

# FANTASTICAL FLYING MACHINES

A cross-curricular immersive mystery project.  
Staff-designed. Child-led. One week.

INVESTIGATE. COLLABORATE. DISCOVER

**IMAGINE...It's Monday morning...** Imagine the school gates have just opened...Imagine the children arriving to what they think will be a NORMAL day...  
Only it ISN'T



...because three FANTASTICAL FLYING MACHINES have crash-landed in the grounds...

**What** are they?  
**Who** do they belong to?  
**Why** are they there?

Fantastical Flying Machines was piloted (!) at Malden Parochial School (Feb 2018)

***“This has been the best week of my life” (Haaris – Y5)***

***“A fantastic idea to engage the kids and create excitement with the entire school community... Would love another mystery week. Thank you.”***

***“I had a great time looking around. The children have done such wonderful work. Thank you to all the teachers”***

***“Such a great idea. The children have come home very excited about what has been happening. Thank you”***

***“... Luke said that he found the experience ‘fun, exciting and different to natural school life.’ I think it’s good to work out of the box – it allows the children to be more imaginative and creative”***

***“Sarah...talked about it non-stop”***

***“[a highlight of my week has been] watching the more sceptical children believe the evidence and question their views - they were so sure it was a hoax on day 1”***

***“...opening the box was the highlight of my career! (I’ve never felt so much excitement and anticipation in a room!)”***

***“fantastic – the children have got more into it as week has progressed!***

***“[I’ve learnt the] importance of trusting children with their learning; stimulus inspired learning is the best; no control over planning for a week does work!”***

***“[I’ve learnt] how to be more fluid with teaching; seeing different children engage and take more prominent roles in the classroom”***

# A ROUGH GUIDE TO SETTING UP THE PROJECT IN YOUR SCHOOL

## BACK STORY

Three amateur flying-machine enthusiasts have taken part in a crazy whacky races-style flying contest. They ran into weather trouble and were forced to crash land in the school grounds. They have scarpered, unharmed, leaving behind their flying machines and a series of clues...

## LEAD UP

Prior to mystery week, all staff collaborates in small teams to design the machine bases (parachute, gliding wing and balloons were provided), the pilot characters, a series of clues (the pilots' belongings) and a lesson-plan sketch.

## THE EVENTS UNFOLD

On Monday morning, pupils and parents arrive at school. They want to know what has happened. The staff in the playground seem to have no idea.

In an emergency assembly with the whole school, staff and pupils are brought up to speed on the events to date: early that morning the caretaker discovered the machines, secured the sites and checked the school premises to make sure there's no-one there. Everything is safe. The Head is – right now – on the phone to the council arranging for someone to take them away at the end of the day. Seeing as this is such an unusual occurrence, the Deputy Head has decided that the children will be given the opportunity to investigate. For today at least, lessons will be abandoned.

Later that morning, classes have a chance to walk around the whole site and then each class is assigned a machine – 2 year groups per machine – to investigate, trying to work out who flew it, where they have come from and what might have happened.

The flying machine canopies (parachute etc.) are taken away by 'the council' on Monday evening but over the next few days more clues show up: a letter, for example, is found in a hedge, a diary – written in Italian – is discovered in a bag on the roof... The school community continues to investigate.

On Wednesday afternoon a journalist comes to interview all of the classes.

On Thursday afternoon a man who owns his own flying machine – a hot air balloon – arrives at the school. He has heard about the strange events on the grapevine and thought the children might be interested to learn about his experiences of flying.

On Friday, the children write a letter to their pilot. They all put their letters into an envelope at the end of the week for their teacher to post.

**SPECIFIC AIM:** the pilot project's key aim was to provide children with opportunities to write across the whole curriculum. The only task that all classes had to complete was to write a letter to their pilot at the end of the week – all other writing tasks were up to class teachers.

## **GUIDING PRINCIPLES**

**AMAZING:** we wanted to create a simple yet theatrical physical stimulus that would grip imaginations and provide the foundation for a whole week of work

**PLAUSABLE:** we decided that plausibility was important – particularly for the buy-in of the older children. Many people fly parachutes and gliders and some people go cluster ballooning. Google says so. Bingo.

**COLLABORATIVE, PLAYFUL:** we wanted the whole staff to be invested from the off and to take ownership project design so we tasked them with working in small teams to create the machines, characters and clues. As the week progressed we noticed how much a project like this opens the space for play across the whole school – teachers hiding clues for other classes to find, the drama of bringing classes together to open letters / boxes - ***note: if you have support staff / PPL cover / supply teachers – make sure they are involved too if possible / at least properly briefed***

**CHILD-LED:** we wanted the collaboration to extend to the whole school: while the staff provided the platform for learning, it was then over to the children to guide the week with their questions and ideas.

**OPEN-ENDED:** the back-story is a starting point for the staff. The investigation goes where the children take it. Two classes investigating the same machine can come up with different theories for what they think has happened – indeed there might be 30 different theories in a class. This project is a chance to negotiate ambiguity, to recognise that evidence can point in many different directions (rather than – say a murder mystery, where the goal is to come up with the correct solution).

**COMMUNAL:** we wanted to begin the week with a communal moment where the whole school came together (the Monday assembly). We also wanted a chance at the end of the week for parents to come in and see what their children had been up to (we sent out a parent note mid-week – doing it in advance would have blown our cover!)

# YOU WILL NEED

## A STEERING TEAM (IDEALLY 3 PEOPLE) WITH CLEAR RESPONSIBILITIES

- STAFF PROJECT MANAGER  
in charge of overall project plan, leading staff INSETS, articulating the lesson-planning process, ensuring communication / idea sharing across the staff
- LOGISTICS MANAGER  
in charge of sourcing all materials, making sure machines and clues are made to deadlines, co-ordinating the weekend get-in
- SLT MEMBER  
senior project sponsor

The steering team should have a weekly catch up – to check in on progress and next steps. They don't need to be long, they just need to happen.

## A DECENT LEAD TIME

- We'd recommend 6 weeks to get everything planned and the staff on board (we did it in 4 weeks but with hindsight it would have been helpful for staff to have had a little more time to absorb the idea and work on their machines)

## A MODEST BUDGET – suggested £350 - £400

This is not an expensive project – the idea is to work with materials the school already has for the lessons. Staff will source the machine bases from things they already own. Our basic budget was as follows:

£201.33 – for helium and 15 3 foot latex balloons <https://balloonhelium.co.uk>

£11.98 – for 12 additional 3 foot balloons from Amazon

£55 – parachute canopy (eBay)

£12 – postage for paragliding wing (wing donated free by paragliding repair firm)

£20.20 – cable ties, fishing wire and pegs for rigging machines

£14.99 – hazard tape to secure areas around machines

£48 – petrol costs for member of the British Balloon & Airship club who came to give a talk on the Thursday

# WEEK 1: PLANNING

## MEETING STEERING TEAM: PROJECT PLANING

- Discuss & clarify project aims: what is the specific focus? what do you want staff & pupils to get out of it? Be sure you're all on the same page!
- Discuss your guiding principles – again, they might be different to ours.
- How will you split the staff into teams – what is a good size?
- What is your timeframe? What are your deadlines? – create a shared doc project plan where you can keep a track of what's been done / is left to do
- Discuss logistics: where will the machines land? What are the implications for setting them up – i.e. will you need to go up ladders etc. will you need to do this on a weekend? Are there areas in the school where the children can't go?
- Identify key staff – who, along with yourselves, will champion the project?
- Create a project proposal for Head / SLT (see memory stick for ours)
- Book whole staff INSET / meetings outlined in this plan – **note the planning sessions in week 5: it's a good idea for the STAFF PROJECT MANAGER to be present at all of those – to ensure clarity of process & cross-pollenate ideas**
- Think about structure: how will you keep momentum over a week?
  - We recommend staggering clue-finding from Monday – Wednesday.  
Note: finding something just before the end of school is a good way to build suspense for the following day.
  - We also recommend you have at least one 'outsider' i.e. a local journalist coming in to interview all the classes (we did this on the Wednesday afternoon) – having someone come in from outside adds credibility and allows the children to digest and discuss their mid-week conclusions.
  - We also had arranged talk from a man with a hot air balloon for the entire school – he came in on Thursday with the back-story that he had heard about the landings and thought the kids might be interested in hearing about yet another type of flying machine.

## FINALISE BUDGET: LOGISTICS MANAGER

- Source flight materials – and put together a budget for the proposal. You don't need to buy everything yet but you'll need to know how much cash you need to ask for & when you need to order things by

## MEETING WITH HEAD TO PRESENT PROJECT PROPOSAL

- Present proposal Head is clear as to the purpose and benefits of the project
- Get sign off for budget, additional hands on deck, access to school on a weekend, ladders / rigging things – who will do this (caretaker)? **CHECK YOUR SCHOOL ALLOWS HELIUM BALLOONS ON SITE**
- If the project will change your lesson-planning process – get sign-off on this too / know when you want to get sign-off by

## END OF WEEK CHECK-IN: STEERING TEAM

- Wrap up on actions to date & confirm actions for following week

# WEEK 2: LAUNCH

## **MEETING – SOFT LAUNCH – KEY STAFF**

- We introduced the project concept to staff in 2 stages – letting Alec (the English lead) in on the secret before anyone else. This means you already have some people bought in before you launch the project. Swear them to secrecy. Secrecy is fun.

## **MEETING – STEERING TEAM: DESIGN STAFF INSET**

Your inset should:

- Introduce the project (concept / aims / benefits)
- Outline who's in which staff team (we used phase teams – i.e. year 1&2; 3&4...etc.)
- Outline which team will work with which flying device – it's useful to have some pictures so they can imagine what their machine will be attached to
- Guide staff teams to come up with a character name, country of origin, occupation, a bag of clues and brainstorm ideas for the base of their machine – something they already own (we had a bike, a swing seat and a car-roof top box): see last page for a SAMPLE CHARACTER
- Confirm next steps: staff teams have **2 weeks** to create machines and source clues – some of which will be on/in the machines, some of which will be 'found' in the grounds
- Stress that plausibility / detail is important - the machines need to look good, the clues need to be well-thought out

## **WHOLE STAFF: PROJECT LAUNCH INSET (1-2 hours)**

- use structure above + space for questions
- make sure staff are clear on next steps and timeframes

## **END OF WEEK CHECK-IN: STEERING TEAM**

- Wrap up on actions to date & confirm actions for following week

## WEEK 3: BUILD MACHINES

### **MONDAY STAFF BRIEFING**

- Check-in – all staff teams to briefly present their characters, machines and clues - this gives them a chance to say it out loud & keeps it present
- Remind them that they are due to have their machines assembled by the end of the following week

### **END OF WEEK TOUCH BASE WITH STAFF TEAMS**

- You can do this informally – just make sure you're chivvyng people to get their machines designed and clues sorted so they don't leave everything until the last minute. It's really important that they know what machines and clues they are working with before they start planning lessons – because these are what they will use to plan them!

### **END OF WEEK CHECK-IN: STEERING TEAM**

- Wrap up on actions to date & confirm actions for following week
- Make sure you've ordered / purchased everything you need to by this point



# WEEK 4: BUILD MACHINES

## **MONDAY BRIEFING**

- Remind everyone the machine assembly deadline is the end of the week
- Tell them where to leave the machines and clues & remind them to keep them secret from the kids – i.e. if you're bringing stuff in, do it stealthily!
- If you're going to need volunteers to come in at the weekend before the project goes live, ask now!

## **MEETING: STEERING TEAM**

- Clarify lesson-planning process - will this be different to normal? We used a blank timetable and sketched out possibilities for lessons based on the clues – plans were kept deliberately loose so we could genuinely respond to the directions the children wanted to go in
- Clarify whether there are any requirements in line with the project's specific aim i.e. 5 pieces of writing across different curriculum areas; 1 piece of design etc.
- Decide the project constants: i.e. everyone will write in a log book for the week
- Nail down the outline of the week – we recommend structuring Monday quite heavily beginning with an assembly, a walk around, a lot of discussion, observation, sketching etc. and at some point during the day, the spontaneous creation of an EVIDENCE BOARD / AREA
- Decide how you will steer the different classes to investigate a specific machine – does this happen in assembly / is this decided after lunch because over lunch it's been decided that it would be best for classes to focus on finding out what has happened with x

## **DEADLINE for machines to be assembled**

## **END OF WEEK CHECK-IN: STEERING TEAM**

- Wrap up on actions to date & confirm actions for following week

# WEEK 5: LESSON PLANNING

## LESSON PLANNING SESSIONS: ALL STAFF

STAFF PROJECT MANAGER shares decisions from the week 4 STEERING GROUP MEETING

- Bring the week to life by outlining its rough shape / key events – i.e. Monday morning assembly. Journalist on Weds...etc.
- Remind staff of set activities scheduled for the week that they might have forgotten (we had external gym & swimming lessons / Ash Wednesday etc.)
- Outline the planning process – i.e. everyone to loose plan with spider diagrams and then rough out a timetable
- Outline expectations (i.e. how many pieces of writing) & specific task – i.e. writing task – if there is one – and suggest they find a time on Monday to create an EVIDENCE BOARD
- Help staff to brainstorm lessons / areas for investigation based on the clues – be ready to share ideas from other sessions (**Note:** Andy decided to – before the site walk-around – have the kids draw what they remembered seeing when first arrived school. Later he facilitated a discussion around the difference between drawing from memory and drawing from observation – a couple of the other teachers loved this idea and also decided to use it)
- Explain that staff need to drip-feed clues to maintain momentum: help staff to think about when they might want different clues to appear (for example our Y4 teacher Michelle hid a letter in the bushes –they found it at the end of Tuesday and went home super-excited to get in on Wednesday and open it. On Wednesday morning, they invited the year 3s along to join in.)
- Encourage staff to share their concerns / excitement – it's really important to open the space for this, the last thing you want is people feeling stressed out and uncomfortable – for us it really helped us to have some teachers who were more confident with the idea of fluid lesson planning / child-led learning reassure those who were nervous.

## END OF WEEK CHECK-IN: STEERING TEAM

Wrap up on actions to date & confirm actions for following week

# WEEK 6: FINISHING TOUCHES

## **STEERING TEAM: PLAN MONDAY'S ASSEMBLY**

- Who will come (ideally all staff, all pupils)
- What will be said & by whom (we found it really useful to pretend that the Head shouldn't know lessons were being abandoned – also for some of the staff to pipe up and be annoyed because they'd 'spent ages planning that weekend')

## **WHOLE STAFF: FINAL BRIEFING MEETING**

- Recap structure of week
- Give staff teams 10 mins or so together to recap on their characters / lesson plans / clue distribution strategy
- Have an open discussion as to how staff might handle challenges from pupils & questions from parents
- Remind everyone to embrace accidents – sometimes this is where the best learning lies!
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# THE WEEKEND

- Give yourselves the whole day to rig, you can always go home early if you finish early
- Be clever about timings – our school was on the road to the local church so we made sure we were out of sight when people were heading to and fro on the Sunday.

***Note – tie everything super-securely and fence sites off with hazard tape. It looks official and means no-one will get too close. If you're using helium balloons don't leave them outside overnight – they shrink. Inflate them and get in early to put them out***

# GOOD LUCK!

# SAMPLE CHARACTER

## PILOT: FRIDA AMSENGA

From the Netherlands

An astronomer (or at least has a great love for the stars)

Bilingual

## MACHINE: PARABIKE

A parachute with lines attached to a road bike

The road bike is covered in ribbons in the colours of the Dutch flag

On the back of the bike there is a basket with the initials FA threaded in ribbon through the wicker.

Inside the basket there is a pillow, some lunch, an espresso cup with a windmill painted on it, a book (in Dutch)

On the front of the bike, a bunch of tulips in a chicken wire vase

## ADDITIONAL CLUES

An astrological map

A letter to a friend

A tiny photograph of Amelia Earhart

