

App Hackathons for Parent Engagement

A planning guide for public media stations

Quick-Start Guide



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Funding for this guide and related materials was provided by the Corporation for Public Broadcasting. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CPB.

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Why a Hackathon? (And what is it?)

Hack-a-what?

A hackathon is an event that brings people together to create new ideas or find solutions for existing challenges. It's an intense, condensed experience that yields a product—or prototype—at the end. Traditional hackathons primarily involve computer programmers (we call them "developers" or "technical folks" here) who work in teams to solve a stated challenge through technical solutions, such as an app, website, online service, or database.

Different organizations host hackathons for different reasons. Companies may host them to bring new ideas and fresh approaches to problems they have been struggling to solve. Government organizations may host them to solve complicated public services issues. Professional organizations may host them to provide opportunities for developers to network and improve their skills. The structure of each hackathon may vary, but the core purpose stays the same: bringing people together to tackle a challenge by creating prototypes of their ideas.

Our approach—the approach outlined in this guide—takes the elements of a traditional hackathon and combines them with the elements of a big brainstorm. We use the brainstorming as a way to generate the challenges to solve. Our hackathon model brings in parents and people from the community to brainstorm challenges they face and then pairs them with technical people to collectively create technical prototypes of app solutions to tackle the challenges.

Note: The hackathon model we outline in the subsequent sections is geared towards engaging parents around challenges they face in their daily lives in regards to the healthy development of children. This guide assumes that your hackathon also focuses on parent engagement but can surely be adjusted for other topics and to suite your station and parents.

Why public media?

As public media providers, we are part of a system of mission-driven, community-funded organizations that serve the needs of our local members. Our role in the community places us in a unique position to provide a listening ear to those whose voices are not always heard in today's media landscape. So many of us consume media constantly—through our mobile devices, televisions, computers, and gadgets—but how many of our local members have input into how that media is created? The parent engagement hackathon hosted by public media provides a unique opportunity to get new voices up into the mix, while getting us down on the ground at the local level. And because we regularly share information with local audiences as well as stations around the country, we're able to serve as a megaphone for great ideas or needs that come out of our own communities.

Why my station?

You know, represent, and create for your community. The work each station does in engaging with members and tailoring services to their needs means you have a direct connection with those who create and those who consume. Not to mention, stations are great conveners~

What goes into putting on a hackathon?

Thanks to support from the Corporation for Public Broadcasting, we've been able to experiment with different hackathon models for engaging parents. This guide outlines our recommendations based on what we've learned from our successes and challenges to date, but is not meant to be implemented word-for-word. You know your community best, and you can best tailor the event to meet your members' needs. And you are best able to find opportunities that extend your hackathon further: what more could you do with the event? Where could this take you? Could one or more of the solutions developed at the hackathon turn into something bigger—an app, a TV show, a service for your community? Could the hackathon presentations be a way to bring in additional funding?

To help you get started, we've broken down the process into eight important steps:

1. Select a topic
2. Secure funding
3. Build partnerships
4. Make it your own
5. Get a venue and supplies
6. Recruit participants
7. Host the hackathon
8. Share with the world

The following sections explain each of these steps in detail.

App Hackathons for Parent Engagement

1. Select a Topic

What do you want your hackathon to be about? You should answer this question before you do anything else, because every subsequent decision you make (whom to invite, whom to ask for funding, etc.) will stem from your answer. You don't need to identify the specific problem to solve—your hackathon participants will take care of that—but you do need to narrow the scope somewhat. Without a designated topic, the hackathon may be too fragmented and frustrating for your attendees.

There are numerous avenues to explore even within the realm of parent engagement. In our work in the community, we've often heard parents express the desire to stay more connected with their child and all the adults that touch their child's life. We selected this as our topic, which was focused enough to give structure and purpose to the event while still leaving the door for creativity wide open.

Here are some questions to help you identify a topic for your station's hackathon:

1. What issues do you hear about frequently when you work with parents in your community?
2. What groups of parents in your community don't have as strong a voice in the media landscape as others?
3. With which groups of parents in your community do you want to engage more?
4. What extensions with parents might make a positive impact in your community?
5. What grant or funding opportunities are available to you?

2. Secure Funding

Chances are, you're not sitting on a pot of gold. So to get this hackathon off the ground, you'll need to do a bit of fundraising; as public media stations, that's in our DNA.

Now that you have your topic, you can start looking for funding opportunities. Which organizations or funders do you work with whose mission aligns with the topic you selected? Which organizations value bringing diverse voices together? Which organizations want to be more known for supporting parents in your community? Is there internal or discretionary funding available to you, if you convince the right stakeholders? What are local organizations that you might be able to partner with to decrease costs?

How much money will you need? Well, that depends. You should work with finance staff to prepare a budget, but here are some costs to consider:

- Staff time for planning and hosting the event
- Venue costs
- Food and supplies
- Prizes or other incentives
- Honorariums for facilitators and judges
- Recruitment costs
- Advertising or documenting

Refer to the budget spreadsheet resource provided to see some line items that you may want to consider.

3. Build Partnerships

Partnerships are important in everything we do. Hosting a hackathon is no different—it is definitely not a solitary endeavor. If you're brand new to the hackathon world or want to amplify its impact even further, look for organizations that could partner with you on the event. These could be organizations with expertise in parent engagement, organizations with experience hosting hackathons, or organizations that work with groups you hope to reach, like a community center or a college with a computer science program. Partnering with another organization will leverage others' expertise with the preparation and implementation, will expand the hackathon's reach, and will ultimately build a stronger community through the relationship. Make sure to consider possible costs that may be associated with different partners so that you can budget accordingly.

Here are a few important partnerships to consider when planning a parent engagement app hackathon:

Facilitators. Facilitation at the parent engagement app hackathon requires the delicate approach of blending a group that does not have a common understanding or set of experiences. For example, some parents may not have any technical background, and at the same time, some developers may not have any experience being a parent. We needed to reach out to organizations that specialize in facilitating brainstorming and discussions, and groups that have hosted hackathons before. Groups that have experience in things like design thinking can either be brought on board to help facilitate or help train your team to facilitate on their own. Perhaps your funding source can support the professional development of your team to grow this skill. Our team had discussions with professional facilitators, attended other hackathons, and also assisted hosting other hackathons to gain experience before we held our own. And even then we iterated three times to get to the model presented here.

Schools. Partnering with schools is a wonderful way to meet and recruit parents (and teachers!) to participate in the hackathon. It may also be a wonderful way to determine your hackathon topic!

Universities, Libraries, Hospitals, or other Community Organizations. Partnerships may include partnering with a communications class throughout the semester and hosting a series of small hackathons or partnering with a computer science department to work with their programmers for the hackathon. You could also partner with libraries and other organizations, classes that are held there, or be creative! We encourage you to explore options and to let us know what you learn!

4. Make it Your Own

Each community is unique, and therefore the challenges that parents and the community face may also be unique. Choose your hackathon topic, attendees, partners, and schedule to work for your community. We chose to host the hackathon over a period of two days, where parents and community members join for the morning and early afternoon on day one (while their kids are at school, but out in time to pick them up!), and then again for the evening of day 2 (where they can bring their family to watch the presentations and celebrate!). Our designers and developers joined at lunch time on day one, worked into the evening, and then came back again and spent the entire second day.

5. Get a Venue and Supplies

Venue

Many public media stations host community events regularly, and your station may even have event space in your building. If this is the case, we recommend checking right away if it is available at a convenient date and whether you can secure it at a reduced cost or at no cost at all. (Note on date selection: consider parents' schedules, partner schedules, school schedules, and holidays. Three-day weekends are great so that attendees didn't have to take off a workday.)

If you don't have easy access to an event space, spend some time looking for venues in your area and discussing with your partners. Until you have a venue secured and a date set for the hackathon, you won't be able to start recruiting participants or volunteers.

Some things to keep in mind as you're researching venues:

- How accessible is it? Is the location easy to get to by car and by public transit, and is there parking nearby? Is the venue accessible for persons with disabilities?
- How much does it cost? Will it fit within your budget?
- How many people can it hold?
- Is the space conducive to working in teams? Is its configuration flexible—in other words, can tables and chairs be moved around to create ideal working environments for teams?

- Is there an auditorium or presentation hall for groups to present their final prototypes? What are its audio/visual capabilities?
- Is there Wi-Fi available? How reliable is it?

Supplies

As the hackathon host, you'll want to provide your attendees with the tools they need to get their best work done. This includes office supplies such as paper, pens, pencils, and sticky notes, but it also includes the fuel they need to stay energized and the prizes and goodies that will add motivation. We've included a suggested list of supplies in the Resources section of this guide, but we encourage you to tailor this list to your hackathon's needs and budget.

Some things to keep in mind as you're gathering supplies:

- Do you plan to provide meals and snacks to participants? What foods would keep their minds active and focused and prevent them from feeling sluggish? (Hint: it might be best to avoid pizza. Instead, try fresh salads, sandwiches, and fruit!)
- Are there local organizations that would be willing to donate food or supplies?
- For participants who need access to laptops, will you be requiring them to bring their own or supplying computers or other devices for them to work on?
- Do you have anything (station swag, PBS or NPR swag) that you could give out as prizes or goodies?

6. Recruit Participants

As soon as you've nailed down a venue and a date, you'll want to start getting the word out to potential participants, judges, volunteers, and partner organizations.

Recruiting Participants (Parents, Developers, and Designers)

By its nature, a Parent Engagement App Hackathon has two types of participants: (1) parents and other members from the local community with a particular interest in the topic you selected, and (2) folks with the technical expertise to bring digital solutions to life. This latter group primarily includes both developers—individuals who know how to code—but can also include designers—individuals with knowledge of usability, user experience, and aesthetics. (We recommend both; designers tend to bridge the gap between a vision and a technical implementation of that vision.)

You'll want to recruit each group separately, though participants that fit into both categories should be encouraged to participate in both parts of the hackathon. Plan to create separate flyers and messaging directed at each group of participants, and to tailor your recruitment efforts to each group. For example, an online forum, Facebook group, or university computer

science class may be a great place to connect with technical folks, and a community event, library, or school might be better for connecting with parents or members of the community.

Parents

Recruiting parents may prove to be the hardest challenge. When recruiting parents for the hackathon, we recommend reaching out to organizations (potentially those with whom you already have a relationship) at least 2 months in advance (or even earlier!). Bring on the leaders of those organizations as partners who can emphasize the hackathon as a great opportunity and champion the event to parents at their organization. And most importantly, plan a visit specifically to speak with parents and community members directly. Keep in mind: the recruitment itself is part of the hackathon's ultimate goal of parent engagement. The hackathon is meant to be a time where parents are to be included—not just as parents of kids—but as experts. Reaching out to them with personal invitations is what would be expected of any expert advisor on a project. Face-to-face is most optimal as the hackathon will be a face-to-face event where parents will feel more at ease if they recognize your friendly face! Treating them like experts from the beginning of recruitment will make all the difference in participant numbers and how deep and meaningful the hackathon can really be for them and for you.

As you're recruiting participants, pay attention to the questions and concerns you hear repeatedly. Are prospective participants worried about the time commitment? Maybe look at reducing the length of the event. Is transportation a challenge? Think about arranging transportation from central locations or arrange services for parents that are unable to provide their own transportation. Is it unclear what participants will be doing? Try to make your messaging more explicit so prospective participants know what to expect.

Registration

You'll also need a way to manage registration. Your station may have a system in place for event registration, or you may want all participants to contact a staff person directly. We used an online ticket registration system like Eventbrite, which is easy to set up and manage. If you're using an online system, you'll want to consider how many participants you want to attend the hackathon. Keep in mind that some percentage of people who register will not attend, so you may want to provide more spots than you have available to ensure that every seat is filled.

Recruiting Judges

If your hackathon includes a process of judging to determine a winner, plan to recruit a panel of judges. These can be people with expertise in the field of the topic you chose, technical folks, entrepreneurs and business people, and/or station leadership. We also had a parent (who was not a participant) as a judge! Recruiting individuals with whom you have a prior

relationship or would like to develop a relationship may be best. Be sure to explain to prospective judges what will be expected of them, and what (if anything) you're offering them as a thanks for their time.

Recruiting Volunteers

If your team is small, you may need volunteers to help you manage the event. Think about the specific tasks you would assign to each volunteer before beginning recruitment, as you'll want to make sure you're keeping them all busy and feeling active. Your station may have a volunteer coordinator who could help you find people to help, or you could reach out to a local high school whose students may be interested in community service opportunities.

Other Roles

You may want to recruit other individuals, either from within your station or outside, to assist with the event. Trained facilitators are necessary to keep groups focused and to ensure that all participants are engaged. (More on facilitators in subsequent sections.) An IT or tech support person is helpful to have on hand to solve any technical difficulties that arise throughout the presentations and to make sure the Wi-Fi is working properly. And if you want to capture the event to show stakeholders or the larger community, plan to bring on a photographer and/or videographer for the duration of the event.

7. Host the Hackathon

Okay, so you have the people and the stuff you need—what should you have them do? Here's a general agenda to help you start thinking about each part of the event:

1. Introductions and ice-breakers (parents/community members)
2. Brainstorming of challenge statements (parents/community members)
3. Presentation of challenge statements and breaking into groups (parents/community members & designers/developers)
4. Brainstorming of app solution (parents/community members & designers/developers)
5. Prototype development (designers/developers)
6. Prototype presentation and judging (parents/community members, designers/developers, & judges)

1. Introductions and ice-breakers

Approximate time: 30 min - 1.5 hours

Invite the parents and community members to arrive several hours before the technical folks. Kick things off as one big group to provide attendees with context and logistical information, and to create cohesion among the whole group. Explain the event's agenda so that

participants know what to expect and express to them the importance of the work they'll be doing.

Next, assign participants into smaller groups. The group size may depend on how many participants are in attendance or how many facilitators are available, but try to keep it to groups no larger than 6 and no smaller than 3. Facilitators should then lead their groups in one or more ice-breaker exercises so help the group members get to know each other.

2. Brainstorming of challenge statements

Approximate time: 2 - 4 hours

Groups will then spend the next part of the hackathon doing several brainstorming exercises (lead by the facilitators) designed to generate and refine challenge statements. The exercises should begin very broadly—a brain dump of everything under the sun—and gradually narrow in on something specific. Err on the side of too much time here: brainstorming often takes longer than expected, and with many voices contributing to the conversation, you'll want to give groups enough time to really get warmed up before asking them to refine their ideas.

By the end of this section of the hackathon, groups should arrive at a specific challenge statement, one per group. This statement can follow the format "I/We need _____ because _____." The first blank represents what's missing from the participant's life; this should read more like "a way to communicate better with my child's teachers and pediatricians" and less like "an app". The second blank represents the problem or challenge that brings about this need. Have facilitators make sure the problem statement is clearly articulated and specific, but avoid prescribing a single solution. Have each group select a presenter and write their final challenge statement on a large piece of paper or share with you digitally.

3. Presentation of problem statements and breaking into groups

Approximate time: 30 min - 1 hour

At this point in the event, the technical folks should arrive. With the entire group together, do a quick welcome to the technical folks and summarize what's happened so far and what's remaining on the agenda. You may want to consider an ice-breaker activity for the whole group to help the designers/developers get to know the community members better, or wait to do so when they've split into smaller groups.

Have each group present their challenge statement one at a time. It's important for both the technical folks and the other community members to hear all of the challenge statements because they will all then select the statement that interests them the most. Allow time to ask questions after each presentation in case participants need further clarification.

Once all groups have presented, each participant should select the challenge statement they find most interesting. Use these selections to assign new groups, accommodating preferences as best as possible. Variation in group size is fine, but try to make sure there are at least two technical folks and two community members in each group. This may require combining similar challenge statements into one group, or having several groups for a single challenge statement.

4. Brainstorming of solution

Approximate time: 2 - 4 hours

Groups will then spend the next several hours discussing their chosen challenge statement and brainstorming solutions. Groups should begin by having the parents and community members explain the challenge statement to the technical folks and elaborate on it further, providing information from their own experience or knowledge to give context to the issue at hand.

Once the challenge statement is understood by everyone in the group, facilitators will then lead a brainstorm of solutions. This brainstorm should be highly collaborative, and participants should feel unrestricted by their roles—all participants can and should partake in idea generation. The goal here is to provide numerous approaches for solving the challenge (or parts of the challenge), not to converge on a single solution.

At the end of this session, the parents and community members depart and the designers and developers continue on to the next phase of the hackathon.

5. Prototype development

Approximate time: 8 - 12 hours

This part should be the hackathon's longest section. You want to provide the designers and developers as much time as possible to go as far as they can with their prototypes, while still maintaining a reasonable time commitment from participants; you can't expect people to be able to take a week out of their schedules to attend the hackathon (unless they're adequately compensated), but there are advantages to stretching the time out over two or three days (reducing fatigue, allowing participants to "sleep on it", etc.).

Groups will need individual workspaces with space to spread out and access to power outlets and Wi-Fi. You will want to keep the workspaces fully stocked with writing materials, snacks, and beverages, and do your best to manage noise levels so that participants can concentrate. Give groups ample uninterrupted work time, but check in with each group once or twice to make sure they're on the right track and answer any questions about the final prototypes or presentations. Be sure to set a clear deadline for the final prototypes, preferably an hour or

two before judging, to give groups time to practice their presentations and to give you time to make sure all prototypes can be viewed in the main presentation space.

6. Prototype presentation and judging

Approximate time: 2 hours

Invite parents and community members to return to the event location at the culmination of the prototype development time. Parents and community members should work with the designers and developers to hone the presentations before the judging period. Invite the judges to arrive a bit early to give you time to greet them and prep them on their roles.

Gather all participants in the large presentation space, and introduce the panel of judges. Explain the criteria by which they'll be evaluating each prototype and the prizes the winning team(s) will receive.

Give each team a set amount of time to describe and demonstrate their prototype, and hold them to that time limit. Allow several minutes of questions or reactions from the judges after each presentation. Once all the groups have presented, give the judges time (and a separate space, if desired) to tally their votes and determine a winner. Take advantage of the down-time participants have judges deliberate such as by having them fill out a survey to get their feedback on the event, or to record video of their reactions to the prototypes.

When the judges have finished deliberating, have them announce the winning team(s) and present the prizes.

8. Share with the World

What happens to the great ideas and prototypes after the hackathon? As a public media station, you have the right expertise and/or community connections to help bring one or more of the ideas to life. Where might you find funding to continue the work? Do you have staff with the technical knowledge to extend the prototype further? What organizations may be interested in partnering with you on this idea? Try to keep the hackathon participants responsible for the idea or prototype connected with the project to keep them feeling connected and passionate about the idea.

At minimum, think about producing a video from the hackathon to show stakeholders the value of the event.

Resources

Check out our website for lots of great resources to help you plan and run your own hackathon, including:

- Planning checklist
- Facilitator's guide
- Budgeting spreadsheet
- Presentation guidelines, template and scoring sheets
- Brainstorming rules
- Challenge statement handout
- And lots more!

first8studios.org/hackathon