

Self Esteem Forest School Intervention (SEFSI)

Context

There has been increasing interest in forest schools in recent years, partly because they address the goals of the Manifesto for learning outside the classroom (DfES, 2006) and partly because they are:

an inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands-on learning experiences in a woodland environment. (O'Brien and Murray, 2006: 4)

A number of claims have been made about the contribution of forest schools. Within this small scale project there was particular interest in the following propositions identified and discussed by O'Brien and Murray (2006) that forest schools:

- increase the self-esteem and self-confidence of individuals who take part (p19)
- improve an individual's ability to work co-operatively and increase their awareness of others (p19)
- counter a lack of motivation and a negative attitude to learning (p20)
- encourage individuals to [gain] a better understanding of the outdoors (p22)
- increase the skills and knowledge of the individuals who take part (p23)

What is a Forest School?

Pupils participating in the current action research project 'Self-Esteem Forest School Intervention (SEFSI)' experienced the following opportunities which have been identified in national evaluations as the key features of a Forest School by O'Brien and Murray (2006: 6):

- the use of a woodland setting – *an exclusive enclosed woodland area on perimeter school grounds*
- a high ratio of adults to pupils – *two adults to six pupils*
- learning linked to the National Curriculum and Foundation-Stage objectives – *a combination of explicit and implicit connections*
- the freedom to explore using multiple senses – *various depending on the session focus*
- regular contact for the children with Forest School over a significant period of time – *6 week period*

Self-Esteem Forest School Intervention (SEFSI)

The SEFSI project consisted of eight sessions delivered during the second half of the 2013 summer term. Two male members of staff one of whom is xx trained Forest School and an enthusiastic Teaching Assistant facilitated the sessions for six years 1 and 2 pupils. There was a standard structure to each session and planned connections with national curriculum areas which are listed below figure 1.

Activities	Examples
Regular	Silence in the wood, Break for a Drink and Show and Tell
Story stimulus	Evil Spirit, Hidden Rainbow, Magic Bird, Hidden Creatures, Time before Time, Fairies who collect children's rubbish, Million Eyes, Wind Bird
Creative Art	Drawing own creature, picture frame, Mandala, cone mobiles and wind whistler
Science - skills	Observation e.g. clay faces, hidden rainbow, grasses and leaves
Science - Knowledge	Identification of trees, leaves, grasses, environmental – collecting rubbish
PSHE	Blindfold game – trust

Figure 1: Summary overview of activities in Self-Esteem Forest School intervention (SEFSI)

Research

An evaluation plan was developed in conjunction with the school using the Loyne Learning Alliance (LLA) Evaluation Planning Sheet which summarized research questions, what data would be collected, when and by whom as well as opportunities for dissemination of the findings within the LLA and to a wider audience. The SEFSI project was supported by funding from LLA, Lancashire County Council and in kind contribution of time from teachers within Mossgate Primary School and the Loyne Specialist School.

Evaluation Questions

1. Can we use the outdoor learning to raise self-esteem?
2. What is the impact of an 8 session forest school intervention on six years 1 and 2 pupils who have low self-esteem?
3. How does a forest school intervention influence / shape children's attitudes to school?
4. Are there changes in pupils' attitude or work in other curriculum areas, if so what are they?

Methods

The SEFSI included collection of qualitative and quantitative data from pupils and staff involved in the project and involved:

- Thirteen pupils (6 Forest School – 3 girls and 3 boys; 7 non-forest school – 2 boys and 5 girls) completing with teacher support, an adapted and abbreviated version of the Rosenberg self-esteem questionnaire (Rosenberg, 1989) with additional health statements based on the KINDL^R (Ravens-Sieberer and Bullinger, 2000). Pupils indicated their level of agreement or disagreement on a 4 point scale to the twenty statements which were subsequently analysed and are reported below
- Pupils drawing and talking about a picture of themselves at school, saying something good about themselves and selecting five word and picture cards that described how they felt that week (see figure 2).
- Class teachers providing pen portraits prior to the project and setting individual targets. They also assessed and discussed achievement of individual targets and participated in audio-recorded interviews, which captured critical incidents and their general views of the impact of the SEFSI. Interview transcripts were analysed on basis of thematic issues.
- Detailed documentary evidence which was collected and recorded following each session and included observations about each pupil, as well as further details of each session. Photographs were taken to corroborate pupil participation in specific activities.



Figure 2: Wordle based on words and pictures



Figure 3: Group & observer week 1



- Two teacher observations that were made by a non-participant observer during the first and final sessions.

The findings from this rich data set are summarised below.

Self Esteem

Based on the responses to the pre and post questionnaires it would seem that for the group as a whole there was a small increase in self-esteem (0.7) and combined factors for health and well-being (1.3) see figure 4. These average scores, mask variation between members of the group as shown in figure 3, where analysis by gender shows greater increase for girls, with a 4 point increase for self-esteem and 3 point for the health and well-being statements. Melissa made the greatest increase as an individual

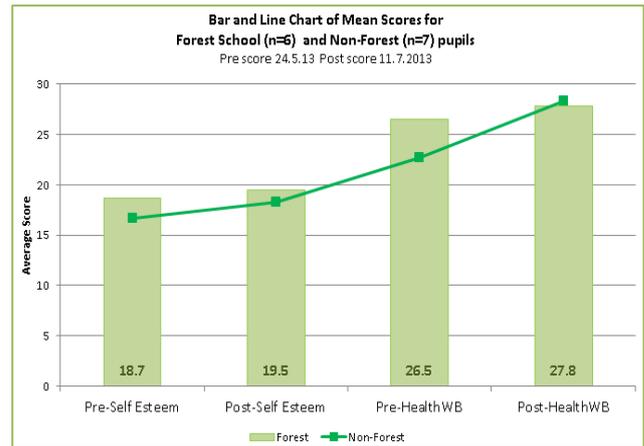


Figure 4: Bar and Line Chart of Pre and Post SEFSI scores

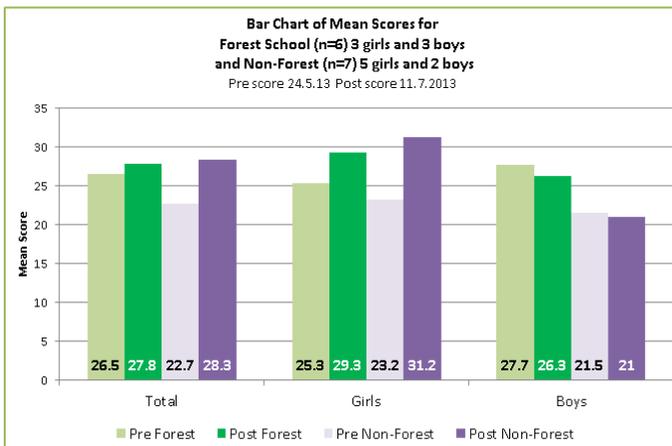


Figure 3: Bar Chart of Pre and Post SEFSI gender scores

moving 6 and 8 point respectively. Gender may therefore account for the larger increase of the non-forest school group who included 5 girls and only 2 boys.

Of the three boys, Neil made the biggest overall increase, although only a 1 point increase on self-esteem score, his health and well-being score was 6. This was a result of an improvement in his physical and emotional scores.

The health and well-being statements covered six broad areas – physical, emotional, self-esteem,

family, friends and school. For the group the greatest impact seems to have been on physical and emotional well-being. On this measure there was a decline with respect to family and friends which as figure 5 shows is a result of the boys’ scores. Closer examination shows this decline was as a result of the shift in William’s scores, at the start he reported strong agreement that he felt fine at home, had played with his friends and enjoyed school; his final responses were the complete opposite and he shared that he *“have no friends at my house”*. It is worth noting that teachers’ assessment of pupils’ achievement of individual targets supports the general messages from the questionnaires. Nevertheless, although this quantitative data is based on tools assessed for reliability, the modification and small numbers mean they needed to be treated with caution. The remaining sections explore the nature of the impact and discuss some of the features of the forest school which seemed to bring about the changes.

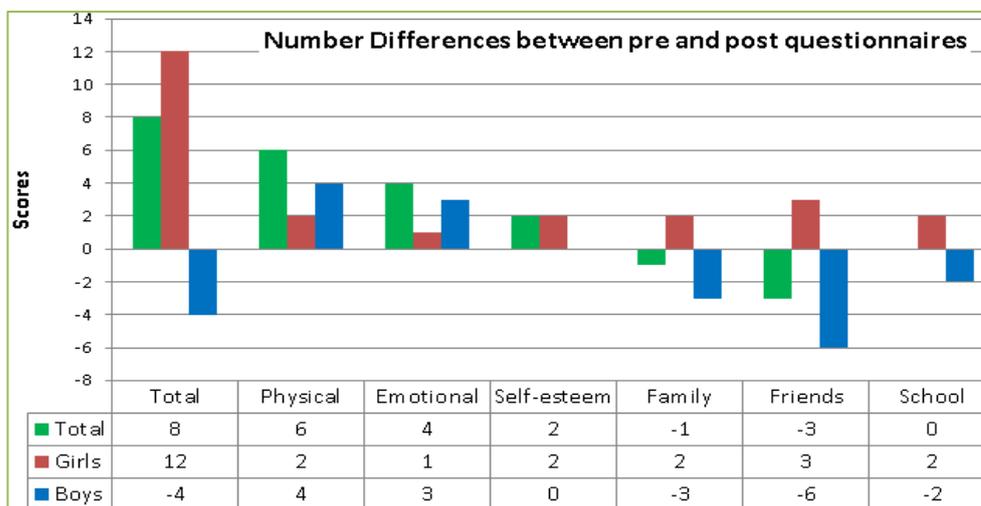


Figure 5: Differences in pre and post responses for Health and Well-Being

Impact on individual targets

In addition to trying to find out if the activities of this short Forest School project would raise self-esteem, there was interest in the nature of the impact and the extent to which individual targets would be achieved. Figures 6 and 7 give an overview of teachers' assessment for the pupils.

Target	Number	Yes a lot	Yes a bit	No change
Overall work	6	2 (33%)	3 (50%)	1 (17%)
Willingness to ask and answer questions	4	3 (75%)	1 (25%)	0
Resilience	5	2 (40%)	1 (20%)	2 (40%)
Decrease in negative reactions / outbursts	1	1 (100%)		
Cope with new and different situations	6	4 (67%)	1 (17%)	1 (17%)
General change	6	3 (50%)	3 (50%)	
Put up hand without prompting	4	3 (75%)	1 (25%)	
Confidence in an outdoor context	2	2 (100%)		

Figure 6: Teacher Assessment of work related targets

For five of the six pupils teachers reported an improvement in their overall work and an ability to cope with new and different situations. Both girls set a target of increased confidence out of doors achieved this goal, Melissa was described as *“becoming a lot more tactile towards other children and staff ... not so petrified about insects and getting muddy and having dirty hands”*. Another child who was *“very weepy and sickness”* following the project the teacher reported, *“no tears in the morning, and only the odd complaint of a headache but nothing like it was before”*.

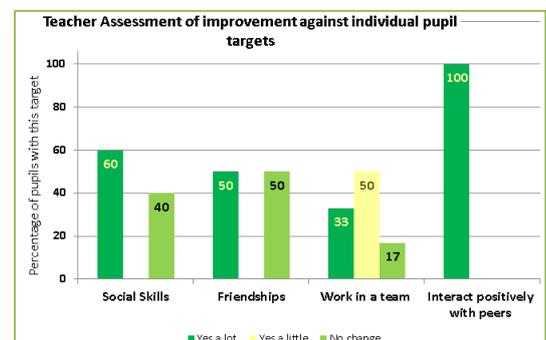
For the two pupils with targets about confidence With respect to work-related targets pupils' willingness to ask and answer questions and to initiate interaction with the teacher in front of their peers by putting their hand up without prompting was particularly pleasing. Teachers reported how increased involvement in lessons was shifting the pupils' perceptions of themselves which overtime they expected would be beneficial. As one teacher explained: *“It's great to see them believing in themselves, feeling they are worthy, their opinions really matter and it doesn't matter if you get something wrong, we all make mistakes”*. For some pupils it was an increase in confidence in additional subjects: *“One of my boys, good numeracy, much more happy to ask for literacy and science, he knew he was good at number, but now he has confidence in other subject areas”*.

Interaction with other children

Target	Pupils	Yes a lot	Yes a bit	No change
Social Skills	5	3 (60%)	0	2 (40%)
Friendships	6	3 (50%)		3 (50%)
Work in a team	6	2 (33%)	3 (50%)	1 (17%)
Interact positively with peers	3	3 (100%)		

Figure 7: Teachers' assessment of social and friend related targets

Interaction with other children was the change most frequently noted by teachers following SEFSI. For example, these children would typically be last to be chosen in teams, for instance, *“one of my girls was a bit of a loner, now she's paying with a couple of other people”*. Discussion between SEFSI staff and class teachers was identified as crucial for consolidating Forest School experiences: *“the time to talk about the session was most valuable; [otherwise] we wouldn't have been able to transfer the learning to the classroom”*. Teachers built in opportunities for pupils to *“show and tell”* what they had done: for example, showing them picking up worms, lying on the grass making snow angels, David and his silly walk.



Attitudes to school

Teachers were interested in identifying how the SEFSI might influence or share pupils' attitudes to school. The work related targets summarised in figure 6 showed their achievement of individual targets. Figure 7 shows that all the girls felt confident in the past week and two of the three boys (67%). Confidence is one of the underlying themes which O'Brien and Murray (2006) propose lead to changes in pupils' attitudes, behaviour and learning. Reasons for increased confidence will depend upon the child, however talking more generally about how and why the forest schools may lead to increased confidence one teacher suggested that: *"when you remove the walls they become slightly more free, they become uninhibited because they are in an open area, more relaxed, in the forest schools there isn't a standard there is no right and wrong and that helps them keep free"*. Making a Green Man from clay was a good example of doing something new which provided: a positive learning experience, an increased understanding of the outdoors, and increased awareness of others interest in their creation and explanation of what they had made. As the following teacher observation notes show:

David: *"seemed to come alive, his facial expression completely changed, [although] he found explaining his Green Man to the other children very difficult, he did it and did it well"*

Melissa: *"was so precise, ... she picked small blades of grass to make the hair, ... [after other pupils finished] she just carried on and completed a wonderful Green Man which made her happy"*

Neil: *"was so proud of his achievement and would stop smiling, he became very vocal when explaining to the other children why he had made his clay face"*



Figure 8: Green Man

Engagement with the curriculum



Figure 10: Risk taking climbing a tree

Observations during Forest School sessions captured examples of pupils applying and extending their classroom knowledge. For example: Rachel applied her knowledge of symmetry (Figure 9) when creating her picture frame, *"she put things on incredibly symmetrically, and when I asked her why, she said, 'we've done symmetry in class, but because I've done it [in my picture frame] it makes more sense'"*



Figure 9: Natural Picture Frame

The benefit of risk taking and engaging in activities which might in the past have been common were considered to be valuable for pupils physical development. The forest school has given them the *"opportunity to do things they wouldn't have a chance [before], haven't been to the forest before, amazing [activities] you associate with being a child, risk taking"* see Melissa climbing a tree (Figure 10).

Conclusions

Although this project has not explicitly explored the 'ripple effect' and impact on parents, other pupils and teachers, the pupils did have an opportunity to share their experiences with their peers. In this cycle of the SEFSI project one member of staff increased their understanding and skills in delivering the Forest School curriculum. *"It's opened my eyes see things in a different light, think about the way I speak to children, or ask question"* and another talked about how writing pen portraits for the SEFSI had helped highlight importance of confidence and focus on pupils talking about what they are proud of in class.

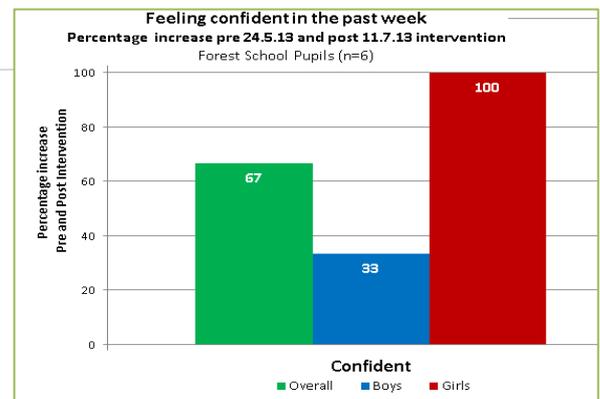


Figure 7: Bar chart of feeling confident in the past week

Research questions revisited

Although a year has been identified as a more optimal time, the resources required to enable all children to access this level of intervention may be prohibitive. There was evidence, even after 8 sessions, of **benefits for all pupils in respect of targets identified and assessed by teacher observation**. The SEFSI project confirmed the importance of routines and that clear boundaries provided consistency and stability that was liberating rather than stifling (see also O'Brien and Murray (2006: p27). **As a stimulus for building confidence and increasing self-esteem the SEFSI appears to have been successful**. There were some promising changes in pupils' willingness to ask and answer questions and increased interaction with peers when pupils returned to class. Based on the data collected it was not possible to confirm changes in pupils' engagement in other curriculum subjects. As noted by O'Brien and Murray (2006) in their large scale evaluation, evaluating the longitudinal impact of Forest School activities is still required. The data collected during the SEFSI project has the potential for further analysis at the level of individual pupils. If there is follow up of this group of pupils it is recommended that interviews are built around photos collected during the project.

Recommendations for future action research cycles of the SEFSI

1. As a strategy for building school capacity and increasing confidence of other teachers to support the Forest School and consider how to transfer its pedagogical approaches to other lessons, it is recommended that other teachers be provided with opportunity to experience forest school.
2. Trained staff with clear understanding of health and safety, the facilitative pedagogy which allows pupils to explore and emphasises pupils recognising and celebrating their own achievements is crucial
3. Story telling appears to be a core stimulus, not all teachers will have a repertoire of stories or the confidence to tell stories, Mossgate Primary School may wish to consider developing resources to share this expertise through specific staff development or production of resources.
4. To ensure there is time for staff delivering Forest School activities and class teachers to discuss progress and thus provide opportunities to consolidate the outdoor learning experiences.
5. To consider longitudinal tracking of initial SEFSI cohort to establish how, or if, any of the benefits are retained and to explore adaptations to the questionnaire for self-assessment by future cohorts.



Figure 11: Forest School

References

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