London Schools Excellence Fund

Self-Evaluation Toolkit

Final report

1. Contact Details

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2. Evaluation Final Report Template

Introduction

The London Schools Excellence Fund (LSEF) is based on the hypothesis that investing in teaching, subject knowledge and subject-specific teaching methods and pedagogy will lead to improved outcomes for pupils in terms of attainment, subject participation and aspiration. The GLA is supporting London schools to continue to be the best in the country, with the best teachers and securing the best results for young Londoners. The evaluation will gather information on the impact of the Fund on teachers, students and the wider system.

This report is designed for you to demonstrate the impact of your project on teachers, pupils and the wider school system and reflect on lessons learnt. It allows you to highlight the strengths and weaknesses of your project methodology and could be used to secure future funding to sustain the project from other sources. All final reports will feed into the programme wide meta-evaluation of the LSEF being undertaken by SQW. Please read in conjunction with Project Oracle's **'Guidance to completing the Evaluation Final Report'**.

Project Oracle: Level 2
Report Submission Deadline: Round 1 and Round 2 - 30 September 2015
Report Submission: Final Report to the GLA

Project Name: **London Geography Alliance**
Lead Delivery Organisation: UCL Institute of Education
London Schools Excellence Fund Reference: LSEFR1239
Author of the Self-Evaluation: D Hawley, A Standish, T Willy.
Total LSEF grant funding for project: (£136,440, plus £19,614)
Total Lifetime cost of the project (inc. match funding): **£156,054**
Actual Project Start Date: January 2014
Actual Project End Date: December 31st 2015

1. Executive Summary

This is the final report on the London Geography Alliance project.
It contains a description of the project, the underpinning theory of change of the project, outlining assumptions, the activities, anticipated outcomes and long-term goals.
The bulk of the report is an evaluation of the project, including sections on the limitations to the course methodology, remarks on course participation and a description of outcomes data (teachers, pupils and the wider impact) gathered in the early and final stages of the project, together with remarks on how teachers made use of the project. There is also a section reflecting on the outcomes and project delivery. The final section provides conclusions and suggested ways forward**.**

Quantitiative and qualitiative methods were used to gather data on the outcomes of the project. Two paper questionnaires, asked participants for background (qualifications and experience), their perceptions of needs on joining the course and the support provided by the course, a self-assessment of their confidence to teach different aspects of geography and a self-efficacy survey of perceptions of self-effectiveness in the use of pedagogic strategies and relationships with pupils in the classroom. The post-course questionnaire included a series of open response questions on their views of the impact of the course. Data was also gathered via visits to schools for semi-structured interviews with participants and other teachers, focus group discussions with pupils and observation of pupils' work.

The key findings indicate the profile of geography as a subject has been raised in the schools participating in the LGA course. Teachers have benefitted from interaction with university 'experts' and have gained confidence in their subject knowledge and ability to teach geography. Pupils show a greater interest in geography and have developed a greater capacity to use technical terminology to articulate geographical dimensions when discussing topics and events. Teachers have benefitted from interacting with colleagues from different schools. The knowledge and ideas accrued from the course by participants have been shard with colleagues which has influenced teaching and classroom practice. Overall, the LGA course has been of positive benefit to teacher participants, pupils and colleagues in their schools. The subject-specific knowledge-led approach to training adopted by the LGA project is an effective model of professional development for teachers.

2. Project Description

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The London Geography Alliance (LSGA) consisting of teachers, Institute of Education (IOE) geography faculty, HEI geography faculty, and other education experts will work together as a diverse, specialist community of practice to improve primary and secondary teachers' subject knowledge and pedagogy. This will build on and strengthen existing partnerships between the IOE and schools in London. Tessa Willy leads the primary group, Dr Alex Standish the secondary. Professor David Lambert is acting as a consultant across the whole project. Dr Simon Carr/Dr Stephen Thomas (Queen Mary University), Professor Nick Clifford/Professor David Green (King's College) and Dr Jan Axmacher (UCL) have all been making a strong contribution to the initial development of the LGA.

The project commenced with six primary and six secondary schools that have a proven track record of excellent geography teaching. In combination with geography specialists and education experts, this cohort developed a model of knowledge-led curriculum planning, informed by contemporary geographical ideas and theories.

In the summer 2014, this model of curriculum development was expanded to thirteen primary and nineteen secondary schools across London, such that they could prepare for teaching the new national curriculum in September. During the second phase we took on eight more schools than we had planned for and hence applied for additional project funding from the GLA. Teachers have participated in half-day workshops, held at the IOE/university partners and led by geography and education specialists, as well as a three-day residential fieldtrip to the Lake District in July. The content of workshops has been planned in conjunction with teachers and addresses aspects of the curriculum they identified as weaknesses in the baseline assessment, such that they are better prepared for teaching the revised national curriculum and revised GCSE specifications. Teachers are creating, teaching and evaluating their own curricular materials, reaching an estimated 4,800 pupils.

Through networking with partner schools, IOE student teachers and a new LGA website is in the process of construction, with a view to disseminating new knowledge-led curricular resources, materials and teaching methods in geography education.

Ultimately, the LGA has begun to establish a new model of knowledge-led continuing professional development for geography teachers in London schools which we aim to extend beyond the project timeframe. Re-engaging teachers in subject knowledge development and related curriculum innovation is enhancing their capacity as professionals at a time when teacher autonomy and professionalization have been eroded.

2.1 Does your project support transition to the new national curriculum? Yes

If **Yes**, what does it address? Aspects of the geography curriculum that have been neglected in recent years, but now are emphasised on the revised national curriculum.

2.2 Please list any materials produced and/or web links and state where the materials can be found. Projects should promote and share resources and include them on the LondonEd website.
Please see the London Geography Alliance website: http://londongeography.org/

3. Theory of Change and Evaluation Methodology

3.1 Please list **all** outcomes from your evaluation framework in Table 1. If you have made any changes to your intended outcomes after your Theory of Change was validated please include revised outcomes and the reason for change.

Theory of Change and Evaluation Framework document are attached separately, and include all anticipated outcomes.

Table 1- Outcomes

Description	Original Target Outcomes	Revised Target Outcomes	[redacted]
Teacher Outcome 1			
Teacher Outcome 2			
Teacher Outcome 3			
Pupil outcome 1			
Pupil outcome 2			
Pupil outcome 3			
Wider system outcome 1			
Wider system outcome 2			
Wider system outcome 3			
Enter additional Outcome Name add extra lines as necessary			

3.2 Did you make any changes to your project's activities after your Theory of Change was validated? No

3.3 Did you change your curriculum subject/s focus or key stage? No

If **Yes**, please explain what changes you made, why, and provide some commentary on how they affected delivery.

3.4 Did you evaluate your project in the way you had originally planned to, as reflected in your validated evaluation plan?

Yes and no. We had to rely more on qualitative data, interviews and school visits than we had anticipated. Although the quantitative data was very informative we did encounter some problems collecting this data from schools. This was especially the case with pupil data as schools appeared to be too busy to have students complete the online survey.

4. Evaluation Methodological Limitations

4.1 What are the main methodological limitations, if any, of your evaluation?

Three key approaches to collecting evidence and evaluating the LGA course were adopted. These were (i) questionnaire, (ii) teacher focus group discussions, (iii) school visits.

(i) **Questionnaire**: the plan was to administer questionnaire via electronic survey to all Primary and Secondary teachers and also to Secondary pupils, to be completed at the outset of the course (baseline survey) and at the end of the course (post-course survey), so that in this respect, all course participants formed the 'comparison' group. The number of participants on the course were of a suitable size for all participants to be feasibly included in the questionnaire process.

The electronic survey was set up and a link sent to participants but the return rate was very limited – only one school responded, although this school sent data from both the teacher participant and pupils. However, it was clear this would not provide a sufficient sample size. Consequently, a paper version of the questionnaire was issued to teachers. The pupil questionnaire was abandoned – as it was not feasible to issue and arrange for return of a large number of paper versions.

The return rate improved. From a participation maximum of 20 secondary schools, there were 14 respondents and 9 primary respondents from a participation maximum of 13 schools. However, this 'sample' was not evenly spread as some of these respondents were from the same school although they represented teachers with different backgrounds and levels of teaching experience. Nevertheless the 'sample' was a reasonable representation of the whole course cohort in terms of the distribution of school locations and range of background and experience.

However, for the post-course questionnaire only two secondary teachers had completed the initial baseline questionnaire and there was a more limited 'sample' of 11 respondents. For the primary course, only 5 teachers responded to the post-course questionnaire and none of these had completed the baseline survey.

Therefore the main limitation to data obtained from these questionnaires is that it was mostly completed by different teachers. The impact of the LGA course on individual teachers is therefore difficult to ascertain, but given the wide range of teachers and their individual experience and needs a fine-grained analysis is less indicative of the overall impact on teachers than from pre- and post-course comparisons made by analysing differences in the mean shifts in teacher confidence of their won knowledge and teaching and from analysis of responses to open questions included in the final questionnaire which directly asked respondents for their views and evidence of the impact of the LGA course.

(ii) **Teacher focus group discussions**: a sample of teachers representing approximately a quarter of the LGA cohort had agreed to attend two discussions (primary and secondary). These did not take place, due to a tube strike on the arranged date and consequently the sessions were cancelled. Nevertheless, one (primary) teacher did manage to attend which afforded an in-depth discussion of the LGA course and how it had been used in school.

(iii) **School visits**: three visits to schools were arranged (one primary and two secondary). These were helpful in providing environmental context and opportunity for face-to face interviews and to view samples of pupils' work Discussions with pupils needed significant interpretation to draw out any changes in pre- and post-course teaching. Pupils could describe what they had been taught and outline teaching styles but few had any direct understanding of how the teaching and content of

geography lessons had changed from lessons taught prior to the LGA course. Nevertheless the discussions yielded useful information. A wider sample of visits would have been useful but the response to requests for a visit was low (due to the time of the school year?) and they proved difficult to arrange. For the visits that did occur, the distance and travel time between schools meant created a minor restriction to the amount of time allocated to the visits.

So, on balance, it is reasonable to be confident that the data collected enables a sound assessment that reflects the general impact of the LGA course on beneficiaries.

One possible action that would help with the quality of data would be to make completing evaluation questionnaires and participation in other evaluative activities a stronger expectation or condition of completing the course.

4.2 Are you planning to continue with the project, once this round of funding finishes? Yes

If **yes**, will you (and how will you) evaluate impact going forward?
By continuing to collect qualitative and quantitative data from participating teachers and schools.

5. Project Costs and Funding

For project funding, please see the report by Stuart Hull.

Table 2 - Project Income

	Original[1] Budget	Additional Funding	Revised Budget [Original + any Additional Funding]	Actual Spend	Variance [Revised budget – Actual]
Total LSEF Funding					
Other Public Funding					
Other Private Funding					
In-kind support (e.g. by schools)					
Total Project Funding					

List details in-kind support below and estimate value.

Table 3 - Project Expenditure

	Original Budget	Additional Funding	Revised Budget [Original + any Additional Funding]	Actual Spend	Variance Revised budget – Actual]
Direct Staff Costs (salaries/on costs)					

[1] Please refer to the budget in your grant agreement

Direct delivery costs e.g. consultants/HE (specify)					
Management and Administration Costs					
Training Costs					
Participant Costs (e.g. Expenses for travelling to venues, etc.)					
Publicity and Marketing Costs					
Teacher Supply / Cover Costs					
[redacted]					
Evaluation Costs					
Others as Required – Please detail in full					
Total Costs					

5.2 Please provide a commentary on Project Expenditure
This section should include:

- *commentary on the spend profile*
- *budget changes that have occurred, including the rationale for any changes*

In general, we spent less than anticipated. This was mainly due to lower turn out for workshops and not all schools claiming their allowance for teacher supply cover and travel. We also had a couple of workshops cancelled. Both of these factors led to lower than expected costs.

6. Project Outputs

Please use the following table to report against agreed output indicators, these should be the same outputs that were agreed in schedule 3 of your Funding Agreement and those that were outlined in your evaluation framework.

Table 4 – Outputs

Description	Original Target Outputs	[redacted]	Actual Outputs	[redacted]
No. of schools	32		32	
No. of teachers	32		40	
No. of pupils	4800		4800	
Enter additional output name *add extra lines as necessary*				

7. Key Beneficiary Data

7.1 Teacher Sub-Groups (teachers directly benefitting counted once during the project)

Please provide your definition for number of benefitting teachers and when this was collected below *(maximum 100 words).*

7.1.2 Please provide written commentary on teacher sub-groups e.g. how this compares to the wider school context or benchmark *(maximum 250 words)*

Key Beneficiary Data -Primary

The schools that we used in the LGA project were from a wide and diverse range of London primary schools and as a result they used the CPD in different ways and had different outcomes.

1. Initially, we worked with those schools that we knew had **strong links to primary geography**, such as those who had been accredited the primary geography mark and with an active and committed geography subject leader, often a geography champion. This established a strong subject knowledge base which we hoped would support other, less confident primary teachers. We started working with 6 such schools, 4 of which remained through the entire programme involving around 12 different teachers. The schools initially sent their geography subject leaders but as time went on, devolved this to other members of staff with specific interests and needs, for example when we had a workshop on river systems they sent their Y6 teacher who was working on this with her class.

2. We then widened our reach to include those schools self-identifying as having weaknesses or gaps in their geography teaching due to, for example not having had any strong leadership for a while or school leaders who had neglected the foundation subjects in their curriculum planning and in particular geography. We invited over 30 schools at this stage but only 8 got back to us expressing their interest and of them 6 sent staff to the workshops. These schools did remain fairly consistent in their attendance but there it was rare to have all attend each session. We ensured that the less experienced teachers worked with more experienced geography subject leaders so benefitting from their experience as well as the input from the specialist leading the workshop.

Key Beneficiary Data: Secondary

It is clear that secondary schools used their involvement in the LGA in different ways. We have divided them into the following categories:

a) Schools/teachers who dipped in to enhance select areas of subject knowledge in a department that had a strong foundation of geographical expertise: 4
b) Schools/teachers who used the LGA to enhance existing or develop new schemes of work: 10
c) Schools/teachers who used the LGA to develop subject knowledge and pedagogy of individual teachers who had weaknesses in areas of geography: 6

These categories of beneficiaries are not mutually exclusive, as some schools used the LGA for more than one reason. A significant factor was the degree to which the geography department was already confident in their geography curriculum.

7.2 Pupil Sub-Groups (these should be pupils who directly benefit from teachers trained)

Please provide your definition for number of benefitting pupils and when this data was collected below *(maximum 100 words)*
We did not collect data on pupil sub-groups.

7.2.1 Please provide a written commentary on your pupil data e.g. a comparison between the targeted groups and school level data, borough average and London average *(maximum 500 words)*

Useful links: London Data Store, DfE Schools Performance, DfE statistical releases

8. Project Impact

8.1 Teacher Outcomes

Date teacher intervention started:

Table 9 – Teacher Outcomes: teachers benefitting from the project

The 1st Return will either be your baseline data collected before the start of your project, or may be historical trend data for the intervention group. Please specify what the data relates to.

Target Outcome	Research method/ data collection	Sample characteristics	Metric used	1st Return and date of collection	2nd Return and date of collection
Improved Teacher Subject Knowledge (Secondary)	*Paper Questionnaire to Secondary and Primary school cohorts*	*Secondary = 35 invitations to participate. 16 respondents on 1st return 10 respondents on 2nd Return The profile of respondents was broadly representative of the population as a whole on both returns.*	*Mean scores by Nat Curric. Geography content topic based on a 1-5 scale (1 – very confident, 2 – quite confident, 3 neither confident nor unconfident, 4 - quite unconfident, 5 – very unconfident)*	*Collected March 2014.*	*Collected July 2015*
Teachers use new ideas for lesson content and pedagogy (Secondary)	*1. Paper Questionnaire Open Response Questions*	*Secondary = 35 invitations to participate. 16 respondents on 1st return 10 respondents on 2nd Return The profile of respondents was broadly representative of the population as a whole on both returns.*	*1. Qualitative analysis based on mention of key words/phrases in responses (tallied).*	. .	*Collected July 2015*
Teachers use new ideas for lesson content and pedagogy (Secondary)	*2. Teacher sense of self-efficacy survey*	*Secondary = 35 invitations to participate. 16 respondents on 1st return 10 respondents on 2nd Return The profile of respondents was broadly representative of*	*2. Mean scores of aspects of efficacy in student engagement and efficacy in instructional strategies bases on a score to the question 'How much can you do? - with a range of 1 to 10 (1= Nothing, 10 -= A great deal) Survey adapted from Megan*	*Collected March 2014*	*Collected July 2015*

		the population as a whole on both returns.	*Tschannen-Moran College of William and Mary Anita Woolfolk Hoy, the Ohio State University.*		
Improved Teacher Subject Knowledge (Primary)	*Paper Questionnaire*	*15 invitations to participate.* *6 respondents on 1st return* *4 respondents on 2nd Return* *Although a small sample - the respondents represented teachers across the Primary phase (EY/KS1. lower and upper KS2).*	*Mean scores by Nat Curric. Geography content topic based on a 1-5 scale (1 – very confident, 2 – quite confident, 3 neither confident nor unconfident, 4 - quite unconfident, 5 – very unconfident)*	*Collected March 2014.* *.*	*Collected July 2015*
Teachers use new ideas for lesson content and pedagogy (Primary)	*1. Paper Questionnaire* *Open Response Questions*	*15 invitations to participate.* *6 respondents on 1st return* *4 respondents on 2nd Return* *Although a small sample - the respondents represented teachers across the Primary phase (EY/KS1. lower and upper KS2*	*1. Qualitative analysis based on mention of key words/phrases in responses (tallied).*	*.* *.*	*Collected July 2015*
Teachers use new ideas for lesson content and pedagogy (Primary)	*2. Teacher sense of self-efficacy survey*	*15 invitations to participate.* *6 respondents on 1st return* *3 respondents on 2nd Return* *Although a small sample - the respondents represented teachers across the Primary phase (EY/KS1. lower and upper KS2*	*2. Mean scores of aspects of efficacy in student engagement and efficacy in instructional strategies bases on a score to the question 'How much can you do? - with a range of 1 to 10 (1= Nothing, 10 -= A great deal) Survey adapted from Megan Tschannen-Moran College of William and Mary Anita Woolfolk Hoy, the Ohio State University.*	*Collected March 2014*	*Collected July 2015*

Table 10 – Comparison data outcomes for Teachers *[not available]*

Target Outcome	Research method/ data collection	Sample characteristics	Metric used	1st Return and date of collection	2nd Return and date of collection
e.g. Increased Teacher confidence	*e.g. E-survey*	*e.g. 100 respondents from a total of 200 invites.* *The profile of respondents was broadly representative of the population as a whole.*	*e.g. Mean score based on a 1-5 scale (1 – very confident, 2 – quite confident, 3 neither confident nor unconfident, 4 - quite unconfident, 5 – very unconfident)*	*e.g. Mean score*	*e.g Mean score*

8.1.1 Please provide information (for both the intervention group and comparison group where you have one) on:

- Sample size, sampling method, and whether the sample was representative or not

Secondary Sample and Data Collection

For the **baseline survey** a paper questionnaire was distributed to 35 participants in March 2014 of which 16 were returned. This sample comprised mostly teachers with a degree background in geography, with an even mix of BSc and BA degrees, suggesting different subject expertise and a few teachers with degrees in cognate subjects (e.g. Geology and Development Studies). The sample included teachers working in a geographical spread of schools across London (North = 6, East =5, SE = 2, SW=1, W=2), ranging from inner city to outer suburbs.
There was a wide range of teaching experience (both teaching length and positions of responsibility) across the sample. Consequently, the sample could be considered representative of the wider range of participants.

The **post-course survey** (July 2015) yielded 10 questionnaire returns. There were two respondents who also responded to the Baseline survey. This sample included teachers working in a geographical spread of schools located from around London, excepting the south west, (N=2, NE=1, E=1, SE=2, SW=0, W=2, NW=1, Central = 2) and which mostly lie within the inner city or inner suburbs, with one exception which is located outside the M25. The majority of teachers had between six and eight years service, with the least being two years into teaching and the most having twenty five years service. Overall, this sample is different in terms of school locations but there is a similar spread of degree backgrounds and length of teaching service.

In summary, whilst a direct comparison cannot be made, the sample might be considered to be a reasonable representation of teachers within the course programme with sampling methods that

yielded both quantitative and qualitative evidence and consequently the data can be used to indicate the general impact resulting from participation in the Secondary LGA course.

Primary
For the **baseline survey** a paper questionnaire was distributed to 15 participants in March 2014 of which 6 were returned. The Primary school sample comprised teachers with a wide range of degree backgrounds, with only one having completed a degree in geography. Most of the teachers work in schools located across North London, with two on the periphery of central London and four in the suburbs (from Wembley to Haringey). Four of the teachers were in their first two years of service, one had been teaching four years and the other seventeen years.
Whilst this was not a large sample, it is considered as offering a reasonable representation of the course cohort for Primary teachers.

The **post-course survey** (July 2015) yielded 4 returns, but one did not complete the full questionnaire, so only three yielded quantitative data on the impact of the LGA course on the development of subject knowledge confidence and teacher self-efficacy. Further qualitative evidence was obtained from two semi-structured interviews with teachers, one an early years specialist and the other a KS2 class teacher.

As with the Secondary data, the evidence gathered from the sample of Primary teachers with the visit to a school can be used to provide a reasonable overview and point to the general impacts on teachers resulting from participation in the Primary LGA course

- Commentary on teacher impact (please also refer to table 5 re impact on different groups of teachers)

8.1. Teacher Outcomes (Secondary) – Commentary on teacher impact

8.1.
The LGA theory of change proposed that teachers would develop new ideas for lesson content and pedagogy in the classroom. To help gauge how successful the programme was in achieving this outcome two metrics were applied to the baseline and post-course questionnaire.

8.1.1
Participants were asked to identify and rank their top three priorities for aspects of geography teaching in which they would like most support in the baseline survey questionnaire (March 2014), and in the post-course survey (July 2015) the teachers ranked the top three aspects for which they considered the LGA course had provided most support**.**
Each aspect was given a score by tallying the number of mentions by rank then weighting each rank by multiplying each rank tally by its inverse (i.e. 1st rank = x 3, 3rd rank = x 1) and the scored adjusted proportional to the sample size. The results are shown in **Chart 8.1.1.1.**

Overall, the results indicate that the LGA course provided high levels of support for teachers in most aspects with a reasonable balance between teachers' perceived need at the beginning and at the

end of the course. The most noticeable difference is in how the course provided support to learn from other colleagues and schools. At the outset of the course this was not a strongly perceived need, but at the end of the course the teachers clearly considered this aspect to be of significant value.

The **baseline survey** rankings indicated teachers' first priorities were spread across the eight of the fifteen listed aspects of teaching. **(Chart 8.1.1.2)**

The 'new areas of the curriculum' were considered top priority by 33% of the respondents and another 33% considered this aspect as second or third priority.
Support for 'Subject knowledge' was the next highest priority, with 20% of respondents ranking it as first priority. The most mentioned priority was 'the use and integration of GIS' with most respondents (87%) ranking this in the top three, although many (60%) listed it as third priority.
Other ranked aspects mentioned by more than one teacher included 'fieldwork', 'pedagogical approaches', 'pupil progression in geography' and 'learning from other colleagues'.

The **post-course survey** rankings **(Chart 8.1.1.2)** showed 'the use and integration of GIS' was well supported as about 40% of respondents ranked this as providing most (first order) support.
The same proportion of respondents ranked provision of support for 'new areas of the curriculum', equally divided between 1st order and 2nd order support.
The most mentioned supported aspect was 'learning from other colleagues' (70%) with nearly all respondents listing this as first order or second order support.
'Pedagogical approaches' was mentioned by 20% as first order support, whilst fieldwork, linking geography to other subjects and 'making geography relevant' were also ranked by 20% of respondents but these aspects were all listed as third order support.
'Pupil progression in geography' was not ranked in the post-course survey, but one respondent did list support for 'understanding the subject itself' as first order priority whereas this aspect did not feature in the rankings of the baseline survey.

8.1.2
Participants were asked to complete a **sense of self-efficacy survey** indicating their opinion of their ability relating to general pedagogical skills and relationships with pupils in lessons. The survey was completed in March 2014 (baseline) and in July 2015, at the end of the LGA course by teachers self-scoring their views on their influence (what they can do) in relation to each of the statements (using a 10 point scale (1= Nothing, 5 = some influence, 10 = a great deal). For each survey a mean was calculated for the individual scores of each teacher and these were then used to derive an overall mean score.
The difference between the mean scores of each survey was calculated to indicate any shift in teachers' opinions on their effectiveness in general pedagogical skills and relationships with pupils in lessons.
The results are shown in **Chart 8.1.2.1 and 8.1.2.2** .

The **baseline survey** revealed a mixed picture of teachers' opinions about how they work in the classroom and with their pupils. The scores show a 'raw range' from 4 to 10, the range of mean scores for the aspects is from 5.2-7.4 with an overall mean score of 6.8 .

The **post-course survey** shows an overall positive shift towards a higher view of effectiveness in the classroom and, in general, a slight narrowing of the variation of teachers' views across the different aspects. The scores raw show a 'raw range' from 2 to 10, the range of mean scores for the aspects is from 5.8-8.1 with an overall mean score of 7.2.

The greatest positive shift was in teachers' views on their ability to craft good questions for pupils (shift effect = 1.0), followed by a shift in views on their ability to provide appropriate challenges for pupils. Five aspects had a shift effect of 0.7 and two an effect of 0.5.
Two aspects showed as mean negative shifts in the post-course survey; these are in teachers' views on their ability to help pupils value learning (shift effect of –0.2) and in getting through to difficult students (shift effect of –0.1).

8.1.3
The LGA theory of change places improved subject knowledge as a key outcome and the course programme was devised with this in mind with university lecturers providing 'cutting edge' knowledge appropriate to key content and topics in the new National Curriculum.

In order to gauge the effect of the course on teachers' subject knowledge, participants were asked to self-evaluate their level of confidence in contemporary subject knowledge and understanding for areas of geography across the curriculum at the beginning of their course, to produce baseline data. Respondents scored 1 for high confidence and 5 for low confidence. The survey was repeated at the end of the course (July 2015) in order for comparison to be made with the baseline data and to gauge any shift in confidence.
The results are shown in Charts **8.1.3.1 and 8.1.3.2**

Calculation of the difference in score between the baseline score and post-course survey score for each topic give an indication of the impact of the course on teachers' confidence in their levels of subject knowledge, with a score of 1.0 representing one whole confidence shift (e.g. from 'quite unconfident' to 'neither confident nor unconfident'). The results are shown in **Chart 8.1.3.4**

For secondary teachers**, the baseline data** revealed the respondents (sample teachers) had confidence in their subject knowledge for most topics. There was some slight variation in levels of confidence in subject knowledge between teachers in each topic, as might be expected with individual teachers' expertise and degree backgrounds. However, there were no obviously wide differences or 'divides' amongst the sample teachers across any particular topics (**Chart 8.1.3.3**)

Overall, the sample teachers were generally less sure about their level of knowledge and understanding of physical geography compared to other aspects of geography (**Chart 8.1.3.2**). There was particularly low confidence in knowledge about soils (mean score (ms) = 4.2). Other topics in which teachers were, on average, less confident were Geological timescales (ms = 3.5) and Geology and landscape formation (ms = 3.3), hot desert environments (ms = 3.0) and physical geography of the local area (ms = 3.0).

Teachers were also less confident about their place knowledge of Russia (ms = 3.6) and the Middle East (ms = 3.1) and the management of mineral resources (ms = 3.4), the geography of health (ms = 3.1) and geography of culture (ms = 3.1) aspects of human geography. Finally teachers overall were less confident about using GIS (ms = 3.4).

The post-course survey data indicates that the LGA course has, on average, improved teachers' confidence in their subject knowledge across all topics with an overall average confidence shift effect of 0.4.

For some topics the effect is relatively small. Teachers remain somewhat neutral in their confidence about knowledge of Russia and the Middle East, with little variation in scores across the sample to produce this 'centre-ground' confidence **(Chart 8.1.3.2).**
Other minor small confidence shifts have occurred in relation to place knowledge of London, the UK and Russia, but there has been a medium-sized effect (0.4-0.6) on improving knowledge confidence in the topics of South Asia, East/South East Asia and Europe (**Chart 8.1.3.5**).

A small knowledge confidence shift was shown for the topic of plate tectonics and natural hazards; a probable explanation for this is that teachers generally felt confident about this topic at the outset (baseline ms = 4.2, Chart 8.1.3.2), so the survey only indicates a little improvement in confidence although the course may have provided teachers with updated knowledge about plate tectonics but the survey did not ask teachers this directly about this form of gaining added value.

A small shift was also shown for knowledge of the physical geography of the local area, but in contrast to plate tectonics, the baseline confidence for this topic was relatively low (baseline ms= 3.0, Chart 8.1.3.2). The data suggest that the teachers did not feel confident in the application of physical geography knowledge to the local area, and one possibility here is that relevant lectures and sessions did not sufficiently highlight how physical geography might be encountered in urban environments.

However, a shift effect of 0.5 or greater has occurred for seven of the thirteen physical geography topics, indicating that the course has, overall, had a positive impact on teachers' confidence in their level of subject knowledge and understanding (**Chart 8.1.3.5).** The data indicates the course has been particularly effective in shifting confidence in those physical geography topics where initial levels of confidence were low, i.e. soils (shift = 0.7), geological timescales (shift= 0.7), geology and landscapes (0.7). Other topics showed teachers' initial confidence as relatively neutral but they are on average now much more confident about their knowledge of large-scale ecosystems (shift= 0.9), weathering and erosion (shift = 0.6) and glaciation/climate change (shift = 0.6).

The baseline survey revealed that teachers were generally neutral or positively confident about their levels of knowledge in topics of human geography, with the exception of the management of mineral resources (baseline ms = 3.4, Chart 8.1.3.2). However the post-course survey data indicates the course has significantly improved teachers' confidence in their knowledge of this topic with the relatively large mean shift effect of more than one whole confidence level (shift effect =1.1, Chart 8.1.3.5). Another significant shift effect is shown in teachers' confidence of their knowledge of how physical and human processes combine to produce unique landscapes (shift effect = 1.0). Other topics where teachers shifted in confidence were management of food (shift effect = 0.8), management of energy resources (0.7) and management of natural hazards (0.7).

These data indicate that although many teachers considered they had reasonable knowledge of many individual topics, the course shifted their knowledge and understanding of the inter-relational dimensions of geography. This is a significant contribution as it has the potential to help teachers to

draw on and develop the use of 'powerful knowledge' within their teaching, with the potential impact of a more coherent curriculum and learning.

Within the category of 'Mapping and Fieldwork' the baseline survey revealed secondary teachers as having a relatively low confidence in their knowledge of 'Using GIS' (ms = 3.3, Chart 8.1.3.2). By the end of the course this had shifted to a more positively confident score (ms = 2.7, Chart 8.1.3.1) producing a shift effect of 0.6. However, the largest shift effect in this category occurred for 'Fieldwork techniques'. At the outset of the course, teachers declared a relative positive confidence in their knowledge of fieldwork techniques (ms = 2.6, Chart 8.1.3.2) but the post-course survey revealed a shift effect of almost one whole confidence level to most teachers being declaring themselves as 'quite confident' in their knowledge of fieldwork techniques. This significant knowledge confidence shift is likely attributable to the (residential) fieldwork course of the LGA programme, where teachers had opportunity to sample new techniques new or renew their experience of techniques.

8.1.4

The post-course questionnaire included an **open response question** asking **"*How has the LGA project helped you as a teacher?*"** Responses were classified into mention of different benefits as perceived by the participants using key words/phrases

For secondary teachers the most frequent mentions (from a total of 10 respondents) were 'updating subject knowledge' (4) and 'new teaching ideas' (4), followed by 'sharing good practice (3), 'understanding the value of fieldwork' (2) and 'developed a more reflective review of my teaching'. Other benefits mentioned included linking of (geographical) ideas, knowledge of online resources, 'development of enquiry skills', 'better understanding of the National Curriculum' and 'improved knowledge of resources'.

8.1.5

During 'site' visits to schools two Secondary teachers took part in a **semi--structured interview** and were asked for examples of how the LGA course had impacted on their teaching. One teacher was a relatively 'young career' teacher, having been teaching for a few years, whist the other was an experienced teacher of 25 years.

Both teachers discussed improved subject knowledge and being more confident about what they were teaching, particularly aspects of physical geography, citing examples of glaciations and climate change. Both teachers also mentioned that the LGA course had provided better teaching material they could use in the classroom (examples and resources) or links to where they could access resources.

They also gave examples of how the course had impacted on A-level teaching. In one school, A level Geography was to be introduced in academic year 2015-16 and the course had played a significant role in preparation and planning for the A level course. In the other school, where A level Geography was established, the LGA course had provided a stimulus to updating the teachers' subject knowledge and providing new material to inject into A level teaching, with the comment "it helped me feel as though I could make the A level topics more relevant and 'cutting edge'".

Both teachers felt that these benefits stemmed from the LGA sessions being given by university lecturers and both commented this had helped them develop a personal connect with university-level teaching and a better understanding of the importance for teachers of engaging with contemporary geography and geographical ideas. One teacher commented that it could be difficult to do this without the structure and access to lecturers provided by the LGA course.

The 'young career' teacher also mentioned how the course had raised awareness of geographical vocabulary and terms and the need to make this more explicit "and to demonstrate/illustrate its meaning in the classroom rather than just using words". In this respect the LGA course had changed and developed the teaching style of this teacher.

This teacher also indicated how the LGA course had helped the assessment of students' work at GCSE due to better subject knowledge being able to identify what makes a better geographical response "beyond facts" - and so help to clarify grade boundaries. This has had a knock-on effect in teaching students how to recognise a better geographical answer.

8.1. Teacher Outcomes (Primary) Commentary on teacher impact

8.1.6
The LGA theory of change proposed that teachers would develop new ideas for lesson content and pedagogy in the classroom. To help gauge how successful the programme was in achieving this outcome two metrics were applied to the baseline and post-course questionnaire.

8.1.7
Participants were asked to **identify and rank the top three priorities** for aspects of geography teaching in which they **would like most support** in the baseline survey questionnaire (March 2014), and in the post-course survey (July 2015) the teachers ranked the top three aspects for which they considered **the LGA course had provided most support.** The results are shown in **Chart 8.1.2.6.**

Each aspect was given a score by tallying the number of mentions by rank then weighting each rank by multiplying each rank tally by its inverse (i.e. 1st rank = x 3, 3rd rank = x 1) and the scored adjusted proportional to the sample size. The results are shown in **Chart 8.1.2.7.**

Perhaps expectedly, primary teachers were mixed in their ranking of perceived priorities for support. However when these are considered overall, at the outset of the LGA course they considered most support was prioritised in the following order: 1. pedagogical approaches, 2. pupil progression in geography, 3. fieldwork, 4. subject knowledge, choosing good resources and learning from other teachers/schools, 5. new areas of the curriculum, geographical skills, 6. making geography relevant. Two aspects - 'understanding the subject itself, and 'the use and integration of GIS' - did not rank as a priority (**Chart 8.1.1.4)**

The post-course survey of support provided by the LGA course indicates that in general it was a good match or better support for the perceived needs at the outset. There were some key aspects that didn't match the original ranking, most markedly support for 'pedagogical approaches' fell short of the originally perceived need. However, there were some gains, particularly in the use and integration GIS and in supporting non-specialist colleagues.

The survey and analysis indicates that the LGA course provided much more balanced support across all aspects of geography teaching than those areas originally prioritised by teachers. It seems likely that teacher have transferred their priority need for pedagogical approaches to realising that the use and integration of GIS is important. Other evidence gathered (e.g. in interviews and observation of teaching activities) indicates that the primary teachers did value the pedagogical approaches explored during the course. They also seem to have understood how their participation on the course has value in developing less confident colleagues in school.

8.1.8
The LGA theory of change places improved subject knowledge as a key outcome and the course programme was devised with this in mind with university lecturers providing 'cutting edge' knowledge appropriate to key content and topics in the new National Curriculum.

In order to gauge the effect of the course on teachers' subject knowledge, participants were asked to self-evaluate their level confidence in contemporary subject knowledge and understanding for areas of geography across the curriculum at the beginning of their course, to produce baseline data. Respondents scored 1 for high confidence and 5 for low confidence (**Chart 8.1.3.6).** The survey was repeated at the end of the course (July 2015) in order for comparisons to be made with the baseline data and to gauge any shift in confidence. The results are shown in **Chart 8.1.3.5**

Calculation of the difference in score between the baseline score and post-course survey score for each topic give an indication of the impact of the course on teachers' confidence in their levels of subject knowledge, with a score of 1.0 representing one whole confidence shift (e.g. from 'quite unconfident' to 'neither confident nor unconfident'). The results are shown in **Chart 8.1.3.7**

The data indicates improved teachers' confidence in their subject knowledge across all topics of the 'new' curriculum, with one whole shift in confidence in knowledge about South America, the water cycle and rivers in the landscape, coastal features, environmental zones and habitats, volcanoes, earthquakes, land use, economic activity and trade, distribution of natural resources, the use of globes, maps and atlases, using and integrating GIS and the highest shift was for confidence in knowledge of fieldwork techniques **(Chart 8.1.3.7).**

8.1.9
Participants were asked to complete a sense of **self-efficacy survey** indicating their opinion of their ability relating to general pedagogical skills and relationships with pupils in lessons. The survey was completed in March 2014 (baseline) and in July 2015, at the end of the LGA course by teachers self-scoring their views on their influence (what they can do) in relation to each of the statements (using a 10 point scale (1= Nothing, 5 = some influence, 10 = a great deal). For each survey a mean was calculated for the individual scores of each teacher and these were then used to derive an overall mean score. The differences between the mean scores of each survey was calculated to indicate any shift in teachers' opinions on their effectiveness in general pedagogical skills and relationships with pupils in lessons. The results are shown in **Charts 8.1.2.3 and 8.1.2.4.**

The highest shifts in self-efficacy relate to motivating pupils, challenging pupils and crafting good questions. These are indicative of a more confident understanding of geography and how it can be

incorporated into teaching in interesting ways. Consequently it is surprising to find a relatively small increase in teachers' self-assessment of their effect in fostering pupil creativity (**Chart 8.1.2.4)**

The overall mean self-efficacy score in the baseline survey was 6.0 and in the post-course self-efficacy survey this had increased to an overall mean self-efficacy score of 8.0, thereby indicating a perceived higher level of effectiveness in pedagogy and relationships with pupils by the post-course respondents

8.1.10
The post-course questionnaire included an **open response question** asking **"*How has the LGA project helped you as a teacher?*"** Responses were classified into mention of different benefits as perceived by the participants using key words/phrases

For primary teachers the most frequent mentions in response to how the LGA project helped you as a teacher (from a total of 4 respondents) were: 'updating subject knowledge (2) 'linking ideas across geography' (2) and 'sharing good practice '(2), with single mentions of 'the importance of geography as a subject', 'improved confidence of subject knowledge' and 'improved understanding of progress in geography'.

8.2 Pupil Outcomes

Date pupil intervention started:

Table 11 – Pupil Outcomes for pupils benefitting from the project

The 1st Return will either be your baseline data collected before the start of your project, or may be historical trend data for the intervention group. Please specify what the data relates to.

Target Outcome	Research method/ data collection	Sample characteristics	Metric used	1st Return and date of collection	2nd Return and date of collection
Pupils' interest in geography in school is enhanced (Secondary)	*Open response question in paper questionnaire to teachers*	*Secondary = 35 invitations to participate. 16 respondents on 1st return 10 respondents on 2nd Return The profile of respondents was broadly representative of the population as a whole on both returns.*	*Tally of common comments*	*Collected March 2014.*	*Collected July 2015*

Pupils' interest in geography in school is enhanced (Secondary)	*School visits Discussion with HoD Observation of pupils' work Focus Groups discussion with pupils*	*Two schools, one located in inner suburbs, the other in the inner city*	*Qualitative analysis of observations and comments*		*Collected July 2015*

Table 12 - Pupil Outcomes for pupil comparison groups *[not available]*

Target Outcome	Research method/ data collection	Sample characteristics	*Metric used*	1st Return and date of collection	2nd Return and date of collection
e.g. Increased educational attainment and progress in Writing	*e.g. Pupil assessment data*	*e.g. Characteristics and assessment data collected for 97 of 100. The profile of respondents matches that initially targeted in the Theory of Change.* *Please find detailed analysis of the profile of respondents in Section 7.2*	*e.g. mean score or percentage at diff National Curriculum Levels or GCSE grades*	*e.g. Mean score- 3.7, collected September 2015*	*e.g. Mean score- 4.5, collected June 2015*

8.2.1 Please provide information (for both the intervention group and comparison group where you have one) on:

- Sample size, sampling method, and whether the sample was representative or not Commentary on pupil impact (please also refer to table 6-8 re impact on different groups of pupils)

Secondary

Visits to a school in a north London inner suburb and another to an east London inner city school provided some qualitative data from interviews with staff and pupils. The pupils were drawn from the full age range of the school and from classes with different teachers. There was also opportunity to observe examples of pupils' work. The visits sample was not big enough to be representative, but they did provide useful contextual understanding of the circumstances in which the schools were

working and opportunity to make qualitative judgements on the impact of the LGA course on the pupils and the departments.

Primary
A visit to a north London Primary (5-11) school to conduct semi-structured interviews with the geography subject coordinator, the senior teacher responsible for curriculum and discussions with a sample of pupils aimed at judging the impact of geography on their subject knowledge and enthusiasm about geography teaching and other activities in the school. The pupils were drawn from the full age range of the school and from classes with different teachers. The interviews provided useful qualitative evidence. There was also opportunity to observe examples of pupils' work.

- Qualitative data to support quantitative evidence.

The post-course questionnaire included an open response question asking "*How has the LGA project helped your pupils' geographical knowledge, skills and understanding*?" Responses were classified into mention of different benefits as perceived by the participants using key words/phrases.

8.2. Pupil Outcomes (Secondary)

8.2.1
The post-course questionnaire included an **open response question** asking, **"*How has the LGA project helped your pupils' geographical knowledge, skills and understanding*?"** Responses were classified into mention of different benefits as perceived by the participants using key words/phrases.

For secondary teachers the most frequent mentions (from a total of 10 respondents) were related to pupil participation and/or motivation with 'More interesting/relevant topics and information' (3) and 'Improved pupil enthusiasm' (2). Another mentioned 'wider activities' (1). These teachers have assumed that the increased motivation of pupils would lead to improved geographical learning outcomes. Some of these teachers link the choice of curriculum content with the ability of students to recognise the significance of geographical knowledge and understanding.

Similarly, a few teachers mentioned 'More/improved fieldwork' (3) and one and 'More map skills' (1) which concerns an increase in provision under the assumption that this will have a knock-on effect of improving geographical learning outcomes (and perhaps linked to motivation in the cases of fieldwork).

A few teachers were more specific with 'Improved accuracy of subject knowledge' (2), with some mentions of particular topics or skills: 'Improved knowledge of glaciation' (1), 'awareness of timescales in geography' and improved GIS skills' (1). Another mentioned the broader benefit of 'improved challenge' (1).

Finally a couple of teachers mentioned the benefits for pupils as being related to the recruitment of pupils to study geography at a higher level: 'Increased GCSE numbers' and 'As a bridge to university geography'. It is unclear whether these teachers thought this benefit was a result of the LGA programme having helped them develop more inspiring geography or helped them linked to contemporary topics. However, a similar mention in an interview with one teacher suggests this is

linked to helping pupils understand that geography is 'real' and dynamic, and the LGA programme provided the teachers with access to the latest knowledge and association with (academic) 'experts' that could inspire pupils.

8.2.2.
Evidence was obtained from a **discussion with a focus group of pupils** during a site' visits to a Secondary school, teaching geography up to GCSE, but introducing A level geography in the 2015-16 academic year. The group comprised four Year7 pupils, two Year 9 pupils and two Year 10 pupils.

The pupils commented this year they had noticed an increase in active teaching approaches and independent learning. The teachers seemed to "know their stuff" and after some teaching at the start of a topic, they would allow students to work through activities and tasks and find information and answers to (geographical) questions, with the teachers making suggestions on how to improve their work. They also had more fieldwork opportunities incorporated in to their work and learning this year, which they considered valuable for learning. All the pupils enjoyed geography and the Year 10 pupils were considering in following up their GCSE with studying the subject at A level.

8.2.3
Another strand of evidence for the impact of the LGA course on pupil outcomes was obtained from an **interview with a Head of Department** (in an inner city school).
Two comments indicate direct impact on pupil outcomes:

"The LGA input has been most beneficial for extended essays that students have done, in both Key Stages, incorporating independent research. The LGA has really managed to update this right up to the present. This the students have found very interesting and significant as it shows geography in action, very topical, right up to the very present: the immediacy."

"The LGA has helped with getting our students to understand the quality of research, and why research is quality. To many of our students this is very important. In a world saturated with so much information, much of which is opinionated, untested scientifically, based on conviction and belief rather than evidence. Our students can become too cynical too quickly to 'new' scientific ideas and advances. Emphasising to students of the route of scientific enquiry, academic peer assessment, great scrutiny of the evidence and only then will universities only then accept findings has given our students a demonstration of the scrutiny and fair process that geographical research has to undergo before it becomes mainstream. In short we have incorporated far more argumentation into teaching and learning activities – which we have demonstrated and expected students to develop."

In addition the HoD commented "By establishing links with the lecturer in the university that is closest to the school, I arranged to take some students to a university lecture so that they could experience first-hand the process and delivery of university lectures. Thankfully they were not too over-awed and afterwards they had a discussion with the lecturer, who 'debriefed' the students on what they had learned. The students have now expressed a keen interest in going to university – which is a positive result as many of our students can get distracted by 'bright lights' jobs that often don't lead anywhere. This has raised their aspirations."

Finally, the HOD reported "I do plenty of after-school clubs for students to bring their work and understanding, and unleash new avenues of thought, testing of their hypothesis, consolidate what they have learnt. The LGA has been a very useful tool in extending this process."

8.2 Pupil Outcomes (Primary)

8.2.4
The post-course questionnaire included an open response question asking, **"*How has the LGA project helped your pupils' geographical knowledge, skills and understanding*?**" Responses were classified into mention of different benefits as perceived by the participants using key words/phrases.

For primary teachers the most frequent mentions (from a total of 4 respondents) in response to how the LGA project has helped pupils' geographical knowledge, skills and understanding can be classified as:

- 'more outdoor experiences' (3),
- 'increased pupil enthusiasm/engagement' (2)
- 'experience of wider skills' (2).

Single mentions were noted for 'improved challenge' and 'new topics'

8.2.5
Evidence was gathered from a **discussion with a focus group of pupils** during a site' visits to a Primary school, which included pupils from Years 2 – 5 from different classes (with different teachers) across the school.

Most of the pupils understood the geography in the context of a topic rather than being taught as a discrete subject, but it was clear from their incorporation of geographical language in their descriptions of activities described that they were beginning to develop a distinct geographical perspective on the topics. One Y5 pupils was able to outline the geography in art, describing the paintings of Turner as 'landscapes', and for a topic on changing the environment the pupil mentioned a debate on the different ways the land is used in rainforest. The pupils could name oceans and continents and describe important skills for making a map. The pupils were able to recall and outline clearly examples of geographical topics and activities they had completed during the year, which included a range of activities that can be directly traced to the LGA course, e.g. using a balloon to create a globe (Y4) and using the school outside area to make a map (Y5), and also using the school quiet area to role-play the water cycle (Y3), and making a map describing travel from London to Russia (across land) (Y5).
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- Projects can also provide additional appendices where appropriate.

(minimum 500 words)

8.3 Wider System Outcomes

Table 13 – Wider System Outcomes

Target Outcome	Research method/ data collection	Sample characteristics	*Metric*	1st Return and date of collection	2nd Return and date of collection
Teachers/schools involved in LGA course making greater use of networks, other schools and colleagues to improve subject knowledge and teaching practice.	*Open response question in paper questionnaire to teachers*		*.*	*Tally of common comments*	*Collected March 2014.*
Other teachers in project schools incorporate ideas from the project into their teaching					

8.3.1 Please provide information on *(minimum 500 words):*

- Sample size, sampling method, and whether the sample was representative or not Secondary

See section 8.1.1 for a commentary on questionnaire sample size and quality.

- Commentary on wider system impact qualitative data to support quantitative evidence.

8.3. Wider System Outcomes (Secondary)

8.3.1

For Secondary teachers, a key finding from the post-course questionnaire question about the support provided by the LGA course was that teachers considered the course had enabled opportunities to learn from other colleagues and schools (see Chart 8.1.1.1)

8.3.2
For Secondary teachers, the post-course questionnaire included an **open response question** asking, "***How has the LGA project helped your department*?"** Responses were classified into mention of different benefits as perceived by the participants using key words/phrases.

The most frequent response was the LGA project had helped to develop new schemes of work and/or introduce new topics into schemes of work (7). Some respondents mentioned specific topics including climate change, glaciation and GIS and the introduction of fieldwork.
Associated with these were mentions of: mapping the National Curriculum (1), subject knowledge update in the department (i.e. shared knowledge) (3) and the development of new teaching ideas (2) and (combining these) one respondent mentioned the development of 'geographical pedagogical content knowledge' (1). One respondent mentioned 'new resources' (1).

The second most frequently mentioned benefit to departments was establishing collaboration with departments in other schools (4).

A further question in the questionnaire specifically addressed this benefit and asked, ***"In what ways has the LGA project help you develop awareness of other work and of other teachers and departments?"*** The most frequent response was 'Discussion with other teachers' (8), followed by 'Sharing ideas' (4), 'School links' (3) and the associated 'Share resources' (1). Other benefits mentioned were: ' reflection on the scheme of work', 'an understanding of the restriction of exam specifications' and 'support for non-specialists'(1).

8.3.3
During '**site' visits to two schools**, the Heads of Department took part in a **semi--structured interview** and were asked for examples of how the LGA course had impacted on their Departments.

8.3.3.1
One HoD commented that the Department was in need of improvement in subject knowledge, and in the confidence to teach to a higher level. The LGA course had provided this level of subject knowledge for the whole Department. Information and ideas from sessions were discussed and used in a Feedback session during weekly Departmental meetings, which included a discussion on where the 'new' subject knowledge and approaches might best be applied in the curriculum. Using this departmental 'cascade' approach ensured the whole department benefitted from the LGA course. The LGA had directly into the development of a new Scheme of Work for KS3, with input to topics of: the rock cycle, weathering; Tundra and Desert ecosystems; the use of natural energy and conflict in use of resources; and climate change from the past to the present.
The LGA work had strongly influenced the introduction of two new field trips – one to a local urban area and the other to a coastal location. A number of teaching approaches highlighted and/or discussed at LGA sessions had been incorporated into the Departmental work, particularly highlighting geographical vocabulary and more independent learning activities.
The Department was introducing A level Geography in the next academic year and felt the LGA course had provided considerable input into the planning and the confidence of the teachers to teach A level geography effectively.

The HoD felt the LGA course had helped the whole Department to become better geographers *"In a school climate where it is easy to get caught up in fire-fighting and stuck in a rut the LGA had re-generated an interest in the subject with focus and direction*".
The LGA had provided "a key stimulus for the Department to develop more recent topics with deeper learning and more focussed learning."

8.3.3.2
The second Department interviewed has four full-time geography teachers.
The HoD reported that different teachers in the Department had attended different LGA sessions. All had found the sessions useful and each was followed up by the appropriate teacher writing a summary report on the session of the content, suggested associated activities, personal reflections and questions for the Department. This was circulated to the other teachers in the Department and the reflections and questions were discussed at the next Departmental meeting.

The HoD also noted that the LGA had helped the Department establish links with universities (see comment above in 8.2.2.3 on arranging to take students to a university lecture) and with other schools/ teachers in London, considering this a healthy benefit. "*As teachers we are almost submerged with so many 'learning inputs' from so many directions. For me it is so much better to establish, develop, build, consolidate and review from an organisation like the LGA, speaking and liaising face-to-face with people: a smallish group, with shared interests, similar motivations (to do the best for their students), all teaching in London schools. That group dynamic helps build, and maintain, a worthwhile system.*"

8.3. Wider System Outcomes (Primary)

8.3.4
For primary teachers, the post-course responses (4 respondents) to the **open question "How has the LGA project helped your school?"** included 'school staff training in geography' (4), 'using new resources' (3), 'introduced New Schemes of Work' (2), 'introduced new teaching ideas' (2), and 'links to secondary schools/discussion with secondary teachers' (2). The question of how the LGA project has helped develop awareness of others work and of other teachers and schools gave three comments on 'sharing ideas', and one noting the project had exposed a variety of teaching methods.

8.3.5
A visit to a Primary school provided enabled an assessment of the impact of the LGA course on the Humanities Coordinator and more widely around the school.
The Coordinator does not have any specialist background in geography and was much more comfortable with teaching History.

Based on learning gained from the LGA course, the Coordinator has developed a school geography policy that emphasises purpose and progression in geography. For example it includes the statement "There should be a fair balance between core geography and sense of the geography, allowing children to understand the size, scale and place of features, whilst relating to the various areas empathetically."

Observation of work completed by different classes across the school, and of displays on the walls in classrooms, indicates that this policy and ideas on how to teach geography in terms of content, key ideas and activities has been effectively disseminated throughout the school.

The Deputy Head of the school (with responsibility for curriculum coordination and professional development) was interviewed and asked to summarise the impact of the LGA course on the Humanities Coordinator and the school. Four key effects of the LGA course on the school were highlighted. Firstly, the Coordinator has become a strong advocate for geography who has enthused and inspired other teachers. Secondly, the LGA course has provided a valuable professional development experience with the Coordinator now able to lead in-service training, express/share a clear vision of geography teaching and has proved to be an agent of change. Thirdly, teachers are much more confident about what makes a good geographical learning experience and they are planning geography more confidently into topic work, Fourth, all teachers and most pupils are now incorporating more geographical language, skills and understanding in their topics

8.3.6
Evidence was also obtained from discussion with a Geography Coordinator in another Primary school. This teacher has a specialist background in geography.
The Coordinator reported that prior to the LGA course had enabled the development of a school curriculum map for geography. In part, this resulted from the school leadership anticipating that attendance of the Coordinator on the LGA course would have impact on the rest of the school. Previously, geography had been 'hidden' within other topic such as History or Literacy. The curriculum map was to indicate how geography could be integrated into the curriculum rather than taught as a 'tick list' or 'assumed teaching' e.g. geography was considered as part of the school garden activities because it is an 'environment', without any clear thinking and reference to key geographical ideas and learning

Content and activities from the LGA course were fed into planning conversations with other teachers – who have now taken on a much stronger sense of ownership for incorporating geography in their planning and teaching. An example is a Year 6 topic on the local area, which previously was a local history project, but now incorporates fieldwork to look at land use and environmental quality with an enquiry into how the local area might be improved. Another example is the now regular use of Google Earth to locate the origin of things studied in topics such where in the world different fruits grow and how they are transported to the UK.

This Coordinator also mentioned contact with Secondary teachers and how this has enabled understanding of how progression from Primary to Secondary can be improved and several key examples were highlighted including more explicit labelling of geographical experience that help pupils understand what geography is, more conscious encouragement to use geographical vocabulary and the development/reinforcement of key mapping skills.

- Projects can also provide additional appendices where appropriate.

8.4 Impact Timelines

Please provide information on impact timelines:

- At what point during/after teacher CPD activity did you expect to see impact on teachers? Did this happen as expected?
- At what point during/after teacher CPD activity did you expect to see impact on pupils? Did this happen as expected?
- At what point did you expect to see wider school outcomes? Did this happen as expected?
- Reflect on any continuing impact anticipated.

9. Reflection on overall project impact *(maximum 1,500 words)*

Overall, the evidence suggests that LGA course has resulted in a noticeable impact on the quality of geography taught and also on teachers' confidence in their ability to plan and teach the new National Curriculum.

For Primary teachers, participation in the LGA course has raised the profile of geography within schools so there is a greater 'visibility' of geography around schools through displays in classrooms and corridors as well as re-written policy documents.

The LGA course has demonstrated ways in which a geographical dimension can be recognized in different topics. This has resulted in a more evenly balanced subject teaching where the curriculum is taught via topics, so now there is much stronger emphasis given to geographical knowledge and the geographical dimensions. Aspects of the National Curriculum knowledge requirements for geography are evident in both teaching and pupils' learning.
In particular, the project seems to have impacted on doing geography outside the classroom with more focused use being made of the school grounds and/or local area. Teachers also recognise the need to incorporate the teaching and use of Geographic Information Systems into the curriculum, though they are not currently very confident about doing so.

The primary participants were enthused by the course tutors and found the suggestions of geographical activities and teaching approaches particularly useful. Many of these have been incorporated into teaching and have been shared with colleagues who did not attend the LGA course.

Participants found different ways to disseminate what they learned on the LGA course, and their method seems to be related to the way the school is organized and the priorities given to curriculum and staff development by the school senior leaders.

The 'formal' approach, with knowledge and ideas being disseminated via staff training days focused on geography, has had high impact in the school where this approach was seen and has resulted in geography becoming embedded within the curriculum effectively.

The 'informal' approach, with the Geography coordinator acting as an 'advisor' to other colleagues, has also had high impact (e.g. in the documented case, the teacher had re-balanced a teaching unit on the 'Local Area' to include a greater focus on geography and local sense of place rather than focussing exclusively on the historical dimensions). However, this approach does rely on the enthusiasm and energy of the Geography coordinator and the willingness of other class teachers to be advised or to seek advice. Consequently it was less clear as to how widespread the impact of this approach was in embedding geography across the school. A potential weakness of this approach is it relies on continuity of the Geography Coordinator working at a school beyond the year of the LGA course - otherwise transference of the knowledge and ideas gained from the LGA course might be limited to only those teachers who have been supported.

Primary teachers found discussion with secondary colleagues during the LGA fieldwork course about the geographical knowledge and skills weaknesses of Year 7 pupils very useful for helping them plan the teaching emphasis in the later years of primary school.

For Secondary teachers, the impact has been to revise and refresh participants' subject knowledge with updated information and expose them to the 'cutting edge' geographical thinking and ideas. Consequently participants engaged in discussion about the geographical topics (and teaching) at a higher than usual level. Overall, participation in the LGA course has improved planning at KS3 level with the development of new or significantly revised units in schemes of work to match the new National Curriculum requirements, with strengthened subject knowledge and the inclusion of contemporary themes. In particular, teachers are more confident in their knowledge of physical geography, even in physical geography topics which they considered their knowledge was sound, e.g. plate tectonics and natural hazards.
The LGA course has precipitated an increase in the provision of fieldwork experiences and fieldwork methods.
The data indicate that although many teachers considered they had reasonable knowledge of many individual topics, the LGA course has shifted their knowledge and understanding of the inter-relational dimensions of geography. This is a significant contribution as it has the potential to help teachers to draw on and develop the use of 'powerful knowledge' within their teaching, resulting in much stronger coherence of geography in curriculum and learning, which enables pupils to see the 'bigger picture' of how key geographical ideas help understanding across different (and sometimes disparate) topics and events. Another, not insignificant effect of the LGA course for many schools, is its impact on the teaching of GCSE and A level topics.

The impact of the LGA course has not been limited to those teachers attending the sessions as departments established various forms of 'cascade' strategies to transfer the outcomes of the sessions to colleagues. The evidence gathered suggests that this dissemination has been successful, particularly where the Department has planned a dedicated time slot for reporting and discussion of the LGA sessions,

The LGA course has impacted on pupils. The evidence suggests that pupils are more interested and enthusiastic about geography than in previous years. The teachers' improved confidence in subject knowledge and pedagogy has enabled improved preparation of teaching materials and encouraged an increase in the use of independent learning approaches that emphasise the evaluation of knowledge and ideas. Pupils are able to outline the geographical dimensions in the topics they have studied and express themselves using technical geographical vocabulary.

The LGA course has initiated a network of geography teachers across a wide range of schools in London through its regular lecture sessions and workshops where teachers meet and discussion is encouraged and is encourages to continue through the LGA website. The impact has been for teachers to develop discipline-specific networking with sharing and comparison of teaching ideas and approaches with colleagues outside their schools in a way that is rarely afforded by school-centred professional development and training. This cross-fertilisation has provided a greater wealth of planning ideas and extended the range of teaching approaches used by teachers and schools (see above).

In addition, for some teachers there has been strengthening of links between schools and universities which has narrowed the gap between school and higher education, resulting in them encouraging greater confidence in their pupils' aspirations beyond school.

The LGA course has initiated a cultural shift and made a good start on raising expectations for geography teaching and learning in the London school system. The LGA course has enabled the teachers to improve the plan and delivery of the new National Curriculum for geography. The teachers on the course are all more confident in what they are teaching and also in their ability to implement this in the classroom. However, to produce a longer-term cultural change this momentum will need sustaining.

Overall, the outcomes of the LGA course support the hypothesis of the LSEF; there has been improvement in pupils' attainment – evidenced in the breadth of what pupils study and in their confidence and accuracy in articulating their learning in geographical terms, and in the increased participation in the subject and raised aspirations of both teachers and pupils. In this regard, the LGA course has had a positive impact in teachers and pupils.

10. *Value for Money*

A value for money assessment considers whether the project has brought about benefits at a reasonable cost. Section 5 brings together the information on cost of delivery which will be used in this section.

2.1. 10.1 Apportionment of the costs across the activity

Please provide an estimate of the percentage of project activity and budget that was allocated to each of the broad activity areas below. Please include the time and costs associated with planning and evaluating those activity areas in your estimates.

Broad type of activity	**Estimated % project activity**	**£ Estimated cost, including in kind**
Producing/Disseminating Materials/Resources		
Teacher CPD (face to face/online etc)		
Events/Networks for Teachers		
Teacher 1:1 support		
Events/Networks for Pupils		
Others as Required – Please detail in full		
TOTAL	100%	£ (same as total cost in section 5)

Please provide some commentary reflecting on the balance of activity and costs incurred: Would more or less of some aspects have been better?

10.2 Commentary of value for money

Please provide some commentary reflecting on the project's overall cost based on the extent to which aims/objectives and targets were met. If possible, draw on insight into similar programmes to comment on whether the programme delivers better or worse value for money than alternatives.

10.3 Value for money calculations

Note: This section is only required for projects with control or comparison groups

In order to demonstrate the cost effectiveness of the project we would like those projects who had control or comparison groups to provide some value for money calculations. Further guidance will be issued to support projects with this.

11. Reflection on project delivery

This section is designed to allow for a discussion of wider issues relating to the project. (maximum 1,500 words)

Reflections on Project Delivery: Primary

a) Concerns

- Identifying and securing specialist lecturers in the appropriate field proved challenging on occasion but using UCL IOE connections as well as the recommendations of the Geographical Association (GA) we were able to find some excellent practitioners and academics to deliver the workshops.
- Similar to secondary geography there are high demands on teacher time and being released for CPD is often difficult despite supply cover and all expenses being covered. This is especially challenging in the primary school where geography is just one of 11 NC subjects and rarely seen as a priority when there is such a focus on mathematics and English. Consequently the teachers found it very difficult to commit to leaving school for half a day twice a term and this was made particularly challenging when they were not well supported by their Headteacher and senior leadership team (SLT). This was despite a lot of time spent prior to the delivery of the workshops in communication with the SLT discussing the project and clearly outlining the commitments. The result of this was that many teachers, despite their own personal commitment and desire to attend were, on occasion not able to, however most committed schools were able to send one member of their staff. We did have some teachers who came for the fieldtrip and the first workshop but did not attend again, nor were they willing to engage in further communication making evaluation less comprehensive.
- Although beneficial in some ways, having an evolving membership of teachers was problematic in that it made it difficult to see the impact of what was being done and evaluating not just the progress of the teachers but also the pupils.
- We found communication with teachers very challenging and it often proved difficult to get them to respond to email messages. We often did not know how many would be attending a workshop as they rarely indicated whether or not they were going to come and either just turned up or did not come at all and failed to send a following message. This had repercussions for our evaluation process as it proved very difficult to get them to engage with surveys, focus groups and individual interviews to assess the impact of the workshops on their practice and consequent progress of their children's learning in geography.

Reflections on Project Delivery : Secondary

a) Concerns

- While the support of partner university geography departments was in general strong, on occasion we had difficulty getting commitment from a lecturer who was supposed to be leading a workshop. In one instance the lecturer pulled out at the last minute and an alternative workshop had to be hastily arranged. Communication worked well with lecturers who were motivated to contribute to the project, but with a couple of individuals maintaining communication was difficult.
- The time demands of teachers are extremely high and SLT are not always supportive of teachers being out on CPD. This meant that attendance at workshops was less than expected, although we came to realise that teachers would attend when they were able and when they identified a clear need. A couple of schools who joined the project early on either did not attend later workshops or attended very sporadically.
- There was some churn with the teachers attending workshops. This was to be expected with people moving schools or going on maternity leave. Some schools therefore sent several teachers over the course of the project timeframe. While not necessarily a problem, this had implications in terms of measuring the impact of the project.
- We encountered some difficult in getting evaluation data from teachers. This was not helped by a tube strike that led to the cancellation of the focus group with the external evaluator. Otherwise, chasing teachers via email is not very fruitful when they are in the final stages of the term.

b) Strengths

- We quite quickly established a way working for workshops. This involved IOE liaison with the lecturer in charge of the workshop prior to delivery. This was necessary for lecturers to understand the nature of the project, the needs of the teachers they would be working with and how to tailor the workshop content to the national curriculum/examinations. The secondary LGA coordinator also attended all workshops and facilitated dialogue between lecturers and teachers. We made sure that workshops were a two-way conversation about geography, so that the content could fit the needs of teachers and also their existing knowledge and curriculum know-how was part of the dialogue. This meant that lecturers were also learning about the work of teachers in schools. Closer understanding between schools and universities can only help the transition of students from the former to the latter.
- It was clear after the first couple of workshops that one of the main strengths of the project was that teachers were engaging in discussion about geographical topics at a higher than usual level. It is not the usual routine of teachers to be sitting back in the lecture theatre in a university department, working with geography academics. Immediately, it raised the intellectual level of discussion and forced them to think more about the geography they are teaching, rather than teaching the same content year on year. Again, this is not just a one-way process. The dialogue between teachers was just as important for them to think about different ways of approaching topics. The questions of **what, why, when** and **how** to teach geographical topics are not straight forward and need to be continually revisited.
- Following the above point, teachers reported that they valued being a part of a network of discipline-specific support. Through workshops and the Internet they were able to problem

solve and share ideas and resources. For many of the younger teachers this was not something they had encountered before and this improved their confidence in their curriculum design.

- In addition to addressing areas of subject knowledge weakness, teachers reported that they valued learning about the most up-to-date knowledge, data and resources. Subject knowledge is not static and there is a danger that in schools the geography taught can become dated, unless teachers undertake to learn the latest ideas and keep up with new trends. The workshops enabled them to do this. Again, breaking down boundaries between knowledge produced in universities and its re-contextualisation in schools can only be positive.

12. Final Report Conclusion

Key conclusions for the Primary LGA course.

Although not always explicit or tangible, there have been substantial and significant changes to not only the perception of participating teachers to primary geography but also in their practice of it. This has benefitted those teachers who have attended the workshops as well as those who work with them in school through effective and comprehensive dissemination. This has ensured that the theory of change with which we started, has been successful. The process has taken 18 months to work through but just in that short time, we have been able to see how the LGA for primary schools has adhered to and met, in part, the goals of the London Schools Excellence Fund by raising expectations, improving practice, deepening subject knowledge and raising the profile of geography in primary school settings. This is currently however on a small scale and in order to become embedded in the schools that have been involved and then rolled out to a much wider potential population of schools, it will need to continue longer into the future through secured funding and school contributions. This will increase the possibility of this initiative enduring well into the future and benefiting a wide range of London schools, teachers and children.

Key conclusions for the Secondary LGA course.

Overall, while it was by no means crystal clear at the start of the project how teachers would make use of and contribute to workshops, over time their value to school became very apparent. In that sense, the theory of change we began with was a success, but sometimes in unexpected ways – such as the degree to which teachers began to depend upon each other as a network to share resources, ideas and for problem solving. Eighteen months later, it is clear that the LGA is close fit with the goals of the London Schools Excellence Fund in raising expectations, cultivating excellent practice and helping geography departments to become more self-sufficient. While we can say that it has helped to initiate change, the project will need more time to become embedded in school practices to really generate a *culture of change*. For this to happen we will need to secure some limited funding and also require schools to start paying regular fees for workshops and fieldwork.

Key conclusions for the LGA course overall.

In summary, the LGA course has been successful in creating a focus on knowledge-led teaching and curriculum. Moreover, it has aided participants' interpretation of the value of knowledge in discipline-based teaching. Thus, participants appreciate that knowledge is more than just an accumulation of 'facts' and understand how knowledge relates to a body of ideas that represent a subject-discipline. Consequently the teachers are promoting a geographical dimension and geographical thinking about the topics they use for teaching.

The profile of geography as a subject has been raised in the schools participating in the LGA course. In primary schools this is evident in geographical displays around the school, in geography-based theme days organized by the Geography Coordinator or in the re-balancing of teaching and emphasis in topics to include much stronger geographical dimensions. In secondary schools a raised profile for geography is recognised through the extension and strengthening of fieldwork experiences and the introduction of contemporary themes and topics into schemes of work.

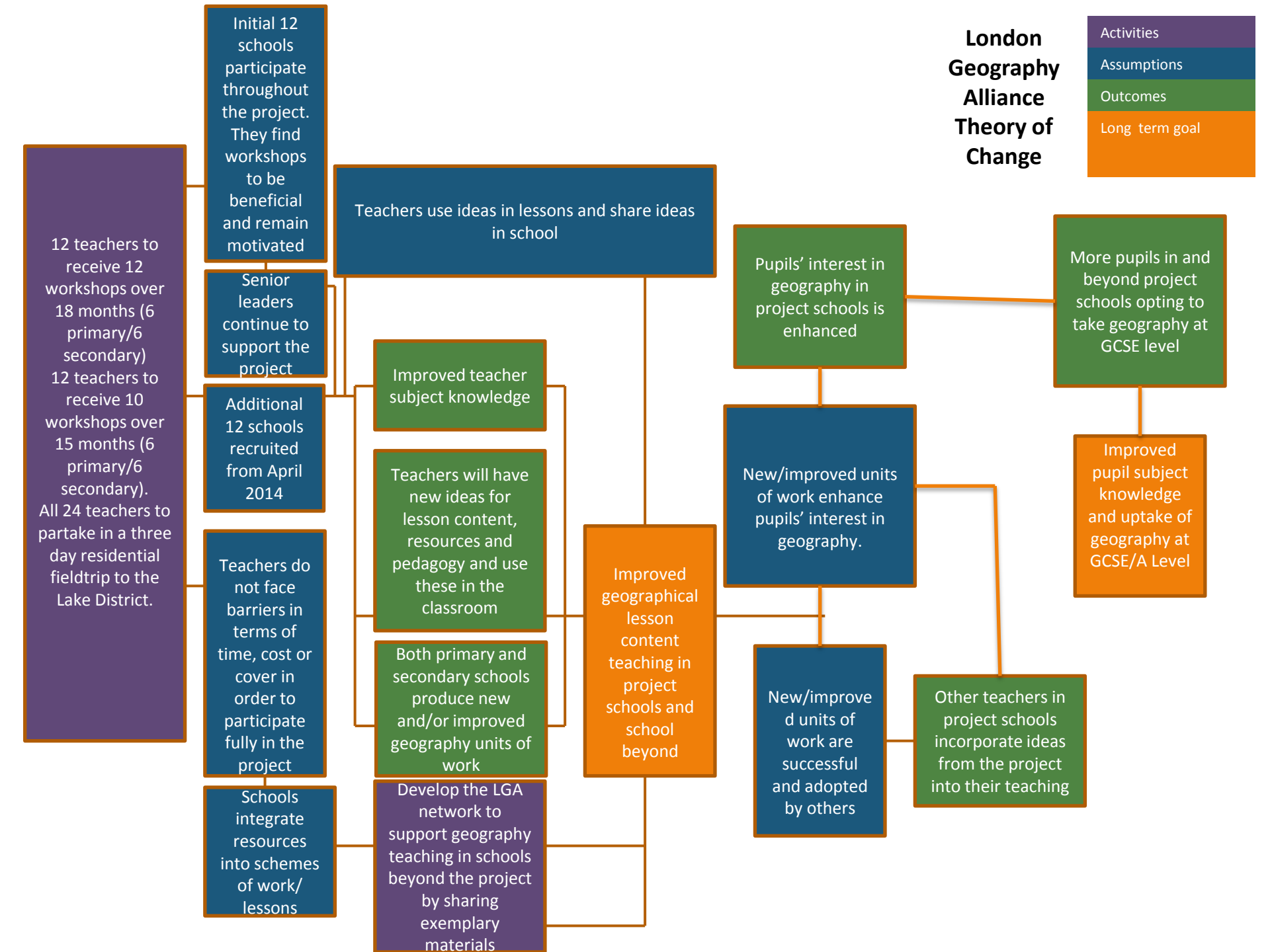
It is too early to establish if the LGA course has had a significant effect on pupil achievement, but it is possible to say that it has generally increased pupils' interest and motivation in the subject, and has developed pupils' capacity to identify the geographical dimensions within topics and to express themselves clearly when talking about these using appropriate subject-specific terminology.

The LGA course has facilitated subject-based discussion within schools and across schools through then organisation of workshops and discussions on a dedicated website which afforded opportunity for sharing of resources, ideas and approaches to teaching. This has established links between teachers in different schools and schools and universities.

The LGA course has initiated a cultural shift and made a good start on raising expectations for geography teaching and learning in the London school system. The teachers on the course are all more confident in what they are teaching and also in their ability to implement this in the classroom. However, to produce a longer-term *cultural change* this momentum will need sustaining.

The LGA course has demonstrated that a funded partnership between university subject experts and subject-specific university teacher educators, who have complementary expertise, is a very effective approach for improving the confidence of teachers in what they teach and how they teach it, for raising the profile of a subject amongst pupils and teacher colleagues, and for initiating improvements in pupils' attainment outcomes.

The clear benefits and positive impacts of the LGA course on the participants, the pupils they teach, the wider effects on colleagues and on the quality of geography curriculum as interpreted by schools, even within the relatively short time-scale of the course, urge that two key actions emerge from this subject-specific professional development model and the structures that have been developed. Firstly, the benefits should be given high profile such that schools that did not participate in this LGA course are urged to join and share benefit from a future LGA course. This would spread the development of teaching excellence more widely across London. Secondly, the LGA course model of professional development should be secured through a further phase of investment and support which would enable the development a repeat of the course and a second phase for the initial participating schools, with a view to these future courses becoming self-sustaining by requiring participants to pay for the benefits and value they receive. This approach would contribute significantly to the aspiration of London to become acknowledged as a centre of teaching excellence in the teaching of geography.


London Geography Alliance Theory of Change
Activities
Assumptions
Outcomes
Long term goal
12 teachers to receive 12 workshops over 18 months (6 primary/6 secondary) 12 teachers to receive 10 workshops over 15 months (6 primary/6 secondary). All 24 teachers to partake in a three day residential fieldtrip to the Lake District.
Initial 12 schools participate throughout the project. They find workshops to be beneficial and remain motivated
Senior leaders continue to support the project
Additional 12 schools recruited from April 2014
Teachers do not face barriers in terms of time, cost or cover in order to participate fully in the project
Schools integrate resources into schemes of work/ lessons
Teachers use ideas in lessons and share ideas in school
Improved teacher subject knowledge
Teachers will have new ideas for lesson content, resources and pedagogy and use these in the classroom
Both primary and secondary schools produce new and/or improved geography units of work
Develop the LGA network to support geography teaching in schools beyond the project by sharing exemplary materials
Improved geographical lesson content teaching in project schools and school beyond
Pupils' interest in geography in project schools is enhanced
New/improved units of work enhance pupils' interest in geography.
New/improved units of work are successful and adopted by others
Other teachers in project schools incorporate ideas from the project into their teaching
More pupils in and beyond project schools opting to take geography at GCSE level
Improved pupil subject knowledge and uptake of geography at GCSE/A Level

London Geography Alliance
Evaluation Framework

	Outcomes	Indicators	Baseline data collection	Impact data collection
Teacher outcomes **Sub Groups** As part of establishing the baseline, the characteristics of the eligible cohort should be analysed across the following sub groups: ☐ NQTs ☐ 3 years + ☐ Primary/ secondary ☐ Other (project specific) These should be expressed as a % of the whole group. **Churn** Throughout the programme thorough records of any "churn" of teachers leaving or joining the intervention group must be kept. In	• Increased subject knowledge in Geography	• Increased teacher scores in subject knowledge tests to be taken by all teachers involved in the intervention (12 primary and 12 secondary teachers, teaching across all key stages)	• Scores collected for individual teachers from pre-**intervention subject knowledge tests** at the start of first professional development sessions March/April 2014 (cohort 1/2). *These tests were designed in conjunction with our external moderator from the IOE.*	• Scores collected for individual teachers from **subject knowledge tests** after third professional development session July 2015.
	• Increased teacher confidence in their ability to plan effective lessons	• Increased teacher scores in confidence surveys to be completed by all teachers involved in the intervention (12 primary and 12 secondary teachers, teaching across all key stages)	• Scores collected for individual teachers will be collected through the use of the **Teacher sense of Self-Efficacy Scale** at the start of first professional development sessions in March/April 2014 (cohort 1/2). • Reflective review comments by individual teachers collected through **a second questionnaire** at interim point (July 2014).	• Scores collected for individual teachers from post intervention **Teacher sense of Self-Efficacy Scale** surveys (July 2015) • Analysis of reflective review comments by teachers, based on self-evaluation of improvements in subject knowledge July 2014, as indicated in **a second questionnaire**.

	Outcomes	Indicators	Baseline data collection	Impact data collection
order to do this records must be kept of: ☐ Unique teacher identifier ☐ Engagement date ☐ Disengagement date and reason	• Delivery of high quality teaching including subject-focused and teaching methods	• Improved teaching performance in observed lessons to be conducted for a sample size of 10% of participants. With a small sample of those to be independently moderated. This will be done once towards the end of the project.	• Participants will report on changes to their practice, including their use of fieldwork in London and beyond.	• *We will be conducting **observations** for* a sample size of 10% of teachers by asking for volunteers *with an independent moderator in Geography using an IoE adapted form based on the Ofsted standards (summer 2015).* The moderator will evaluate how the teachers have incorporated knowledge and resources from workshops.
	• Use of improved subject-specific resources	• Improved subject-specific resources available.	• **Audit/sample** scrutiny of existing subject specific resources being used, to be carried out by the evaluator. The evaluator has extensive experience of teaching geography and will review the extent to which resources reflect contemporary ideas and best practices in geography education.	• Independent review of new subject specific resources and old **audited resources** July 2015. See baseline data collection.

	Outcomes	Indicators	Baseline data collection	Impact data collection
Pupil outcomes	• Increased motivation and interest in learning geography.	• Change in attitude towards geography as a subject and in understanding of the relevance of geography	• A **questionnaire** will be given to a sample of one class (approx. 1/10th) per school (24 schools) to evaluate pupils' attitudes and interest in geography (before new unit is taught).	• A second **questionnaire** will be given to a sample of one class per school after they have completed the revised unit of work.
	• Increased geographical subject knowledge (Key Stage 2 & 3)	• Pupils report on what they have learnt in new geography classes.	• A **questionnaire** will be given to a sample of one class per school (approx. 1/10th of classes) to evaluate how much geography they know before a new unit of work is introduced.	• A second **questionnaire** will be given to a sample one class after they have completed the revised unit of work.
	• Increased take up of specific subjects at GCSE level.	• Increased numbers of pupils taking up Geography subjects at GCSE in 2015.	• Trend data: **numbers of pupils taking up Geography subjects at GCSEs** 3 years prior to intervention January	• Intervention group: **numbers of pupils taking Geography subjects GCSEs** July 2015.

	Outcomes	Indicators	Baseline data collection	Impact data collection
School System Outcomes/Links with Non-Project Schools	• Revision of existing schemes of work	• Schemes of work have been modified and show improved subject knowledge, ideas and resources.	• **Pre-project schemes of work** are collected from a sample (50%) of project schools.	• **Post-project schemes of work** are collected from a sample (50%) of project schools and reviewed to assess changes to the topics included.
	• New or revised units of work incorporated into SoW	• Units of work have enhanced subject knowledge focus, content and fieldwork opportunities.	• **Pre-project units of work** for topics covered by workshops are collected from a sample (50%) of project schools.	• **Post-project units of work** for topics covered by workshops are from a sample (50%) of project schools will be evaluated in terms of subject knowledge, curricular innovation and resources.