

STEM Nation Award

Evidence

Applicant details

- Sunflower Family Nurture Centre
- Fife Council
- CS2003017099
- Shirley Bremner, Vickie Elder, Katrina Jackson, Laura Robertson, Mardie Templeman, Morag Steele, Vivien Laing
- 17th December 2019



[WATCH as we introduce STEM at Sunflower Family Nurture Centre](#)

Setting profile

Sunflower Family Nurture Centre provides Early Education and Care to children in their ante pre-school and pre-school year and extended day places for children with an identified social, emotional or educational need. During session 2017-2018 a total of 91 children, aged 3-5 years, attended the nursery. We also provide Early Entrant provision for up to 30 children aged 2-3 years. Currently we have 77 3-5 year olds enrolled and 33 2-3 year olds.

As a Family Nurture Centre we are open for 52 weeks a year. During holiday periods we continue to support children and families by providing a variety of services. We offer places to children from across the locality, and numbers accessing this service are continuing to increase.

We provide excellent Family Learning opportunities, including both targeted and universal groups. We work in partnership with a number of local agencies and have strong links with the local community.

We offer a welcoming, safe place for families who may be experiencing a range of challenges in their home lives. We are a food bank voucher holder and also support our families through use of the Fairshare scheme in partnership with TESCO. We signpost families who are in financial crisis and do what we can to make life a little easier, for example, taking part in charity schemes that support our families very well (e.g. Cash for Kids Christmas Appeal etc).

We have high aspirations for all our children and families.





Leadership in STEM

Staff at Sunflower FNC are committed to ongoing professional learning. Staff take on leadership roles to drive forward aspects of the Improvement Plan. This session our STEM Ambassadors have provided high quality STEM learning for their colleagues. They are also working in partnership with 4 locality schools to upskill staff and support STEM professional dialogue.



Practitioners supporting each other to build skills in using tools and power tools



Leadership of learning



Collation of results from staff questionnaires

Professional learning in STEM areas is having a positive impact on practitioners' ability to ensure high quality STEM outcomes for all children.



Sunflower Family Nurture Centre
STEM
INSET Day - October 2019
Collation of results



Question 1

How confident were you about STEM before the INSET Day?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|-----|-----|-----|-----|---|---|---|----|
| | | 10% | 27% | 27% | 36% | | | | |

Question 2

Have you put anything you have learned from the INSET Day into practice?

- More confident when engaging in woodwork activities with children.
- I supported one child this week to create and make his robot.
- I have been more confident when supporting parents to use the drill during our craft class.
- I enjoyed sharing ideas - I have shared these with Lochgelly West Nursery Class this week.
- I have supported children this week to make puppet stick holder.
- I have used the computer to investigate numbers.
- We have used the sensory bottles to support development of children talking about their senses.
- We have added the sensory bottles into our areas.
- We are supported children in the Under 3s to make a scarecrow using tools.
- I am more confident to be ready to make things with the children using tools and equipment.
- We have stocked the indoor and outdoor woodwork benches and continue to support the children to explore and create in the woodwork areas.

Question 3 - Embedding STEM

How confident were you about STEM after the INSET Day?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|-----|-----|-----|----|
| | | | | | | 39% | 31% | 31% | |

| Number of points confidence levels have increased by since INSET | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|---|-----|-----|-----|----|---|---|---|---|----|
| Percentage of staff | | 36% | 36% | 19% | 9% | | | | | |



Leadership in STEM

Practitioners attend professional learning opportunities within Sunflower, across Fife, for example, a recent exchange with Beanstalk Family Nurture Centre and through attending professional learning opportunities outwith Fife. We recently welcomed EYO's from Kinross Nursery (Perth and Kinross Council) to share in professional dialogue around Outdoor Learning.

Leadership of learning



Staff regularly attend professional learning opportunities. Examples here include STEM for Early Level professional learning provided by SSERC and Exploring Sciences at Dundee Science Centre.





Leadership in STEM

Leadership of learning

All staff in Sunflower FNC take part in fortnightly staff forums where a range of subjects are covered supporting our self evaluation using HGIOELC.

Recently we have been focusing on our STEM learning. Forums are led by the staff. Anything discussed at forums is fed back to the wider team at team meetings.

How Good is Our Early Learning and Childcare? Staff Forum



Date: 04.09.19

Present: Nicola, Romana, Cara, Ellie, Morag

QI: 2.3 Learning, teaching & assessment (focus on STEM learning)

Theme: * Learning and engagement * Quality of interactions * Effective use of assessment
*Planning tracking and monitoring

Reflective/Challenge Questions:

- How do we know that all children are making very good progress in their STEM learning?
- To what extent do our learning environments support different types of play/STEM learning?

Points for Discussion

- Practitioners make sound judgements about children's progress and respond quickly to ensure learning opportunities meet the needs of individuals.
- Tracking and monitoring of children's progress is well-understood and used effectively to secure improved outcomes for all children.

Links to Action Plan

- Learners will experience appropriately challenging rich, stimulating experiences to ensuring high aspiration for all children.

Looking inwards - whats going well ?

- Practitioners know learners well and progress is evident in observations and tracking in PLJ's.
- High quality observations result in well planned learning experiences which children participate in.
- High quality interactions which use rich language which supports STEM understanding.
- Sharing learning - Parental feedback evidences children transferring STEM skills outwith the nursery setting.
- Effective use of tracking and monitoring evidences skills progression and children meeting benchmarks.
- Childrens voice is evident and they can confidently lead and share their own learning.
- STEM learning starts at an early age through experiences starting with babies.
- Children display curiosity and are keen to explore.
- Childrens STEM voice is valued, interest explored and extended.
- A variety of experiences extend STEM learning, beach, forest, intergenerational learning, Melgund Market.
- Intentional promotion ensures that a breadth of STEM learning and skills are covered.
- Resources to support STEM learning promotion, "I am" books and books which support STEM.

Moving Forwards

- Exposing under 3 children to further STEM experiences through shared learning experiences between both rooms.
- Develop language of learning within STEM experiences.
- Become more effective in evidencing STEM experiences within planning documents.
- Make STEM learning more visible for our families, use social media as a tool #SunflowerSTEM
- Explore how we can further develop STEM into our Melgund Market.
- Explore partnerships which will enhance professional and children/family STEM learning - Dundee Science Centre, Kinghorn Ecology Centre, Dynamic Earth (Ellie with follow this up)

Ellie will feedback Forum at next team meeting.



Leadership in STEM

Leadership of change

Sunflower Family Nurture Centre
STEM Learning Partnership Programme

Partnership Settings / Schools
St Kevins RC School ELC Setting
Loughgally West Primary School ELC Setting
St Ninians RC School ELC Setting
Coomshingaugh Primary School ELC Setting

Weekly Plan for Partnership Programme

| Week | Date | Activity | Who? | Intended Outcome |
|------|--------------------------|--|--|---|
| 1-5 | 21/10/19 - 8/11/19 | STEM ambassadors from Sunflower FNC to upskill Sunflower FNC practitioners STEM research and resource consideration Planning of STEM night Consideration of programme content Meeting / support from Karen Doherty - Science Development Officer | Sunflower Team Karen Doherty Partnership Schools | STEM Ambassadors feel confident in all aspects of STEM and are supported to share high quality practice |
| 4-5 | 11/10/19 - | Visits to Partnership ELC settings to meet with STEM Champions | MS SB | Staff will begin to form relationships |

We applied for STEM Funding through the Leadership and collegiate professional learning fund. We were successful in our bid. We now have 3 STEM ambassadors who are upskilling staff across 4 locality schools. This is a planned piece of work and data gathered so far is evidencing a positive impact on STEM outcomes for children. Within Sunflower FNC almost all staff are now confidently supporting and leading STEM across the setting.

SUNFLOWER FAMILY NURTURE CENTRE
STANDARDS AND QUALITY REPORT 2017-18

| | | | | | |
|---|--|---|--|---|--|
| D. Professional Learning: Supporting practice / ongoing development | <ul style="list-style-type: none"> Partners staff knowledge, skills, language and confidence in STEM development Development of Critical Friends Approach and Peer Exchange as a learning practice Deployment of key persons to bring on board communication strategy | <ul style="list-style-type: none"> Through Critical Friends model staff are reporting that the Communication High 5 is now embedded in daily practice Staff are problem solving with their Critical Friends on areas where they are finding communication High 5 to be a challenge Staff are accessing the Development Hub regularly Children are developing a rich language and communication skills. We are using children taking part in and for conversations with staff and peers Parents are accessing the Play Sessions and are reporting on Communication High 5 in the home Practitioners feel confident to plan for skills learning in a holistic way STEM subjects are fully embedded into the life of the setting and not planned for in discrete subjects Learning across the locality with our partners in the primary schools and high school Children are developing skills for life and learning in all the contexts through quality play experiences Parents support the learning of key skills through play and play sessions and sharing learning from the home | <ul style="list-style-type: none"> All staff Green Bell (SALD) MTJTD SB Senior EYCP High School Caroline Craig (TTC, Science) Sharon Hopper (PT), STEM Karen Doherty Science Development Officer Tonia - Bob Gannon Local Primary schools | <ul style="list-style-type: none"> T1 - Reception parents from training session 18/19 Peer Exchange visit introduction August INSET Day Peer Exchange - T2 Play sessions for parents - T2 onwards INSET Day - Oct 19 | <ul style="list-style-type: none"> Critical Friends - quality of interactions Room observations Parent Forums Playroom Observations Staff forums Parent forums |
|---|--|---|--|---|--|

STEM has featured on our Improvement Plan for a number of years. STEM has been re-visited as we work to completely embed this in the life of the setting.

Our Vision, Values and Aims have been developed in consultation with our children, staff, parents and partners. These are real, are lived and are re-visited regularly.

Sunflower Family Nurture Centre

Vision, Values and Aims

Vision
Together we dream, believe and achieve

Values
We will provide a responsive service based on
Honesty – Inclusion – Respect - Equality

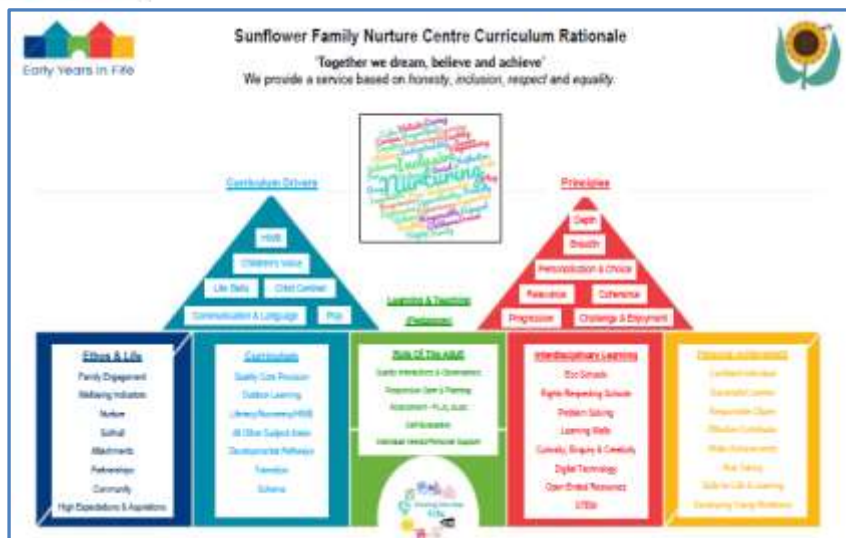
Aims

- We aim to play an active role in nurturing our children and their families within a caring, safe, secure and happy environment.
- We aim to work together as a team to ensure the best possible outcomes for children and families.
- Through play, we aim to provide opportunities for all children to develop their skills for life and learning.

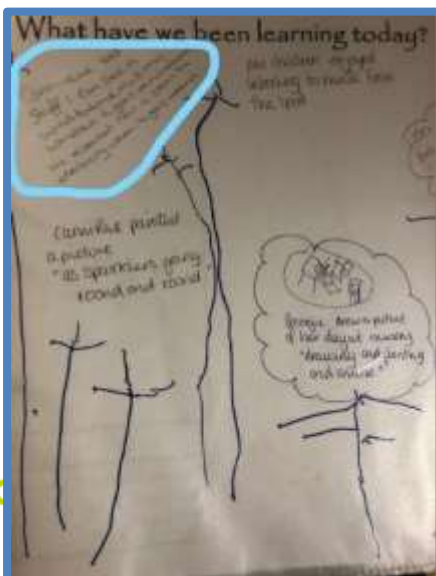


Leadership in STEM

Curriculum, learning, teaching and assessment

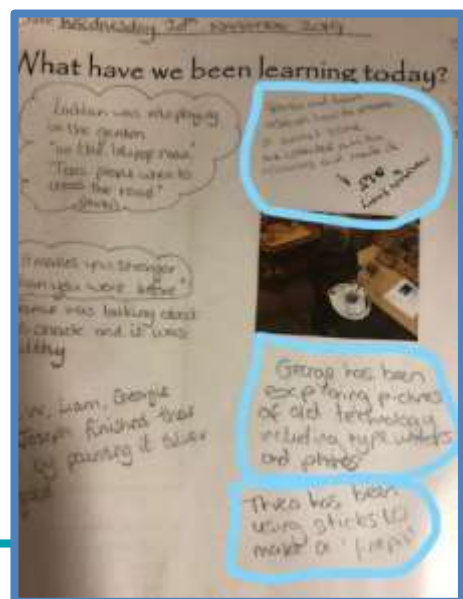


Our rationale and design of the STEM curriculum has been developed to ensure it meets the needs of our individual children. We ensure that children's interests are central to our planning process and children lead their learning in a number of ways; contributing to daily responsive planning, group times, learning walls, Personal learning journals.



'Cami-Rae told staff I can see a wind turbine out my window.it goes around and round' We researched how it stores the electricity when it goes around'

Children mark make on the daily responsive planning to share their ideas and views about their learning.



Examples of child's interests

'Georgie and Liam research how to make a wind vane...we collected all the resources and then made it'

'Georgie has been exploring pictures of old technology, including typewriters and phones'

'Theo has been using sticks to make a firepit'



STEM family learning

Sunflower Family Nurture Centre October 2019

Monday

Baby Massage 9.15am - 9.45am

Relaxing time for you and your baby (aged 4 weeks - 8 months)

Creative Play 10.00am - 10.30am

Parents and children will learn a new creative skill each week. (aged 1-3 years)

Baby Massage 12.45pm - 1.15pm

Relaxing time for you and your baby (aged 4 weeks - 8 months)

Bumps to Baby Steps 2.00pm (Maxwell Centre Cowdenbeath)

Fun, informative sessions for expectant parents and parents with children aged up to two.

Tuesday

Stay and Communicate 9.15am

Exciting new group for our 3-5 children and their parents/carers. Limited spaces, sign up fast.

Boosting Budgets 1.00pm

Adult group. See staff for more info, limited spaces.

Wednesday

Sensory Fun 9.30am - 10.30am

Sensory and messy play sessions (aged 0-18 months)

Double the Fun (Twin & Multi Births Group) 1.00pm - 2.00pm

Fun sessions for you and your children

Dads Group 2.30pm - 3.30pm

Interactive sessions for dads and their children

Thursday

Bookbug Breakfast 9.15am - 9.45am

Join us for breakfast and lots of fun singing songs and telling stories.

Crafty Creations 10.00am - 11.15am

Let's get inspired and release your creative side (adult group)

Stay and Communicate 1.00pm

Exciting new group for our 3-5 children and their parents, limited spaces, sign up fast.

Learn & Play 2.00pm

(under 25s) Fun interactive sessions for parents and children

Friday

Musical Minors 9.30am - 10.15am

Come along and join in the fun singing and dancing with 'Pepe' (aged 0-5 years)

Crafty Creations 1.00pm - 2.30pm

Let's get inspired and release your creative side (parents group)

For more information about any of the above classes, please call

Sunflower Family Nurture Centre on: 01592 585555

At Sunflower Family Nurture Centre we provide a full programme of Family Learning. This is updated termly based on the needs of our families.

We build positive, supportive relationships with children and families within the locality from the very earliest stages. Through a variety of family groups children and families are learning and developing STEM skills together. Skills for life and learning are developed from the earliest stages. Our most recent offering has included; Baby Massage, Creative Play, Stay and Communicate, Boosting Budgets (in partnership with CLD), Sensory Fun, Double the Fun (Twins Group), Dad's Group, Bookbug Breakfast, Crafty Creations, Learn and Play and Musical Minors. All of these groups are providing parents and families in our locality with opportunities to develop a range of STEM skills with their children.



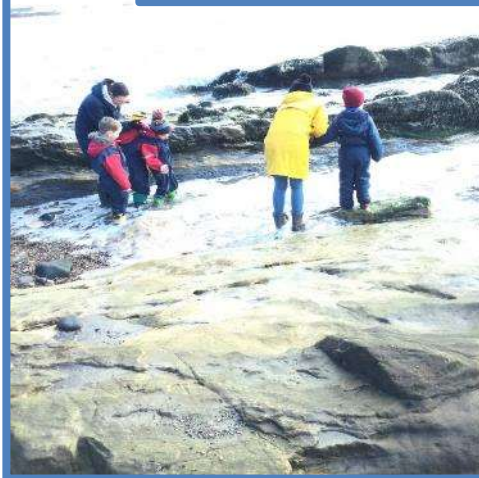


STEM family learning

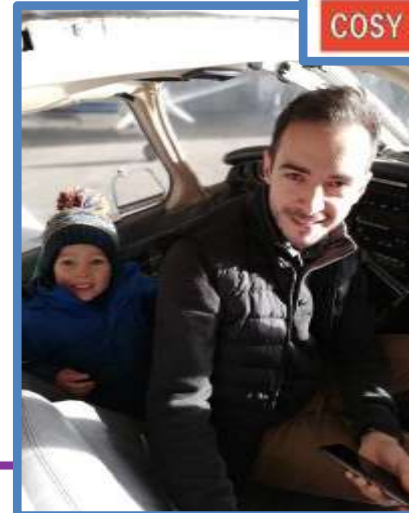
We work in partnership with a range of partners who support us to develop our Family Learning, for example, Fife Gingerbread and CLD colleagues. This session we have been working with CLD to run a Boosting Budgets group for our parents and families. Our parents are developing a range of skills for life and work. Feedback from our parent group evidences the positive impact these groups are having on their lives and wellbeing. Our **STEM and Communicate** group has been very popular with our families. Recently we have visited the beach, the woods and the local airport. The aim of this group is twofold; to support parents in using key communication strategies with their child and to explore STEM learning together.

Boosting Budgets Sunflower Nurture Centre

| | | |
|--------|--------------------------------------|--|
| Week 1 | Tuesday 22nd October PM | Coffee Morning (cover what course involves ice-breaker for participants) |
| Week 2 | Tuesday 29 th October PM | Cosy kingdom Workshop |
| Week 3 | Tuesday 5 th November PM | CARF Workshop |
| Week 4 | Tuesday 12 th November PM | CARF Workshop |
| Week 5 | Tuesday 19 th November PM | Practical cooking session |
| Week 6 | Tuesday 26 th November PM | Practical cooking session |
| Week 7 | Tuesday 3 rd December PM | Guest speakers, Credit union, support & connect and CLD |
| Week 8 | Tuesday 10 th December PM | Celebration |



Exploring and discovering with our families at the beach.



Receive a £20 Credit Union Voucher for taking part!

SUPPORT & CONNECT Fife COUNCIL

Boosting Budgets £££

- How to make the most of your money
- Saving and borrowing with the Credit Union
 - Cooking on a budget
- Where to get help when you need it
- Learn about the changes to benefits

The small group is going to be running for 8 weeks in your nursery starting on **Tuesday 22nd of October at 1 pm**. This will be a 2 hour session with lunch provided

Please let a member of nursery staff know if you would like to join and a space will be reserved.

COSY KINGDOM

Citizens Advice & Rights Fife
Citizens Advice Bureau
Independent advice for you and your community



STEM family learning

Melgund Market

Our weekly Melgund Market provides an excellent opportunity to engage our parents in STEM learning with their children in the home. Our children plan what they will sell at our market and prepare the resources required. They are in charge of considering their budget and handling the cash when serving our families. The children also bank the money at the local Credit Union.



These pictures are examples of our families using their Melgund Market learning at home bags. As you can see they are developing their STEM skills with their families. Examples include; making a windmill, making pancakes, making jelly. All resources required are part of the bag, making the activity accessible for all. The activity for home relates to the child's interest through the Daily Responsive Planning.



Preparing our Plum Crumble bags to sell. We use a real till in our shop. Every shop assistant has been trained in how to use this.



STEM family learning

Communication and engagement with Sunflower Family Nurture Centre

| | | | | | |
|----|--|---|-----------|---------------|----|
| 12 | I receive helpful feedback about how my child is learning and developing e.g. informal feedback, parent chats, FLJs. | 99% | 1% | | |
| 13 | I understand how the setting monitors my child's progress with learning | 99% | | | 1% |
| 14 | The setting gives me ideas on how to support my child's learning at home | 97% | | 1% | 2% |
| 15 | The setting organises activities where my child and I can learn together | 97% | 1% | 1% | 1% |
| 16 | The setting takes my views into account when making changes | 99% | | | 1% |
| 17 | I feel confident to ask questions | Improvement Priority (19-20) | | | |
| | | Very Important | Important | Not Important | |
| 18 | I feel encouraged to share my views | Further opportunities to share our Language and Communication strategies with you | | | |
| | | 70% | 30% | | |
| | | A closer look at opportunities we offer in Science, Technology, Engineering and Maths (STEM). | | | |
| | | 70% | 30% | | |
| | | Further opportunities to allow families to participate in their child's learning | | | |
| | | 78% | 22% | | |
| | | Continue our work to support children to recognise and understand their emotions | | | |
| | | 82% | 18% | | |
| | | Emotional wellbeing of children and families | | | |
| | | 82% | 17% | 1% | |

1. **Staffing Update**
 Morgan Donaldson - Under 5s
 Lynsey Foster - 5-6s

2. **What's Happening at Sunflower?**

Children

- ✓ Busy Bees have been learning about Autumn and Sunbeams have been learning about the Winter.
- ✓ Children have been researching and investigating STEM opportunities have been included.
- ✓ Under 5s have settled well.
- ✓ Visits to the Beach and Woods are going well.
- ✓ Bright Heavy Enterprise - Melquid Market takes place weekly on a Wednesday - this has included activities to support your child with in the home.
- ✓ Continue to work with Mission Care Home.
- ✓ STEM - STEM Nation/STEM funding.
- ✓ Emotion Works.

Feedback and notes
 Alison shared that James is using different emotion words at home.

Families

- ✓ Laura shared the Family Learning Timetable.
- ✓ Our Stay and Communicate Group has been a great success. Visits to the Beach/Woods with key strategies with parents.
- ✓ Christmas Page - 29th November
- ✓ Cafe de Flores - 15th December
- ✓ Christmas Dates - week beginning 16th December
- ✓ Tell us what you think? Suggestions!
- ✓ STEM - STEM Nation/STEM funding.

Feedback and notes
 Last year some parents felt that the Nativity performance was very busy and overwhelming for some. This is being reviewed this year to work out the best way forward.

Staff

- ✓ Improvement Priorities - Emotional Wellbeing/Challenging Learning Experiences/Leadership
- ✓ October INSET Day - STEM Learning - power tools. November INSET Day - Bears
- ✓ Professional Development - BA Childhood Studies
- ✓ Twilight training programme.

Feedback and notes

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Sunflower Family Nurture Centre
 2 October · 🌐

What a busy day with more STEAM learning in Sunflower!! Following on from our interest in spectacles we have been busy developing our science knowledge and learning about how glass is made. We used the smartboard to support our learning by watching videos of the process and how people create artwork from glass. Playing with to... See more

Home About Posts Photos Videos

Sunflower Family Nurture Centre
 1 November · 🌐

Stem Learning at Sunflower

Families had a great time at Ravenscraig Park and Black Sands Beach exploring the natural environment.

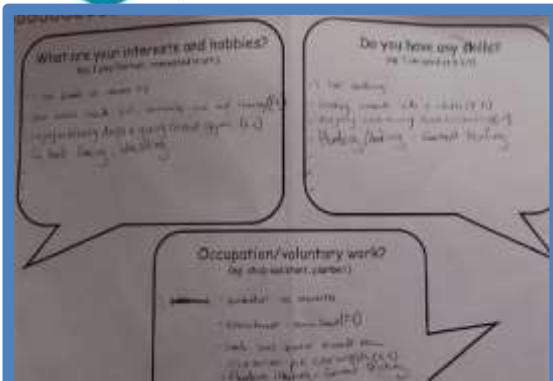
What do you think?

Send Message

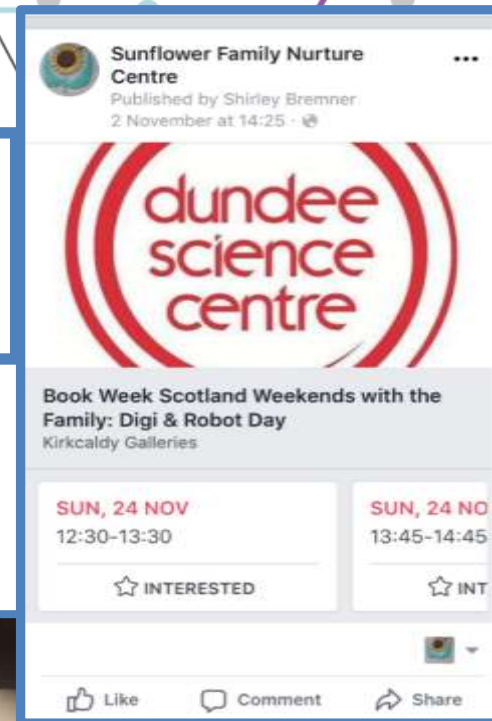
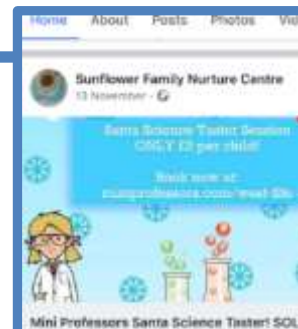
We consult parents regularly to ensure we are meeting their STEM learning needs. We do this through questionnaires, through our Parent Forum and through ongoing daily communication. We use social media to engage and involve parents in STEM learning.



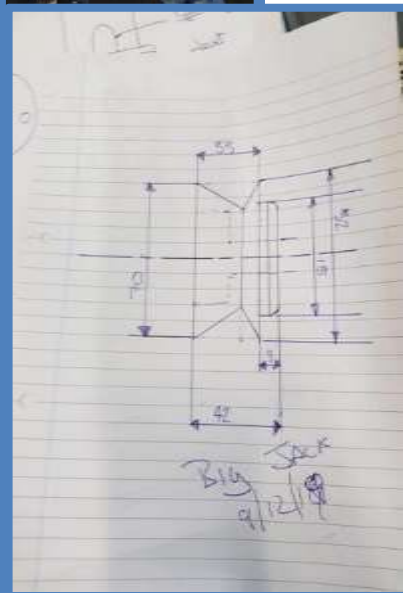
STEM family learning



We use Social Media effectively to promote national STEM learning events. This supports our families to engage in STEM Family Learning during weekends and holiday periods.



We regularly gather information from our parents and families about their own skills and expertise. We use this to support our planning process. An example of this would be, recently we have been supported by 2 dads who have a specialist background in engineering. One dad works at Fife College in the Engineering department. He, alongside his students have made a lighthouse that our children can use to investigate and problem solve how parts fit together and work. He involved us in the planning for this as you can see. Another dad is an engineer who works with turbines. He has taken part in a project to build bird boxes for us.





Employability and STEM partnership working



We work closely with our Education partners to ensure we access the skills and expertise we require to develop practice and keep abreast of current research and pedagogy. We work closely with Karen Doherty – Science Development Officer – to support and upskill staff. We have links with our local High School so we can access subject leader experience. Our STEM Ambassadors lead this work.

We have a wide range of partners who we work with to support our STEM strategy. We have a range of Education, Health, Community and Industry partners.

STEAM Fife @STEAMFife · 4h

Getting to grips with hand tools for that authentic engineering buzz 🤝👍 #teamwork #STEM #skills Sunflower INSET

Catriona Gill @Lin... · 13/09/2019

Thinking about developing STEM in your setting? Check out this fantastic resource from Sunflower Family Nurture Centre. #STEM @SEICollab

ES Sciences... · 12/09/2019

Delighted 🌻 Sunflower Family Nurture Centre 🌻 @FifeCouncil have shared their STEM practice

It's worth a 👁️ look 👁️ education.gov.scot/improvement/pr...

Carrie Lindsay @c... · 31/10/2017

Quality at 🌻 Sunflower Family Nurture Centre. Great place to launch elc quality action plan. #early learning fife twitter.com/markmcdsnp/sta...

STEAM Fife @ST... · 21/03/2018

Wonderful visit to Sunflower Family Nurture Centre. Great to see the amazing work they have done and how STEAM is embedded in everything! #STEAMFife #RAiSEscot @EducationScot





Employability and STEM partnership working



We have a close relationship with our local care home – Mossview at the Opera. The children visit Mossview weekly and there is a planned programme of collaborative work. This focuses mainly on the Arts and STEM. Recently the children worked with the residents to develop their outdoor area.



The children planned the outdoor area with the residents. They painted plant pots and as you can see here planned and made a seat out of pallets. The residents worked with the children to paint the seat. This project is supporting our children to develop their STEM skills in real and relevant contexts.



[WATCH us having fun and building our STEM skills with the residents of Mossview Care Home](#)



Employability and STEM partnership working



We have a close partnership with the local cycle park. Our children and families benefit from this. The Cycle Park provide us with bikes and training for our children and families. The trainer carefully supports our children to understand concepts such as pushing/pulling, forces, faster/slower and the importance of cycling safely.



| Boosting Budgets Sunflower Nurture Centre | | |
|---|--------------------------|--|
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| Week7 | Tuesday PM | credit union, support & connect and |
| Week8 | Tuesday PM | |



Fife Gingerbread have worked closely with us over a number of years to support local families. They have supported a number of our Family Groups. This close partnership has had a positive impact on the wellbeing of many of our families as well as supporting our parents who are in need of building critical skills for life and work.



Employability and STEM partnership working



What are your interests and hobbies?
(eg: I play football, interested in art.)

- I like football for leisure (FC)
- other hobbies include golf, swimming, gym and running (FC)
- enjoy walking dogs & going to the gym (CC)
- Go kart Racing, Wrestling

Do you have any skills?
(eg: I am good at D.I.Y)

- I like gardening
- Coaching football with adults (FC)
- enjoy cooking and baking (CC)
- Plumbing/Heating - Garment Printing

Occupation/voluntary work?
(eg: shop assistant, plumber.)

- ~~Footballer~~ - footballer for Montrose
- Recruitment consultant (FC)
- Coach local amateur football team
- cleaner at car wash (CC)
- Plumbing/Heating - Garment Printing

We utilise the resources that are available to us. Dundee Science Centre continues to provide excellent professional learning for staff.

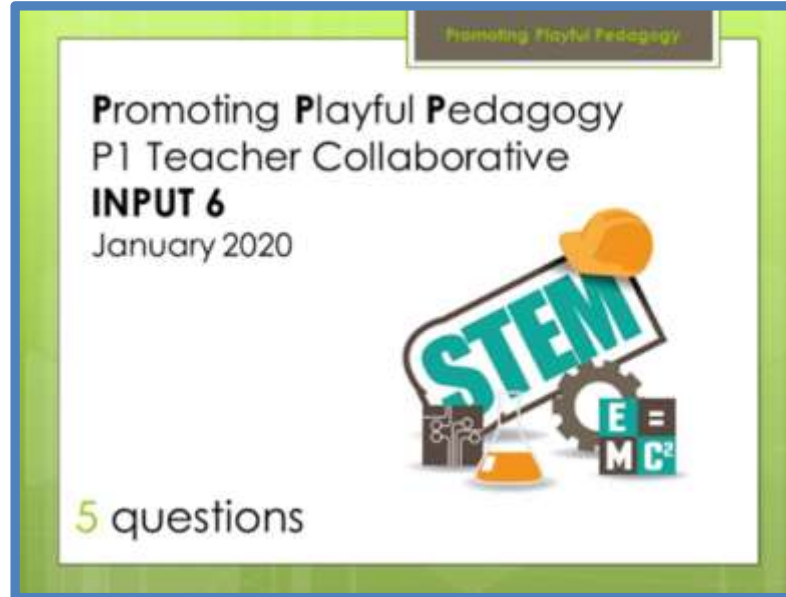
We have a good knowledge of our local context and are well supported by local businesses in our area. We gather data from our families about jobs and careers and use this to support the planning of our STEM learning. We sit on the Locality Network Group which ensures we have a sound knowledge of our locality, employment rates and the local labour market.





STEM curriculum and learner pathways

Transition

We meet regularly with our 3 feeder primary schools to carefully plan the pastoral transitions and transition in learning. Our Primary 1 colleagues visit us in Nursery throughout the year to see our STEM learning in action. Our Learning Pathways are shared with the primary schools and we have recently scheduled tracking meetings with Primary 1 colleagues to ensure the pace and challenge delivered in ELC is maintained and built upon in Primary 1. Joint STEM learning days with Cluster Primary are planned for . Our STEM ambassadors work across 4 locality schools to share skills and learning. Our staff lead and deliver professional learning in STEM for all Primary 1 colleagues across Fife through the Promoting Playful Pedagogy group. We plan opportunities for parents to visit our Cluster Primary Schools to allow them the opportunity to see what learning in STEM looks like as children progress through the Early Level.



We deliver professional learning to Primary 1 teachers from across Fife to support the transition from ELC into Primary 1. This ensures the skills our children develop and master whilst in the ELC are built upon and progressed in the Primary 1 classroom.



11.11.19 Transition Meeting – Sunflower FNC/Lochgelly West Primary School

Present – Stephanie (DHT Lochgelly West PS), Michelle (P1 teacher Lochgelly West PS), Alison (P1 Teacher Lochgelly West PS, Morag (HT Sunflower FNC), Mardie (PT Sunflower FNC)

Term 1

- Sunflower staff to visit P1 classes – regular visits, staff dialogue, individual conversations about key children
- Parent & child evaluation of transition
- School to share baseline assessments with nursery
- P1 Parent Information Session – Curriculum
- Tracking meeting – progression through the Early Level

Term 2

- Nursery to invite school management team to review meetings
- Nursery to liaise with management team re. ASN children
- Tracking meeting – progression through the Early Level

Term 3

- School staff to visit children in nursery, share PLJs with them
- Nursery to organise informal visits for key children/enhanced transition visits
- End T3 – Joint/Exchange Activity Day e.g. STEM and Outdoor Play
- Tracking meeting – progression through the Early Level

Term 4

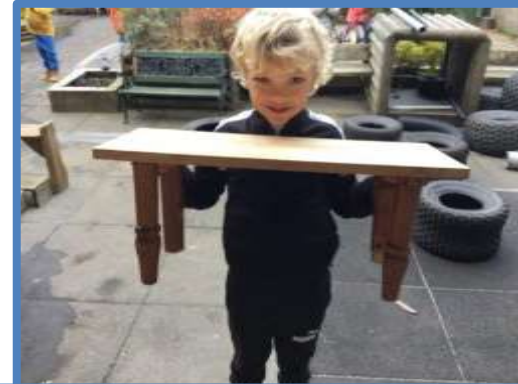
- School Transition Booklet to be sent out with acceptance letter
- Tracking meeting – progression through the Early Level
- 6 formal themed visits (Children take PLJs to school to share with staff)
- 29.4.19 – Stay & Play
- 6.5.19 – Stay & Play
- 13.5.19 – Literacy
- 20.5.19 – Numeracy
- 27.5.19 – STEM (with Buddies?)
- 10.6.19 – Potted Sports (with Buddies & parents)
- 3.6.19 – Parent/Child Drop In Session 4-6pm
- 17.6.19 – Transition Assembly, Parent Information Session – Logistics, Stay for lunch

Example of our transition programme for one of our Cluster primary schools. Transition takes place throughout the year. STEM is embedded throughout our Transition and is planned for in partnership with the Primary Schools. STEM focus days are also included.

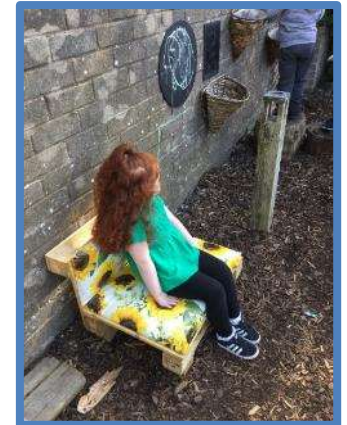
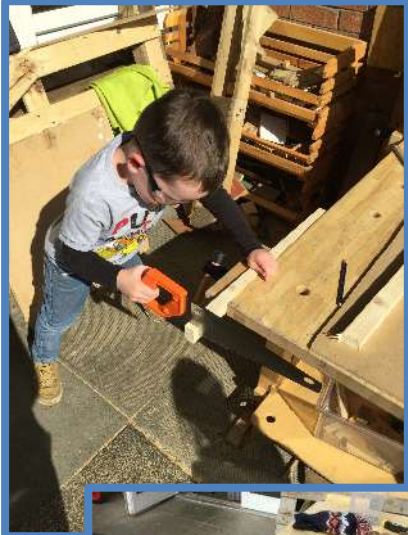
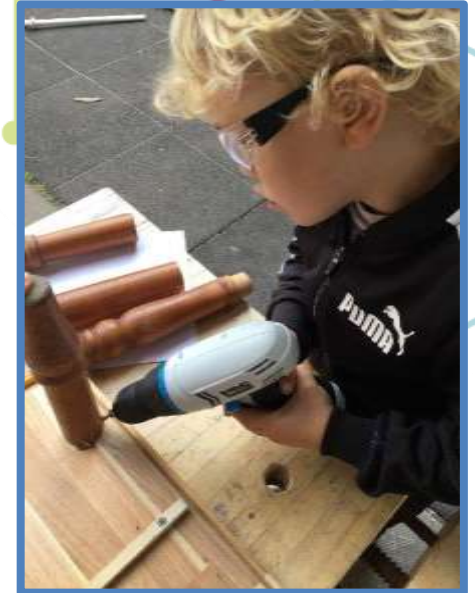


STEM curriculum and learner pathways

In Sunflower Family Nurture Centre our children are encouraged to design and make their own play resources. Examples include; a petrol pump, chair, outside stove, go-kart, puppet theatre. Staff follow the child's interests and skilfully support them to design and make what they need. Children are developing their STEM skills daily. Children and families are delighted with their ongoing achievements.



Evan was finding lunch times a little tricky. He decided to make a table for himself and his friend to sit at. Lunchtimes are now fun and much more sociable. STEM is supporting some of our most vulnerable learners to make excellent progress across the curriculum.





STEM curriculum and learner pathways

Curriculum, learning, teaching and assessment

Science, technology, engineering and Mathematics is embedded across the curriculum. STEM skills are developed daily through play and active learning. Experiences are challenging and motivate our learners. Children are excited about their STEM learning and achievements are celebrated. Our Wellbeing Sunflower links the Wellbeing indicators to our learning. Our children are fully involved in planning their learning. They contribute to our Daily Responsive Planning and are fully involved in their interactive Learning Walls. Personal Learning Journals detail progress for individual children in STEM – this is shared regularly with parents at Parent chats. Parents are fully involved in planning next steps for their children.

The progress of individual children in STEM is monitored through a robust system. This involves learning conversations between key workers and leadership team and termly monitoring of the tracking of individual children. Key workers are involved in discussions to ensure that all children are making progress and being challenged across the curriculum. The Career Education Early Level 'I Can' statements are embedded within our STEM curriculum.



Making wooden Christmas trees to sell at our Christmas Fayre



We were interested in finding out all about how our lungs work. We were amazed at what we found out.



Learning about position and direction using the Beebot



Collecting a pallet from a local business – we keep a stock so we are prepared and ready with resources to design and make our next project should an interest arise.



STEM curriculum and learner pathways

WATCH us take you on a tour to see all the resources we have made to support our learning



The children at Sunflower Family Nurture Centre learn Spanish through their play. To compliment this an enterprise project called Café de Flores was set up. The Café is open once or twice per term. The children plan and lead the Café project. They plan the menu, make the dishes and serve on the day. They carry out all job roles; welcoming customers, handling cash, serving, taking orders, preparing drinks. Our children develop their creativity and STEM skills through this project.



We develop STEM skills from the earliest stage within Sunflower FNC. Here you can see our 2 year old children designing and making their own Scarecrow.

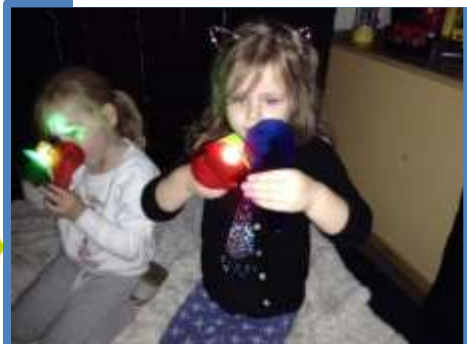




STEM curriculum and learner pathways



During role-play we used our fingers to make spectacles, Nicola (teacher) asked “how else we can we make glasses?” We discussed our thoughts and ideas, taking turns and contributing to the conversation. We used our I-pod to capture images of people in our nursery who wear glasses, we also thought about why we wear them. We used the internet to search for different types of spectacle designs then printed these off to create an inspiration board. We looked at and responded to the various designs, sharing our thoughts and feelings. Our inspiration board motivated us to draw designs for our own spectacles, we thought about shape, size colour and use. We looked for shapes in our environment to support our learning and used blocks and a whole variety of materials to help create our glasses. We thought about the lenses and about how the colours would be affected by the sunlight.





Equity and equality in STEM

WATCH us working together to achieve through STEM learning

As you can see from our video clip above, every individual within Sunflower is valued, treated with respect and their contributions and achievements celebrated. We treat children fairly and ensure equity and equality for all. Through daily conversations with parents and grandparents we educate them to challenge their gender stereotypes and address unconscious bias. This is possible as a result of strong, trusting relationships that staff hold with our families. The area of Lochgelly is an old mining town and historic beliefs of gender stereotypes still exist. We work hard to support families to understand the negative impact of this. There are high aspirations for all children and a belief that they, in the future, could do any job they choose to do. Developing the Young Workforce is central to our STEM learning.





Equity and equality in STEM



Staff at Sunflower Family Nurture Centre are absolutely committed to improving gender balance, equality, diversity and inclusion through STEM. The photos above show our staff developing their skills at a recent STEM INSET. All staff, regardless of gender, support children in experiences across the curriculum. An ongoing drive to develop our STEM capacity has a continued positive impact on staff relationships, enthusiasm and motivation. We learn together and support each other. As you can see from our photographs there is joy and laughter!



Equity and equality in STEM



IMPROVING
GENDER
BALANCE

“ A lesson on the science of make-up will encourage girls to take up STEM subjects”



IMPROVING
GENDER
BALANCE

“ Boys thrive in a competitive learning environment”



Our children at Sunflower Family Nurture Centre are shown here on Improving Gender Balance support materials.



Equity and equality in STEM



IMPROVING
GENDER
BALANCE &
EQUALITIES



Education
Scotland
Foghlam Alba

Improving Gender Balance: Participation & Self-efficacy A course for ELC, primary and secondary practitioners.

What

This course will use research and practitioner reflection to develop inclusive learning and teaching with a specific focus on addressing gender gaps in self-efficacy (belief about one's ability to perform specific tasks) and participation across all curricular areas.

When

The course is a blended learning course and will run from Jan – Dec 2020. The term 'blended' means it will be a mixture of online learning and collaboration with face-to-face components.

Module overview

- Module 1 – Skills and self-selection
- Module 2 – Whole class interactions
- Module 3 – Individual feedback

Last session staff from Sunflower Family Nurture Centre met with Heather Earnshaw to support the development of the above course. They spent a day in Edinburgh collaborating with professionals from across Scotland. This work is ensuring that our staff are keeping abreast of current research on gender equality and stereotyping in STEM.





Equity and equality in STEM



We ensure that our children are exposed to a wide range of jobs and careers and that they can see that these jobs are possible regardless of gender – here you can see a female Firefighter talking about her job with the children.

Sunflower Family Nurture Centre
Next Steps in Learning Consultations

by - Laura Winton

| Child Name | Term 2 Next Steps | Action Points | Term 3 Next Steps | Action Points | Term 4 Next Steps |
|------------|---|---|-------------------|---------------|--|
| Dean | <ul style="list-style-type: none"> Awareness of my rights Using words linking to events such as before, after Identify some letters that are important to me | <ul style="list-style-type: none"> Discussion during together time Play opportunities Stories lots of discussion, questions, comments Writing for a purpose (letters home) English letter letters | | | |
| Rutherford | <ul style="list-style-type: none"> Make choices to develop my learning Identify and match number to quantity up to ten Identify letters in my name | <ul style="list-style-type: none"> Give opportunities for choice Music / play Follow up videos Table top games, loose parts, chalk games Explore letters, sounds through | | | |
| Robertson | <ul style="list-style-type: none"> Describe the work that people do Recognise numbers in the environment Ask questions to develop learning | <ul style="list-style-type: none"> Books, songs, discussion Walks in the local environment Environmental walk table top games, outdoor play One to one, story time, discussion | | | |
| Campbell | <ul style="list-style-type: none"> I know that friendships are important Count & match groups of objects Take part in conversations | <ul style="list-style-type: none"> Share about friends, stories, songs, support with joining in games Table top games, sorting, counting, role-play Discussions, comments, games | | | <ul style="list-style-type: none"> Become play with Identify Draw |
| Smith | <ul style="list-style-type: none"> I know that friendships are important Awareness of number in the | <ul style="list-style-type: none"> Share about friends, stories, songs, support with joining in games opportunities for role play | | | |

We ensure all children are making very good progress and track learning

Sunflower Family Nurture Centre
Vision, Values and Aims

Vision
Together we dream, believe and achieve

Values
We will provide a responsive service based on
Honesty – Inclusion – Respect – Equality

Aims

- We aim to play an active role in nurturing our children and their families within a caring, safe, secure and happy environment.
- We aim to work together as a team to ensure the best possible outcomes for children and families.
- Through play, we aim to provide opportunities for all children to develop their skills for life and learning.









Our Vision, Values and Aims have been developed in consultation with our children, staff, parents and partners. These are real, are lived and are re-visited regularly.



Education
Scotland
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**STEM
Nation**

