries.org</u>
- Duluth Public Library in Minnesota
- Iowa Seed Libraries
- <u>SeedLibraries.net</u>
- The Seed Library Social Network
- Hartland Seed Library in Vermont
- PC Sweeny on the East Palo Alto Seed Library
- Orcas Island Seed Library in Washington
- Seed Savers Exchange
- <u>Vegetable and herb seeds will be available at Stratford library</u>, 1/7/18
- Seeds of Change: A Seed Library for All Ages, in South Carolina
- Why So Many Public Libraries Are Now Giving Out Seeds, Atlas Obscura
- Person County Seed Library, in North Carolina

Related Initiatives and Resources

- <u>The Edible Schoolyard Project</u>, created by Alice Waters, includes a wealth of resources useful to library garden projects, along with a number of library sites.
- <u>Let's Move!</u> (archived site) was a comprehensive initiative, launched by the First Lady, dedicated to putting children on the path to a healthy future during their earliest months and years; giving parents helpful information and fostering environments that support healthy choices; providing healthier foods in our schools; ensuring that every family has access to healthy, affordable food; and helping children become more physically active. See related resources in:
 - Let's Move! Museums & Gardens: There are 625 museums and gardens representing all 50 states and D.C. that have signed on to provide interactive exhibits, outdoor spaces, gardens and programs that help children and families learn about healthy foods and get out and play!
 - <u>Community Garden Resource Guide</u> (PDF): full of resources and guidance on how libraries can initiate, expand and coordinate activities that make their communities places of wellness for kids and families. See also <u>Community</u> <u>Garden Checklist</u> (PDF)
 - See <u>video</u> of <u>First Lady Michelle Obama's surprise visit to school and community</u> <u>gardens</u>.



- Slow Food USA's <u>National School Garden Program</u>: Aims to reconnect youth with their food by teaching them how to grow, cook and enjoy real food.
 Site includes manuals, guides and documents created by Slow Food leaders to support activities in school gardens.
- USDA, <u>The People's Garden</u>: A collaborative effort of over 700 local and national organizations all working together to establish community and school gardens across the country. The simple act of planting a garden can help unite neighborhoods in a common effort and inspire locally led solutions to challenges facing our country, from hunger to the environment.
- <u>EatPlayGrow™</u>: An early childhood health curriculum developed by the Children's Museum of Manhattan in partnership with the National Institutes of Health.
- Shared on <u>PAFA.net</u>, news of <u>Amazing Seeds: A Kids Guide to Strange and Wonderful</u> <u>Garden Veggies</u>, available to libraries in bulk for free from Baker Creek Heirloom Seeds.
- On racial equity in food systems, see <u>Center for Environmental Farming Systems</u>, <u>Committee on Racial Equity in the Food System</u> at North Carolina State University, and <u>Food System Racial Equity Assessment Tool: A Facilitation Guide</u> from University of Wisconsin
- Gardening Interventions to Increase Vegetable Consumption Among Children, the Community Preventive Services Task Force (CPSTF) recommends school-based gardening interventions in combination with nutrition education to increase children's vegetable consumption.
- <u>SC Plants the Seed</u>, Multi-sector partnerships formed among library directors, SC State Library, SNAP-Ed, and SC DSS, and farmers. See <u>similiar program in Richland, SC</u>.
- The <u>Fresh Food Collective</u> in New York collects and redistributes surplus produce from local farms, the Greenwich Community Garden, and home gardens, *at local libraries*.

Hunger and Libraries: Snacks, Backpacks and More



Autumn is an excellent time of year to highlight

ways libraries are fighting hunger in their communities, and October is a great month to start planning for summer lunch and learning programs. This list of resources will help you explore how food insecurity is impacting your local community. We've also gathered ideas and inspiration from library staff who are teaming up with local partners to provide after-school snacks, breakfast before schools, backpacks with food to get kids through the weekend, and more.

Hungry in America?

- Find out more about the problem of hunger in America by exploring resources from <u>No</u> <u>Kid Hungry</u>.
- Use Feeding America's <u>Map the Meal Gap</u> to learn more about food insecurity and the food banks in your community.
- The <u>Food Research and Action Center</u> (FRAC) website provides state-specific data, antihunger advocate contacts, and other helpful resources. Last June, FRAC issued its most recent <u>Hunger Doesn't Take a Vacation</u> report that features a state-by-state analysis of participation trends in summer food programs and opportunities to reach more kids during the summer months.
- Read about the <u>need for summer meal programs</u> from California's <u>Lunch at the Library</u> website.
- On racial equity in food systems, see <u>Center for Environmental Farming Systems</u>, <u>Committee on Racial Equity in the Food System</u> at North Carolina State University, and <u>Food System Racial Equity Assessment Tool: A Facilitation Guide</u> from University of Wisconsin

Practical resources to get started

- Use <u>WhyHunger</u>'s hotline to refer people in need to food pantries, soup kitchens, summer meals sites, government nutrition programs and grassroots organizations across the U.S. Call 1(800) 5-HUNGRY, text your zip code to 1-800-548-6479, or use <u>this online form</u> to locate a local emergency food provider and other support services. WhyHunger also has free downloadable <u>posters</u> with this information in English and Spanish on its website.
- Help finding food for kids, families trying to get ahead, seniors and others using <u>Feeding</u> <u>America's website and resources</u>.
- <u>Range</u> is a free mobile app that locates the nearest locations where summer meals for youth are served. Range locates free meal sites and provides contact information and directions to easily guide a youth to a nearby site. Read more about the launch of Range in this WebJunction article, "Feeding a Need."
- <u>Lunch at the Library</u> has a useful <u>outline of first steps</u> for establishing a USDA summer meal program at your library.

Easy-to-use tools for expanding existing services and programming

- Browse Youth Service America's <u>10 Ways to End Hunger</u> for some inspiration and programming ideas.
- Use the <u>Hungry to Help Family Action Plan</u> (pdf) from Feeding America to inspire and empower families with kids to take action and fight summer hunger.
- The <u>Lunch at the Library</u> website provides practice-based resources and evaluation tools to help librarians successfully partner the lunch service with summer reading and enrichment programs.
- The USDA's <u>Summer Food Service Program</u> website features webinars, toolkits, and a mapping tool to help determine need in the community. The <u>Summer Meals Toolkit</u> is a great place to start.

Ideas and inspiration from other libraries

- <u>Kids Cafe afterschool meal sites</u> in partnership with The Seattle Public Library, King County Library System, and United Way of King County (<u>see poster</u> pdf)
- Chatfield Public Library's food drive for their community's weekend <u>backpacks program</u>
- Free Lunch at the Library, New York Times, 7/30/17
- <u>Sterling library gives children food for mind, body and soul, *Cleveland.com*, 9/24/17</u>
- Summer Learning, Summer Library, Summer Lunch: SL3, Oregon program
- Eudora Public Library in Kansas shared a simple infographic to illustrate the impact of donations to their <u>Feeding Eudora</u> program.
- <u>Feeding body and mind: [Toledo-Lucas County Public] Library helps feed kids in summer</u>, *The Toledo Blade*, 8/7/17
- <u>Let's Move Libraries</u>, a website collecting resources related to gardening in library programs, as part of movement-based programs. On <u>Facebook</u> and <u>Twitter</u>.

 <u>Beautiful Rainbow Cafe</u>, a collaboration of the Gadsden City Schools, City of Gadsden, and Gadsden Public Library. See <u>Gadsden City High School program a tasty success</u>, 12/5/17

Further related articles and learning on WebJunction

- Columbus Metropolitan Responds to Hunger: Summer Meals and More
- November 2015 Poll Results: Health and Nutrition Programs and Resources
- Libraries Provide Much-Needed Access to Nutrition in the Summer
- <u>Case Study: Henry County Library System Provides Summer Food Service Program</u>
- Beyond Food for Fines: Libraries, Food Banks and Feeding America (webinar)
- Growing Library Garden Programs
- Lunch at the Library: Nourishing Bodies and Minds (webinar)

https://www.webjunction.org/news/webjunction/hunger-and-libraries.html



https://www.youtube.com/watch?v=uYvgVDK0ZfU&feature=youtu.be

Guest House: Revenue Generation and Workforce Development



If a portion of the 1.3 acres were dedicated to a smallish (10 bedroom) Library Guest House, that could be a beneficial development for the community as a whole in a variety of ways, such as:

- Accommodations for Fayetteville Public Library keynote speakers, and guest authors, and visiting artists;
- Consistent revenue generation for culinary education programs/operations;
- > HMR tax revenue contributor to the City of Fayetteville from overnight guests;
- Partnership opportunities with the University of Arkansas Hospitality degree program
- Workforce partnership opportunity with the City of Fayetteville/State of Arkansas

Aspirational Examples:

Hotel helpers: Students gain high-level experience at The Inn at Virginia Tech

Preparing innovators and leaders for the hospitality, events and tourism industry

Students Working, and Learning, at the Hotel

Summary

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Order of Operations

In terms of how to begin, the Deli and in-house catering are operational functions and, as such, are priority functions, followed closely by the educational partnerships in the teaching kitchens, development of the production-based native landscaping, greenhouse construction, and, potentially, a guest house/lodge development partnership. Each of the nested circles represents a cohort of partnerships, relationships, and leadership.



Cohort Groups

The following are individuals/organizations who have been identified and/or previously engaged in conversations regarding particular aspects of relative cohorts within their topic expertise.

Deli	Teaching Kitchen	Garden + Edible/ Native Landscaping	Greenhouse	Guesthouse
Steve Jenkins - Brightwater	Karin Endy – Food Systems Consultant	Darrin Joffe – Farmer D Consulting	Jonathan McArthur – Samaritan Community Center Farm and Greenhouse Developer	Robert Reed - SouthFace
John-Francoise Muellenet, Director, UA Food Sciences	Lisa Hotsenpiller – Director of Career and Technical Education, FPS	Angela Head – Thaden School Garden	Laura Brewer – Brightwater Greenhouse/ Cobblestone Farm	Alli Thurman – Flintlock Consulting
Renee Threlfall – UA Culinary/ Food Sciences	Emily Engligh – UAMS / AR Childrens Hospital	Becky Roark – Beaver Watershed Alliance	Megan Thomas - Samaritan Community Center	Specialized Real Estate
Rogelio Contreras – Director of Social Innovatio, Walton Business School	Sydney Jackson – Food Safety and Nutrition, Fayetteville High School	Cale Nicholson – Appleseeds Teaching Farm	Curt Rom – Local Food Systems/ Horticulture Professor UA Horticulture	Donna Graham - UA Hospitality Program
Local food business owner	Michelle Bailey – Dietetics and Nutrition, UA	Horticulture Program, FPS	Jade Cameron – Plant sciences/Greenhouse Management, Fayetteville High School	Devin Howland – Economic Development Director, City of Fayetteville