

Welcome to the January newsletter for STEM Ambassadors and a belated Happy New Year to you. The first three weeks of 2010 have got off to a flying start with lots of Ambassadors busy in schools. The 3 careers events held in the last couple of weeks went very well so thank you to the Ambassadors who volunteered for these. We always welcome your feedback after helping out at events so please send us an email or give us a call to tell us of your experience. We have more requests for careers events for February and March so please look out for them in the requests section overleaf. This term is prime time for careers events since pupils are choosing their subjects for standard and higher grades.

A warm welcome also to new Construction Ambassadors who recently became STEM Ambassadors – remember that any activities you undertake as Construction Ambassadors also count as STEM Ambassador activities!

We are heading for the end of the STEMMNET year on 31st March so please ensure that ANY activity you have undertaken **in the last 12 months, or are planning to do in the next 6 months**, is entered into the STEMMNET database (or email us with details). There are a number of Ambassadors with no activity recorded in the database and I am sure some of you are doing activities that have not been recorded! It does not have to be organised by us at Science Connects, any STEM related activity is useful to know about so we can gauge the success of the Ambassador programme and its impact in schools.

Annual Celebration Event for Ambassadors and Teachers

We are pleased to inform you that Science Connects and Global Science (the STEMPPOINT in the East of Scotland) are once again organising a Celebration Event for Ambassadors and Teachers. It will be held in the Glasgow Science Centre on **Tuesday 30th March**, from 5-7:30pm. This annual event is a great opportunity to meet other Ambassadors, talk to teachers, meet STEM Providers who offer programmes to schools and have a chance to try out some of the activities that are used in schools and need Ambassadors for. There will also be presentations from a teacher on his experience of using Ambassadors and the Communications Manager from INEOS in Grangemouth which is a huge supporter of the programme and enrolls many staff as Ambassadors.

Invitations will be sent out shortly but please put this date in your diary. Places will be limited so if you wish to guarantee a place now, please contact Alan Kerr at a.kerr@physics.gla.ac.uk

This event has been very successful over the last 4 years and it is a great opportunity to meet other Ambassadors and find out what you can get involved in.



REQUESTS for HELP

The following requests have been made by schools and organisations. **If you can help please email us at ambassadors@physics.gla.ac.uk or phone on 0141 330 6396** and we can liaise with the appropriate school on your behalf.

| SCHOOL / EVENT | DATE | REQUEST |
|---|--|--|
| Gourock Primary School | As soon as possible | Help with new Young Engineers and Science Club |
| Douglas Academy, Milngavie | January | Talks on modern chemical techniques |
| Craighead Primary, Milton of Campsie | Anytime this term | Help with KNEX Challenge |
| Killermont Primary, Bearsden | Anytime this term | P2 Activities relating to the 5 senses P6 KNEX Challenge |
| Gateside Primary, Beith | Anytime this term | Help with P1/2 "in the Kitchen" topic to cover Forces. |
| Burnside Primary, Rutherglen | Anytime this term | Any help on Rainforests and the environment topic |
| Lochend Community High School, Glasgow | Anytime this term | Help with Advanced Higher Physics Investigations |
| Bonhill Primary, West Dunbartonshire | Anytime this term | Help with P5, P6 and P7 topics (see in detail section) |
| Christie Park Primary, Alexandria | Tuesdays 3-4pm starting 26 January | Help with Young Engineers and Science Club Also any help with KNEX required |
| Govan Reshuffle, Pearce Institute | Sat 6 th Feb 12:00-5:00pm | Community event – looking for Ambassadors to help with hands-on activities |
| Calderside Academy, East Kilbride | Anytime in Feb | Careers talks to S2 pupils on Physics and Engineering |
| Notre Dame High, Glasgow | 10 th Feb morning | Careers Events for S2 pupils |
| Shawlands Academy, Glasgow | 10 th Feb, Evening | Careers event for S2 pupils and parents |
| Kingspark Secondary, Glasgow | 11 th or 18 th Feb | Junior Café Sci speaker required. Either topic : "Drugs, Should substances less harmful than alcohol remain illegal" or "Do men and women think differently" |
| St Peter the Apostle High School, Clydebank | 17 th or 18 th Feb | Help with KNEX Challenge during their science week |
| Clober Primary, Milngavie | Feb/Mar | Help with many class topics, see in detail section |
| Bannerman High School, Glasgow | Thursday afternoons, starting 25 Feb | Looking for help with new S1 after school science club. Biology teacher is leading the club. |
| Turnbull High School, Bishopbriggs | 25 th Feb | Help with Business Dynamics event involving communication skills and problem solving |

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| Lenzie Academy | 2 nd March | Ambassadors required for S2 careers event, "Speed networking" style of event. Also require a motivational speaker for talk to whole S2 assembly. |
| Bishopbriggs Academy | 5 th March | Help with Business Dynamics event involving communication skills and problem solving |
| Knightswood Primary, Glasgow | 19 th March (morning) | Looking for 2 or 3 Ambassadors to help with P6 KNEX Classroom workshop and Challenge |
| Kersland School, Paisley | 31 st March | Help with IOP Lab in a Lorry |
| Glasgow area | March | Helpers needed for drama show - Zombie Science/Time-Tastical Time Tale |
| Killermont Primary, Bearsden | Anytime in Term 4, April-June | P6-7 Help with activities relating to Earth in Space. |
| Gleniffer High School, Paisley | 28 th April | Careers event for S3 pupils |
| Hutcheson's Grammar School, Glasgow | May | Looking for advice/inspiration for a Biology/Maths Day from anyone who has worked with bees. |
| Kirkintilloch High School | 2 nd or 3 rd June | Help with Business Dynamics event involving communication skills and problem solving |
| CREST Awards Final, Dundee | 7 th June | Engineering / Technology Judges required for CREST Final |
| Lenzie Academy | 10 th or 11 th June | Help with Business Dynamics event involving communication skills and problem solving |
| Boclair Academy | 15 th June | Help with Business Dynamics event involving communication skills and problem solving |

Gourock Primary, Inverclyde

Gourock Primary started a new Young Engineers and Science Club last term and is still looking for any help at all that an Ambassador can give.

If you would like to help, even once a month, please get in touch with us.



Douglas Academy, Milngavie

The Chemistry Dept at Douglas Academy would like to request an Ambassador to talk to the Advanced Higher students about modern chemical techniques in chemistry that are part of their Unit 3 AH course. The modern chemical techniques that are discussed are spectroscopy, NMR, X-ray diffraction. If you can help out please get in touch with us.

KNEX Challenge 2010

The KNEX Challenge has kicked off again for 2010 and application forms went out to schools in December. We are already receiving requests from schools for Ambassadors to help. Help can be in the form of running a classroom workshop or judging a challenge. Classroom worksheets are available on our website at <http://www.scienceconnects.org.uk/knex.htm> so please have a look and find out how easy it is to be involved.



Currently the schools looking for help are:

- Craighead Primary, Milton of Campsie
- Christie Park Primary, Alexandria
- Killermont Primary, Bearsden
- St Peter the Apostle High School, Clydebank (as part of their science week)
- Knightswood Primary, Glasgow
- Inverclyde Area Final Judging – 11th May (Enterprise Centre in Port Glasgow)

If you would like to help any of the above schools, or help your local school, please get in touch with us.

Gateside Primary, Beith

Gateside Primary in Beith has not used STEM Ambassadors before and we received this request via the Ayrshire Chamber of Commerce which is keen to link schools with industry/academia in Ayrshire. The P1/2 class is covering the topic of “In the Kitchen” this term and would like to include some work on Forces within this topic. Time to get your thinking cap on and see how you can link the two!

If you would like to help this school out please let us know and we will put you in touch.

Burnside Primary, Rutherglen

Burnside Primary P6 class is covering Rainforests and the Environment this term and would appreciate any help concerning this topic. If you can provide any assistance, be it a talk or a hands on activity, please let us know.

Lochend Community High School, Glasgow

Lochend Community High School has 5 pupils who are doing Adv.Higher Physics, which is more than they have had before taking this course. The Science dept is struggling for resource to help the pupils with their investigations and would appreciate help with this. We have one Ambassador who is hoping to help but he does not have a lot of time since he is currently helping other schools with their investigations.

If you are able to offer any assistance it would be appreciated greatly by the school. Please get in touch with us and we will pass your details on.

Bonhill Primary, Alexandria

Bonhill Primary is looking for help in class or after school clubs with any of the following topics:

P5 Topics Electricity
Energy Changes

P7 Topics Materials from Earth
Forms of Energy (Light &
Sound)
Energy Conversion
Energy Resources
Pollution

P6 Topics Materials from earth
Burning Materials/Evaporation &
Filtration/Burning Fossil Fuels
Streamlining
Flowering Plant Reproduction
Habitats
Improving our Environment

If you would like to help this school out please let us know and we will put you in touch.

Christie Park Primary, Alexandria – Young Engineers and Science Club

Christie Park Primary plan to start up their Young Engineers and Science Club again after a successful stint last year. The teacher would like to run the club after school on a Tuesday, from 3pm-4pm, starting on 26th January for 4 to 6 weeks. She would love to have the assistance of a STEM Ambassador to come along and help her at the club.



The club is interested in taking part in next year's National Science and Engineering Week (12-21 March 2010), of which the theme is "Earth" and will be working on projects related to this during the 6 weeks. Please contact us if you would like to become involved in the club and help out.

Govan Reshuffle, Pearce Institute



RESHUFFLE is a "hands on" event held at the Pearce Institute in Govan every year for the last 4. This year it is on 6th February - 12:00 - 5:00pm. In the words of the organisers, City Strolls, "Basically it is an event to start the year on a positive note, get some people into a community centre and have them leave thinking they have seen some stuff that could be of interest to them!" They want visitors to taste what people are up to, or what groups are up to in the community that is accessible to them. The Reshuffle has no budget and relies on volunteers helping out.

The Glasgow University Science Festival is providing workshops at the event: KNEX, the Daleks and many other things. They would welcome more volunteers to help with these workshops.

For more info visit <http://www.citystrolls.com/reshuffle10/>
If you would like to help out please contact us as soon as possible.

Calderside Academy, East Kilbride

Calderside Academy is looking for careers talks on engineering or physics to S2 pupils before

they choose their subjects. This can take any form, whether talking about your career and the path you choose, your industry in general or specific guidance in getting into careers eg university/apprenticeships etc.

A Tuesday, 1:40 – 3:30pm, is preferable due to their timetable but will be flexible to suit Ambassador.

Notre Dame High School, Glasgow

Notre Dame High is organising a careers events for S2 pupils on 10th February from 9:15am to 12:30pm and would like Ambassadors from a range of sectors to attend to allow pupils to gain an insight into areas of work they may not be familiar with. The school has pupils who are keen to continue their interest in science into all aspects of careers. There are also some pupils who have an interest in movie making and animation so if that is something you are involved with please volunteer!

The conference involves 150 S2 pupils who are in the process of making their subject choices whilst considering future career options. They will ask questions in a group setting and generally want to find out more about what to expect in the world of work. There will be groups of around 10 or 12 pupils who will speak to each of the guests for 10 minutes. Ambassador will speak to 6 or 7 groups throughout the morning.

If you are able to help please get in touch with us as soon as possible.

Shawlands Academy, Glasgow

Shawlands Academy is hosting a careers evening on 10th February where a number of companies, employers, colleges, universities and training providers set up a stall with leaflets, pamphlets, course booklets etc to inform pupils and parents of what they do. The event will start at 6:45pm for set up, 7pm start with year group (either S2 or S4,5 and 6) and then at 8pm there will be a change over of year groups. The evening will finish around 9pm

This is a repeat of their successful event held last year where some companies such as the M74 Project brought along graduates for the pupils to talk to, plans of their developments for the M74 and posters. EKGTA brought along Modern Apprenticeships who were maybe only a few years out of school. Some organisations brought along application forms for pupils to look at as this gives them a better idea of what companies are looking for.

If you are interested in promoting your industry/company/education establishment at this event please let us know as soon as possible.

Kingspark Secondary, Glasgow

Last term Kingspark Secondary ran their first Junior Café Scientifique event. One of our Ambassadors gave a talk and both pupils and Ambassadors thoroughly enjoyed it.



The school now wishes to run their second event and is looking for an Ambassador to give a talk on either of the following two topics: either "Drugs: Should substances less harmful than alcohol (LSD, ecstasy and cannabis) remain illegal?" or "Do men and women think differently?"

In terms of dates, they are looking at 11th or 18th of February but most Thursdays after school are fine if these dates do not suit the Ambassador.

The Junior Café Scientifique is very informal and if you are interested in knowing more about how the event ran in December, we can put you in touch with the Ambassador who did this talk for more information.

If you would like to volunteer please let us know as soon as possible.

St Peter the Apostle High School, Clydebank

St Peter the Apostle High school is a new school this year, merged from St Columba's and St Andrews in Clydebank. They are holding a science fair during the third week in February for the whole school. One of the activities that will be run is a KNEX Challenge and they would appreciate the services of an Ambassador to help judge this challenge. Dates will be flexible between 15th and 18th Feb to suit Ambassador.

If you are able to help please let us know.

Clober Primary, Milngavie

Clober Primary is very interested in the Ambassador Programme and has had a very successful visit from an Ambassador last term.

This term they would like Ambassadors to provide talks or workshops on the following topics :

P1 - Understanding Earth and Space - Planets

P2 - Understanding Earth and Space - Stars and Constellations

P4 - Gases, Solids and Liquids

P5 - Solar System - Earth, Sun and Planets. Dealing with temperature, position and atmosphere.

P6 - Understanding Energy - Electrical and Sound

P7 - Understanding Energy - Gravity and Weight

If you can help with any of the above topics please let us know.

Bannerman High School, Glasgow

Bannerman High has a probationary Biology teacher who is starting an S1 Science Club on 25 Feb, running on Thursdays from 3.10 to 4.10pm. This provides an excellent opportunity for an ambassador to offer ideas both within and outwith the S1 curriculum. The teacher would invite the ambassador to an initial meeting in advance of starting the club.

If you are able to help the science club, even on a fortnightly or adhoc basis, it would be a great help to the school.

Business Dynamics Events inc. Turnbull High School, Bishopbriggs

Business Dynamics will be running a Core Skills event at Turnbull High's (Bishopbriggs) on 25th February. There are two sessions, one morning and one afternoon so you can volunteer to do one or both sessions. This is an S3 event where Business Dynamics provide the activity – the ambassador has no preparation to do.

The Core skills all interlink (Working with Others, Communication Skills and Problem Solving) so it doesn't really matter which activity is given to which Ambassador.

Business Dynamics will also be running **similar events** at:

- Bishopbriggs Academy 5th March
- Kirkintilloch High 2nd or 3rd June
- Lenzie Academy 10th or 11th June
- Boclair Academy Bearsden 15th June

If you are able to help out with any of the events please let us know.

Lenzie Academy, East Dunbartonshire

Lenzie Academy is hosting their annual UKANDOIT2 conference for 240 S2 pupils on 2nd March, from 1-3:30pm (including lunch). They are looking for Ambassadors to work with groups of 10 pupils at a time (then rotating round different groups) so that pupils can ask Ambassadors questions on their jobs/career path etc. Any science related career would be of use and interest to the pupils.

Lenzie would also like a **motivational presentation** from an Ambassador to the whole year group to enthuse them in a career in a STEM related field. This may not be every Ambassador's "forte" but if you would like to give a 20-30 minute presentation to the S2 year group to enthuse them in a career in a science related field please let us know asap and we can put you in touch with the teacher.

Knightswood Primary, Glasgow

Knightswood Primary school in Glasgow is currently organising a science week within the school starting 15th March. As part of this science week they are holding a KNEX Challenge for the two P6 classes on the morning of Friday 19th March. They are looking for a couple of ambassadors (or 3 if possible!) to hold a classroom workshop and then a mini challenge for the pupils. This would be done twice to cover the two classes.

If you need guidance in how to hold a KNEX Classroom Challenge please let us know and we can talk you through what is required.

Lab in a Lorry

The Institute of Physics Lab in a Lorry is touring the country in the next few months! All the Scottish dates are included below in case you fancy doing a tour of the country with the Lorry – some of Ambassadors have done so in the past and had a fantastic time.

Lab in a Lorry is an interactive mobile laboratory which gives young people (11-14 year olds) the opportunity to explore science through open-ended experiments. Volunteers guide the students through the experiments (oil and viscous liquids, sound and resonance, light scattering and colours, climate change and energy sources, optoelectronics) and makes sure everyone gets to be involved through hands on experience.



You are asked to oversee an experiment for a day. On the morning of an event, you receive

training on the Lab and the organiser will send you all the background material in advance.

Venues and dates of the next visits are:

| Scottish Government sponsored Highlands Tour | | |
|--|--|--|
| Fort William | Feb 9/10/11 | Ardnamurchan, Lochaber, Kinlochleven high schools. |
| Sutherland | Feb 22/23 | Golspie High School, Sutherland |
| | Feb 24/25 | Dornoch Academy, Sutherland |
| Caithness | March 1/2 | Wick High School, Caithness |
| | March 3/4 | Thurso High School, Caithness |
| | March 5* | Farr High School, Caithness |
| Highland | March 9/10 | Kingussie High School |
| Isle of Lewis zone | March 16 | Shawbost School, Isle of Lewis. |
| | March 17 | Lionel School, Ness, Isle of Lewis. |
| | March 18/19 | Isle of Lewis Science Festival, Stornoway. |
| North West Coast | March 22 | Ullapool High School |
| | March 23 | Kinlochbervie High School |
| | March 24 | Gairloch High School |
| | March 25 | Plockton High School |
| | | |
| March 31 | Kersland School, Paisley | |
| April 12-17 | Edinburgh Science Festival. | |
| May | Week of 24th - Oban High School and Tobermory High School, Isle of Mull. | |

If you would like to volunteer for any local schools, or for one of the tours please let us know.

Zombie Science/Time-Tastical Time Tale

One of our STEM Ambassadors runs science shows and outreach activities both in schools and at public events. He is looking for helpers to take part in drama style science communication shows to be held in March, at a venue in Glasgow. Full training will be given before the shows.

If you are interested in being involved in this VERY fun activity, let us know!

Killermont Primary

Killermont Primary in Bearsden is looking for a couple of Ambassadors to help out. One for this term (Jan-March) to work with their P2 class on the topic of the 5 senses. If you can do any sort of activity or talk relating to these eg sound experiments, it would be a great boost to the class.

The P6-7 class will be covering Earth in Space in term 4 (April-June) so any activities or talks relating to this will be appreciated.

Gleniffer High School, Paisley

Gleniffer High is holding their annual Careers Event (Skills for Work) for S3 pupils from 8.30am to 12.30pm on 28th April 2010. Ambassadors will work small groups of pupils talking about the skills involved in their career and then help to lead pupils through 3 fun activities. The onus is on the pupils to be creative. Lunch is provided! If you would like to volunteer please let us know.

Other information of interest to Ambassadors...

CREST AWARDS Finals

CREST is Britain's largest national award scheme for project work in the STEM subjects. It gives young people aged 11-19 opportunities to explore real world projects in an exciting way. CREST Awards are extremely flexible – they can link into work experience placements, after-schools clubs or several linked schemes. Some projects might be done in one day – others over several months. Students can investigate or design and make, research a subject, or design a science communication project.



The CREST Awards Final will be held on Monday 7th June 2010 in the University of Abertay, Dundee. The final will be incorporated in to the Big Bang Scotland Fair. If you have been working with a school towards a CREST Award, please let your school and teachers know of the event and if they wish to nominate any of their pupils and projects to attend, please ask them to

Techfest-Setpoint who organise the Crest Finals are also looking for judges, particularly engineering/technology bias, for this event. Please let us know if you are interested in attending.

British Science Association Media Fellowships 2010

Application is now open for the 2010 Media Fellowships. The Fellowships are a great way for scientists and engineers to see how science becomes news and come away better equipped to communicate their research to colleagues and the public. Experience first hand how science is reported by spending 3-8 weeks with a national press, broadcast or internet journalist on a summer placement, working with them to produce accurate, well informed news pieces about developments in science.



You are eligible to apply for the scheme if you: are a scientist, clinician, social scientist or engineer, have a minimum of 2 years postgraduate experience in your field, are a resident of the UK

For details about the scheme, including an online application form, visit <http://www.britishsocietyassociation.org/mediafellows>. Application deadline: 2 March 2010

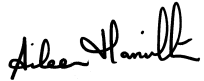
Induction Training

If you have not already undertaken your induction training, the next session will be run on **Tuesday 23rd February at 3:00pm** in the University of Glasgow. If you would like to register for this induction please email or call us and we will reserve a place for you. The training will last around 2 hours and will enable you to complete your disclosure form also. The next training after this will be Tuesday 16th March 2009 at 3pm.

If you have many employees at your place of work who are interested in becoming Ambassadors we can organise for induction training to be delivered on-site. We require a minimum of 10 people for this training however. Please get in touch if you are interested in discussing this.

Thank you once again for all your efforts and please take a good look at the requests on offer and see where you can help out. Please remember to record your activity at www.stemnet.org.uk!!

Regards



Science Connects Operations Manager