

The Value of Practical Subjects, Routine Tasks and Outdoor Education within an Educational Programme

Easter 2021



The Importance of Spending Time in Our Real Working Environments

Fig. 1

UNNAMED (Iroquois)

“If the gentlemen of Virginia will send us a dozen of their sons, we will take great care of their education” (1744)

Benjamin Franklin tells the story of the speech that follows, how at a council between them and the government of Virginia, the Iroquois were offered a college education for some of their young men.

"We know that you highly esteem the kind of learning taught in those colleges, and that the maintenance of our young men, while with you, would be very expensive to you. We are convinced, therefore, that you mean to do us good by your proposal, and we thank you heartily. But you who are wise must know that different nations have different conceptions of things; and you will therefore not take it amiss if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it: several of our young people were formerly brought up at the colleges of the northern provinces; they were instructed in all your sciences; but when they came back to us, they were bad runners; ignorant of every means of living in the woods; unable to bear either cold or hunger; knew neither how to build a cabin, take a deer, or kill an enemy; spoke our language imperfectly; were therefore neither fit for hunters, warriors, or counsellors; they were totally good for nothing. We are, however, not the less obliged by your kind offer, though we decline in accepting it: and to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take great care of their education, instruct them in all we know, and make men of them."

Introduction.

The value of practical subjects within an education programme has often been debated. “Are they really learning, is it proper school work” are just some of the comments I have been familiar with over the years. This debate is wonderfully illustrated by the speech by a First Nation Indian chief which is shown in fig. 1.

We all learn in different ways and at different levels and frequencies. For the children in our care, learning by doing is so important and to be reinforced by repetition equally so.

The children in our care also need time to heal. The trauma they have experienced is so damaging that I encourage practitioners to see their cognitive functioning as a snow globe that has been shaken, they need time for all the snow bits to settle before they can use their cognitive ability to their full potential.

Therefore, the opportunity to undertake educational activities that also have a therapeutic benefit is so important, learning while they are healing but not learning instead of or at the expense of healing.

Within the document ‘A therapeutic approach to helping children and young people recover from trauma and abuse’ within the chapter ‘The value of activities’ I have tried to demonstrate this by designing a visual aid to a simple analysis process by which different activities can be assessed as to the value they bring to the process. <http://www.peartreeprojects.co.uk/therapeuticapproach.pdf>

I would encourage you to read the full chapter (if not the whole document) to have a greater understanding of the context but to summarise - Each activity has various attributes which we value, which are prevalent within an activity. I’ve narrowed these down to be considered against each activity as being

- Broaden Horizons
- Educational
- Therapeutic
- Improving Skills
- Social Skills
- Leisure
- Physical Fitness.

These are the attributes we value in our recovery process as being significant to healing and growing. To measure them we need to consider what elements are prevalent within each attribute. For example to qualify as an activity that actually does Broaden horizons it must be assessed against the criteria which is - outside familiar environment - experiential - new culture - Increased new vocabulary.

The chapter on The value of activities was first written in 2013. Increased new vocabulary was initially ‘New language’ which of course only measured when children had the opportunity to experience a foreign holiday, usually France. This at the time was not only an aspiration but a target for all children in our care. As I’m writing in 2021 this is no longer possible. However, what that question missed was the importance of an ‘increased vocabulary’ which can be measured by exposure to new experiences and the exposure to many new words this creates.

This process can be seen on the graphs which demonstrates the elements of the varying attributes. Again, the thinking behind these elements is explained in the above publication in more detail.

When assessing an activity, the elements are considered against a 0-5 criteria.

0= not prevalent

1= may be ever so slightly prevalent

2= slightly prevalent

3= prevalent

4= significantly prevalent

5= highly prevalent.

Each element ends up with a total score which is then considered against our chart below to gain an overview / summary as to the value of this activity.

0=0

1-4=1

5-9=2

10-14=3

15-19=4

20=5.

Many of our activities are not just about learning facts but learning the importance of values. Therefore, in the same way we apply a system to assess the activities against the opportunity to promote and establish our corporate values. These being:

- Courage
- Integrity
- Respect
- Responsibility
- Kindness.

As before, the qualifying elements of each value can be seen against the following graphs.

This system demonstrates the importance of many activities which are not only educational but therapeutic and promote values. These values need to be embedded and as such repetition is very important to our recovery process.

Having values embedded as defining principals that guide a person's life in all kinds of decision making helps a child to be able to apply these to their life long learning journey. They are also significant in providing an appropriate model of reference, significant in any relapse prevention strategy.

The above are the very foundations upon which worthwhile learning can take place. Most of the children who come our way have at best had an unsuccessful start to their learning for many reasons. The consequences to this are often well established avoidance strategies.

Therefore, if students are doing repetitive tasks that they have already learned, they are having them embedded through repetition as are the values they are learning which are also being embedded.

The school curriculum offered seeks to gently overcome these avoidance strategies and re-engage students. The following is the process and methodology to this.

Inspire - Motivate - Educate - Train - Employ.

The above must be done in sequential order to be effective. In order to motivate our students to engage in education they must be inspired to do so. If we can educate we can train and this training is focused, not on paper qualifications but increased prospects of employability. Real practical tasks that students can see are not there just for their entertainment but have a direct result that may lead to their employment as young adults.

To demonstrate the process, I will lead you through an analysis of the areas we hold in high value. To do so I will analyse the subjects in an order that best demonstrates this.

- Working on the farm or in the stable yard.
- Working in the gardens and conservation work.
- Horse riding.
- Outdoor education, walking, cycling, kayaking.
- Working in the workshop or forge.

David Bartlett MBE
January 2021.

Analysis of Working on the Farm and in the Stables.

("Geography creates culture, culture creates a sense of belonging".)

Roger Scruton

The value of this activity can be seen on the graphs and I will elaborate and explain in further detail using the criteria established.

Broadening horizons - this is a significant factor to consider. Many of the children who use our service have in many cases been deprived of any worthwhile experiences. The experiences that have been inflicted upon them have been damaging on every level. There is little knowledge shared of the world around them and therefore a programme of events that can broaden horizons is important.

To qualify the activity must be :-

- Outside familiar environment. What could be more 'outside familiar environment' than working on the farm or in the stable yard. Most children who come our way are initially resistant to this, for reasons I will discuss later. Some are excited and inspired. Being surrounded by animals, muck, dangers and unknown smells and textures is also:-
- Experiential. Therefore I marked both these as being highly prevalent.
- New Culture. Within any working environments cultures form. This is evident in the form of having to wear the correct clothing appropriate to the weather and the task in hand, "trainers and jogging bottoms definitely not allowed." Also working practices are also part of a cultural expectation, learning to always close gates behind you is just one example.
- Increased vocabulary. This is experienced in many ways, breeds of animals, types of machinery, types of feeds, points of the horse, types of tack etc etc. Therefore significantly prevalent.

Educational- As a school document regarding activities in school you would expect educational activities to be 'educational'. What I would like to demonstrate is how our chosen activities have an educational context and how this promotes learning in other subjects also.

- Communication and listening skills. Within this activity communication is so important. With this listening and following instructions. When herding sheep as an example, stand in the wrong place by one yard will send the sheep the wrong direction. Students must follow instructions to know when to walk, stop, stand still, and on occasions take a step back. (Just like the sheep dog !)
- Cross curricular content. Staying with the sheep as an example, lambing time will bring the experiences of life and death encompassing science and human and social as well as PE as the work can be physically demanding. Once machinery is involved then technology also becomes prevalent.
- Inspiring. Working on the farm or in the stable yard is hoped to be inspiring, encouraging children to want to learn more. This learning process promoting the fun of learning and the benefits of hard work is hugely important in changing previously held beliefs which were more about avoidance of learning. Overcoming these avoidance strategies sets children on a path of exploration and life long learning.

- Encouraging creativity. Although less significant, creativity is prevalent in the form of problem solving and creating practical solutions. This is particularly evident whilst fencing. (When I say fencing this is the hammer and nails type designed to keep livestock safe, not duelling with a sword as one practitioner thought.) likewise building a show jumping course in a similar way, when working in the stables yard.

It is standard practice that once a topic such as 'lambing' is completed that this subject is discussed at length in the classroom to consolidate learning. This will involve written work at this stage.

Therapeutic. The word Therapeutic means 'to heal'. This word is used in a variety of contexts and means different things to different people. There is increasing evidence and research regarding the healing benefits of access to green spaces which of course working on the farm involves. It has been demonstrated that access to green spaces helps to reduce anxiety. As part of the overall healing process, I've broken this process into the following four criteria.

- Enjoyable. Recovering from trauma means you've had a miserable time. Having enjoyable experiences helps to as they say "reset the clock" so positive memories overlay previous negative memories. Once children become more familiar with the farming environment we begin to see lots of smiling faces. This is not only significant in terms of happy memories but also from a neuroscience perspective allowing the child to develop positive memory muscle and then building more of this positive muscle later when recalling positive experiences. (Ruby Wax.)
- Stimulating senses. The work on the farm or in the stable yard often requires you to have your senses about you. You don't want to fall asleep in the catch pens with the cattle, that's for certain. Surrounded by new smells and textures from trees and flowers to muck and urine. Plenty of material to stimulate the senses.
- There are plenty of 'positive interactions' between those participating as team work and often struggling against adversity is important.
- Promoting empathy. The importance of empathy cannot be understated and is possibly the most singular significant factor in an individuals ability to connect positively with the rest of the world. It's has a chapter of its own in the <http://www.peartreeprojects.co.uk/therapeuticapproach.pdf> . Working on the farm or in the stable yard is all about nurturing plants and animals to grow. The consequences of a lack of care can be evident or the consequences of plenty of good quality care. Having the farm animals and horses as a medium to connect with their own experiences and learn the importance of nurturing promotes empathy. This is often the first time students have had the responsibility of looking after another living creature and having the responsibility of putting its needs first before your own, as is the culture.

Improving Skills. The variety of task required working on the farm naturally lends itself to the opportunity to improve skills usually in an equally important sequential order. Sweeping up leads to filling and moving wheel barrows, which leads to driving the buggy to driving tractors. In order to demonstrate I've broke this down into the following four points.

- Dexterity. From hammering nails into fencing, fixing machinery, cutting bales, to name but a few tasks requires increasing levels of dexterity.
- Hand eye, foot eye co-ordination. From general physically demanding tasks to driving machinery.

- Focus. As has been explained with earlier tasks, the lack of focus can have such a detrimental effect on the outcome of the tasks requiring completion, regardless of whether the student remains focused or not, particularly when involved in animal welfare. The communal desire to achieve the required outcome leads to increased focus.
- Confidence. Being successful builds confidence. Being part of a successful team that achieves the desired outcome builds confidence. Moving from driving a wheel barrow to driving machinery builds confidence.

Social skills. The importance of developing and building social skills is an important factor and significant in a developmental process and effects life opportunities. I've broken this attribute down in to the following four elements.

- Communication. As stated above communication with those you work with is very important.
- Confidence. Being able to make a contribution within a team effort using a variety of skills increases confidence.
- Interactions with outside people. Initially outside people means outside of the contained and controlled environments of the residential home. People like instructors, farm managers. As time goes by this may also include people like farriers, fencing contractors, vets, agricultural contractors. Not only important to be able to communicate with, but from past experience they may one day be a future employer.
- Presentation. Whilst we initially think of presentation within the context of social skills as presentation in good socialising clothes, that's not the only case. In this example wearing the correct attire for the weather and the tasks in hand indicate your ability and competence and is therefore part of social skills expectations.

Leisure. We must not forget the importance of having a good time and activities we may do to relax in our spare time. Whilst some may be surprised that a hard working environment could ever be attractive to people in their spare / leisure time. I like many farmers am aware of and have always been surrounded by people who just want to spend time on the farm or in the stables and help out on their days off. This is highlighted by the young people who have left our service who ask if they could return as a volunteer. To consider this activity against our criteria we must consider

- Enjoyable. We set out to make farm and yard work enjoyable as well as rewarding and want our students to learn that hard work is also good fun.
- Stimulating. Surrounded by things that make noises, smells and are unpredictable. This is by its nature a stimulating environment.
- Relaxing. Whilst it's not relaxing in a sunbathing, watching TV sort of way, when something is all consuming and takes you away from your worries and concerns this is relaxing in a positive rewarding way.
- Structured. The day is broken down into areas of structure. Starting with morning feeds and ending with evening feeds, it is a very structured environment with expectations that are time critical.

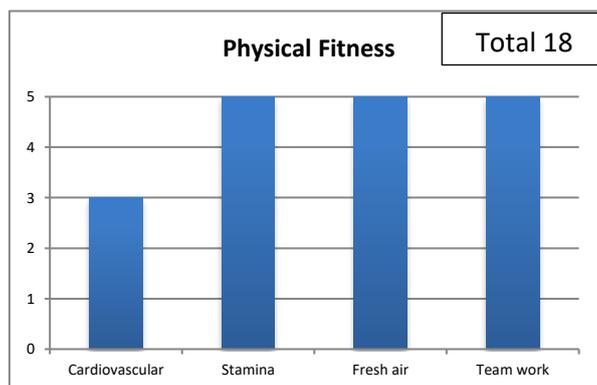
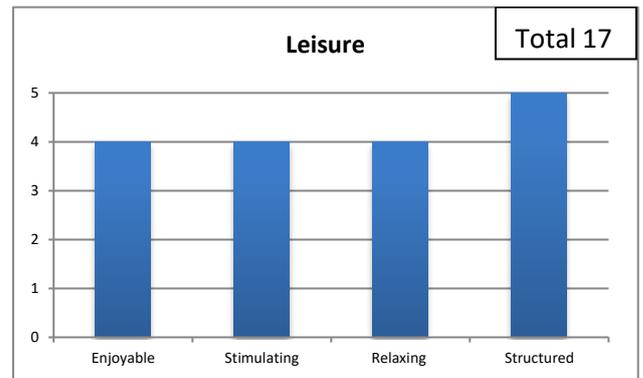
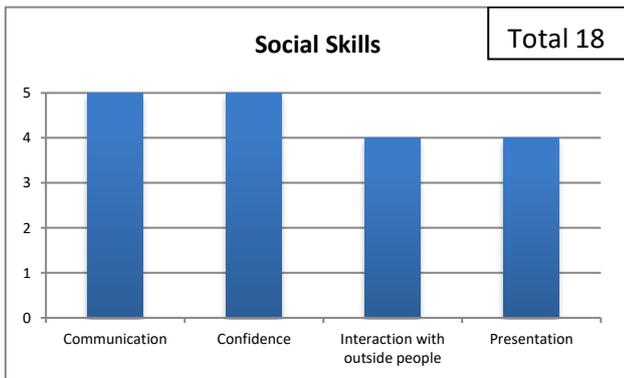
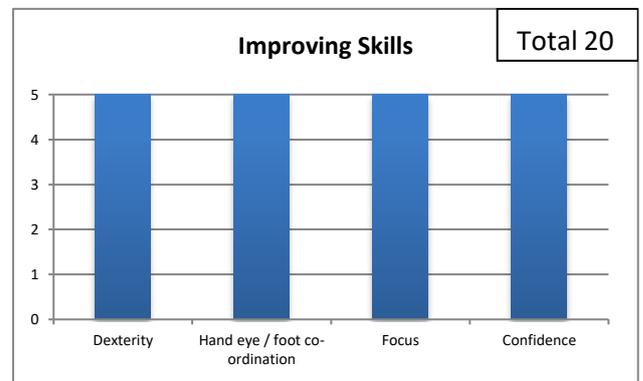
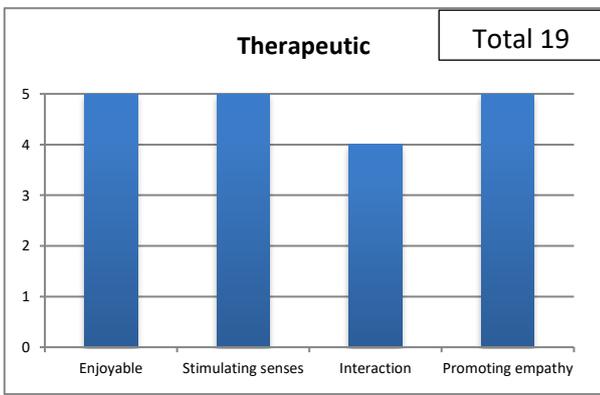
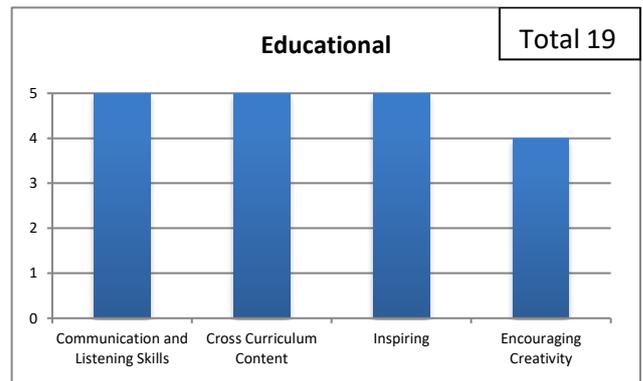
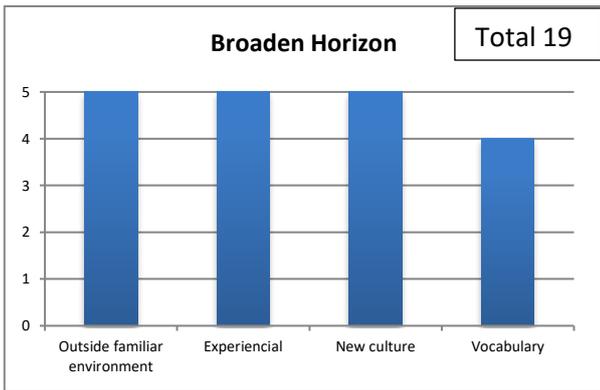
Physical fitness. From rugby players to jockeys, hard work on the land has been the foundation of many good sportsman. There is a need for physical fitness and this in itself can become part of a healthy lifestyle. This is why.

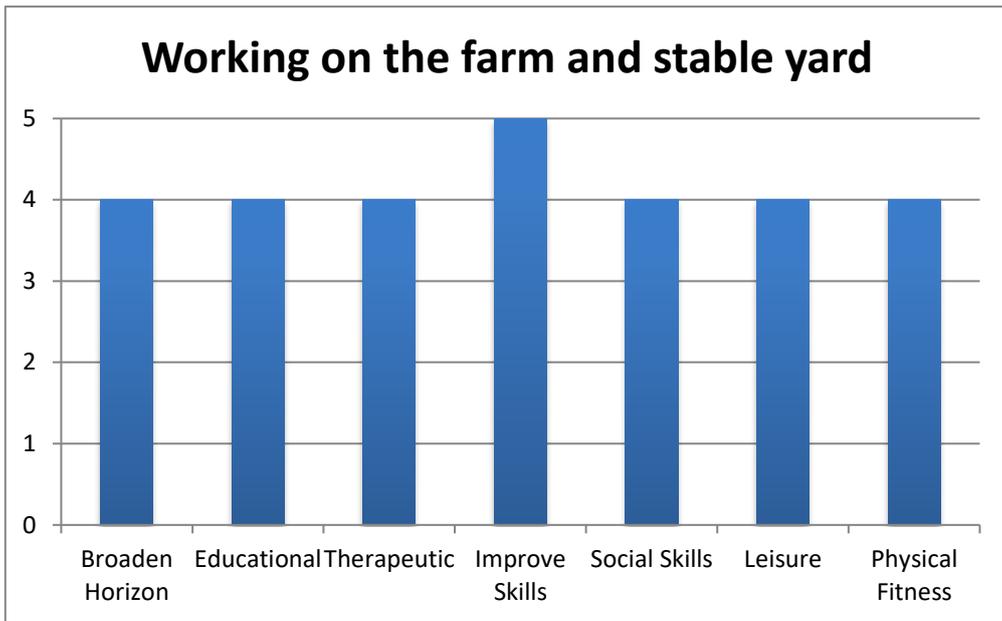
- Cardio vascular. Whilst not required through the day every day, it is still prevalent. If you have to chase sheep across the fields you will feel it. What is more prevalent is :-
- Stamina. Being able to keep going when your cold and wet. When your being challenged to complete tasks against adversity developing stamina and resilience is so important.
- Fresh air. The working environment means you are out in the fresh air. The importance of this has never been so clearly demonstrated than during the current pandemic. (2020-2021)
- Team work. The above is all the more enhanced by working as part of a team to achieve a desired outcome. The interaction and collective success is a key part of this activity.

Summary.

Using our methodology it is clear to see this activity is a high value activity with all attributes significantly prevalent and improving skills highly prevalent.

Analysis of Working on the Farm and in the Stables.





This is a high value activity in all areas and excels at improving skills.

Values assessment.

As a values based organisation we always need to consider how 'what we do' promotes values. So the same kind of assessment and analysis can be undertaken.

Our corporate values are Courage, Integrity, Respect, Responsibility and Kindness. So how does working on the farm or in the stable yard promote these values.

Courage. Having courage in life to face adversity is so important. We hope that our students will grow in many ways to be able to face the demons of the past to ensure they are not repeated in the future. So in terms of this activity how can it be measured.

- Demonstrate resilience. Working in all weathers against adversity, completing tasks that on the face of it seem insurmountable. Coping with strange smells and textures. Ensuring you don't get bitten by the front of a horse or cow or kicked at the other end. Increasing resilience is a natural outcome of time in this environment because by being there they are :-
- Out of their comfort zone. An unfamiliar environment with dangers and joys to behold is most definitely taking them out of their comfort zone.
- Being challenged, by tasks that may be one offs or may be part of a daily routine and are time critical. Being asked to face fears such as working around a horse when mucking it out for the first time. Unsure as to how it will react and how you will react.
- Negative consequences if unsuccessful. Whilst these are managed risks, it is still evident to any student that if livestock aren't fed they will get stressed and hungry and may die. If you don't move out of the way quick enough you may get stood on or kicked. Likewise if your driving a tractor with a set task and you forget to do something at the correct time you may drive through a hedge.

Integrity. Being able to know what's right and wrong and being able to always do the right thing. To do this we must :-

- Being honest. Have you put the correct feed into the correct stable? Did you count the sheep and they are all present. Have you put the tractor keys back in the right place. But importantly not saying you have if you haven't.
- Reliable, knowing to be at the right place at the right time. Whether this is turning up on time or listening to instructions accurately during the day.
- Right from wrong, knowing to shut the gate, check the horses water and filling it up or cleaning it out if it is not as it should be. This leads on to being :-
- Trustworthy. An important element of having integrity. If you have all of the above then you become trustworthy and celebrated as such.

Respect. A hugely important attribute to have that leads to all kinds life enhancing opportunities that simply disappear if you don't have or fail to show it. To have and show respect you must have the following elements but how does our chosen activity fair against this criteria.

- Consideration for others. This is important for those you work with and the animals you care for. It is a factor that is constantly promoted.

- Humility. We have experienced many students that have presented more arrogant than humble and it is not a prerequisite for working in this environment so is shown slightly prevalent.
- Positive interactions with others. The environment lends itself to the opportunity to have positive interactions with others and the staff team promote this on a daily basis. Within a stable yard environment negative behaviour can have a detrimental effect on horses who are extremely sensitive to human attitudes and behaviours. All students know this and as such often don't want to let the horses down by being negative.
- Set positive example. Again the environment lends itself to promoting those that can do tasks and are highlighted as competent and this leads us on to the next key attribute:-

Responsibility. The culture and ethos of the working environments is all about promoting responsibility. Whether this is to look after precious animals or manoeuvre high value machinery. Again the criteria is

- Reliable. Starting with small tasks like putting the right feed in the right trough to being able to learn and take in the information needed to drive a tractor, the environment showcases opportunities open to those that are reliable.
- Make decisions. The ability to make decisions with increasing independence is promoted and is significantly prevalent. Ranging from choice of tools to sweep the yard through to how to tackle a task with a tractor and attached machinery and as such by doing so promoting the ability to :-
- Act independently. This may be viewed by the wider public slightly differently as it is always within the context of being supervised at varying levels. However the level of support our students start off needing on a daily basis is quite significant, therefore any decision making ability that leads to acting independently is of significance to our process. This is all within the context of :-
- Ability to meet targets. From everyday feeding requirements to getting the harvest in.

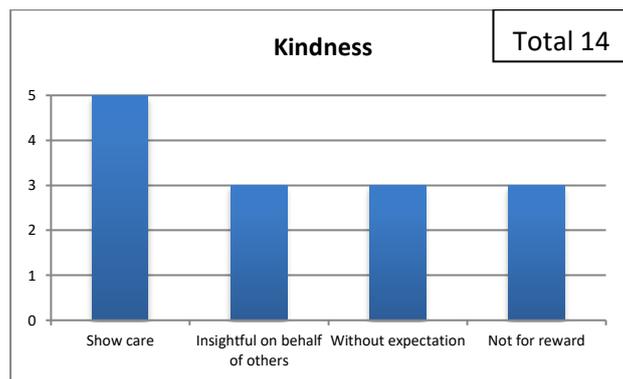
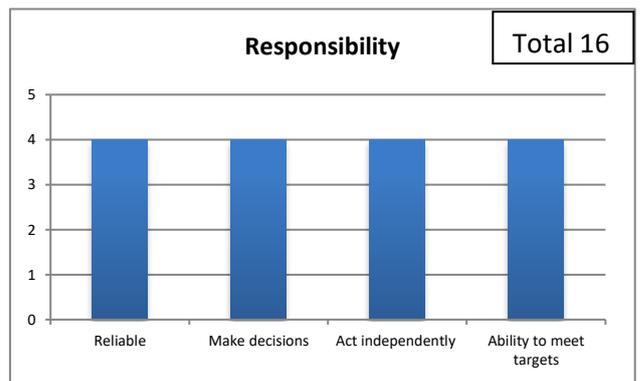
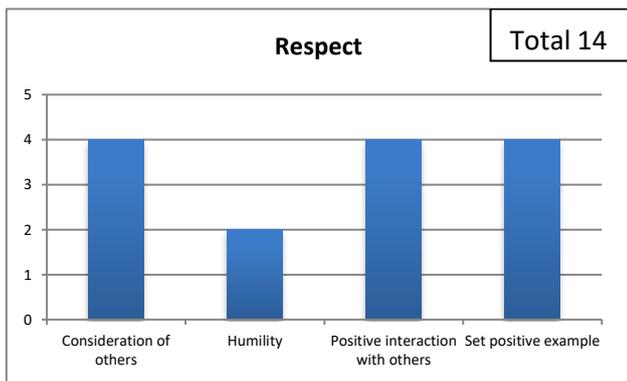
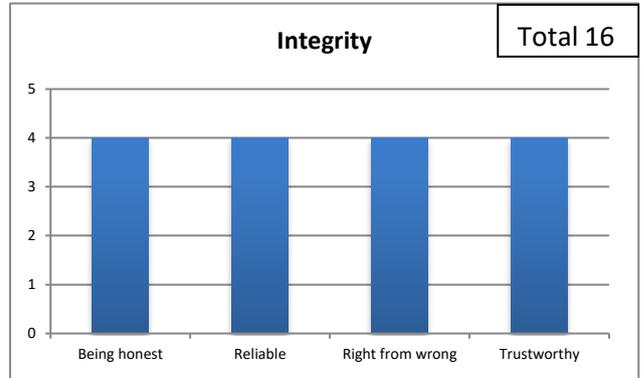
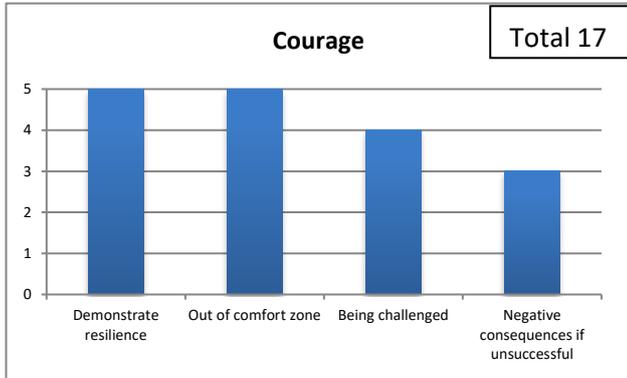
Kindness. Working on the farm or in the stable yard is all about nurturing animals and by doing so nurturing our students. This gives us the opportunity to demonstrate good care and to involve the students in the process of giving good care and commitment to others (animals) and by doing so being role models as to how to care for people. So how does it work against our criteria.

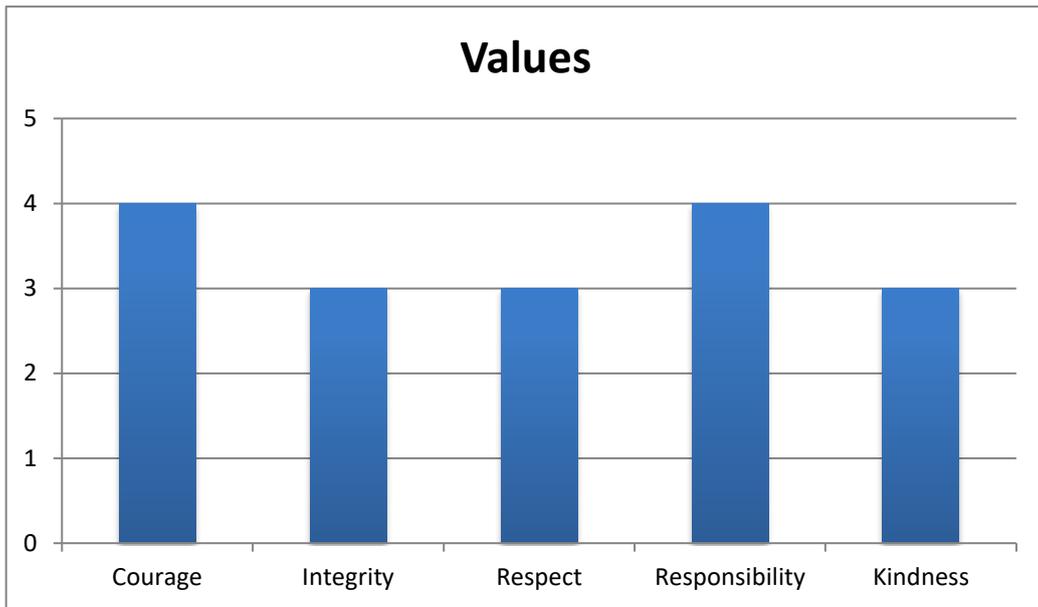
- Showing care, this is highly prevalent.
- Insightful on behalf of others. Being insightful on behalf of others is one thing, being able to demonstrate this is another. Working with livestock enables us to demonstrate this due to the fact that animals can't talk and tell you when they are ill or have needs unmet. They demonstrate this in the body gestures and presentation that needs to be understood and acted upon. Within the human world working as part of a team requires those in the team to help and support each other.
- Without expectation. From a students perspective the animal they help isn't going to say thank you or arrange an increase in pocket money. In a similar way :-
- Not for reward, this being a general criteria for being kind is evident. As such the last three elements are listed as prevalent.

Values

Summary.

As you can see from this analysis this activity promotes values as being prevalent with courage and responsibility significantly prevalent.





Approaching the rare White Park Cattle

Working in the Gardens and Conservation work.

(Learning about gardening is learning about life. Christine Walkden.)

This area for consideration includes the growing of plants, trees and shrubs. It is the contribution to the kitchen garden and also the creatively landscaped areas and woodland environments.

This environment is very similar to the above so to save time I have focused on the areas that are different.

Activities Assessment.

Broadening Horizons.

Whilst many people have gardens, the children who often come our way within their life experiences these are not often valued and certainly a full sized kitchen garden and the many landscaped areas this includes is very much outside of their familiar environment. It is not quite the strikingly different experience as working with animals has and similarly the new culture is slightly less significant and this is shown in the graphs. Increased vocabulary is highly prevalent in terms of the names of plants and their purposes.

More advanced students will begin to explore the Latin names and by doing so the languages classification model. Without the Latin version just learning plants names is an important part of language development.

“At the time of writing, having spent the morning planting ‘hydrangeas’ and going into some detail as to why we were planting them within a Walled garden, when it came time to reflect on what they have learned the answer was we have planted ‘Range rovers’ to ‘feed the cattle’. Whilst I can see the similarity or word structure with ‘Range Rovers’ being two syllables ending with the sound of ‘ers’. What the cattle would be doing in a walled garden I will never know!”

Educational.

This scores similarly to the farm and stable yard work but higher in creativity. The creative skills explored and promoted in the form of landscaping, flower arranging and at Christmas making wreaths and decorations is overt and not subtle in any way. All this work is inspiring and leads to cross curricular content from the creative to the scientific and often with the use of machinery, technological as well.

Therapeutic.

When I first started Pear Tree in 1990 little was known or respected of the science behind how plants help us heal. Such talk was for fools and HRH Prince Charles was a tree hugging idiot. Today he is not only highly respected throughout the world as leading the thinking on conservation and the importance of nature but the world is much more familiar with the fact that gardening and being among trees and plants has a healing quality about it. Indeed you can now be prescribed time in a garden by your GP. It excels in terms of ‘stimulating senses’ due to the variety of different and changing smells, fragrances and textures. It is even thought to be an activity that can increase your IQ which explains why we consider this to be time well spent that has a direct impact on learning in other areas.

Very few children would ever say they wanted to spend time gardening on admission, however not long after they start, that is very much the case. Enjoyable, yes, stimulating senses, most definitely, the opportunity to have positive interactions with those around you absolutely.

Growing plants is all about nurturing. To nurture you must be empathic, thinking of things from the plants perspective. Has it got enough light, has it got enough water. Anything that promotes empathy is extremely valuable in a recovery programme and I would argue sets the foundations in place for better education.

Improving Skills.

Gardening and conservation work requires dexterity and good gross motor skills in the form of hand / foot, eye coordination. It has the capacity to allow yourself to get lost in the moment so scores less for focus and doesn't have the dramatic effect of building confidence as other areas we may consider. However, this would change if the students became familiar with driving garden machinery such as lawn mowers, small tractors, a factor considered in the farm analysis.

Social skills.

In this area communication is highly prevalent to ensure you follow instructions correctly and don't pull out the flowers in mistake of weeds, as just a basic example. Growing confidence is also marked as prevalent. Interactions with outside people less so. The issues about wearing the right clothes for the right weather is also prevalent.

Leisure.

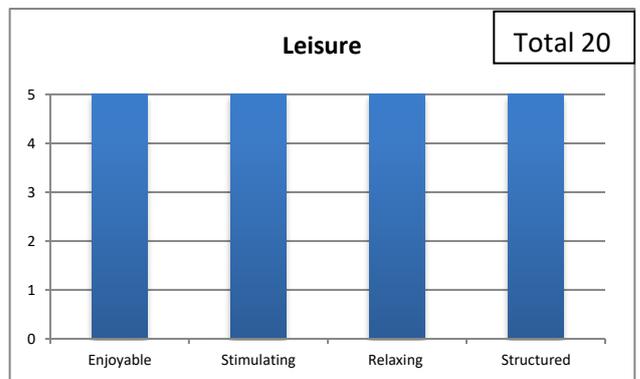
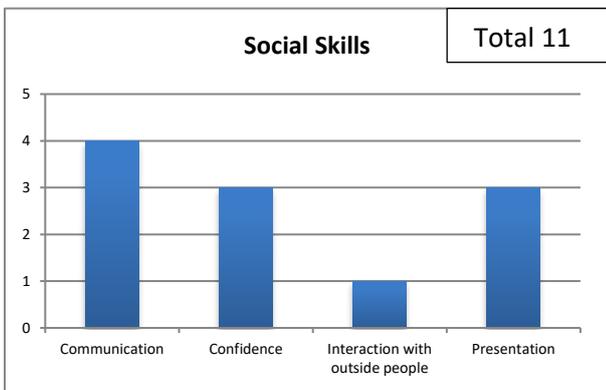
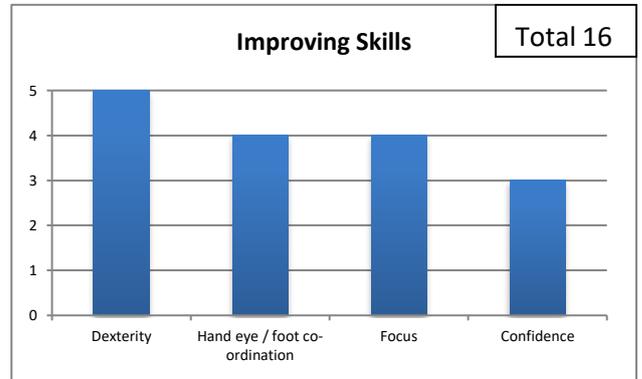
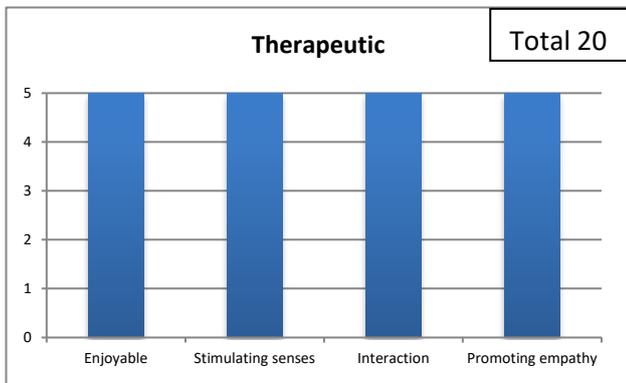
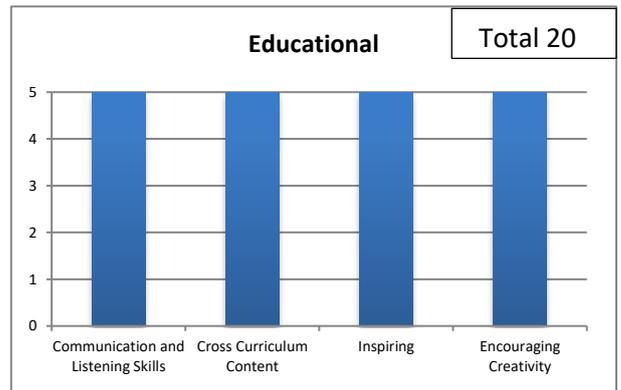
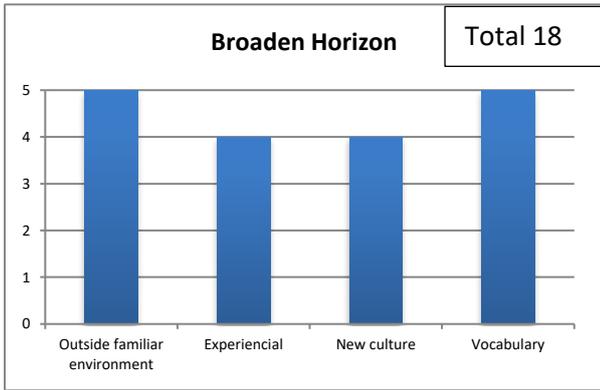
The TV programme Gardeners World has grown significantly in popularity over recent years. During the spring of 2020 during the first National Lockdown the importance of gardening as a leisure activity became very clear to anyone lucky enough to have a garden. It hits all of the right notes I identified as being important back in 2013. Enjoyable, yes, stimulating, relaxing and structured. It has all the important facets. It is also a skill and quality that can be utilised to promote ones quality of life for the rest of a child's life, long after discharge. This aspect is often not given as much importance as it should be. Whilst it is aspirational to assume our students may be able to afford their own garden, it is very realistic to assume they would have the skills to gain employment or become a volunteer at a garden or wildlife trust. Helping students to learn how to put the building blocks in place to access worthwhile activities that by there nature bring other qualities such as a social network and support long after we have done our bit, is crucial.

Physical Fitness.

This is not a sport and as such cardio vascular is not as prevalent as it would be running after sheep as an example, however if you were to ask any of our students who worked with Keith Cracket, who it appeared, his favourite activity was 'Double digging' would know this to be true. Today we get the rotavator out and include technology in our analysis instead.

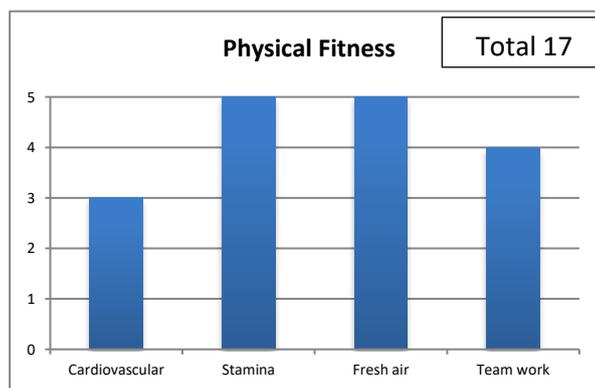
Stamina is highly prevalent as is fresh air. Fresh air is a factor many don't think of and rarely value. The importance of working in the fresh air became realised by all of our team during the pandemic, as it was clear it was also a very safe activity that could continue. Likewise team work is also significantly prevalent.

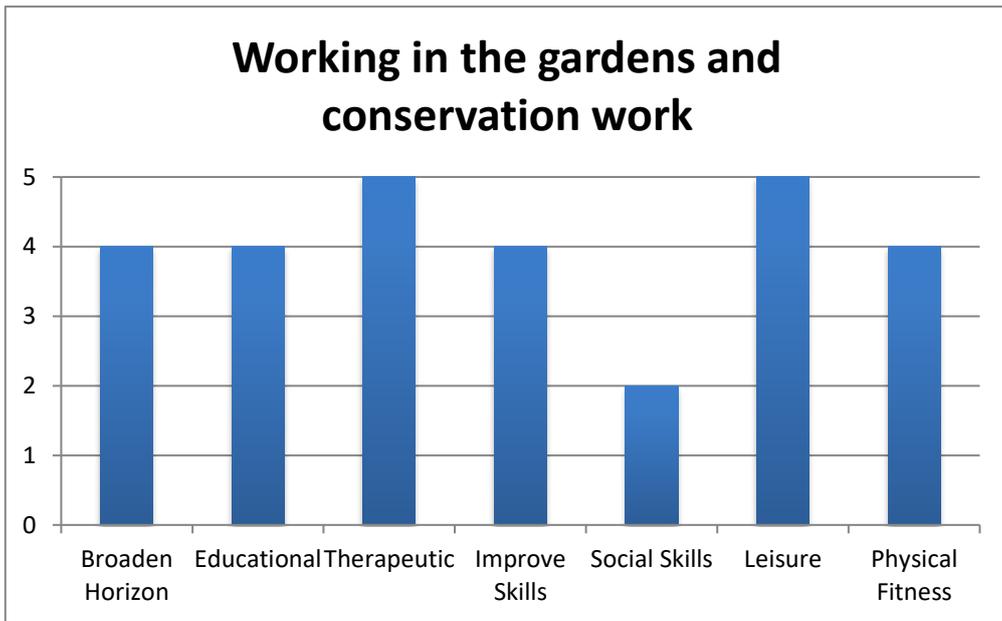
Working in the Gardens and Conservation work.



This is a

high value activity in all areas but social skills.





This is a high value activity in all areas but social skills.

Values assessment.

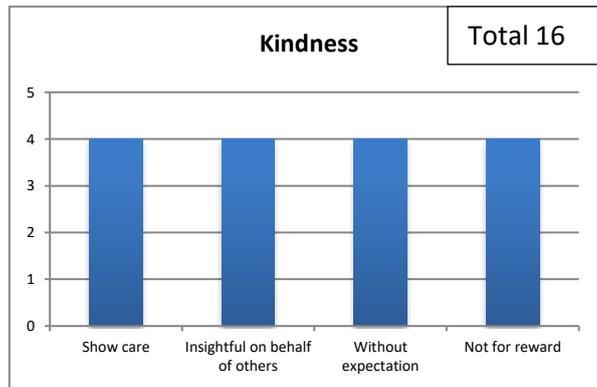
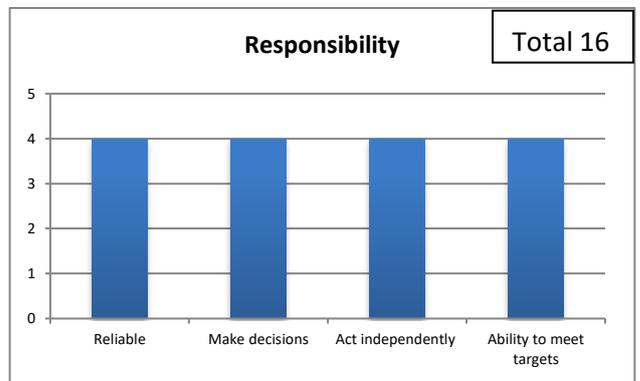
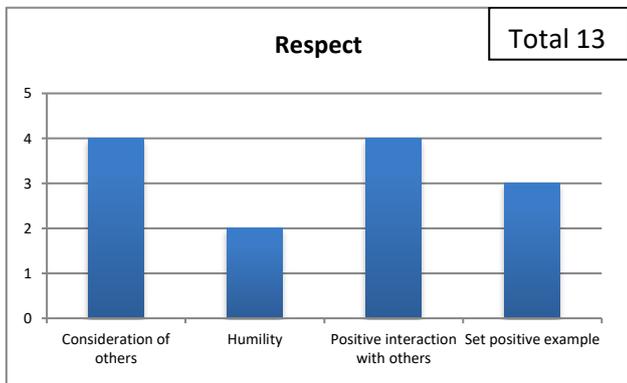
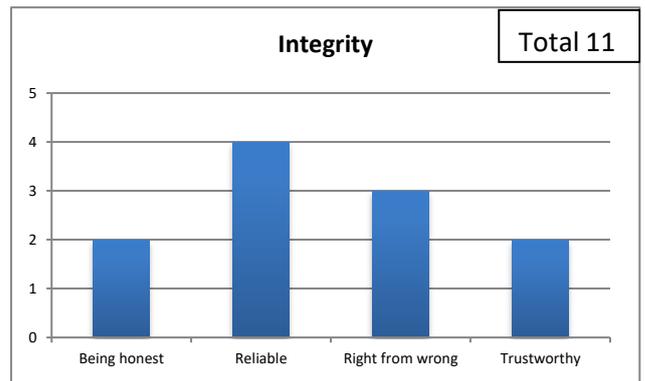
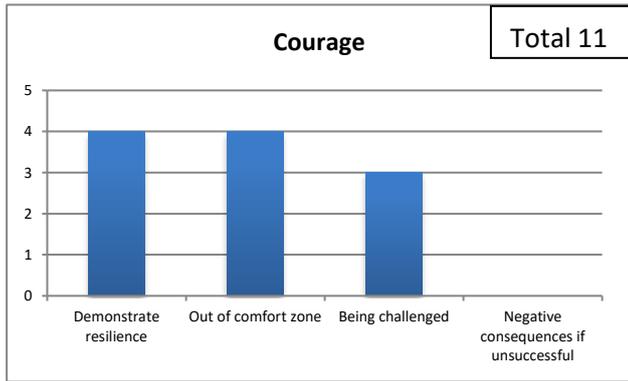
Again the opportunity to consider this activity against the farm and stable yard work is interesting. It has many of the same qualities just much less intensely so. For example

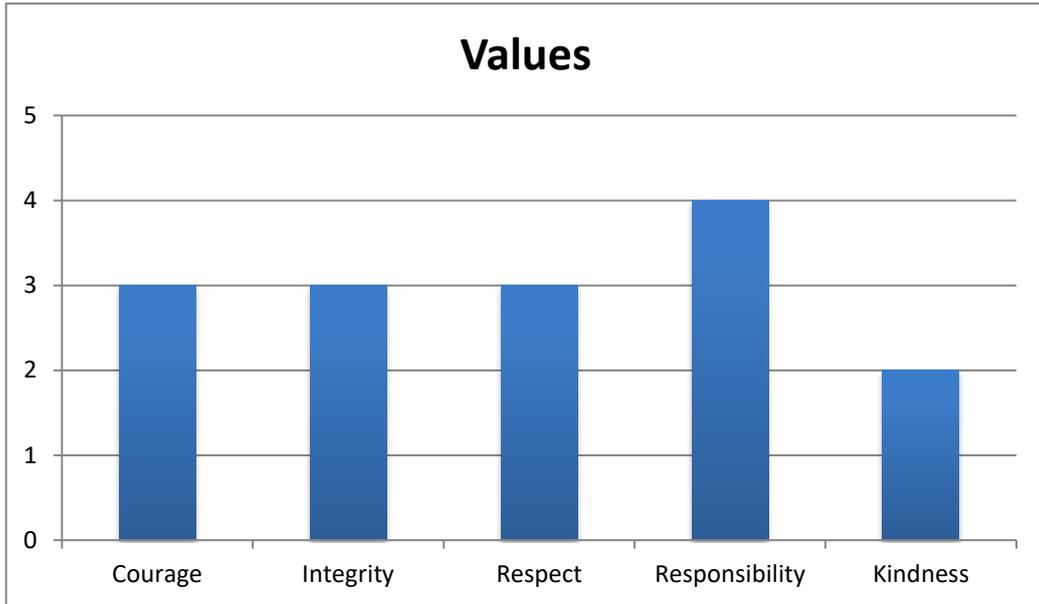
Courage - there is the opportunity to learn resilience working in all weathers. This takes children out their comfort zone, both qualities listed as being significantly prevalent. Being challenged is prevalent but much less so than when dealing with livestock. Within the garden and conservation work there are no negative consequences if unsuccessful. This doesn't take anything away from the subject matter and may be very important for children at their early stages when such stress is simply not yet helpful.

Integrity- again less intense. Being honest is important but lying about watering the plants has less significance than if it were an animal for example. It's always important to be reliable and know right from wrong but again less intensely. Trustworthy, yes but only to a level of slightly prevalent.

Respect.- as above, it's all there but on a less significant scale. Responsibility and Kindness measures in at significantly prevalent in all areas for reasons I'm sure you can see for yourself now we've analysed not only the activity but the system also.

Values





Planting hydrangeas in a walled garden

Horse Riding.

("The outside of a horse is good for the inside of a man' Winston Churchill.")

The impact of time with horses on our cohort is significant. From standing grooming and getting to know, a form of pet therapy, to regular riding out and contributing towards a horses training programme.

"To be able to control a horse you must be able to control yourself". (The Household Cavalry).

Any contact is helpful towards a healing process. This analysis is going to look at the process of riding horses.

Broadening horizons is highly prevalent in all areas for reasons already explained, but will reinforce the fact that a new culture in the form of new expectations and behaviour along with an increased vocabulary is often overlooked in terms of its value.

Educational. Communication and listening skills are highly prevalent. Cross curricular content is significantly prevalent in the form of PE and science and it is an activity that does so much towards promoting enthusiasm and 'inspiring' students to want to do more and learn more.

Encouraging creativity may be slightly prevalent in the form of problem solving and course designing. Pictures of horses are often the most likely subject to be chosen in arts and crafts.

Therapeutic. Scores highly prevalent in all areas except inspiring which is slightly less but still significantly prevalent.

Improving skills is highly prevalent in all areas. We see many children make significant progress in other areas as a result of transferring the skills they've learnt from horse riding to other subjects.

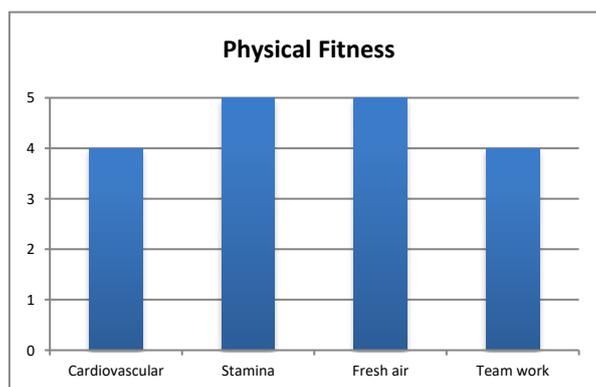
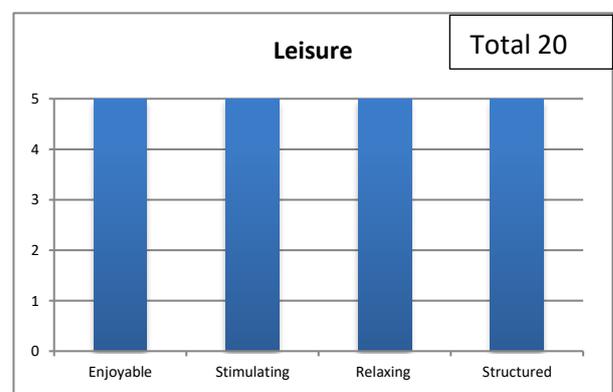
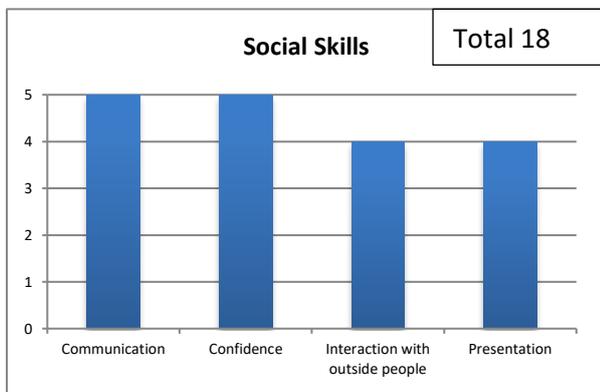
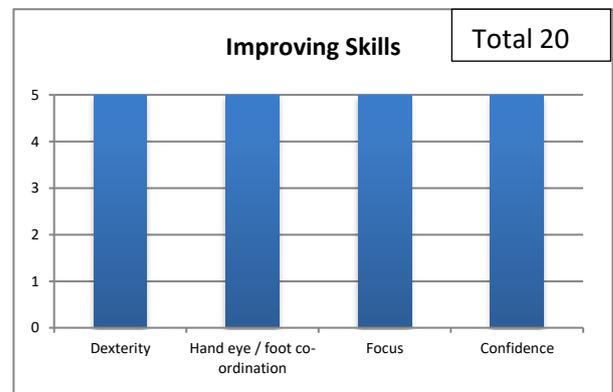
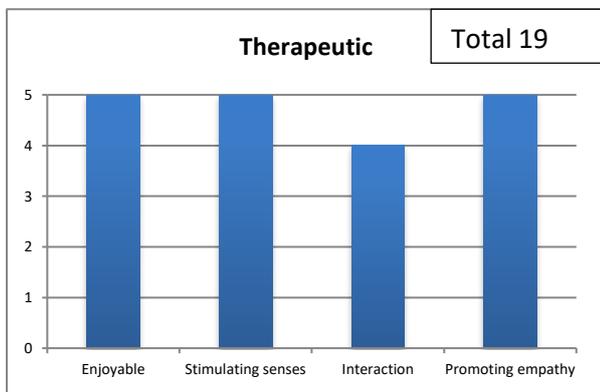
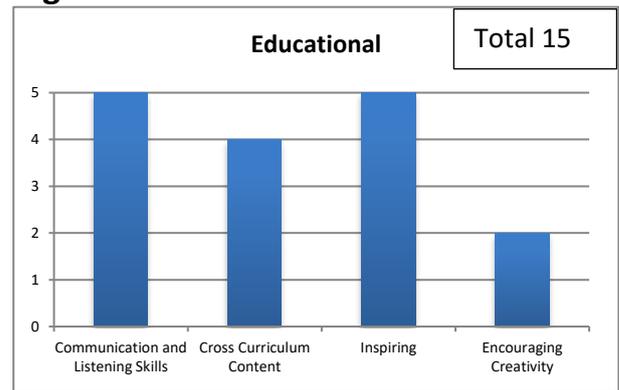
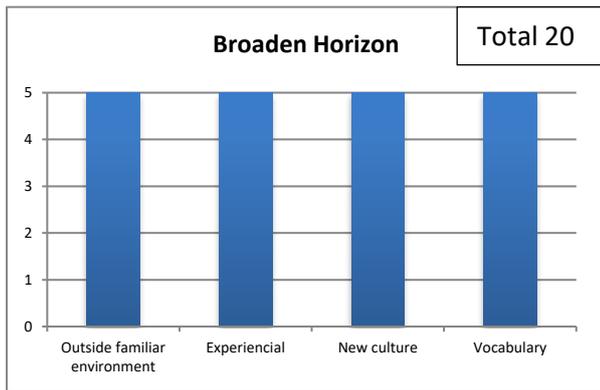
Social Skills. Communication and confidence are highly prevalent from communication between rider and instructors, it is more significant between rider and horse. The concept that communication is not restricted to verbal ability but more importantly whole of body, presence and sensitivity are critical factors. Interactions with outside people is significantly prevalent as is presentation in the form of right clothes for riding and weather.

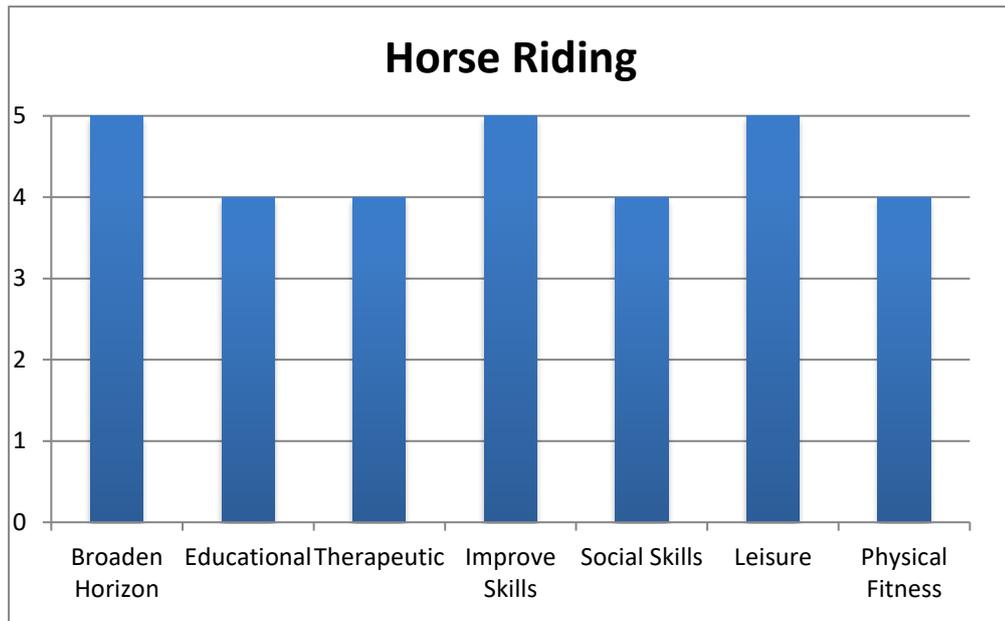
Leisure. It has it all and is why so many people want to do this in their recreation time. It can (and has) lead to voluntary positions and even paid employment post discharge.

Physical Fitness. Cardio vascular is significantly prevalent but not highly prevalent as other sports may be. Teamwork is prevalent in the form of riding together in an arena but also when hacking out on busy roads, team work so important.

The most highly prevalent is developing stamina and resilience in a fresh air environment.

Horse Riding.





Values assessment.

This activity whilst can be undertaken with a poor standard of values, this activity encourages and gives the opportunity to develop good values in the way it requires a level of thinking and performance to get a satisfactory outcome.

Courage. As intimated above demonstrating (developing) resilience, being out of their comfort zone and being challenged is highly prevalent but what is really significant in terms of encouraging 'Courage' is that there is very clearly negative consequences if unsuccessful. It hurts if you fall off!

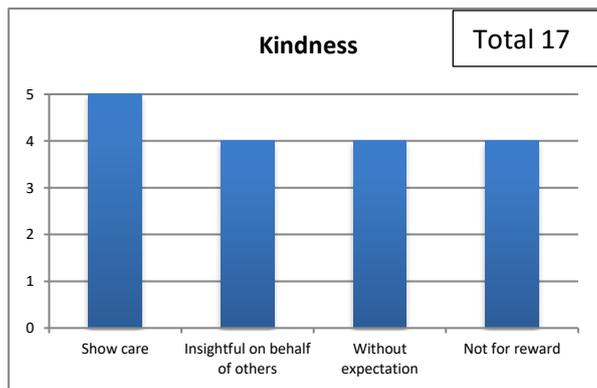
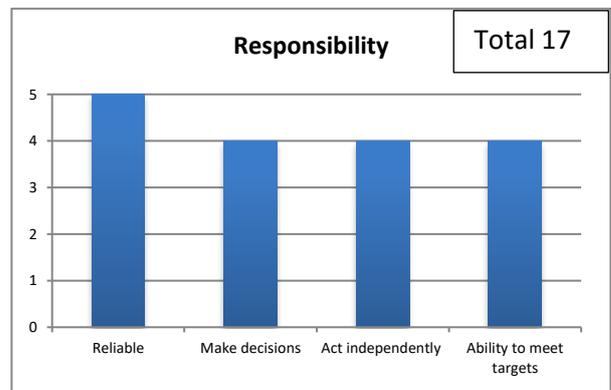
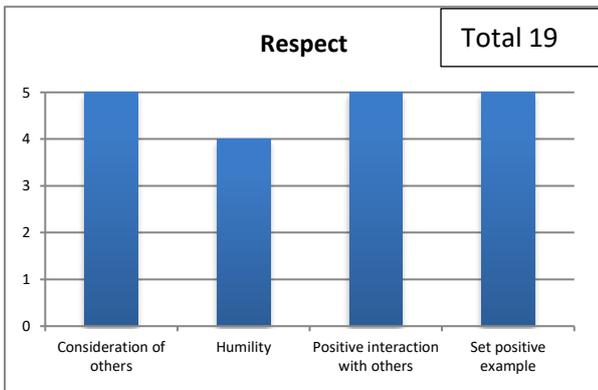
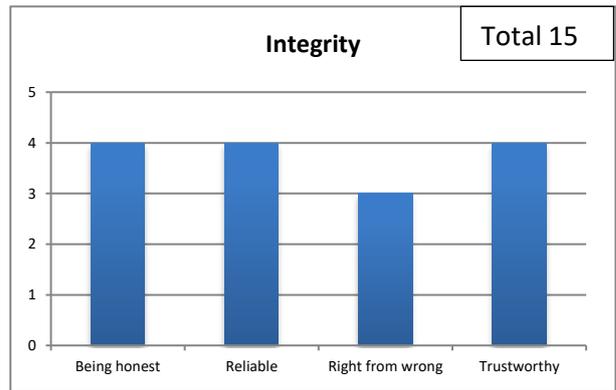
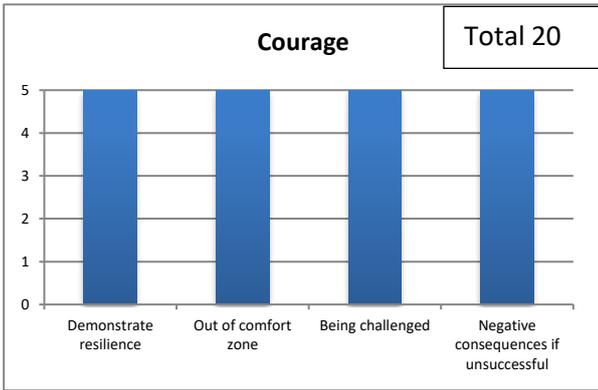
Integrity. Being honest about how your feelings whilst riding, being reliable and trustworthy are factors that are significantly prevalent. Knowing and doing right from wrong is prevalent but much less significant.

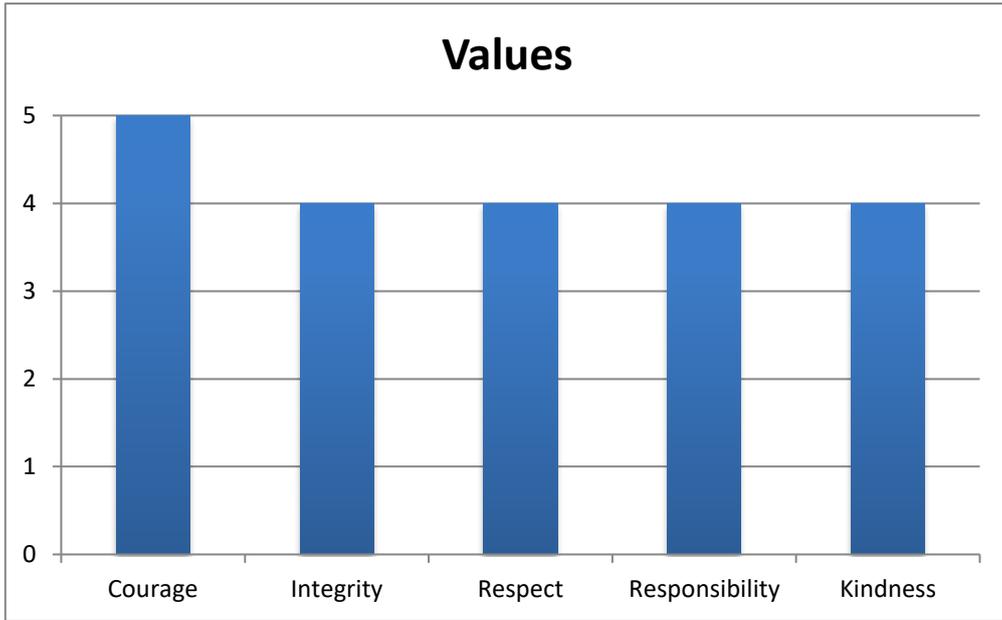
Respect. Consideration for others can be so important in terms of fellow riders but also your horse becomes the most important partner a child may have had. Any partnership requires humility toward your horse and from that this may be extended to others. It allows positive interactions and the opportunity to set a positive example to others.

Responsibility. Being reliable to your horse and fellow riders can be hugely important. It requires you to make decisions and sometimes act independently under pressure. This can require you to meet specific targets at certain times particularly if riding out on the roads or open countryside which can often be time critical.

Kindness. Whilst it gives the opportunity to show care for other riders it is important you show care for your horse. You also need to be insightful on behalf of your horse, looking out for dangers it may not understand. You do this because you want to without expectation or reward. The aim is a harmonious relationship between you and your horse.

Values





Children hacking out at Danby

Outdoor Education.

From its very beginnings Pear Tree valued the importance of outdoor education. Within our current timetable this means mainly walking, which can and does take place all year round in all weathers. Mountain biking or cycling which is mainly summer months and less often but certainly significant is kayaking which again is mainly summer months.

It is quite right we should ask 'why?' Why do it? what are the children getting out of it? Our analysis system helps us to articulate why! And I hope for others to have a clearer understanding of 'why'!

Activities Assessment.

As stated earlier most of the children who use our service have had a very limited life experience. What they have experienced is traumatic and negatively impacted on their cognitive development. There is a clearly an identified need to broaden their scope of reference and by doing so stimulate the growth of neurones and build positive memory muscle. (Ruby Wax).

So by walking in the countryside, local or regional, mountain biking or kayaking we are broadening horizons. The issues in this section are all 'highly prevalent'. It is very much outside their familiar environment, it is always an experience. There is exposure to a new culture in terms of correct attire for the weather and conditions. There is also increased vocabulary in terms of names of places, geographical features, farm animals and wildlife. Respect for and following the Country Code is part of the culture.

From an 'Educational' perspective, communication and listening skills is highly prevalent as is cross curricular content. This is evident in the form of PE, but also exposure to issues in the field that encompass geography and very often history.

It is inspiring and a subtle way of encouraging learning of issues related to the subjects mentioned but also by doing so encouraging learning more generally. Encouraging creativity is slightly prevalent.

From a 'therapeutic' perspective it is highly enjoyable and stimulating senses is highly prevalent. Interaction with those partaking is prevalent. It is not an activity that specifically promotes empathy.

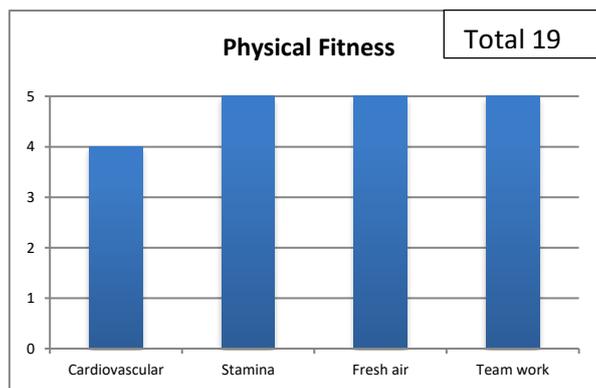
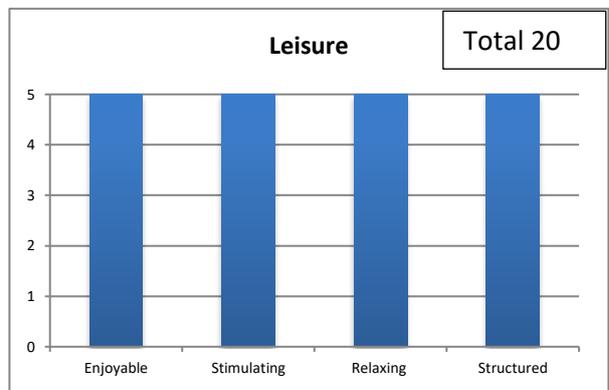
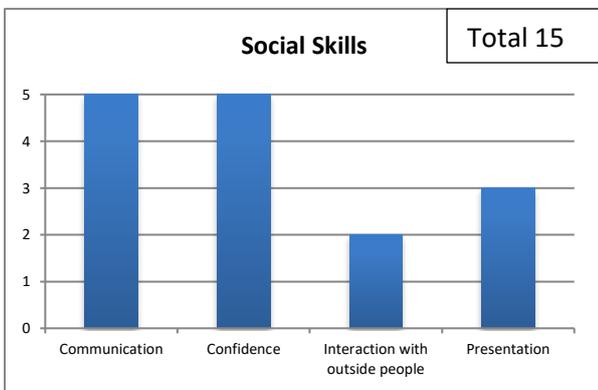
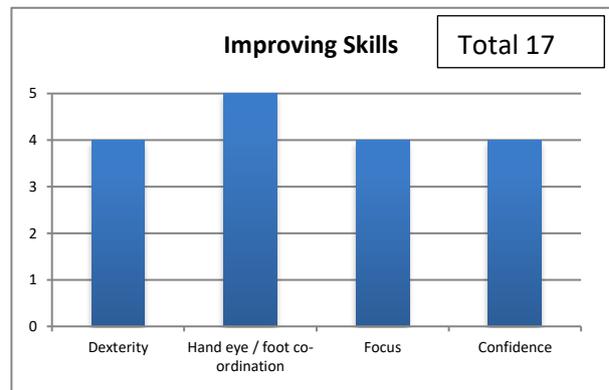
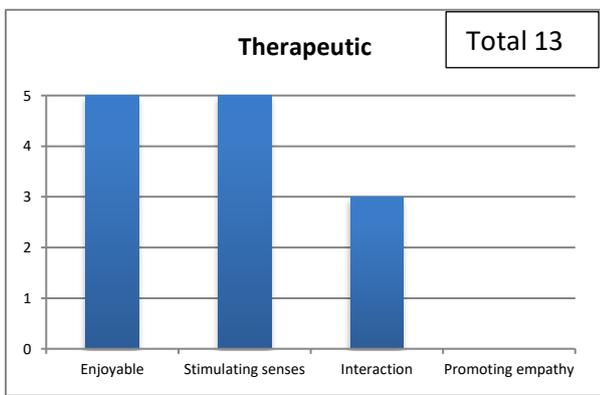
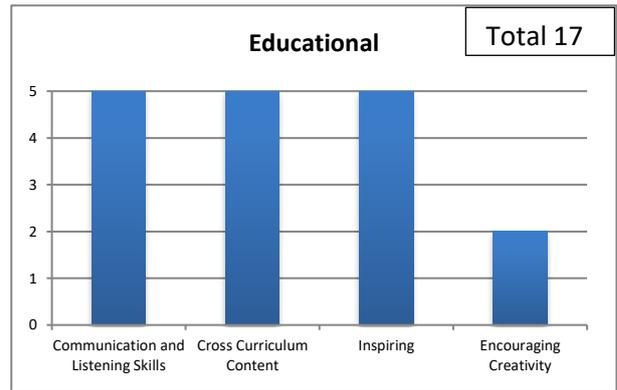
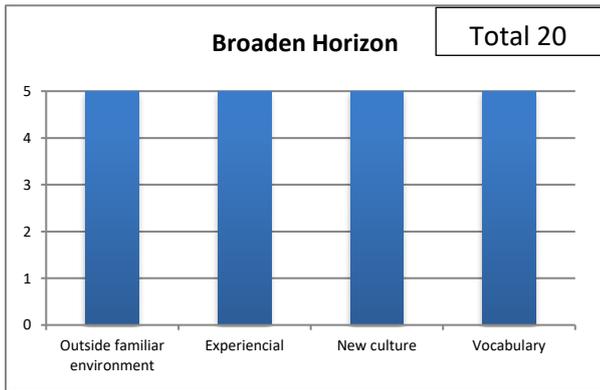
Improving skills. Looking after your kit, applying harnesses and other forms of equipment, map reading, all encourages the use of fine motor skills or 'dexterity'. More prevalent is the promotion and development of gross motor skills. The need to be focused is significantly prevalent as is the promotion of confidence.

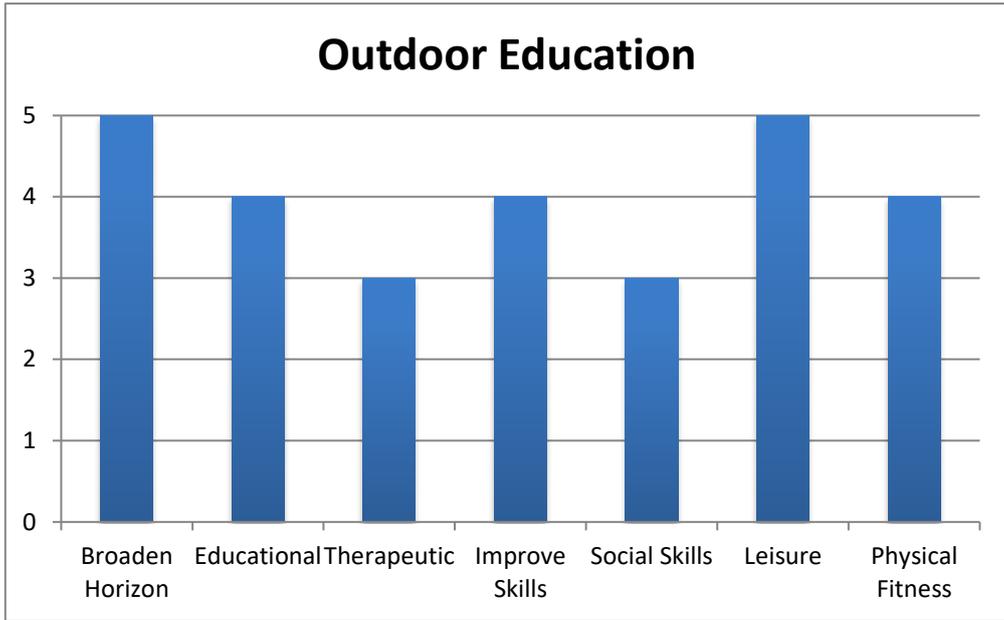
Social Skills. Communication is highly prevalent as is building confidence. Interaction with outside people is slightly prevalent. Presentation in the form of correct attire is prevalent.

Leisure. This areas scores highly as being enjoyable, stimulating, relaxing in the way it is a significant distraction from the worries of the world, which is all highly prevalent. It is also highly structured.

Physical fitness. Whilst cardio vascular activity is significantly prevalent it is not a constant as in other sports. Stamina however is highly prevalent as is being in the fresh air. Team work is also highly prevalent.

Outdoor Education





Values assessment.

So how does this activity promote our corporate values? Again, the system helps us to understand and illustrate.

Courage. It gives our children to opportunity to help increase resilience. This activity is not easy, it is not meant to be. They are out in all weathers, they are very much out of their comfort zone. They are going to be challenged against adversity. These issues are all highly prevalent. Negative consequences if unsuccessful is significantly prevalent within the context of being highly supervised. However despite the levels of supervision, it still hurts if you fall of your bike. It is still unpleasant if you roll your kayak. It is still consequential if your navigating and you get it wrong.

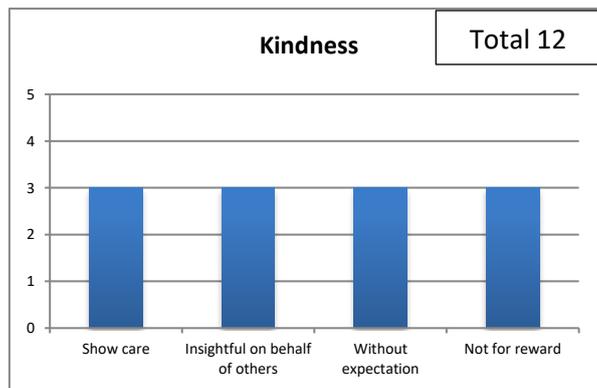
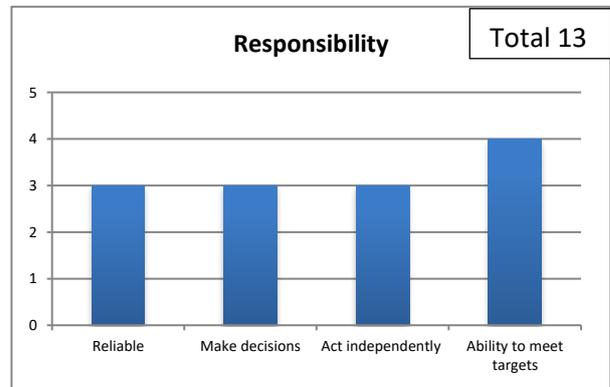
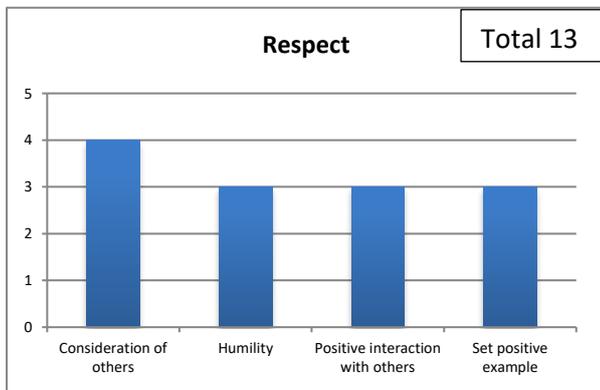
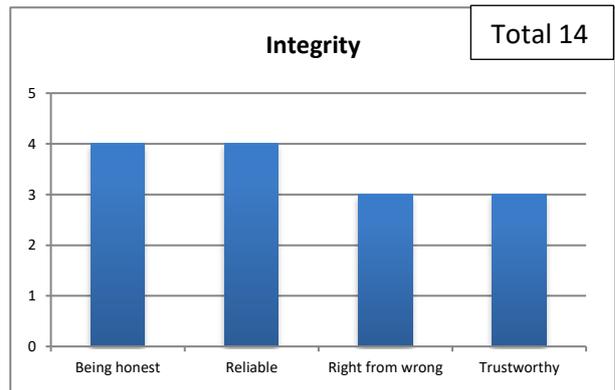
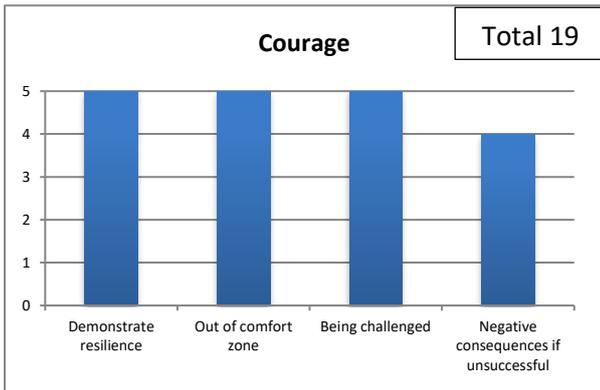
Integrity. Giving honest feedback is important in any of these activities. Being reliable is also important. Knowing wright form wrong and being trustworthy is prevalent but manageable if not present.

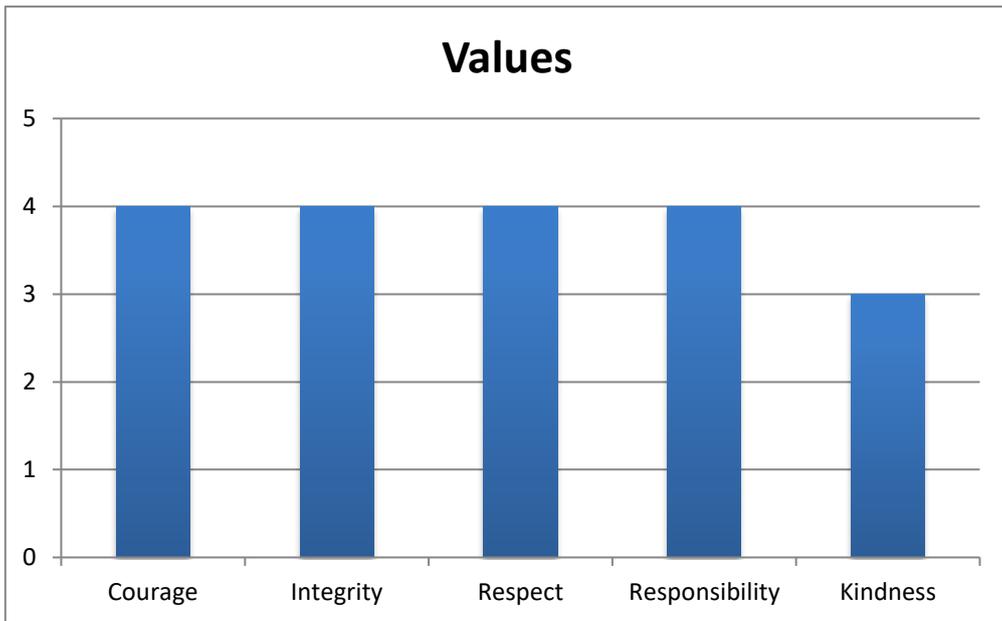
Respect. Consideration for others is significantly prevalent, humility, positive interactions with others and the ability to set a positive example are all prevalent but again manageable if not evident. Respect for and following the Country Code is part of the culture.

Responsibility. This activity gives students the opportunity to be reliable, make decisions and act independently within the context of the activity which is all listed as prevalent. Importantly this leads to the ability and necessity to meet targets. No one is going to collect you if you don't get back to the base of the mountain or RV point.

Kindness. This is not an activity that requires kindness. But being on an adventure and a shared experience of significance against adversity, which they usually are, gives staff and children the opportunity to show care for others, to be insightful on behalf of others without expectation in return or for reward. It gives the adults that take the children the opportunity to be the great role models they are. It is this kind of experience that creates the culture and context of good sound relationship building. The kind of which is fundamental to our work and last long after they have left the outdoor environment.

Values





Walking in the great outdoors

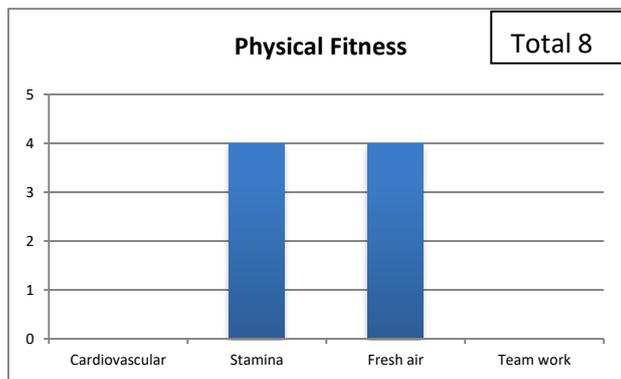
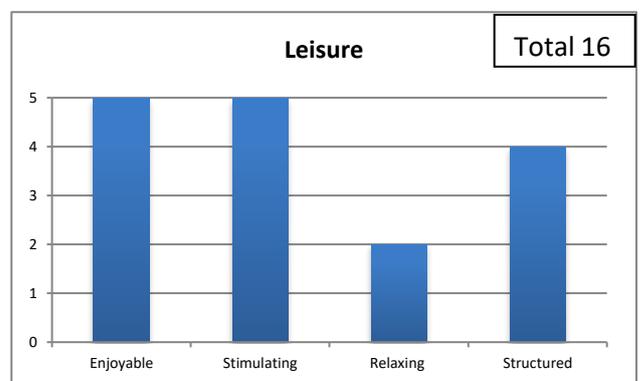
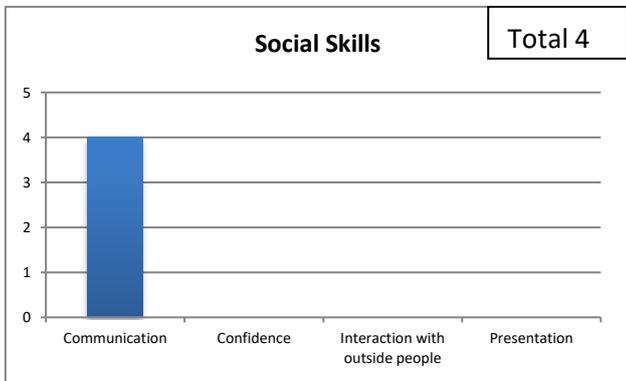
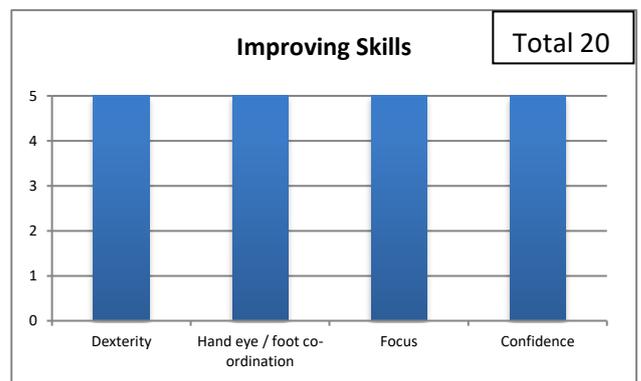
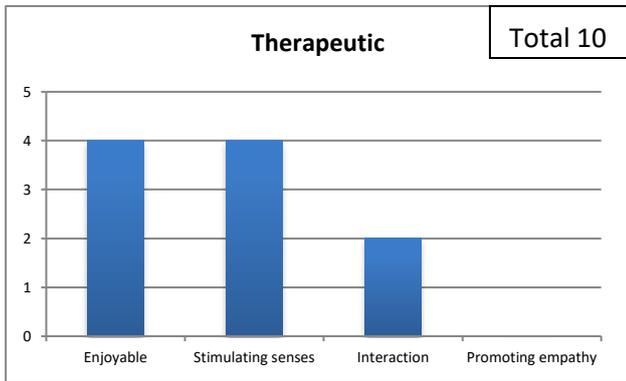
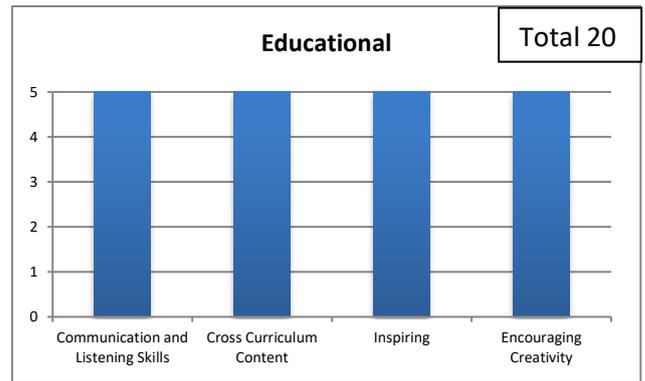
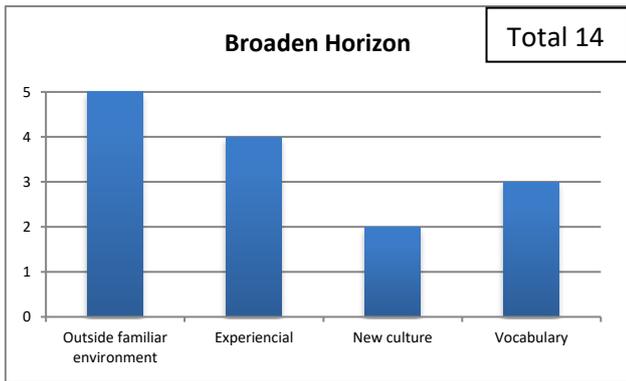
Working in the Workshop and Forge.

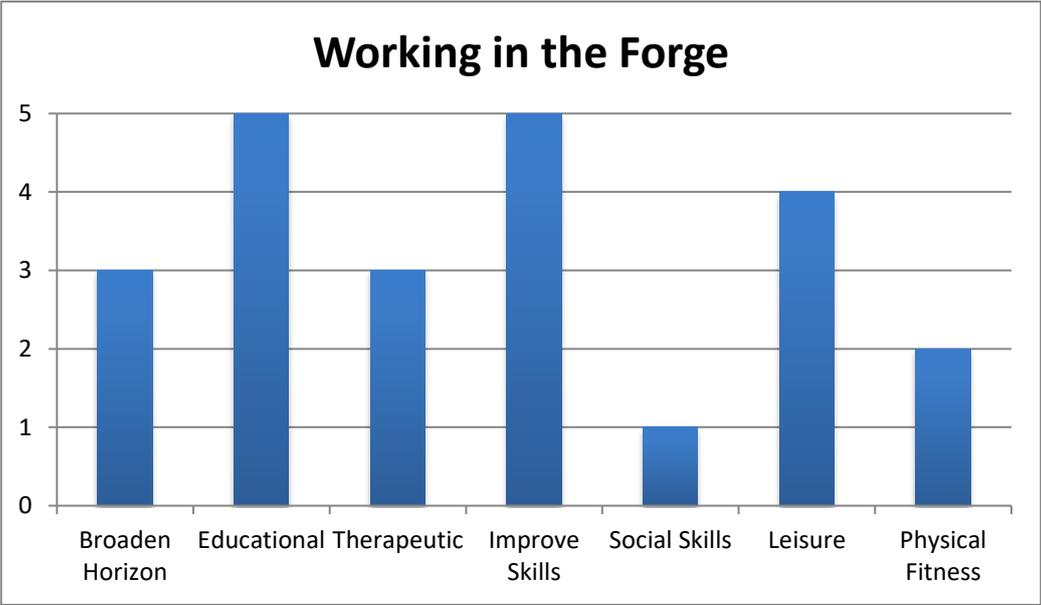
Summary.

Using the approach demonstrated in the analysis of working on the farm and in the stables this activity clearly broadens horizons which is significantly prevalent in all four elements. Highly prevalent in all four elements for educational, slightly less for Therapeutic due to interactions with others and promoting empathy only acknowledged as prevalent. This activity is all about improving skills with all areas highly prevalent. Social skills is prevalent, it can be hugely enjoyable in leisure time but it is not a major contributor to physical fitness.

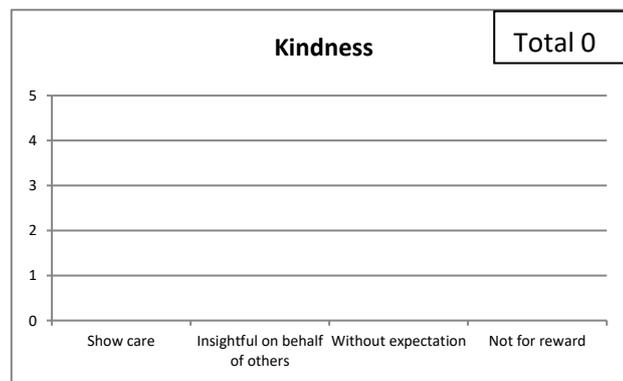
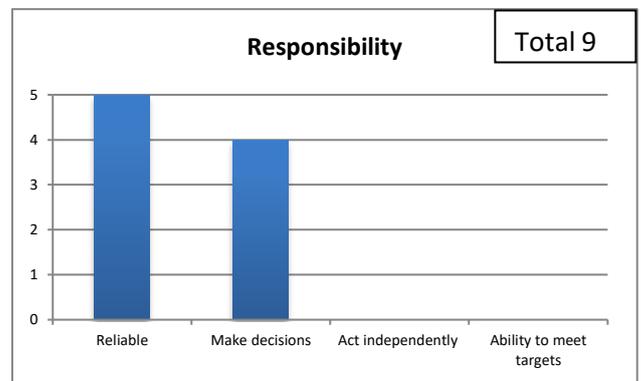
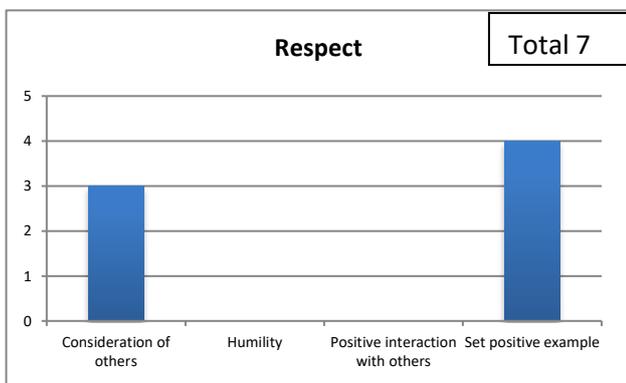
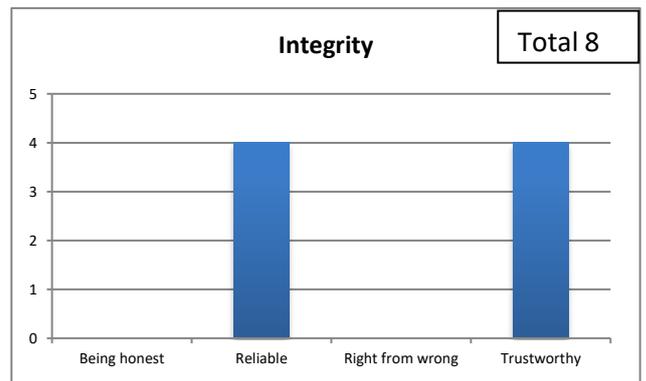
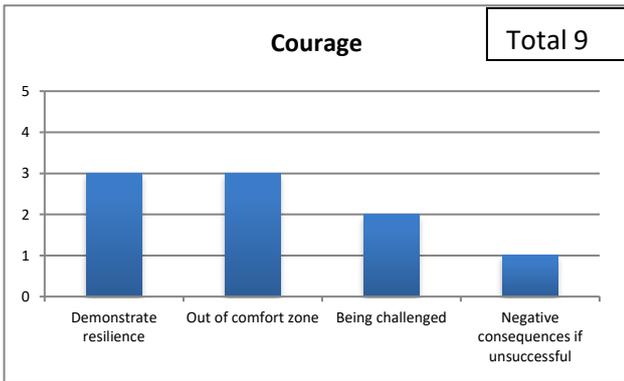
What is interesting with these activities is how it promotes values. Working often on singular tasks with little interaction with others means this is not obviously an activity that promotes values. 'Unless' you are making things for others in which case the opportunity to promote values in terms of thinking for others changes the whole context of the activities. This is so evident on the run up to Christmas when we spend a great deal of time and energy making Christmas hampers for the lonely and elderly in the community. These hampers contain many items which have been considered from the receivers perspective. Opportunities like this are significant in promoting empathy and 'Kindness'.

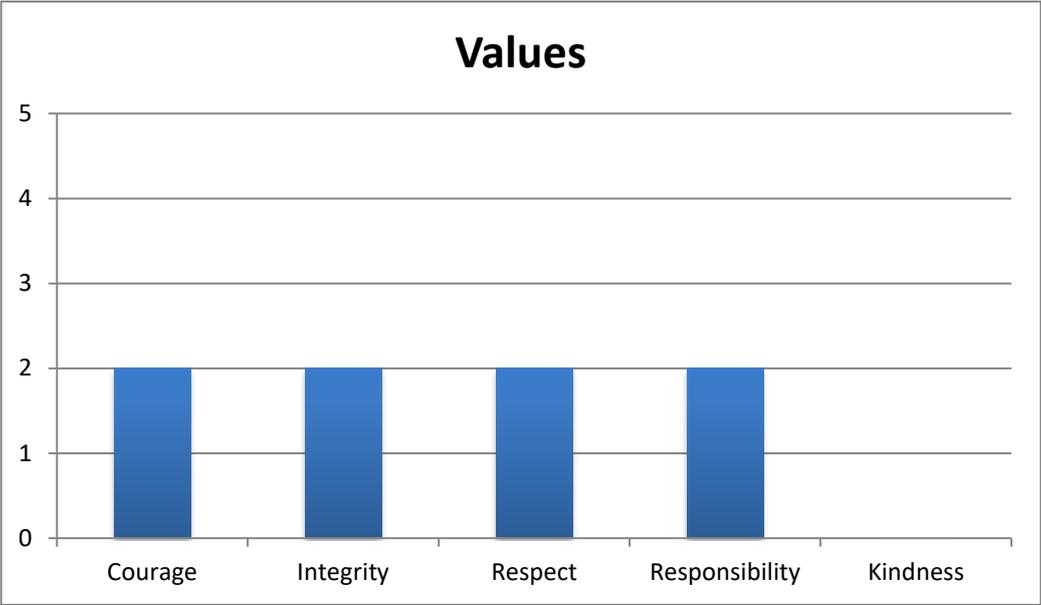
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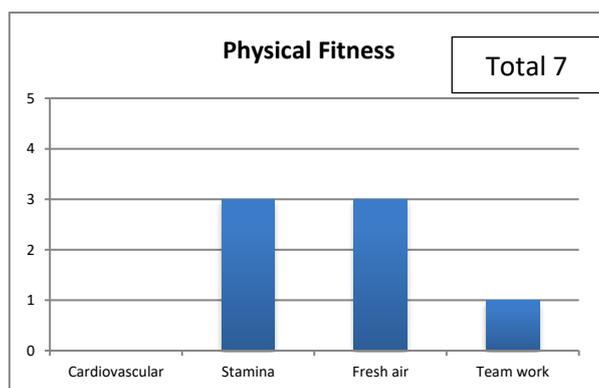
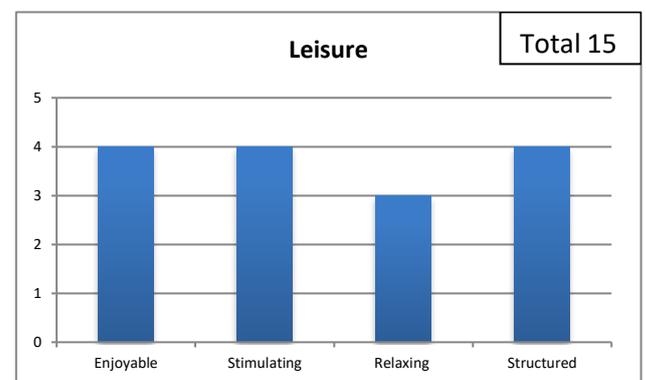
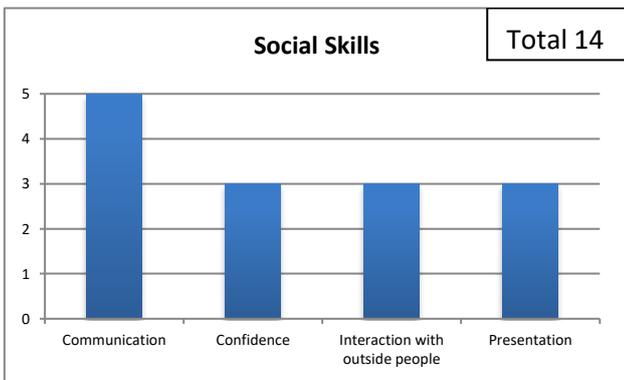
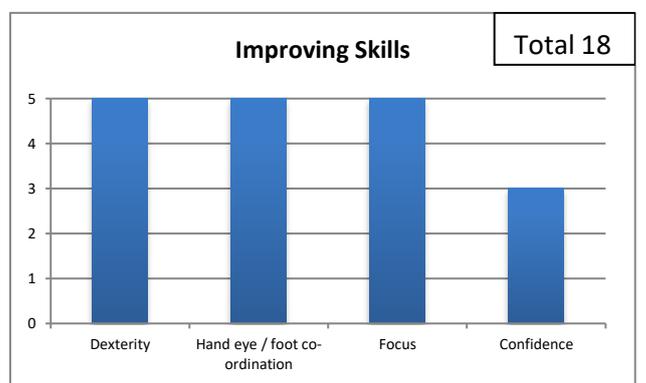
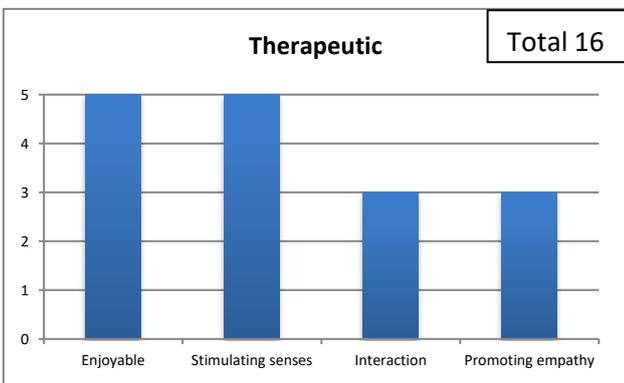
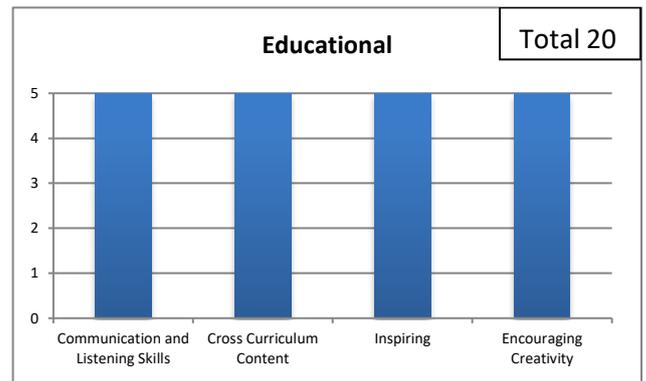
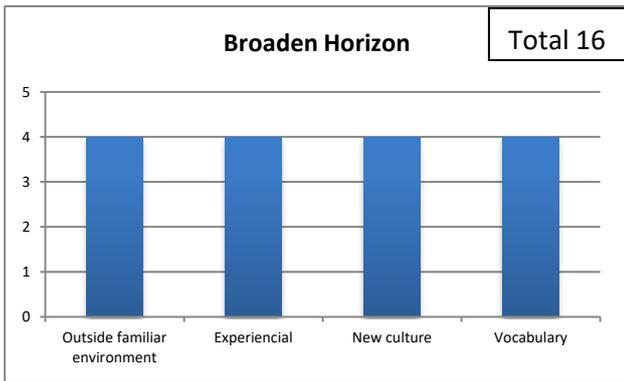


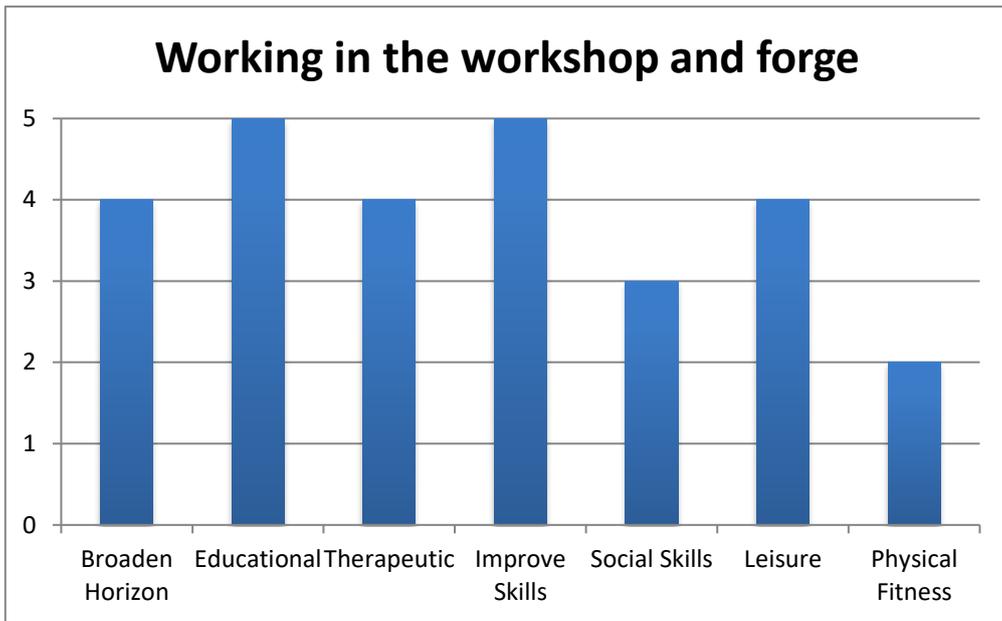
Values





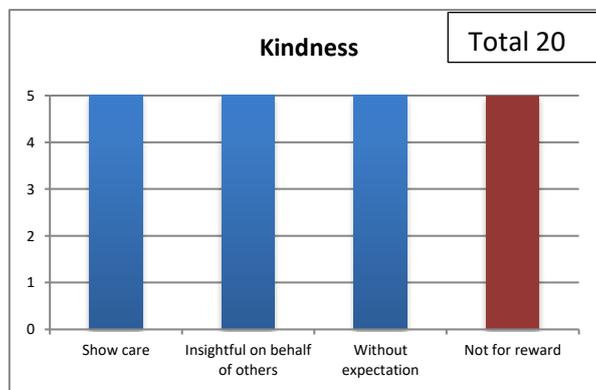
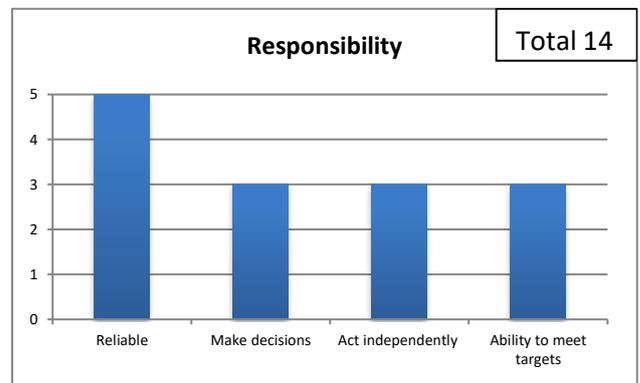
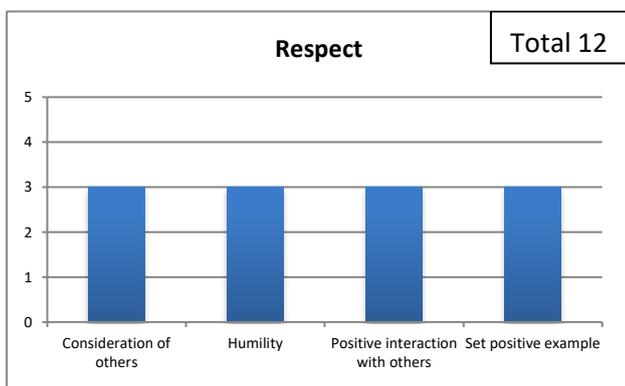
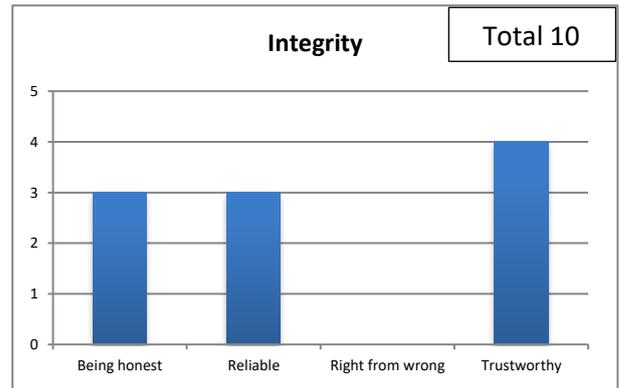
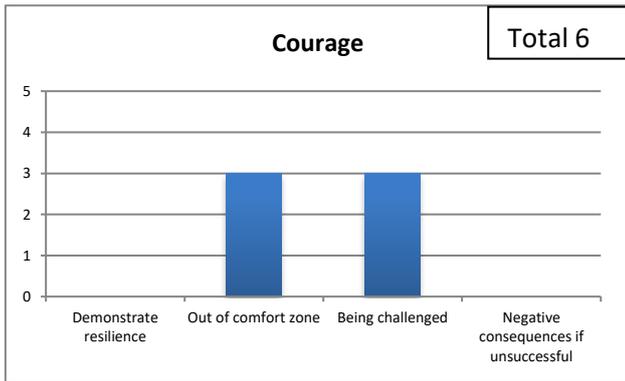
Working in the Workshop and Forge.



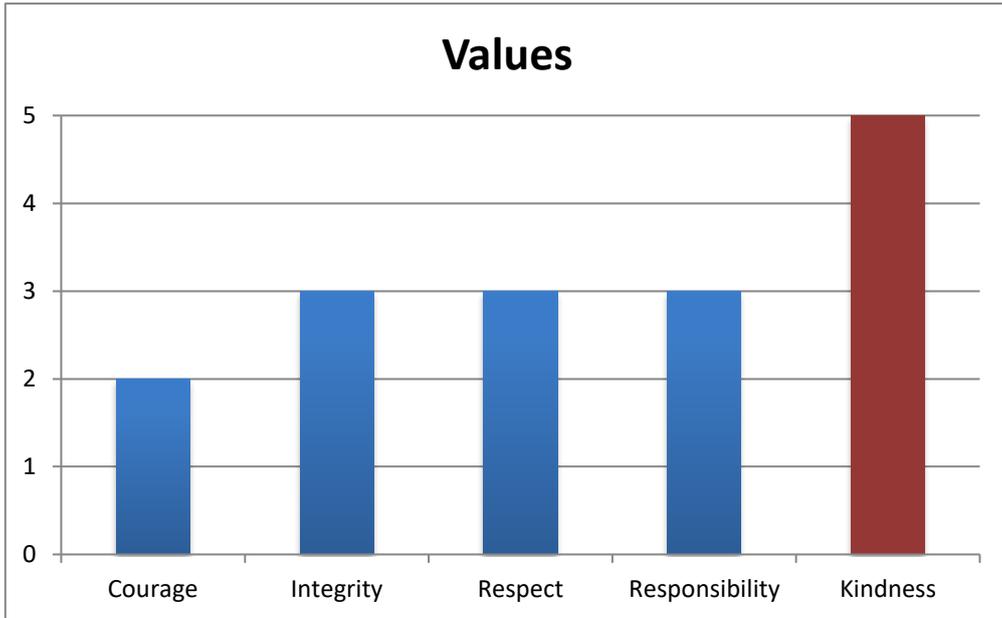


This is a high value activity particularly in the areas of broadening horizons, educational, therapeutic, improving skills and leisure.

Values



 When making Christmas hampers or items as gifts



When making Christmas hampers or items as gifts



Working in the forge

Conclusion.

When I started Pear Tree in 1990, I had few resources and limited funds. From the onset our unique selling point was the alternative environment we offered, and the rural skill set accessible through this. What became immediately apparent was how much the young people at the time valued these 'different' experiences.

Over the years it has become increasingly important that we maintain the essence of these experiences and develop them in an increasingly complex context of education which is always under scrutiny.

What I am absolutely certain of is the importance of the activities described in this document not just as part of an education programme but in being fundamental to the recovery and rehabilitation process from which our young people can flourish, rebuild and move on with their lives.

David Bartlett MBE
February 2021.

Part 2

Lesson Plans

1. Working on the farm
2. Working in the stables
3. Horse Riding
4. Working in the gardens and conservation work
5. Outdoor Education
6. Working in the workshop and forge

Working on the farm

Lesson Plan: Feeding round.

The term feeding round is used in most farms and equine facilities as the time all animals kept inside receive their food, this being morning and at the end of the working day.

At the start of the feeding round process students should be briefed on any health or safety issues, like horses that may bite. Horses that may have been moved to a different stable. Sheep that may rush to the feed trough etc. They also need to know the following and be monitored to ensure the following.

- The names and locations of the animals being fed. This could be an individual horses name or ' the pigs'.
- What feed stuffs are being used.
- The proportions of the feed stuffs and the volume / number of scoops.
- Any additives or medication.
- When feed is allocated to a specific bucket that the correct bucket of feed is delivered to the correct animal.
- The student checks the animals water is available and clean.
- The feed round lead monitors to ensure animals are fed correctly.
- Students are asked to remember what animal gets fed, what feed in what proportions and to recall this information.

Instructors need to ensure that stables show the correct name plates for the relevant horse. That feed bins remain in a permanent position, if they have to be moved that the move is permanent and not changed regularly / infrequently without consideration. This is to stop assumptions of the contents of the feed bins being made and the wrong feed stuff allocated.

For the same reason waste bins for general waste and recycling are kept at the same place in the same order. Waste materials such as empty feed bags must be dealt with correctly at the time and not put to one side.

Curriculum areas

- Attitude to education is prevalent throughout.
- Linguistic 9/ Can the student read and follow instructions.
- Numerical 1/ Does the student have basic number literacy. 7/ Does the student understand fractions a) they understand what a fraction is and it's relationship to a whole, is it half a scoop or a third of a bucket ?
- Science 7/ Does the student understand the food chain a) plants in different environments are grown and eaten by different types of animals. b) Animals eat plants in different environments converting plant material to muscle.
- PE 5/ Can the student undertake physically demanding tasks independently. a) They can feed animals to a required feeding list independently.
- Career planning and personal development. 1/ Has the student attended work experience within Pear Trees working environments a) the farm b) the stables.

Lesson Plan: Preparing Ewes for mating.

What we hope our students will learn.

- Attitude to education is prevalent throughout this activity.
- How to gather sheep from the field. Listen to instructions to know where to go where to stand and how to herd towards a penning system. Science 8 can the student record and log data - a) counting livestock in a field (or penning system) b) moving livestock to fresh pasture (or a penning system)
- How to identify breeding sheep from fat lambs - Science 6 Does the student understand the life cycle and habitat of animals (b) Birth to full grown, lambs through to slaughter. 10 Does the student understand the basic concept of animal biology. a) parts of the animal externally. f) reproductive system of the animal.
- How to use identifying markers.
- The need to prepare the ewe for mating by cutting droppings from around its genital area to allow for easy access for the male reproductive organs. Science 10 Does the student understand the basic concept of animal biology. - a) parts of the animal externally f) reproductive system of the animal.
- How to administer wormers. Science 17 Has the student been present during a veterinary procedure undertaken by a vet or farm staff. g) worming

- Why we need to administer wormers or vitamin drenches. Science 12 Does the student understand about diseases, infections and viruses. (a) They are aware of different diseases and their impact on animals and humans. 17 has the student been present during a veterinary procedure undertaken by a vet or farm staff. g) worming.
- Career planning and personal development 1/ Has the student attended work experience within Pear Trees working environments. a) The Farm.

It must be recognised that this activity has been assessed using the format outlined in our document 'A therapeutic approach to helping children and young people recover from abuse, the value of activities' - particularly Therapeutic value, Improving skills and physical education. Therefore instructors should not be concerned about repetition and take the opportunity to do this task when the need arises.

Lesson Plan: Herding livestock to a different field or enclosure.

Like many activities on the farm this is a task that is required to be done for a variety of practical and functional reasons. Whilst many tasks can be undertaken whilst the livestock are in a contained area, this lesson plan is about the way they get there 'only' and the learning opportunities in this process.

Whenever moving livestock from one area to another the following must take place.

- Initial briefing by the leader to cover what animals are being moved and why.
- The plan for moving livestock including hazards and safety requirements. These may vary depending on the type of livestock being moved, also the geography, how to cross the terrain and specific difficulties that may be encountered.
- The importance of body gestures and how to be authoritative and also how to be submissive and blend into the background. When and where it is important to be both the above.
- The importance of following instructions precisely and specifically. The importance of knowing if the instruction is to stop to stop immediately. If the instruction is to take a step backwards to do so immediately. If the instruction is to run to do so immediately and why. The impact on the animals of the above actions and the need to keep everything calm and heart rates low.
- How to read animal behaviour and understand what the animals may be feeling and thinking at different times of the process.
- How to control our behaviour to ensure a good outcome for the animals being moved.
- Each student must be assessed for compliance and competency and anyone not compliant or competent at any time instructed to withdraw from the process.

Attitude to education

4/ a) They listen to teachers and instructors and learn from them. b) They can listen to feedback and use it constructively.

5/ a) They can follow simple instructions without the need for repetition. b) They can follow complex instructions without the need for repetition.

Science

9/ b) Working on the farm rearing animals through to the kitchen.

PE

4/ d) They can herd animals as part of a team and follow instructions. e) They can assist with a variety of physically demanding tasks.

Career Planning and Personal Development.

1/ Has the student attended work experience within Pear Tress working environments. a) The Farm.

This is also a high value activity in terms of Broadening horizons, Therapeutic, Improving Skills and Physical Fitness as set out in our document 'A therapeutic approach to helping children and young people recover from trauma and abuse'.

David Bartlett

Lesson Plan: Preparing Game.

What we hope our students will learn.

How to prepare a pheasant to be cooked
How to be respectful around dead animals
How to be hygienic and food safe

- How to clean and prepare work area
- How to remove feathers from breast area
- How to cut through membrane and remove breast from the bird
- How to cut and check meat for shot
- How to store meat until it is to be cooked (either by refrigeration or vacuum/freezing)
- How to safely dispose of carcass
- How to clean and disinfect work area

Science

9. Does the student understand where their food comes from?

d) Preparing game to be eaten

- Career planning and personal development

1/ Has the student attended work experience within Pear Trees working environments a) The farm.

2/ Has the student demonstrated they have the communication skills required to progress. a) They are confident to engage adults in appropriate conversation b) They say please and thank you without prompting c) They can ask for help when needed d) They can listen to and follow instructions e) They can use a varied vocabulary specific to their area(s) of interest.

David Bartlett

Working in the stables

Lesson Title: Approaching a horse	
Subject: PE	Group:
Date:	Time/Session:
Reference to scheme of work: PE 1.a,b,c	Links to Assessment Specification BTEC Land based studies
<p>Learning Objectives:</p> <p>To approach a horse correctly (PE 1.a,b,c)</p> <p>To understand why we must be calm and quiet around horses (PE 1.a,b,c)</p>	
Lesson Structure	Teacher Notes
<p>Starter:</p> <p>Before entering the yard the group will discuss the importance of remaining calm and quiet around the horses – led discussion (horses can be spooked/scared easily which could cause accident leading to horse or humans being hurt).</p> <p>Main activity:</p> <p>The group will enter the yard, calmly and quietly as discussed. It will be explained to the group how to approach a horse correctly and demonstrated. Approach the horse’s shoulder, talk in a calm and quiet voice so the horse knows you are there, touch the horse’s shoulder or neck in a purposeful but calm way (explain that they should not touch the horse too lightly as this may tickle and the horse may turn to itch the spot, possibly thinking it is a fly).</p> <p>Each member of the group will then demonstrate how to approach a horse correctly, one at a time. Feedback will be given to each group member and then their improvements demonstrated.</p> <p>Plenary:</p> <p>Recap the reasons why it is important to remain calm and quiet on the yard.</p> <p>Discuss the steps of approaching the horse. Ask questions for children to demonstrate their understanding. Why should we touch the horse in a purposeful way? Why should we approach the shoulder? Why should we talk to the horse as we approach?</p>	<p>How do I know all students have made progress?</p> <ul style="list-style-type: none"> • All students can recall the reasons to remain quiet and calm around horses. • All students can demonstrate how to approach a horse correctly. • All students can explain why we must approach a horse correctly.
<p>Differentiation:</p> <p>Specific/targeted questioning</p> <p>More able to give peer feedback</p>	
<p>Links to Therapeutic Education Curriculum:</p> <ul style="list-style-type: none"> • PE 1.a,b,c • Careers and professional development 2.a,c,d,e • Attitude to education 4.a,b 6.a,b,c,d 	

Resources: Quiet horse
Assessments: Visual assessment
Health & Safety: Suitable horses

Horse Riding

Lesson Title: Getting on and off a horse	
Subject: PE	Group:
Date:	Time/Session:
Reference to scheme of work: PE 3.b,d	Links to Assessment Specification BTEC Land based studies
<p>Learning Objectives:</p> <p>To get on a horse correctly (mounting)</p> <p>To get off a horse correctly (dismounting)</p>	
Lesson Structure	Teacher Notes
<p>Starter:</p> <p>The process of mounting will be explained and the students will climb onto the mounting block to be confident with the height and stability of the block.</p> <p>Main activity:</p> <p><u>Mounting a horse</u></p> <p>The students will remove the horses head collar and untwist the reins and check the girth is tight (varied support given), pull down the stirrups and check the length using the length of their arm as a guide. They will lead their horse to the mounting block from the left hand side and stop their horse next to the block. After climbing onto the mounting block whilst keeping hold of the reins, the student will gather the reins and neck strap into their left hand and hold the back of the saddle with their right hand. The student will place their left foot into the stirrup and swing their right leg over the horses back, sitting into the middle of the saddle gently. They will then hold the reins in both hands and put their right foot in the stirrup. The girth will be checked (varied support given).</p> <p><u>Dismounting a horse</u></p> <p>The student will ask their horse to stop by gently pulling both reins. They will remove both feet from the stirrups and hold both reins and neck strap in the left hand before leaning forwards and swinging their right leg over the back of the saddle. They will hold onto the back of the saddle with their right hand and lower themselves to the ground. The student should be reminded to bend their knees as they land to avoid concussion. They will be shown how to run stirrups up correctly whilst looping one are through a rein to prevent the horse from walking off. They will ensure that both stirrups are ran up before leading the horse to a suitable are to be tied up.</p> <p>Plenary:</p> <p>The student will be able to recall the process of mounting and dismounting correctly.</p>	<p>How do I know all students have made progress?</p> <ul style="list-style-type: none"> • Increased independence • Ability to support others with the mounting or dismounting process • Following instructions with reduced need for repetition

Differentiation:
Differentiated support

Links to Therapeutic Education Curriculum:

- PE 3.b,d
- Careers and professional development 2.a,c,d,e
- Attitude to education 3.a,b,c,d 5.a,b,c,e 7.a,b

Resources:

Suitable horse

Correctly fitting tack

Sturdy mounting block

Assessments:

Visual assessment

Health & Safety:

Suitable horses

Rider is wearing the correct safety wear for riding

Lesson Title: Riding without stirrups	
Subject: Equine studies	Group:
Date:	Time/Session:
Reference to scheme of work:	Links to Assessment Specification
<p>Learning Objectives: To improve balance by riding without stirrups</p>	
Lesson Structure	Teacher Notes
<p>Starter: The group will walk, trot and canter (if capable) to get their horses muscles warmed up in open order. Explain to the riders the expectations of a good position.</p> <p>Main activity: The group will halt then quit and cross their stirrups over the front of the saddle. Ensure the stirrups are crossed right stirrup first, left second. Explain that this is because if the rider needs to get off, they can get back on quickly and effectively by easily unhooking the left stirrup which is on top. Riders will walk around the arena to gain balance and ensure they are sat in the middle of the saddle. Riders can make suitable turns and changes of rein to improve their balance. Riders will then progress to riding at trot if able. First time riders may need to be lead. If appropriate riders will make suitable changes of rein and turns. They will be encouraged to keep hands and legs still and relaxed as they ride and ensure they sit in the middle of the saddle. Some riders may be able to improve balance without stirrups in canter. 20m circles, serpentines, transitions, shallow loops ect. may be ridden to improve balance and coordination.</p> <p>Plenary: Riders will regain stirrups and demonstrate riding the same exercises showing any improvements in balance, control and coordination. Riders will explain what a good position should look like.</p>	<p>How do I know all students have made progress?</p> <ul style="list-style-type: none"> • Can the riders explain points of a good position? • Can riders cross their stirrups correctly? • Do riders have the confidence to ride without stirrups? • Can the riders trot without stirrups independently? • Can the riders canter without stirrups? • Can riders explain expectations of a correct position? • Can riders identify any loss of balance?
<p>Differentiation: Trotting with/out a leader Complexity of exercises Some may canter</p>	
<p>Links to Therapeutic Education Curriculum:</p> <ul style="list-style-type: none"> • Equine • PE • Careers and Professional development 	

Resources:
Suitable horses
Well-fitting tack
Suitable riding space

Assessments:
Visual assessment

Health & Safety:
Suitable horses
Arena suitability
Tack correctly fitted and maintained
Hat, body protector and boots correctly fitted

Lesson Title: Riding 20 meter circle	
Subject: Equine studies	Group:
Date:	Time/Session:
Reference to scheme of work:	Links to Assessment Specification
Learning Objectives: To ride a 20 meter circle	
Lesson Structure	Teacher Notes
<p>Starter: The group will walk, trot and canter to get their horses muscles warmed up in open order.</p> <p>Main activity: Explain to the group about the size of the arena (40x20 meters) and use this to relate to a 20 meter circle. Ask the group to show the shape of a circle with their hands/arms. Use a marker or poles to identify where X (centre of the arena/ top of the circle) is located. The group will follow the instructor around the shape of a circle beginning at A or C identifying noticeable points to remember on the way around. Discuss diameter in relation to circles – distance across the very centre of the circle – 20 meters, pace over if needed to demonstrate. Allow the riders to steer their horses around a circle in walk. Progress to trot or canter if appropriate.</p> <p>Plenary: Remove the X marker and encourage riders to ride the circle without any intervention. Encourage riders to identify any possible improvements that could be made and what went well.</p>	<p>How do I know all students have made progress?</p> <ul style="list-style-type: none"> • Can riders steer around a circle shape correctly with markers to support? • Can riders steer around a circle shape correctly without markers to support? • Can riders demonstrate improved balance whilst riding the circle? • Are riders able to ride a circle correctly at a faster gait than previously?
<p>Differentiation: Riding the circle in walk, trot or canter Ride with or without markers on the circle</p>	
<p>Links to Therapeutic Education Curriculum:</p> <ul style="list-style-type: none"> • Equine • Numerical 	
<p>Resources: Poles/markers</p>	
<p>Assessments: Visual assessment</p>	

Health & Safety:

Suitable horses

Arena suitability

Tack correctly fitted and maintained

Hat, body protector and boots correctly fitted

Working in the gardens and conservation work

Lesson Plan: Bulb planting.

What we hope the student will learn

- Quality check on the bulb, is it healthy or poor.
- Identify the top and bottom of the bulb and the planting depth required.
- Different places a bulb can be planted.
- How to plant a bulb.
- How to promote growth and reproduction of flowers grown from bulbs.

Attitude to education is prevalent throughout this activity.

- Consider where to plant bulbs. What colours will be shown and the aesthetic value they may bring. Aesthetic and creative. Identify colours d) when arranging flowers.
- Inspect the bulb checking for its condition, firm (good) soft (bad) discard soft bulbs. Science 5. Does the student understand the life-cycle and habitat of plants? d) roots, plants, bulbs.
- Examine the bulb and identify where the roots and shoots will come from. Linguistics 9. Can the student read and follow instructions? a) follow basic instructions.
- Identify and collect tools for the task. Technology 1. Can the student be safe in our designated working environment? c) Is safe to use tools. 2. Can the student do basic tasks in our designated working environment? c) Keep work area tidy.
- Prepare the hole to the correct dept and insert the bulb with the roots pointing down, backfill and firm using your foot. (science 1.c) Different types of soil.
- Tidy the work area, collect and clean tools and put away. (Technology 2.b) clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden.

Discussion points.

- Flowering times and how they relate to the seasons.
- When to cut back the foliage, how the bulb needs to refuel for next year, example Daffodil, summer solstice. Human and Social 10. Does the student understand the Seasons? g) The Summer Solstice.
- The diverse areas bulbs can be planted e.g containers, parkland and woodlands.
- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Planting trees and hedges.

What we hope the student will learn.

- Attitude to education is prevalent throughout this activity.
- How to identify the area to be planted. Human and social 9 Does the student have an understanding of how geography has impacted on an areas development through the ages g) History of farming, rig and furrow, The Enclosure act (1773), planting hedges and walls.
- How to pace out the distance between trees and shrubs.
- How to count different varieties of trees or shrubs and covers. "Numerical 1 Does the student have basic number literacy."
- How to dig a hole the appropriate size to plant a tree or shrub.
- The difference between trees and shrubs and why they are used differently.
- How to place the tree or shrub in the ground and cover and firm the ground around it.
- How to identify a suitable cover to place around the tree or shrub.
- How to fit the cover.
- Why covers are required. "Science 5 Does the student understand the life-cycle and habitat of plants. b) plants in different environments c) plants with varying longevity i) How to plant a new forest, looking at diversity of species and their different growing times to create a woodland area that will last for centuries j) creating a wildlife habitat k) why we should plant trees and their importance to the planet. n) planting hedges to create a boundary.
- Career planning and personal development 1/ Has the student attended work experience within Pear Trees working environments. a) the farm.

Discussion points.

- Human and social 9- G Maintaining boundaries the history of farming and the enclosure act 1773. The need for planting hedges and walls.
- Human and social 13- does the student have an understanding of climate change. A B C D E.

It must also be recognised that this activity has been assessed using the format described in the document 'A therapeutic approach to helping children and young people recover from trauma and abuse. The value of activities'.

This activity is a high value activity in particular Therapeutic value and improving skills and therefore instructors should not be concerned about repetition and take advantage of the opportunity to do this task as and when the need arises.

David Bartlett

Lesson Plan: Preparing a vegetable plot.

What we hope the students will learn.

- The reasons why we need to prepare the ground.
- Identifying tools and learning preparation techniques.
- The importance of adding nutrients/well rotted farmyard manure into the soil.

Attitude to education is prevalent throughout this activity.

- Choose and identify the correct tools for the task. Technology 2. Can the student do basic tasks in our designated working environment? d) get tools out. Technology 1. Can the student be safe in our designated working environment? c) is safe to use tools. Science 19. Can they use their scientific knowledge in a practical manner safely and independently? b) They can select from a variety of tools available the correct equipment for the chosen task in hand in the work shop or forge, on the farm, on the stable yard in the garden, kitchen. Science 5. Does the student understand the life-cycle and habitat of plants? c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees, d) Roots, plants, bulbs and leaves.
- Using a spade or fork, turn over the soil to encourage aeration. Technology 7. Has the student experienced working with different agricultural tools and machinery? a) Used spade or shovel. 1. Can the student be safe in our designated working environment? c) Is safe to use tools.
- Introduce nutrients/well rotted farmyard manure to the plot, work in gently with a fork and leave to overwinter. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants, c) Different types of soil.
- Tidy area and put tools away. Technology 2. Can the student do basic tasks in our designated working environment? b) clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- Identification of weeds and their growing habits.
- Discuss soil structures and ways to improve.
- How the weather can break down and improve the soil structure.

- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Pruning roses.

What we hope the students will learn.

- The correct time of year for pruning roses.
- The correct technique
- The reasons for pruning.
- Choosing and using the correct equipment.

Attitude to education is prevalent throughout this activity.

- Identify the tools needed for the task. Science 19. Can they use their scientific knowledge in a practical manner safely and independently? a) They are aware of the need to use PPE and do so without prompting. b) They can select from a variety of tools available the correct equipment for the chosen task in hand in the work shop or forge, on the farm, on the stable yard in the garden, kitchen.
- Identify a rose that needs pruning. Science 5. Does the student understand the life-cycle and habitat of plants? c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees.
- Using the three D's method start pruning by removing dead, dying and diseased wood. Technology 9. Is the student able to use machinery in a working environment safely? c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow. Science 5. Does the student know how to stay safe online? d) Begin to develop digital resilience. Linguistic 9. Can the student read and follow instructions? a) follow basic instructions.
- Tidy area and put tools away. Technology 2. Can the student do basic tasks in our designated working environment? b) Clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points

- What time of year and seasons do we prune roses?
- Talk about other pruning tools and their dangers.
- Other types of roses such as ramblers and climbers.

- Can they demonstrate pruning techniques?

- Ask student to give 3 reasons for pruning.

- Can they identify a rose from other plants and flowers?

- Ask student to name equipment used.

Steven O'Leary

Lesson Plan: Pricking out.

What we hope the students will learn.

- The reason for pricking out a seedling
- The correct method of pricking out a seedling.
- watering the seedling in.

Attitude to education is prevalent throughout this activity.

- Recognize when a seedling is ready to prick out. Science 5. Does the student understand the life-cycle and habitat of plants? a) from seed to full grown.
- Choose the correct equipment for the task. Science 19. Can they use their scientific knowledge in a practical manner safely and independently? b) They can select from a variety of tools available the correct equipment for the chosen task in hand in the workshop or forge, on the farm, on the stable yard in the garden, kitchen.
- Fill the chosen container with the correct compost to the correct level. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plant, c) Different types of soil
- Handle the seedlings correctly and transfer from seed tray to pot. Linguistic 9. Can the student read and follow instructions? a) Follow basic instructions.
- Carefully water the seedling in with watering can and rose. Technology 2. Can the student do basic tasks in our designated working environment? f) Water plants.
- Write out a label with plant name and date. Linguistics 1. Can the student make themselves understood? g) Can write legibly.
- Tidy work station. Technology 2. Can the student do basic tasks in our designated working environment? b) Clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- Why we prick out seedlings
- Protect the seedling from being damaged by holding the correctly.
- The importance of labelling correctly and clearly.

- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Seed sowing.

What we hope the students will learn.

- To understand and follow simple instructions
- The reason why we grow a plant from seed.
- To understand the importance of light, heat and water to germinate a seed.

Attitude to education is prevalent throughout this activity.

- Select a seed packet and follow the instructions. Linguistic 9. Can the student read and follow instructions? a) follow basic instructions.
- Choose a container which is relevant to the size/quantity of the seed.
- Fill the container with the correct amount of compost and firm. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants, c) Different types of soil
- Water with a watering can and rose until the soil is moist. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? d) Water, what it's made of, how plants and animals need water to live. Technology 2. Can the student do basic tasks in our designated working environment? f) Water plants.
- Label the seed tray with the plant name and date. Linguistic 1. Can the student make themselves understood? d) Can form letters, g) Can write legibly.
- Place the seed tray into the propagator.
- Provide the correct environment until germination. Science 14. Does the student understand the importance of light? a) Importance of light in growing plants.

Discussion points.

- What type of plant we are growing. Science 5. Does the student understand the life-cycle and habitat of plants? c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees
- What are the benefits of growing plants from seed
- What are the key factors of germination.

- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Hedge cutting.

What we hope the students will learn.

- Why we cut hedges.
- Correct time of year to cut a hedge.
- The different tools we can use.
- Correct P.P.E and have an understanding of sharp moving parts.
- Importance of hedges.

Attitude to education is prevalent throughout this activity.

- Discuss and have a good understanding of the dangers of sharp moving parts. Technology 1. Can the student be safe in our designated working environment? c) Is safe to use tools.
- Identify and collect the correct P.P.E and tools. Science 19. Can they use their scientific knowledge in a practical manner safely and independently? b) They can select from a variety of tools available the correct equipment for the chosen task in hand in the work shop or forge, on the farm, on the stable yard in the garden, kitchen.
- Start cutting the hedge using the correct techniques with the chosen tools depending on the shape and size of the hedge. Science 5. Does the student understand the life-cycle and habitat of plants? b) Plants in different environments, c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees. Technology 9. Is the student able to use machinery in a working environment safely? c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow, d) They are able to use small hand held mechanical tools such as garden strimmer, hedge cutter, push lawnmower
- Stand back and assess the shape, height and tidiness of the hedge, once happy start clearing the site with the correct tools. Technology 2. Can the student do basic tasks in our designated working environment? b) Clean up after themselves. 7. Has the student experienced working with different agricultural tools and machinery? a) Used spade or shovel, c) Ridden on buggy (as passenger). 9. Is the student able to use machinery in a working environment safely? e) They are able to use small simple machinery such as the golf buggy, ride on lawn mower.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- Why we need to cut hedges at certain times of the year e.g avoiding nesting birds
- Importance of hedges and their uses e.g habitats, boundaries and windbreaks.
- Different species of plants that can be used as a hedge.
- Different types of animals that use the hedgerows and why.

- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Pruning a shrub.

What we hope the students will learn.

The correct time of year for pruning shrubs.

The correct technique.

The reasons for pruning.

Choosing and using the correct equipment.

Attitude to education is prevalent throughout this activity.

Identify the tools needed for the task. Science 19. Can they use their scientific knowledge in a practical manner safely and independently? a) They are aware of the need to use PPE and do so without prompting, b) They can select from a variety of tools available the correct equipment for the chosen task in hand in the work shop or forge, on the farm, on the stable yard in the garden, kitchen.

Identify a shrub that needs pruning. Science 5. Does the student understand the life-cycle and habitat of plants? c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees.

Using the three D's method start pruning by removing dead, dying and diseased wood. Technology 9. Is the student able to use machinery in a working environment safely? c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow.

Continue pruning by reducing the height and spread, making the cut just above the bud. Science 5. Does the student know how to stay safe online? d) Begin to develop digital resilience. Linguistic 9. Can the student read and follow instructions? a) follow basic instructions.

Tidy area and put tools away. Technology 2. Can the student do basic tasks in our designated working environment? b) Clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points

- What time of year and seasons do we prune shrubs.
- Why do we prune shrubs.
- Talk about other pruning tools such as secateurs, loppers and saws and their dangers.
- Various types of shrubs and their different pruning times.
- The importance of shrubs in the garden.
- Can they recall different types of shrubs x 3?

Steven O'Leary

Lesson Plan: Planting up a container or hanging basket.

What we hope the students will learn.

How to prepare and plant a container.

Different types of containers we can use to create a display.

New plant names and their uses.

The upkeep of a container and the plants in them.

Attitude to education is prevalent throughout this activity.

Choose a container, e.g. pot, box, hanging basket or trough.

Choose the correct tools for the task. Technology 2. Can the student do basic tasks in our designated working environment? d) get the tools out.

Add drainage to the container e.g. crock or gravel. Choose and add the correct substrate depending on your chosen plants. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants, c) soil structure how we can improve soil to increase plant growth. Different types of soil.

Select a variety of different plants with seasonal interest. Science 5. Does the student understand the life-cycle and habitat of plants? a) From seed to full grown, c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees.

Stage out chosen plants in the container, when you are satisfied with the layout, prepare the hole the same depth as the pot size and plant. Science 5. Does the student understand the life-cycle and habitat of plants? b) Plants in different environments, d) Roots, plants, bulbs and leaves.

Using your hand firm in around the plant and water in. Tidy work area and put the tools away. Technology 2. Can the student do basic tasks in our designated working environment? f) Water plants c) Keep work area tidy, b) Clean up after themselves.

Career planning and personal development 1 Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- Importance of drainage in a pot/container.
- Advantages of planting in a container.
- Different types of material that can be used to house plants.
- The upkeep and maintenance once the container is planted.
- At the end of the lesson, can the student recall different plants x3?

Steven O'Leary

Lesson Plan: Maintaining the garden in Autumn

What we hope the students will learn.

When is autumn?

To identify the correct tools for the task.

What are compostable materials?

The importance of tidying the garden in autumn.

Attitude to education is prevalent throughout this activity.

Identify the task and collect the required tools needed. Technology 9. Is the student able to use machinery in a working environment safely? b) They can identify often used tools 2. Can the student do basic tasks in our designated working environment? d) Get tools out.

Using secateurs, cut back perennial plants and clean the bed of weeds. Science 5. Does the student understand the life-cycle and habitat of plants? a) From seed to full grown c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees d) Roots, plants, bulbs and leaves. From seed to full grown, with varying longevity i.e annual ,bi-annual, perennials, shrubs and trees ,roots, plants, bulbs and leaves. Technology 9 Is the student able to use machinery in a working environment safely? c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow.

Technology 1. Can the student be safe in our designated working environment? c) Is safe to use tools. Rake out leaves and decaying foliage to prevent pests and disease from spreading.

Using a wheelbarrow or buggy transfer the soft compostable materials to the compost heap and the woody materials to the fire. Science 7 Does the student understand the food chain? e) decomposition and composting. Technology 9. Is the student able to use machinery in a working environment safely? e) They are able to use small simple machinery such as the golf buggy, ride on lawn mower. 7. Has the student experienced working with different agricultural tools and machinery? c) Ridden on buggy (as passenger).

Gently turn over the soil with a fork to create a tidy surface. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) soil structure, how we can improve soil to increase plant growth. Technology 2. Can the student do basic tasks in our designated working environment? c) keep the work area tidy.

Collect and clean tools and put away Technology 2. Can the student do basic tasks in our designated working environment? b) clean up after themselves.

Career planning and personal development 1. Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- When on the calendar is autumn and how does it affect plants and trees. Science 13. Does the student understand the seasons? f) The Autumn Equinox
- Making new plants by division (digging them up and splitting into pieces).
- What components are needed to break down garden waste to create compost.
- At the end of the lesson, what can the student recall?

Lesson Plan: Constructing simple supports for plants.

What we hope the students will learn.

- Recognize which plants need support.
- Different ways a plant uses structures to climb.
- Various materials that can be used to make a support.
- Why we need to support plants.
- Learn how to tie simple knots.

Attitude to education is prevalent throughout this activity.

- Identify the plant that needs support and discuss what is the best type of structure to make. Science 5. Does the student understand the life-cycle and habitat of plants? b) Plants in different environments, c) Plants with varying longevity. ie annuals, bi-annuals, shrubs and trees, h) Their use as building materials.
- Collect materials and tools needed to assemble the structure. Technology 1. Can the student be safe in our designated working environment? c) Is safe to use tools. 2. Can the student do basic tasks in our designated working environment? d) Get tools out. 7. Has the student experienced working with different agricultural tools and machinery? b) Used hammer and saw.
- If required prepare the ground by levelling and fertilizing. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants. c) Different types of soil.
- Connect materials together using desired method (string. Wire, screws, nails) depending on the type of structure. Technology 12. Can the student design and make 3 Dimensional objects that are either aesthetic or functional? a) Choosing correct materials, b) Choosing the correct tools, c) Accurate application of tools and equipment.
- Make sure the frame is secure by applying force.
- Clean work area and tidy tools away. Technology 2. Can the student do basic tasks in our designated working environment? b) Clean up after themselves, c) Keep work area tidy.

Career planning and personal development 1. Has the student attended work experience within Pear Tree's working environments? f) The garden is prevalent throughout this activity.

Discussion points.

- Different types of materials that can be used.
- Different species of plants that need support.
- Knots that can be used to form simple fixings.
- What can the student recall?

Sharon O'Leary

Lesson Plan: Bulb planting.

Making a raised bed.

What we hope the students will learn.

- Reasons in which raised beds are useful.
- How to construct a raised bed.
- Understanding different soil types.
- Different materials that can be used to make a raised bed.

Attitude to education is prevalent throughout this activity.

- Locate and measure the area that's needed to construct the bed.
- Select the chosen materials and collect tools needed for the job. Technology 1. Can the student be safe in our designated working environment? c) Is safe to use tools. 2. Can the student do basic tasks in our designated working environment? d) Get tools out.
- Measure and mark out the area. Numerical 11. Does the student have a knowledge of the metric (SI) system? b) They have a working knowledge of the metric units of length, c) They have a working knowledge of the metric units of area.
- Using the materials selected, construct the walls and strengthen the corners if needed. Technology 7. Has the student experienced working with different agricultural tools and machinery? a) Used spade or shovel, b) Used hammer and saw. Technology 9. Is the student able to use machinery in a working environment safely? b) They can identify often used tools, c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow.
- Fill the bed with organic material and top soil then compact and level. Science 1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants, c) Different types of soil.

Career planning and personal development is prevalent throughout this activity 1. Has the student attended work experience within Pear Tree's working environments? f) The garden.

Discussion points.

- Different materials than can be used.
- The benefits of a raised bed.
- What can be grown in a raised bed.
- What can the student recall?

Lesson Plan: Pests and disease.

What we hope the students will learn.

1. Identifying different diseases on plants.
2. Recognizing signs of damage.
3. Ways to prevent damage from animals.
4. Environment friendly techniques to reduce pests and disease.
5. Keeping work area tidy to prevent pests and disease.

Attitude to education is prevalent throughout this activity.

- Identify the disease or pest damage on the plant. (science) 5.a, from seed to full grown. 5.b, plants in different environments. 5.c, plants with varying longevity i.e., annuals, bi annuals, perennials, shrubs and trees. 6.a, Different types of animals and what makes them different including insects, birds, fish, reptiles and mammals. 7.a, plants in different environments grow and eaten by different types of animals.
- Discuss ways we can prevent this from happening.
- Collect materials and equipment needed for the task. (technology) 9.b, they can identify often used tools. 2.d, get tools out.
- Apply chemical (supervised and correct P.P.E) or construct suitable deterrent. This could include rabbit wire on a fence, a simple frame with netting or a scarecrow. (technology) 1.c, is safe to use tools. 7.a, use spade or shovel. 7.b, using a hammer or saw. 1.a, use appropriate P.P.E. 1.b, understand the need for P.P.E. (science) 19.a, they are aware of the need to use P.P.E and do so without prompting.
- Return back regularly to observe and make amendments if needed. (technology) 9.a, they have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions, 9.f, they are able to demonstrate a deeper understanding of the task in hand and not just its immediate function.

Career planning and personal development is prevalent throughout this activity (1.f)

Discussion points.

- Weather conditions disease thrives in.
- Catch crops.
- Disposal of diseased material.
- Animals.
- What can the student recall?

Sharon O'Leary

Lesson Plan: Producing plants from cuttings.

What we hope the students will learn.

1. Different techniques of producing plants from cuttings.
2. Benefits of multiplying your own plant stock.
3. Financial savings.
4. When is the best time to take a cutting.

Attitude to education is prevalent throughout this activity.

1. Decide which cutting you are going to take depending on the time of year. (science) 5.a, from seed to full grown. 5.b plants in different environments.
2. Gather tools and equipment needed for the task. (technology) 1.c, is safe to use tools. 2.d, get tools out. 9.b, they can identify often used tools. 9.c, they are able to use hand tools with simple working parts such as pruning cutters or shears.
3. Identify and collect healthy plant material and put in a plastic bag to keep fresh. (science) 5.c, plants with varying longevity i.e., annuals perennial shrubs and trees.
4. Prepare the pot, tray or ground ready for the cutting with the correct medium. (science) 1.b, soil structure how we can improve soil to increase the growth of plants. 1.c, different types of soil. 14.a, importance of light in growing plants.
5. Using the correct method make your cutting, add hormone powder and insert into the soil. (technology) 9.a, they have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions. 2.c, keep their work area tidy. 2.b, clean up after themselves.
6. Water and put in appropriate environment until roots appear. (technology) 2.f, water plants.

Career planning and personal development is prevalent throughout this activity (1.f)

Discussion points.

- How expensive plants are.
- Different housings for cuttings.
- Lengths of time it takes a cutting to root.
- What can the student recall?

Lesson Plan: Using a strimmer.

What we hope the students will learn.

1. Making sure the strimmer is safe to use.
2. Correct P.P.E to use and its dangers.
3. When and why to use a strimmer.
4. Learning new skills.
5. Plant identification.

Attitude to education is prevalent throughout this activity.

- Check over your equipment making sure it's safe to use. e.g., fuel, strimmer cord, stop switch. (Technology) 1.c is safe to use tools, 2,d get tools out.
- Collect the correct fitting P.P.E e.g., gloves, ear defenders, goggles. (Technology) 1.a use appropriate P.P.E, 1.b understanding the need for P.P.E, (science) 19.a they are aware of the need to use P.P.E and do so without prompting.
- Take all equipment to the chosen site, identify vegetation to be trimmed. (science) 5.a from seed to full grown, 5.b plants in different environments, 5.c plants with a varying longevity i.e., annuals and perennials.
- Using the correct technique, start safely, use the strimmer until the job is complete. (technology) 9.a they can demonstrate to follow instructions in sequential order and do so without deviating from their instructions, 9.d they are able to use small hand-held mechanical tools such as garden strimmer, hedge cutters and lawn mower.
- Clean and wash down equipment and store in a clean, dry and secure area. (technology) 2.b clean up after themselves, 2.c keep work area tidy.

Career planning and personal development (1.F) is prevalent throughout this activity.

Discussion points.

- What are the benefits of strimming?
- To be aware of your surroundings and safety of others.
- To identify and be aware of dangerous plants and when they are dangerous.
- At the end of the lesson, what can the student recall?

Sharon O'Leary

Lesson Plan: Cutting grass with a pedestrian lawn mower.

What we hope the students will learn.

1. Identifying the appropriate P.P.E.
2. Basic safety and maintenance check on machinery.
3. How to use a lawnmower safely and when to do so.
4. Cutting techniques.
5. Cleaning and storing the lawn mower after use.

Attitude to education is prevalent throughout this activity.

- Identify the area that needs cutting. (science) 5.b, plants in different environments, 5.d, roots, plants, bulbs and leaves.
- Collect the correct P.P.E for the task and make sure the lawnmower is safe to use. (science) 19.a, they are aware of the need to use P.P.E and do so without prompting. (technology) 1.a, use appropriate P.P.E. 1.b, understand the need for P.P.E.
- Check the fuel and oil levels and add accordingly under supervision.
- Learn how to start (cold start with choke) and how to stop the lawn mower correctly.
- Start the lawn mower and using the correct techniques cut the grass under the instructor's supervision. (technology) 9.d, they are able to use small handheld mechanical tools such as garden strimmer, hedge cutter and lawn mower. 9.a, they have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions. (P.E) 4.e, they can assist with a variety of physically demanding tasks.
- When the grass box is full, turn off the lawn mower and dispose of the grass clippings in the appropriate place. (science) 7.e, decomposition and composting.
- Clean down the lawn mower and store away in a safe place. (technology) 1.c, keep work area tidy. 2.b, clean up after themselves.

Career planning and personal development is prevalent throughout this activity. (1.f)

Discussion points.

- Different types of lawn mowers.
- Composting grass clippings.
- When not to cut grass.
- Dangers of feeding grass clippings to animals.
- At the end of the lesson, what can the student recall?

David Bartlett

Lesson Plan: Planting out crops.

What we hope the students will learn.

1. The importance of planting correctly.
2. Using the correct tools.
3. Why its beneficial to plant in straight lines.
4. Knowing and understanding the correct conditions for planting out.

Attitude to education is prevalent throughout this activity.

- Choose and identify the correct tools for the task. (technology 1.c) is safe to use tools. (science 19 b) select a variety of tools.
- Identify the area and using the correct technique make sure soil is ready for planting. E.g. raking level and removing any large stones. (Science) 1.b, soil structure how we can improve soil to improve growth of plants. 1.c, different types of soil. 5.a, from seed to full grown. 5.b plants in different environments.
- Using a string line or board, measure the correct planting spaces. (Science) 5.d, roots, plants, bulbs and leaves. 5.e, their uses and place in the food chain.
- With the correct tools prepare a hole and plant. (Technology) 7.a, use a spade or shovel. 1.c, is safe to use tools. 19.b, they can select from a variety of tools available, the correct equipment for the chosen task in hand in the garden.
- Water in the plants and tidy away the tools. (Technology) 2.f, water plants 2.b, clean up after themselves.

Career planning and personal development is prevalent throughout this activity. (1.f)

Discussion points.

- The correct weather conditions for planting out.
- The advantages of planting in rows.
- Other ways of spacing out plants.
- The importance of growing our own food.
- What can the student recall?

David Bartlett

Lesson Plan: Repairing a lawn.

What we hope the students will learn.

1. New techniques and skills.
2. How to aesthetically improve a lawn.
3. Making an area level for easier maintenance.
4. When to renovate lawns.

Attitude to education is prevalent throughout this activity.

- Identify and recognize the correct tools needed to complete the task. (technology) 9.b, they can identify often used tools. 12.b, choosing the correct tools.
- Using the allocated tools start by removing high areas and reuse the soil to build up low areas. (technology) 12.c, Accurate application of tools and equipment.
- If needed add new top soil to holes, diverts and depressions and rake level leaving a flat surface. (science) 1.b, soil structure how we can improve soil to increase growth of plants. 1.c, different types of soil.
- Remove any large stones and using the back of a rake or your feet, firm the soil.
- Rake again to produce a fine tilth and evenly disperse the grass seed onto the surface. (science) 5.a, from seed to full grown. 5.b, plants in different environments.
- Rake for the final time to cover some off the grass seed and water in using a watering can and rose. (Technology) 9.c, They have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instruction. (science) 1.d, water and what it's made of, how plants need water to live. 1.e, how we can collect water.
- If needed protect the seed from birds using nets or other deterrents.
- Clean area and put tools in their appropriate place. (technology) 2.b, clean up after themselves.

Career planning and personal development is prevalent throughout this activity. (1.f)

Discussion points.

- The best conditions for repairing a lawn.
- Protecting your seed from pests.
- What are the pests?
- Other ways of repairing lawns
- What can the student recall?

Sharon O'Leary

Lesson Plan: Weeding.

What we hope the students will learn.

1. What is a weed?
2. Plant identification.
3. Environment friendly techniques of weed control.
4. Importance of keeping crops and borders weed free.
5. Ways in which weeds spread and become invasive.

Attitude to education is prevalent throughout this activity.

- Gather necessary tools and equipment including correct P.P.E. (Technology) 1.a, Use appropriate P.P.E, 1.b, Understand the need for P.P.E. 2.d, get tools out. 9.b, They can identify often used tools.
- Establish the area that needs weeding and distinguish what is a weed. (science) 4.b, Learning about plants. Plants in different environments. 5.a, from seed to full grown.
- Once you have identified what needs removing, using the correct technique up root the weed. This could be pulling wearing gloves, hoeing annuals or digging up with a fork for the more invasive species. (science) 5.d, roots, plants, bulbs and leaves. 5.c, plants with varying longevity i.e., annuals and perennials. (technology) 7.a, used spade or shovel
- Dispose of, on the compost heap or fire depending on the plant's longevity. (science) 7.e Decomposition and composting.
- Leave work area tidy and return tools and equipment to their allocated position. (technology) 2.b, clean up after themselves. 2.c, keep work area tidy.

Career planning and personal development is prevalent throughout this activity.

Discussion points.

- Plants in the correct environment.
- Destructive weeds, (Ivy, Japanese hogweed, Hog weed).
- Weeds that can be foraged.
- At the end of the lesson, what can the student recall?

Lesson Plan: Dead heading and pinching out.

What we hope the students will learn.

1. New techniques and different skills.
2. Benefits of Dead heading.
3. Making plants stronger by pinching out the tips.
4. Increasing the yield.
5. Prolonging the plant life.

Attitude to education is prevalent throughout this activity.

- Collect tools and equipment that is required for the task. (Technology) 9.g, can identify all tools from the garden. 1.c, is safe to use tools. 2.d, get tools out.
- Identify the plant that needs attention and recognize when a flower is ready to remove. (science) 5. a, from seed to full grown. 5.c, plants with varying longevity, annuals and perennials, shrubs and trees. 5.d, roots, plants, bulbs, and leaves.
- Using a sharp, clean pair of secateurs remove the dead flowers, tip or side shoot as instructed. (technology) 9.c, They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow.
- Understand that removing dead flowers encourages more to develop and removing tips or side shoots can strengthen the plant.
- Dispose the material on the compost heap, or save the seeds to resow for next year's crop. (science) 7.e, Decomposition and composting.
- Leave the work place tidy and put tools away in appropriate place. (technology) 2.b, clean up after themselves. 2.c, keep work area tidy.

Career planning and personal development is prevalent throughout this activity.

Discussion points.

- What a plant is trying to achieve.
- What wildlife is attracted.
- Collecting and saving seeds.
- At the end of the lesson, what can the student recall?

Sharon O'Leary

Collecting and saving seeds.

What we hope the children will learn.

1. Recognizing when a seed is ripe to harvest.
2. Financial savings from collecting your own seed.
3. Storing seeds in the correct environments.
4. Importance of clear labelling and dating.
5. Plant identification.

Attitude to education is prevalent throughout this activity.

- Collect paper bags, envelopes or any other storage container that allows the seed to remain dry. (Technology) 12.a, choosing the correct materials.
- Identify the plant species and condition of the seed that is to be harvested. (Science) 5.a, From seed to full grown., 5.b, plants in different environments. 5.c, plants with varying longevity i.e., annuals, bi annuals, perennials, shrubs and trees. 6.d, pollination by insects.
- Using a sharp pair of secateurs remove dry flower heads and place in a paper bag. (technology) 1.c, safe to use tools. 2.d, get tools out. 9.c, they are able to use hand tools with simple moving parts such as pruning cutters or shears or wheelbarrow.
- Place seeds on a sheet of dry paper and blow gently to remove any debris leaving only the seeds behind. (technology) 9.a, They have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions.
- Collect the seeds together and place them in an envelope and seal properly.
- Write clearly on the envelope the plant name and date and store in a cool frost free environment. (Linguistic) 1.d, can form letters. 1.f, can be understood in written work. 1.g, can write legibly.

Career and personal development is prevalent throughout this activity.

Discussion points.

- The advantages of been able to produce your own plants from your own seeds.
- What seeds not to collect.
- Seeds for eating and culinary uses.
- At the end of the lesson, what can the student recall?

Sharon O'Leary

Lesson Plan: Growing potatoes.

What we hope the students will learn.

1. How to grow potatoes.
2. Soil improvement for a larger yield.
3. Forcing tubers (chitting) for quicker harvest.
4. Identify when a plant is ready for harvest.
5. Different categories of potatoes.
6. How to store potatoes.

Attitude to education is prevalent throughout this activity.

- After purchasing the seed potatoes make sure they are kept in a cool, light, frost free environment.
- Two weeks before planting place seeds in a dark warm place in egg boxes to encourage the potatoes to produce shoots (chitting)
- Collect necessary equipment for the task. (technology) 2.d, get tools out. (science) 19.b, They can select from a variety of tools available the correct equipment for the chosen task in hand in the workshop, the farm, on the stable yard in the garden, kitchen. 9.b, They can identify often used tools.
- Prepare the planting area by turning over the soil and add fertilizer if necessary. (science) 1.b Soil structure how we can improve soil to increase growth of plants. 1.b, Different types of soil. (technology) Used a spade or shovel.
- Measure out with a string line and measuring tape ready for planting, this is 24" between rows. (Numerical) 11.b, They have a working knowledge of the metric units of length,
- Using a draw hoe make a gully using the string as a ruler 6" deep.
- Place the seed potatoes 12" apart in the gully and cover with soil producing a ridge. (technology) 9.a, They have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions.
- Water in dry conditions and keep weed free. (science) 1.d, Water, what it's made of, how plants and animals need water to live. 1.e how we can collect water. (technology) 2.f, water plants.
- When the foliage starts to yellow lift the plants with a fork and collect the potatoes. (science) 4.b, Learning about plants. Plants in different environments, how we use plants and their role in the food chain. How they are eaten by animals. 5.a, From seed to full grown. 5.b, Plants in different environments. 5.c, plants with varying longevity, i.e., annuals, bi-annuals, shrubs and trees. 5.d Roots, plants, bulbs and leaves. 5.e, their uses and place in the food chain.
- Clean them ready for the kitchen or store in a cool dark environment to prolong the life. (science) 9.a, Growing plants in the garden and on the farm, harvesting them for use as feed to other animals or straight to the kitchen.

Career and personal development are prevalent throughout this activity.

Discussion points.

- Growing potatoes in containers or in the fields.
- Ways to increase yields. (halving seeds)
- Crop rotation.
- At the end of the lesson, what can the student recall?

Lesson Plan: Woodland management.

What we hope the students will learn.

1. Different tree species.
2. Dangers of working in woodland environments.
3. Importance of thinning out invasive Variety's.
4. Introducing light to woodland floors.
5. Farming fast growing trees for fuel.

Attitude to education is prevalent throughout this activity.

- Assess the job and collect the required tools needed for the task. (technology) 1.b, understand the need for P.P.E. 1.a use appropriate P.P.E. 1.c, is safe to use tools. 2.d, get tools out. (science) 19.b, they can select from a variety of tools available the correct equipment for the chosen task in hand it the garden. 5.i, how to plant a new forest looking at the diversity of species and their different growing times to create a woodland area that will last for century's.
- Stand a safe distance away with the understanding of the machine operators lack of vision and hearing. (Technology) 9.a, they have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions.
- When instructed using a hand saw or loppers remove small branches from the limbs. (Technology) 9.c, they are able to use hand tools with simple moving parts such as pruning cutters and loppers. 7.b, used hammer and saw.
- Take brush to a burning pile or create natural habitats for wildlife. (science) 5.j, creating a wild habitat.
- Tidily stack the larger pieces to season for fire wood.
- Make a final sweep of the woodland floor picking up larger sticks taking care not to damage growing plants and bulbs. (science) 5.d, roots, plants bulbs and leaves.
- Collect and clean tools and store away. (Technology) 2.b, clean up after themselves. 2.c, keep the work area tidy.

Career and personal development are prevalent throughout this activity.

Discussion points.

- The different types of plants and trees that grow in and around woodland.
- The correct time of year to cut down or thin out trees.
- Animals and insects that live in woodland.
- What happens when we let light onto a woodland floor.
- At the end of the lesson, what can the student recall?

Steven O'Leary

Lesson Plan: Feeding plants.

What we hope the students will learn.

1. Why we feed plants.
2. What plants need, Nitrogen, phosphorus and potassium (NPK).
3. How to apply different types of feed.
4. Importance of regular feeding.

Attitude to education is prevalent throughout this activity.

- Collect required equipment and materials needed for the task. (technology) 9. b, they can identify often used tools 2.d, get tools out.
- Identify the plant that needs feeding and select the correct type of feed. (science) 5.a, from seed to full grown. 5.b, plants in different environments. 5.c, plants with varying longevity. i.e., annuals, bi-annuals, perennials, shrubs and trees. 5.d, roots, plants, bulbs and leaves.
- Carefully read the label and mix with water (if needed), measure granules or fill wheelbarrows with organic matter. (technology) 9.a, they have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions. (numerical) 11.e, they have a working knowledge of the metric units of capacity and volume. 15.a, do they know what a ratio is. 15.b, can they use simple ratios to calculate quantities e.g., cake mix, mixing plant food and two stroke mix.
- Apply feed as instructed (by product label or instructor.) (science) 1.b, Soil structure how we can improve soil to increase growth of plants. 1.c, different types of soil. 5.e, their uses and place in the food chain. 9.a, growing plants in the garden and on the farm, harvesting them for use as feed to other animals or direct to the kitchen. (technology) 2.f, water plants.
- Continue feeding throughout the growing season making sure to follow any feeding programmes. (linguistics) 9.a, follow basic instructions.
- Clean equipment and place in appropriate place. (technology) 2.b, clean up after themselves. 2.c, keep work area tidy.

Career planning and personal development is prevalent throughout this activity.

Discussion points.

- What are natural feeds (nettles, comfrey, manure, leaves)
- Signs of deficiency.
- Over feeding.
- At the end of the lesson, what can the student recall?

Outdoor Education

Lesson Plan: Walking in the open countryside

Aims, to inspire and motivate.

The activity.

- Prior to setting off the instructor will complete a risk assessment which will include planned route and panic time which will be given to the duty manager and school leaders.
- Instructor to meet the household / education group at a prearranged RV.
- The instructor will ascertain the current status of the physical and mental abilities of the group and any difficulties including injuries, mood and resistance that may present barriers to the proposed activity.
- Group to be briefed on the proposed route, distance and duration of walk. Weather forecast and appropriate clothing.
- The briefing will include discussions on geographical and historical features to be encountered. Potential wildlife that may be seen and agricultural practices that may be ongoing.
- On conclusion of the briefing the group will set off and aim to complete the proposed route.

The intended learning.

Physical education.

7, 8, 9, 10, 11,

- To increase personal fitness, stamina and resilience.

Geographical features.

Human and social 1, 2, 4, 6, 7, 8, 12,

- To be exposed to the subject of geography.
- To be shown a map of the route and how to use it at a level commensurate with age and ability.
- How the weather changes and effects us during a walk.
- The concept of geographical time.
- To be made aware of geographical features and how they were formed.
- To consider farming practices encountered.

Historically features encountered.

Human and social 1, 2,

- To be exposed to the subject of history, the concept of time and recent history.
- To consider historical features encountered. What they are, what they were and how they fit into the context of the landscape.

Science encountered.

1, 6,

- The flora and fauna encountered on route.
- Wildlife observed.
- Agricultural practices seen ongoing.

What I hope students will be able to do at the end of this lesson.

- Be able to recall the names of places walked through.
- Be able to recall the names geographical features encountered and describe how they were formed.
- Be able to recall historical features encountered.
- Be able to recall flora and fauna encountered.
- Be able to recall any wildlife observed.
- Be able to recall any agricultural practices observed.

The above is to be commensurate with the age and ability of each student. The level of detail recalled from each session and from previous sessions is an indicator to progress and will be evident in each students individual comments.

Today's route is

- A
- B
- C
- D

Distance =

Expected duration =

David Bartlett

Lesson Plan: Cycling

Aims, to inspire and motivate.

The activity.

- Prior to setting off the instructor will complete a risk assessment which will include planned route and panic time which will be given to the duty manager and school leaders.
- Instructor to meet the household / education group at a prearranged RV.
- The instructor will ascertain the current status of the physical and mental abilities of the group and any difficulties including injuries, mood and resistance that may present barriers to the proposed activity.
- The instructor will perform a pre ride safety check, to ensure the bicycles are in good repair.
- The instructor will ensure the household / education group have the appropriate safety equipment.
- Group to be briefed on the proposed route, distance and duration of the ride. Weather forecast and appropriate clothing.
- The briefing will include road safety and best practice.
- The briefing will also include places of interest we will encounter on route.
- On conclusion of the briefing the group will set off and aim to complete the proposed route.

The intended learning.

Physical education.

12, 13, 14, 15, 16

- To increase personal fitness, stamina and resilience, promoting gross motor skills.

What I hope students will be able to do at the end of this lesson.

- Be able to recall the names of places cycled through.
- Be able to recall any places of interest we encountered on route.
- Be able to discuss the geography of the route taken, difficulties encountered and why.
- Reflect on cycling performance of the ride undertaken.
- Reflect on their road safety and best practice performance.
- Be able to perform routine maintenance, clean and store away, ensuring their bicycle is kept in good repair.

The above is to be commensurate with the age and ability of each student. The level of detail recalled from each session and from previous sessions is an indicator to progress and will be evident in each student's individual comments.

Today's route is

- A
- B
- C
- D

Distance =

Expected duration =

Mark Wade

Working in the Workshop and Forge

Lesson Plan: Introduction to the forge 1.

What we hope our students will learn.

How the forge works, how we can be safe in the forge environment.

- Identify what PPE is available and why we use it
- Ear defenders when someone is using the grinder
- Eye Protection at all times
- Gloves until we are confident and competent so they hinder us
- Leather Apron at all times

Technology

9. Is the student able to use machinery in a working environment safely?

g) They can identify all tools from forge/workshop/garden/farm/yard

- Clean out the forge and remove the slag/burnt coke

Science

1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life?

j) Fire, the sun, how man first made fire, it's dangers, how to light and control fire and use it constructively. It's uses in craft and engineering. Cooking, Central heating, fossil fuels. combustion engines, tractors, work in the forge.

Career planning and personal development

1. Has the student attended work experience within Pear Tree's working environments? d) the forge.
2. Has the student demonstrated they have the communication skills required to progress? a) They are confident to engage adults in appropriate conversation b) They say please and thank you without prompting c) They can ask for help when needed d) They can listen to and follow instructions e) They can use a varied vocabulary specific to their area(s) of interest.

Lesson Plan: Introduction to the forge 2.

What we hope our students will learn.

How to light the forge and how to heat metal ready to be forged.

- Create paper balls tightly wrapped and place near the air hole of the forge
- Select thinner kindling and build a criss-cross structure next to air hole on top of paper
- Build up thicker kindling
- Fill the coal scuttle with PET Coke
- Light the paper and then introduce the air slowly
- When the fire has taken hold carefully add the coke to the top of the fire in one motion
- Leave the forge until the smoke is clear

Science

1. Does the student have an understanding of the properties of Earth, Water, Fire and Air and their importance to life?

j) Fire, the sun, how man first made fire, it's dangers, how to light and control fire and use it constructively. It's uses in craft and engineering. Cooking, Central heating, fossil fuels. combustion engines, tractors, work in the forge

- Show students different types of steel explain properties
- Select a [piece to demonstrate how to heat and where about it needs to go in the fire
- Practical demonstration of what colours need to be reached in order for the metal to be forgeable
- Show what happens when metal gets too hot

3. Does the student have an understanding of the particle model of solids, liquids and gasses?

c) Metal being heated in the forge going from fixed solid to molten mailable metal that can be made in to ornamental or functional objects and then returning to a fixed so.

Lesson Plan: Making a Wooden Tree Guard.

What we hope the student will learn:

- Attitude to education is prevalent throughout this activity.
- Identify three or four, wooden posts of equal length.
- Manufacture three frames, of four lengths, of rail at equal length.
- Attach open frame to posts. First 700mm from base, then two more. One towards top and one in middle.
- Place open structure into place, straddling sapling
- Anchor posts, striking each one in turn into ground.
- Once frames around posts are level with ground. Attach flat rail planking, vertically to three open frames, secured around posts.
- Having put in place protection from, livestock. Sheep, Beast. Further protection, from smaller animals. Can be added, by attaching wire netting at base. Housed with wire staples.
- Technology 1. Can the student be safe in our designated working environment? a) Use appropriate PPE b) Understand the need for PPE c) Is safe to use tools 2. Can the student do basic tasks in our designated working environment? a) Mark and measure accurately, f) Water plants. 7. Has the student experienced working with different agricultural tools and machinery? a) Used spade or shovel b) Used hammer and saw. 12. Can the student design and make 3 Dimensional objects that are ether aesthetic or functional? a) Choosing correct materials b) Choosing the correct tools c) Accurate application of tools and equipment.
- Science 1. Does the student have an understanding of the properties of earth, water, fire and air and their importance to life? b) Soil structure how we can improve soil to increase growth of plants. 5. Does the student understand the life-cycle and habitat of plants? d) Roots, plants, bulbs and leaves, l) Grassland management. How we look after our pastures for different reasons k) Why we should plant trees and their importance to the planet.
- Human and Social. 13. Does the student have an understanding of climate change? a) What is climate change ®
- Career Planning and Personal Development. 1. Has the student attended work experience within Pear Tree's working environments? c) The workshop 2. Has the student demonstrated they have the communication skills required to progress? d) They can listen to and follow instructions
- Attitude to Education 5. Can the student listen and learn from teachers and instructors? a) They can follow simple instructions without the need for repetition.
- At the end of his lesson it is hoped the student has contributed towards the construction of the tree guards.
- Is able to explain why it is important to provide the tree this kind of protection.
- Is able to increase their contribution to the construction of the tree guards over time until able to complete in full independently.

Nick Pearson

Lesson Plan: Making a Flying Model.

What we hope the student will learn:

- Attitude to education is prevalent throughout this activity.
 - To demonstrate that a student will be able to select all materials required for completion of project. Working with a parts list. All materials provided.
 - Health and Safety. Listen to a demonstration on the use of equipment, attentatively. Learn how to communicate any given concerns over the use of hot glue guns and craft tools.
 - First mark out accurately all parts using card templates. Templates to be placed over materials correctly identified.
 - Wing made using foam supermarket meat tray.
 - Fuselage 5mm Depron sheet, three of.
 - Tail plane, one polystyrene disposable party plate.
 - Fuselage and tail plane connected by one Bamboo meat skewer.
 - To understand that during the manufacture of the wing. It is crucial that all values of part, must be marked and cut very accurately. Failure to do so, will result in a flying model, that does not glide well.
 - Manufacture all parts, safely and discard all waist.
 - Assemble all parts safely using a hot glue gun. Taking care to ensure that the dihedral of the wing, the angel of the wing where it comes into contact with the fuselage. Is evenly balanced and the two parts of the tail plane, are at ninety degrees to each other.
 - How to assemble all parts using a hot glue gun. Following detailed instruction, or demonstration using pre made components.
-
- Technology 1. Can the student be safe in our designated working environment? a) Use appropriate PPE, b) Understand the need for PPE, c) Is safe to use tools.
 - Technology 2. Can the student do basic tasks in our designated working environment? a) Mark and measure accurately, c) Keep work area tidy.
 - Technology 9. Is the student able to use machinery in a working environment safely? a) They have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions, b) They can identify often used tools, c) They are able to use hand tools with simple working parts such as pruning cutters or shears, push wheelbarrow
 - Technology 12. Can the student design and make 3 Dimensional objects that are ether aesthetic or functional? a) Choosing correct materials, b) Choosing the correct tools, c) Accurate application of tools and equipment.
 - Technology 15. Does the student understand the properties of materials and how to best use them? c) Selecting appropriate plastics for job identified task.
 - Aesthetic and Creative 9. Can the student produce a 3D object with form and structure? g) Junk sculpture
 - Career Planning and Personal Development 2. Has the student demonstrated they have the communication skills required to progress? d) They can listen to and follow instructions.

- Develop a better understanding of how to launch a flying vehicle. Avoiding the compulsion to through.
- P E 12. Does the student take part in sports and games? a) Sports that promote fine motor skills.
- Evaluate the proprieties of project. Learn to better understand the principals of flight. Thrust, Lift, and Drag.
- As an extended activity, the student could develop a better understanding of Gravity. By identifying where the centre of it, is, on their model. Find that and the model glider will fly flat and cover some ground.
- Science 1 Does the student have an understanding of the properties of Earth, Water, Fire and Air. h) Air, what it's made of, how it is important to all life
- Science 15 Does the student understand the basics of Volume, Mass and Density? b) Workshop-selecting appropriate materials for the task and outcome
- Science 16 Has the student been involved in a scientific experiment? g) The egg lander project. (Gravity and Forces).

Discussion points

- Does the model plane fly?
- Does it fly well, how could it be improved?

Lesson Planning: Cigar Box Guitar.

During which we hope our students will learn how to:

- Identify suitable reclaimed/ sourced material for a project. Learn how to reconsider, an object in a new application. A new way of seeing.
- How to understand better P. P. E. Technology 1 Can the student be safe in our designated working environment. a) Use appropriate PPE b) Understand the need for PPE c) Is safe to use tools.
- To manufacture, accurately a box, using thin material. Thin enough for sound to resonate within. Technology 12 Can the student design and make 3 Dimensional objects that are either aesthetic or functional a) Choosing correct materials b) Choosing the correct tools c) Accurate application of tools and equipment. 15 Does the student understand the properties of materials and how to best use them? a) Select appropriate timber for job identified task. 2 Can the student do basic tasks in our designated working environment? a) Mark and measure accurately b) Clean up after themselves c) Keep work area tidy d) Get tools out. Science 15 Does the student understand the basics of Volume, Mass and Density? b) Workshop-selecting appropriate materials for the task and outcome.
- Mark out on lid, a symmetrical design. From which, hole saws can create large openings, for sound to resonate from box. Aesthetic and Creative 6 Can the student produce drawings demonstrating technical knowledge of measurement and symmetry? a) Can use a rule r[®] b) Can use a straight edge [®] c) Can measure accurately [®] e) Can demonstrate symmetry [®]. 11 Can the student demonstrate the ability to apply creativity in a variety of settings? b) In the workshop.
- To identify material with a greater tensile strength, to manufacture a neck for the guitar. Dense enough, as not to bend, when under tension from a wire. Technology 12 Can the student design and make 3 Dimensional objects that are either aesthetic or functional? a) Choosing correct materials b) Choosing the correct tools c) Accurate application of tools and equipment. 15 Does the student understand the properties of materials and how to best use them? a) Select appropriate timber for job identified task. Science 15 Does the student understand the basics of Volume, Mass and Density? b) Workshop-selecting appropriate materials for the task and outcome.
- To install a simple electric circuit. Attaching an electrical pick up. To the inside of lid of box, connected to a jack on the outside of the box, prior to sealing the box. Technology 12 Can the student design and make 3 Dimensional objects that are either aesthetic or functional? b) Choosing the correct tools c) Accurate application of tools and equipment. 9 is the student able to use machinery in a working environment safely? a) They have demonstrated the ability to follow instructions in sequential order and do so without deviating from their instructions. 14 Does the student have an understanding of basic mechanics and electronics? d) A basic understanding of voltage and current e) Have knowledge of a basic electrical circuit.
- Once more find discarded components to be appropriated into the two parts of the Guitar, that the strings are tensioned over. A broken door key, a discarded hinge, are ideal.
- To measure accurately the distance between the two, referred to as the European scale and install. Technology 2 Can the student do basic tasks in our designated working

environment? a) Mark and measure accurately. Numerical 15 Does the student have an understanding of ratios? a) Do they know what a ratio is?

- Sculpt the head of neck, or manufacture in the forge, from flat steel. A functional anchoring point for the tensioning pins. Technology 12 Can the student design and make 3 Dimensional objects that are either aesthetic or functional? b) Choosing the correct tools c) Accurate application of tools and equipment. Aesthetic and Creative 9 Can the student produce a 3D object with form and structure? a) Metalwork in the forge c) Wood carving. S.M.S.C. 15 Does the student respond positively to being involved in artistic, musical, sporting and cultural opportunities? a) They enjoy being creative in the workshop, forge, art room or classroom.
- To create a slot in the back of the neck to locate head of Guitar, using a rebate plane and hand chisels. Technology 9 Is the student able to use machinery in a working environment safely? b) They can identify often used tools.
- Further develop creative skill set, through considering how to decorate the instrument. working with paint or decoupage. Aesthetic and Creative 10 Can the student apply colour to a 3D object? b) Paint items made in the workshop c) Paint items made in the forge
- Apply a suitable finish to a project. Technology 12 Can the student design and make 3 Dimensional objects that are either aesthetic or functional? a) Choosing correct materials
- String and tune a Guitar. Aesthetic and Creative 14 Can the student play a musical instrument? a) Any instrument including attendance at private lessons.
- Evaluate the final project. Aesthetic and Creative 11 Can the student demonstrate the ability to apply creativity in a variety of settings? b) In the workshop.

Discussion points on completion.

- How does it sound when being played?
- How could it be improved/
- What would you do differently next time?

Lesson Plan: Making a decoration for the Christmas hamper.

What we hope the student will learn.

During which, attitude to education is prevalent.

- Health and Safety, to greater understand the importance of not only their own safety but also the safety of others around them.
- Identify correct size paper card.
- Roll card into a cone and secure edge of, with either hot glue, or tape.
- Measure and cut a length of 8mm dowel.
- Shape a base, from flat material or a small length of half round fence rail.
- Drill a hole in base, using a pillar drill. The same diameter as dowel.
- Glue dowel into base.
- Placing dowel inside cone, secure both together with hot glue.
- Correctly identify appropriate flavoured tea bags, fitting with the season.
- Using the colour of the paper sleeve, around tea bag. Create a sequential pattern to decorate cone.
- Working from base of cone up. Attach tea bags, in colour order with hot glue as one, would slate a roof. Over lapping the paper bags, in turn.
- Appropriately decorate a polystyrene star and mount with hot glue. To the top of paper tea tree, decoration.
- Extended activity, decorate further, the base. With a wash of white paint. Attach holly and ivy. Mount thin ribbon around the paper tree.

Areas of Curriculum covered.

- Career Planning and Personal Development, 2. Has the student demonstrated they have the communication skills required to progress? d) They can listen to and follow instructions.
- SMSC, 13. Has the student been actively involved in doing something for others when there was no apparent reward for doing so? f) They have made items in the workshop, forge or classroom for the Christmas hampers and delivered them to people living in the school's local community.
- Aesthetic and Creative, 9. Can the student produce a 3D object with form and structure? g) Junk sculpture
- Technology, 1. Can the student be safe in our designated working environment? a) Use appropriate PPE b) Understand the need for PPE c) Is safe to use tools. 9, Is the student able to use machinery in a working environment safely? g) They can identify all tools from forge/workshop/garden/farm/yard 12, Can the student design and make 3 Dimensional objects that are either aesthetic or functional? a) Choosing correct materials c) Accurate application of tools and equipment.

Discussion points on completion.

- How could it be improved?
- What would you do differently next time?

Nick Pearson

Lesson Plan: Christmas Hampers (why we do them).

What we hope our students will learn.

- How to put together a range of gifts for people of different ages
- How to decorate a hamper
- Why it is important to help people in the community that may be lonely at Christmas time.
- What different items could we add for different people and why?

SMSC

2. Does the student have an awareness of their own Faiths or beliefs or of those around them and how they are relevant to everyday life? ®

(L)

a) The story of Christmas

- Complete one workshop project (door stop/Tree ornament/Christmas display)
- Complete one rural science project (wreath, chutney, centre piece)
- Complete one classroom based project (Christmas card/Wall hanging/felted soap)
- All dependant on different areas LP

SMSC

13. Has the student been actively involved in doing something for others when there was no apparent reward for doing so?

f) They have made items in the workshop, forge or classroom for the Christmas hampers and delivered them to people living in the school's local community

Discussion points on completion.

- Could it be improved?
- What could you do differently next time?
- How could we assess impact of gift?

