GROW / LEARN / DISCOVER

SCHOOL POLYTUNNEL DESIGN

Design tips and inspirational ideas for your school garden

A school polytunnel can be a wonderful tool and an exciting space for fun and learning. As a designer, I have worked with many educators and others to create school gardens, and I understand just how useful a polytunnel can be within a school setting.

But I also understand how easily things can go wrong if things have not been carefully planned and thought out. So in this guide, I will share some tips and ideas to help you make sure that your school polytunnel not only meets the basic requirements, but more than fulfils its potential and can be used to the fullest.



INCORPORATING A POLYTUNNEL INTO SCHOOL GARDENS

First things first, it is important to understand that a polytunnel should be just one part of a wider school garden - part of a holistic and well-thought-out design that is tailored perfectly to a particular spot.

What works well for one school in one location might not work as well for another, in a very different place. But a polytunnel can find a place not only on perfect school properties, with plenty of space, but also on smaller and much less promising plots.

THE BENEFITS OF A SCHOOL POLYTUNNEL

Polytunnels will of course provide many benefits wherever they are placed. But there are several benefits of placing one at a school in particular. A school polytunnel can, for example:

- Promote Healthy Eating and Nutrition
- Assist in Enhancing Science Education
- Enhance Environmental Awareness
- Help Integrate Cross-Curriculum Activities

• Encourage Community Engagement

So let's take a look at each of these areas in a little more depth.

PROMOTE HEALTHY EATING AND NUTRITION

The importance of teaching students about healthy food choices and the benefits of fresh produce should not be underestimated. Instilling an understanding of healthy eating and nutrition in children at a young age can of course quite literally shape them for their whole lives.

Growing food in a school garden can reconnect children with where food comes from, and by getting involved in that food production, those children can form healthy habits as well as a healthy relationship with the food that ends up on their plates.

A polytunnel can make growing food on school premises a whole lot easier. Polytunnel gardening decouples the growing to a great degree from the weather, meaning that teachers and students alike can sow and grow throughout the whole of the year and not just during the summer season. And can enjoy spending time on food production even when the rain pours.

ASSIST IN ENHANCING SCIENCE EDUCATION

A polytunnel also really comes into its own when we delve a little deeper and look at how it can enhance study and allow schools to engage pupils with different elements of the curriculum.

A polytunnel is the perfect place for STEM learning. There is great potential for experiments and scientific observations within the controlled environment of a polytunnel. And students can study numerous factors relating to environmental conditions and plant growth.

HELP INTEGRATE CROSS-CURRICULUM ACTIVITIES

Of course, it is not only the science curriculum that can be worked on in a polytunnel. A polytunnel can be the perfect environment for cross-curriculum activities, that engage with many different subjects at the same time.

There are numerous opportunities to integrate mathematics, language arts, art, and social studies into garden-related projects and activities in a polytunnel setting.

For example, consider activities such as measuring plant growth, writing garden journals, creating garden-inspired artwork, and studying cultural connections to food. Integration not segregation is an important principle in holistic education, and a polytunnel can help prevent silo learning and integrate cross-curriculum activities.

ENCOURAGE COMMUNITY ENGAGEMENT

When school polytunnels are used to the fullest, it is not only the pupils who benefit. School staff, parents and others in the wider community can also learn and grow within the space. School polytunnels can play a key role in combatting food insecurity and banish food deserts.

A polytunnel can encourage partnerships between different groups in a community - bringing people of different ages, interests and beliefs together in common cause - growing food that can then be shared with that same community to strengthen community ties.

WHERE TO POSITION A SCHOOL POLYTUNNEL

It is clear just how useful a school polytunnel can be. But in order to make the most of a polytunnel you certainly need to think carefully about where one should be positioned, and how it will fit in with the rest of the school garden on school grounds.

One of the first stages in determining a good location for a school polytunnel is understanding the sectors of the site. Sectors determine the energy flow on the site - in terms of sun, wind and water. Sectors can also tell us about other natural factors of a location, such as shade, and micro-climate conditions.

All too often, polytunnels and other growing areas are positioned with little regard for the fact that human beings are an important part of the polytunnel system too. So as well as considering natural forces and flows, we also need to think about patterns of human movement. This can be particularly important in a heavily-used school polytunnel.

The ideas of zoning and systems analysis can help to make sure that a polytunnel is positioned in the right location, and can help prevent potential problems from arising down the road.

Of course, when thinking about location for a school polytunnel, other elements like a composting system and water source should also be carefully positioned with reference to the polytunnel siting. Think holistically so that all the elements on school grounds can come together to create one smoothly-functioning whole.

ENHANCE ENVIRONMENTAL AWARENESS

School gardens can be important in promoting biodiversity and supporting local ecosystems. With diverse planting in and around a polytunnel, school grounds can become havens not only for children but for wildlife too.

These gardens can be oases in cities and towns, and important sanctuaries for the creatures that share our space.

In a polytunnel, children can learn about the natural world around them, and learn positive habits and beliefs when it comes to their interactions with that natural environment. This enhances environmental awareness.

The work that goes on within a polytunnel teaches children about sustainable actions and practices - growing food locally, composting, harvesting rainwater, upcycling and repurposing and more... So a school polytunnel can help us create the sustainable citizens of the future.

HOW BIG SHOULD A SCHOOL POLYTUNNEL BE?

One of the decisions that you will have to make when looking at a polytunnel for a school is sizing.

As a general rule, it is always best to select the largest polytunnel that can comfortably be accommodated on school grounds. No matter how large a polytunnel you purchase - rest assured you will have no difficulty making use of the space.

Remember, in a school setting, it will often be useful if you can fit an entire class and their teacher inside a polytunnel without the space feeling too confined. But even if you cannot fit a large enough polytunnel on school premises, smaller groups can still benefit from using the space.

LAYOUT AND DESIGN IDEAS FOR A SCHOOL POLYTUNNEL



Even smaller polytunnels can feel larger if they have a sensible layout and are well designed. No matter the size of a school polytunnel, layout is very important, and you need to think very carefully about which elements you include within the space, as well as how you plant it.

Here are a few layout and design tips for a school polytunnel used for teaching and food production:

- Make sure pathways are of sufficient width.
- Create beds/ growing areas, ideally raised beds, that can easily be reached across so they are not trampled.
- Central beds with paths on both sides can be useful for class activities and demonstrations.
- Staging is useful and can be rigged so that it folds out of the way allowing for more growing space when not in use.
- Make multi-functionality a rule no matter the size of the space and incorporate plenty of flexibility into your design.

SAFETY CONSIDERATIONS FOR A SCHOOL POLYTUNNEL

Naturally, it is very important when planning for a school polytunnel to think about the safety of everyone and anyone who will be using the space. Here are some things that it could be important to think about:

- Make sure that the structure itself is well-secured and constructed correctly.
- Ensure adequate ventilation within the space so things do not get stifling in hot weather.
- Avoid trip hazards and make sure the space is accessible.
- Check for and eliminate sharp spikes, edges, corners etc...
- Always garden organically and never have harmful substances around.

Most of the time, of course, safety is just about common sense. Of course safety precautions will depend on the temperaments and ages of those using the space. But school polytunnels, when well designed and used correctly, can be safe and happy places for anyone to spend some time.