GOLLEY HOUSES

Tiny House Backyard Classroom Homeschool Guide

A guide to help families build affordable tiny house backyard classrooms for remote-learning and homeschooling.

Table of Contents

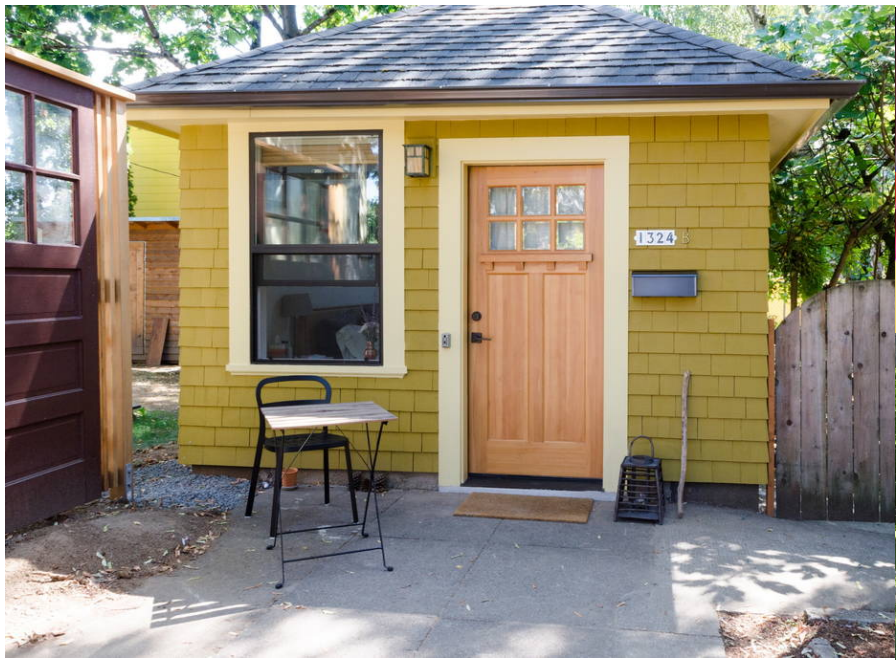
What is a tiny house backyard classroom?

A tiny house backyard classroom is a dedicated space for remote learning and homeschooling.

Many families across the country got their first taste of homeschooling this past spring during the COVID-19 quarantines. That trend has continued, with numerous districts adding online programs in place of in-person classes to avoid the spread of COVID.

Ongoing changes to public gatherings are taking their toll on education. Public school are struggling to adapt while families weigh the costs of in-person versus remote learning, or the challenges of intermittent quarantines that interrupt learning and force kids to stay home.

Kids attending school from home need a dedicated area to work. Moreover, many parents are working from home and need a space for kids to work that does not interfere with their own home offices.



Growth in Homeschooling

A **RealClear Opinion Research** survey of 2,122 registered voters shows that a significant portion of parents are more likely to pursue homeschooling opportunities after the lockdowns end.

The results show that 40% of families are more likely to homeschool or virtual school after lockdowns, and that 64% support school choice and 69% support the federal Education Freedom Scholarships proposal.

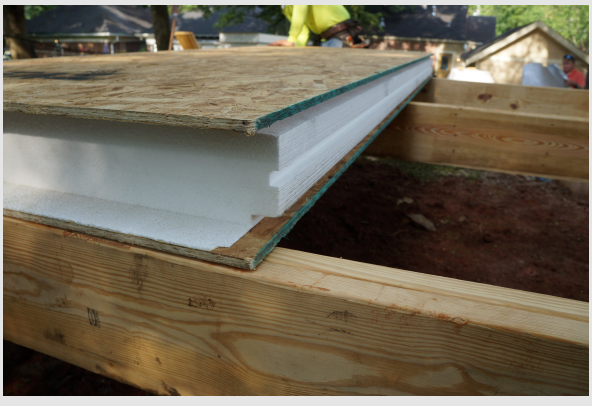
NPR reports that remote learning could go on for years, and the U.S. and states legislatures are fielding renewed interests in school choice programs and vouchers for families who want to educate children at home or in alternative programs or private schools.

A tiny house homeschool backyard classroom are a great solution for families who need extra space for at-home learning. A Golley House is often less expensive than a home addition and can be constructed in a matter of days in a homeowner's backyard.

PERMITTING

How do I obtain a permit to build a tiny house?

Your local planning and zoning department will provide you the necessary information to obtain a permit. The process is not difficult and is intended to assure that buildings meet the minimum safety standards of the local jurisdiction. The officials are usually helpful and excited to help homeowners fit their projects into local zoning codes.



CONSTRUCTION

What is an accessory dwelling unit (ADU)?

An ADU (accessory dwelling unit) is an additional, self-contained dwelling on a typical single-family lot. It can be attached, such as in the lower level of the main dwelling, or detached at the rear of the property.

Accessory Dwelling Units can be homes, offices and studios. The Golley House has been designed using manufacturing and modularity to create a simple-to-assemble structure that can be customized to match its intended use.

These smaller units represent the “missing middle,” filling the gap between single-family homes and multi-unit dwellings in urban neighborhoods. While ADUs are not the sole answer to our country's housing issues, they provide an affordable alternative to single family housing. ADUs are inexpensive and can be built efficiently and quickly, making it possible for more families to own and maintain a home.

Zoning regulations surrounding ADUs vary by location, but here are some examples from the city of Decatur, Georgia, according to the City of Decatur Planning and Zoning Department.

An ADU may be developed in or to the rear of an existing or new main dwelling. To keep true to its accessory size, an ADU may have a floor area up to 800 square feet, and should not exceed 40 percent of the floor area of the primary dwelling. If the ADU is combined with the garage, the total floor area may be up to 1,000 square feet.

An ADU may have up to two bedrooms. The owner is required to reside in either the main dwelling or the ADU for at least eight months of the year. An affidavit will be required of the owner confirming residency.

If detached from the main dwelling, an ADU must be located in the rear yard and have a footprint no greater than 30 percent of the rear yard. In combination with the main dwelling, the total floor area should not exceed 40 percent of the lot area. Similarly, the total lot coverage of all impervious surfaces should not exceed 40 percent of the lot area.

As a housing option, ADUs demonstrate the values of diversity and affordability.

How much does an Golley House cost?

A basic Golley House can be built for approximately $17,000 and completely finished for another $8,000, for a total cost of less than $25,000.

Do I need a contractor?

Whether you are able to build a Golley House yourself or need a contractor is dependent upon your skill level. The panels are not very heavy, but are large and can be difficult to handle without help. Someone with basic do-it-yourself skills can easily build a tiny house with several helpers. If you are not handy and don't have a skilled friend, it might be easier to use a contractor to do the heavy lifting. Also, a contractor will get your project completed quickly so you can start using the space in the shortest amount of time.

How long does it take to build a tiny house?

The project is usually accomplished in three phases:

- Installing the foundation or slab
- Assembling the kit
- Finishing the exterior and interior

The foundation takes approximately 2-3 days. Assembling the kit takes approximately three days and the finishing typically takes about a week, especially when including interior and exterior painting.

What type of foundation do I need for a tiny house?

The Golley House kit's **Structural Insulating Panels (SIPs)** provide an insulated floor, so typically **a raised foundation is best**. Options include piers with a wooden frame, concrete blocks or a poured concrete foundation with walls to provide a controlled crawl space. If you do not need a crawl space, the tiny house can be built on a slab. (A concrete slab foundation may not need the insulated flooring panels.)

A level and square foundation is very important. For this reason, we recommend you work with an experienced contractor to install your foundation. The type of foundation you choose can vary greatly in cost and provide different performance characteristics. Also, zoning regulations may require that you place your tiny house on a particular type of foundation.

Water, electricity and sewer should be provided at the site prior to the installation of your tiny house. If you are planning to use your tiny house off the grid, the energy efficiency of the structural insulating panels (SIP) makes it an ideal platform to work with.

Are tiny houses energy efficient?

Tiny houses can be incredibly energy efficient if they are designed correctly and built with the proper materials.

Golley Hoyses rely on **Structural Insulating Panels (SIPs)** to create a tight insulated structure that maximizes energy efficiency and strength. The 30 SIPs used for the basic Golley House include insulated walls, ceiling and floor.

SIPs are constructed as a sandwich of oriented strand board (OSB) and encapsulated polystyrene foam (EPS). The SIPs replace the traditional house framing, creating a monocoque structure much like the frame of your car or the shell of an egg.

The panels are joined with splines and nails and then glued with injected foam that seals the panel joints and creates an envelope with no openings, except for the window and doors. The panel thickness determines the R-value of the panel and because there is very little air infiltration it is easy to achieve a **very energy efficient building**.

Planning & Design

When designing your tiny house, consider both your immediate needs and how you may use the space in the future. What may be a homeschool room now may turn into a rental property or a guest house in the future. Some basic living requirements may be a bathroom, a living space, and a small kitchen. Design your tiny house to be multi-functional. You may either have one open space or add a loft to double the available floor space.

When designing for a homeschool environment, you may want a comfy space for reading, a workspace for different subjects and a large table for projects.

Layout

The basic floor plan is open all the way to the roof providing up to 16 feet of height. Below are some ideas for how to set up the space.

Planned Add-ons

Planned add-ons for the Golley House kit include:

- Door/window package
- Loft material package
- Kitchen cabinet layout & product selection order sheet for different styles
- Bathroom layout & order sheet; toilet & shower fixtures
- Cut sheet or order sheet for materials needed to build different exterior style treatments
- Interior materials list for finishing the interior in different styles

Materials

What is included in a Golley House kit?

The Golley House is a modular, environmentally friendly tiny house flat-pack kit that provides a cost-effective, easily-assembled solution for alternative housing. The Basic Golley House kit is comprised of 30 primary structural components.

The Golley house kit uses standardized components to be fully modular so adding extra space is as easy as ordering additional modules. Each ring of components creates a module that adds four feet of additional space. Two or three modules create another room.

- The basic Golley House kit is 10 ft wide and 16 ft deep.
- The side walls are 12 ft tall to allow the addition of a loft space that has stand-up headroom.
- The structure is created using SIPs so construction is extremely quick.
- Using SIP's creates a "tight" insulated structure for energy efficiency and strength.
- The finished height of the Golley Houses is in excess of 16 ft, a perfect size for ADUs, small cabins and cottages.

All of the materials needed to build the basic kit are included:

- The pre-cut structural panels for the walls, roof and floor
- All the splines, precut lumber, fasteners, caulk and foam sealant

NOTE: The foundation must be installed prior to assembly of the Golley House kit. Local building codes will determine the type of foundation you decide to use. A foundation dimension drawing will be included with the kit.

Structural Insulating Panels (SIPs)

SIPs require less energy to heat and cool, provide better control over indoor environmental conditions than wood alone, and produce less construction waste than traditional stick construction. SIPs are constructed as a sandwich of oriented strand board (OSB) and encapsulated polystyrene foam (EPS). The materials are fabricated in a factory, allowing for a controlled environment and greater efficiency than on-site framing.

OSB is a green building material that relies on a fast-growing, underutilized and often less expensive wood species that is ground into chips and then converted into board. **SIPs do not contain any volatile organic compounds (VOCs) or other harmful chemicals and meet some of the most stringent standards for indoor air quality.**

The SIPs used for the basic Golley House include insulated walls, ceiling and floor. The SIPs replace the traditional house framing creating a monocoque structure much like the frame of your car or the shell of an egg.

The panels are joined with splines and nails then glued with injected foam that seals the panel joints creating an envelope with no openings except for the window and doors. The panel thickness determines the R-value of the panel and because there is very little air infiltration it is easy to achieve a highly energy-efficient building.

HVAC

All SIP structures are extremely airtight so proper air circulation is important especially if you include a bathroom or kitchen. The addition of an ERV (energy recovery ventilation) system will maintain the air quality while keeping the energy use low.

Several options for HVAC systems are suitable for tiny home applications. Mini-split heat pumps are common and can be placed almost anywhere within the structure, with only a small penetration for the line to the external unit. PTAC heat pumps are single-unit heat pumps similar to the inside portion of the mini-split, although they generally require a larger opening in the wall.

It is also possible to install a standard window AC unit and a separate heat source. Remember, the thermal efficiency of the SIP structure means that you will not need a lot of heating or cooling energy to maintain a comfortable environment.

Plumbing

The plumbing requirements for your tiny house are the same as any home. However, as the outside walls are basically solid, all plumbing should be routed up through the floor and on the inside of the structure. An advantage of this design is that no water lines will be susceptible to freezing in the walls.

Electrical

There is a horizontal wiring chase designed into each wall panel of the Golley House. For overhead fixtures it is easiest to surface mount wire channels that can be hidden by trim or wall treatments. If hidden wiring is important, it can be installed during the panel installation process so the wiring is invisible and protected within the panels.

Insulation

Additional insulation is unnecessary because the SIP panel construction incorporates the insulation within the structure. The insulation actually becomes a part of the structure.

Note: Follow local building codes and regulations when installing any and all utilities in your Golley House for both safety and legality.

Doors & Windows

• Use a standard 32” exterior door for the entry. The “rough” opening is 36”.
• All three windows are the same size: 2’4” x 5’.
• All openings in the kit are accurate and square making it easy to install the components.
• Flashing materials are not part of the kit. It is important to properly install flashing to assure the longevity of the home.

Roofing

Your Golley House can be fitted with custom roofing materials and the exterior treatments of your choice. Whether you are interested in a specific architectural style, a roof with solar equipment that can be leveraged for power, or a long lasting metal roof, it’s easy to customize your roof to capture your vision.

Finishings

The Golley House kit provides the structure and you supply the finishes to match the style or purpose you like. By adding your own finishes, the Golley House can be designed to match the style of the primary dwelling or can be made as unique as you want.

The materials used in the SIP construction mean that an additional vapor barrier is not necessary, however it is necessary to add “house wrap” to create a "water plane” behind whatever siding you desire. Options range from vinyl siding for its ease-of-installation and low-maintenance, to cement siding for its longevity and strength, to metal panels or wood shingles or boards. Your imagination is the only limit.

The level of finish is up to the owner. The ideas above are just a few of the possibilities. Choose the roofing material, siding and detailing with either cost or style in mind.

It is simple to add a small roof over the entrance or deck for outdoor space. The Golley House is the “box” waiting for your expression of style.

Assembly

Detailed drawings and assembly instructions are included with each kit. The tools needed and assembly techniques are common in the building process.

Each SIP panel is precut to the required dimensions with grooves routed in the foam for either 2x lumber used around the outer edges or splines used in the connection of panels. The splines are placed in their routed grooves and then two panels are pushed or pulled together; 8p nails are placed on either side of the joint through both the outer skin of the panel and the spline at regular intervals securing the panels together.

After the panels have been installed, holes are drilled through the joint to the center of the foam and injected with the expanding foam to seal the joint and make the panels airtight.

Expanding foam or construction adhesive is added to all joints and connections to create a sealed envelope much like an egg shell. This process of connecting all the panels is what gives the Golley House its efficiency and strength.

NOTE: While the assembly process is not complicated, following the steps outlined in the drawings is important for both safety and for the best final product.

HS and Remote Learning Resources

Popular Homeschooling Philosophies

Classical Education (Socratic Method) – Based on the Trivium, or the phases of child development (reason, record, research, relate, and rhetoric) this approach builds knowledge around concrete, abstract, and analytical approaches to learning, and is often age-based.
Goal: *Teach students to learn for themselves.*

Charlotte Mason – Focused on teaching the whole child, this approach is based on a three-pronged vision of education; atmosphere, vision, and life. Respect for children is key. Real-life situations are the best tools to help children learn. Narration and discussion are the best way to demonstrate knowledge.
Goal: *Learn from real-life situations.*

Waldorf Education – Based on the work of Rudolf Steiner, this approach focuses on educating the whole child; body, mind, and spirit. Use of televisions and computers is discouraged. Students develop their own textbooks.
Goal: *Children are taught how to figure things out for themselves and practice self-awareness.*

Unschooling – Children are encouraged to follow their own curiosity, and learning will develop naturally. Formal lesson plans and curricula are not used.
Goal: *Living and learning should be thought of as the same thing.*

Unit Study – Also called cross-curriculum, this approach takes the cue of a child's interest in a certain subject, and uses that to prompt lessons in multiple educational disciplines, such as history, art, science, spelling, math, and reading.
Goal: *Learning improves when children are interested fully immersed in a topic.*

Montessori – Organization and a strong aesthetic sensibility are central to this approach. Education is viewed not just as a means to an end, but as an aid to life; where the method for learning comes not from a curriculum, but from the natural development of a child. Creativity, innovation, and individuality are valued as much as concentration, motivation, and persistence.
Goal: *Provide a carefully planned, stimulating environment to help a child develop an excellent foundation for creative learning.*

Online Education – Online homeschooling provides direct access to online schools, homeschooling programs, and curriculum choices for all ages and disciplines, as well as expert resources and content. The challenge is sifting through all the options and evaluating quality.
Goal: *The Internet provides families with all the resources homeschooling curriculum support they need.*

Source: http://www.homeschool.com/

Homeschool

TIPS

1. Create a dedicated work space for school. You need a workspace that is free from distractions such as toys, electronics, snacks, etc.

2. Develop a consistent schedule. Whether you are working with an online platform and scheduled classes or your own curriculum, be consistent in how the day flows. Do difficult subjects first, and more relaxed or active subjects as the day progresses and attention wanes.

3. Learn with them. Children are more engaged when you are engaged with them.

4. Encourage reading. Elementary age children love it when someone reads to them. Give older children time to enjoy a book in a cozy chair.

5. Give kids free time. Everyone needs time to relax after structured learning. Unstructured play gives kids time to process and reflect on their learning.

6. Play an audiobook, podcast or documentary. Different media sources provide children with variety and appeal to different learning styles.

7. Include time outdoors. Use the outdoors for science and nature exploration, discovery and study. Sunlight and fresh air also promote physical and mental health.

8. Provide numerous breaks. Work in 30- or 45-minute increments.

9. Be positive. If you are enthusiastic about learning, your children are more likely to be equally interested and engaged.

10. Join a Facebook or homeschooling group for support, ideas, and field trip information.

Tips for Creating a Dedicated Learning Environment

Some best practices for creating school-age learning environments are to make sure the space is comfortable, fun, and organized. Consider your child's favorite (and least favorite) subjects and design the room around those topics. Add a reading corner to promote reading, a math station for working problems, a small science lab near the kitchen part of the house, and another nook for arts and crafts.

Parents can also incorporate natural backyard features into the school's design. For example, window boxes on the tiny house can be used for planting projects to teach earth science. A bird feeder can provide children with entertainment and education. A rain gauge, weather vain or sundial can teach children weather concepts and many backyards are already equipped with playsets for recreational time.

There are two key steps in getting ready for homeschooling; classroom preparation and homeschool curriculum planning. Students should have a designated place to read, write, and study quietly. Line up resources for both kinds of experiences. Your curriculum should reflect your homeschooling philosophy and how your children learn best.

State Laws and Regulations

Notification of Homeschooling – The requirements for notification of homeschooling vary in different states, which underscores the importance of reviewing local and state regulations when you plan to homeschool. According to the Council for Responsible Home Education (CRHE), in 11 states, no notice is required. In 10 states, parents only need to let the authorities know they are homeschooling when they begin the practice. In the other 29 states, parents need to file a homeschooling notice with state officials every year.

Parent Education Minimums – There is great latitude in state regulations regarding the parent education minimums required in order to homeschool. In 40 states, homeschool teachers don't have to be a high school graduate, even if they plan to homeschool through the 12th grade.

State-Mandated Subject Requirements – Only 17 states have state-mandated subject requirements for homeschooling, and the requirements vary depending on the location. Some states require parents to teach certain subjects, and others say instruction must simply be "equivalent" to public schools. Out of the 33 states that do mandate teaching of certain subjects, only 11 have any means of checking to see if students are actually learning the required material.

Assessment Requirements – Less than half of the states in the country have any assessment requirements for homeschooled students. There are no ramifications for poor student performance in many of the 23 states that do mandate periodic evaluation. Some states require assessment, but do not set standards for passing or failing.

Earning Credits/Diploma – High school graduation requirements and the definition of a "credit" vary from state to state, and also change with time. Check your state's earning credits/diploma requirements to plan with precision. Parents who homeschool their children can develop their own diplomas; however, accredited diplomas are only available from schools which have gone through the process of receiving accreditation from a recognized agency.

Virtual online schooling offers students in many states the option of earning an accredited high school diploma online. If you do not live in one of the states listed here, you may be able to purchase online homeschooling curriculum.

Vaccination Requirements – In 25 states, there are no vaccination requirements for students who are educated at home. Some states mandate vaccinations, but parents do not have to provide documentation. Proof of required vaccinations is only required in five states. In some states, homeschools are not defined as "schools," so they are exempt from immunization laws, but in other states they are considered "private schools," and must comply.

***Source**: https://projects.propublica.org/graphics/homeschool*

Educational games

Arcademics, for free, multiplayer educational games for kindergarten through eighth grade students

National Geographic Kids, for online games, science experiments, and quizzes

All Kids Network, for free worksheets and printable crafts, activities, and mazes

Virtual Field Trips

WebExhibits provide an online interactive museum that covers science, the humanities, and culture.

The Boston Children's Museum, the Louvre, the British Museum, the Metropolitan Museum of Art, the Smithsonian, and many other museums provide virtual tours and online kid-friendly activities.

The Georgia and Monterey Bay Aquariums, the San Diego Zoo, Zoo Atlanta, and the Houston Zoo offer live animal cams. Yellowstone National Park and the Great Wall of China provide virtual field trips.

Curriculums (recommended by Wasko)

- Mystery Science, for a starter list of kindergarten through fifth grade science lessons
- Prodigy, for first through eighth grade math lessons built into an interactive battle-style game
- Reading Eggs, for a homeschool reading curriculum with online reading lessons
- ABCmouse.com, for a full, online curriculum for kids between two and eight years old
- Khan Academy Kids, for free lessons divided by grade levels and subjects
- Online G3, for classes geared toward accelerated learners

Educational projects

Savethechildren.org, for tools and tips specific to COVID-19, plus weekly learning activities organized by age
Scholastic Learn at Home, for a twenty-day plan with daily projects during school closures
PBS SoCal At-Home Learning, for at-home learning tips and pre-K to twelfth grade programming and activities
Primer, for a collection of education games, apps, and videos from around the web

Technology

Educators have more resources than ever before to assist them in creating a multi-faceted curriculum that engages all the senses. A wealth of quality content can be found online in the form of online lectures, online textbooks, regular assessment of student learning, and access to counselors. Moreover, a wide range of learning software is available to students, providing them important structure, plus the flexibility to master material at their own pace.

Myriad devices are useful for learning and complement projects and ongoing communications, whether its tablets, mobile phones, laptops or cameras. Educational apps in a range of subjects such as math, reading, science, history and foreign languages, can be downloaded for learning.

Technology also plays a crucial role in allowing students to connect in both formal settings, such as an online classes, or informal settings, such as chat rooms and online communities.

Websites

Homeschooling Organizations
The National Home Education Research Institute
The Home School Legal Defense Association
Homeschool World
The Coalition for Responsible Home Education

Networking Sites
National Homeschool Organizations
Homeschool Organizations by State
The Homeschool Mom
Secular Homeschool

Online Learning Tools
KhanAcademy.org
BrainPOP Junior
Parents – Homeschooling Resources Online
Time4Learnning

Educational Software
Homeschool.com – Software and Videos
iamhomeschooling.com
a2zHomesCool
EasyFunSchool

Technology Resources
CuriosityHacked.org
The Wired Homeschool
Ihomeschoolnetwork
Homeschool Buyers Co-op

Lesson Planners and Trackers
HomeschoolTracker.com
iTunes U
Homeschooling Resource Guide
freeHomeschoolDeals

College Planning
Home School Legal Defense Association (HSLDA)
And What About College
Homeschool Success
LetsHomeschoolHighSchool

Georgia Homeschooling Resources

Homeschooling in Georgia
Georgia Homeschooling Laws
Georgia Homeschool Groups and Co-ops
Georgia Standardized Testing and Test Prep
Homeschool Field Trips in Georgia

Golley Houses was created by Frank Golley as his contribution to addressing the affordable housing crisis. Accessory Dwelling Units (ADUs) can be homes, offices, backyard homeschool classrooms, and studios. The Golley House has been designed using manufacturing and modularity to create a simple to assemble structure that can be customized to match it's intended use.

Want to learn more about tiny houses?

Sign up for the Tiny House Real Estate Newsletter!

403 W Ponce de Leon Ave. Suite 118
Decatur, GA, 30030, US
404-427-9349
thegolleyhouse@gmail.com
www.golleyhouses.com

The information is provided by Golley Houses and is provided for educational and informational purposes only. Please consult with local authorities regarding contruction and regulation guidelines.