



Centre for Educational Development
Appraisal and Research

**EVALUATION OF *PGCE PLUS*, 2004 - 2006
FINAL REPORT**

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Executive summary:

The Post Graduate Certificate of Education Plus (*PGCE Plus*) pilot ran from 2004-2006. This pilot was run by the National Academy for Gifted & Talented Youth (NAGTY), and was funded by the Gatsby Charitable Foundation's Technical Education Projects (GTEP). *PGCE Plus* focused on two areas of teacher shortage (in mathematics and science), and offered an enhancement to initial teacher training for PGCE graduates with an interest in provision for gifted and talented pupils. The three week (2004), and two week (2005 and 2006) residential courses were offered at the universities of Warwick (mathematics) and Canterbury (science), and were run in conjunction with NAGTY summer schools for gifted and talented pupils. In total, 46 mathematics and 30 science participants attended the *PGCE Plus* courses. The participants were also offered two years of continuing professional development (CPD) support, including three Termly Meetings a year, held at the University of Warwick, access to e-resources, and CATs points to be used in conjunction with study for a Masters degree offered by Warwick Institute of Education (WIE).

The *PGCE Plus* pilot was, overall, a successful programme that delivered enhanced teacher training in the field of gifted and talented mathematics and science provision. In addition to developing skills and knowledge in the area of gifted and talented education, the programme also represented a successful model of interphase teacher training between the initial and post-qualification stages. The teaching experiences of the *PGCE Plus* participants indicated that the impact of the programme was twofold. Firstly, participants found that, as teachers, they had a high level of conceptualisation of gifted and talentedness. Secondly, they felt that the skills they had developed to differentiate their teaching of gifted and talented pupils were transferable for differentiating their teaching of pupils of all abilities. The *PGCE Plus* programme therefore had a wider impact than might, at first, be suggested by the focus on gifted and talented provision.

Further, the *PGCE Plus* participants were enthused for gifted and talented education by their involvement in the project. This was a valuable outcome, especially for those *PGCE Plus* participants who found that their schools were not wholly supportive of the gifted and talented agenda. This was an illustration of the fact that the influence of NAGTY decreased over the three stages of the *PGCE Plus* programme. Whereas NAGTY had full responsibility for the initial residential courses, it had little control over what happened in schools. This accentuates the importance of the CPD

component of *PGCE Plus* to help support participants in maintaining their enthusiasm and continuing professional development.

In summary, the CEDAR evaluation of the NAGTY *PGCE Plus* pilot indicated that:

- The *PGCE Plus* residential courses, held at the Universities of Warwick and Canterbury, were successful models of enhanced teacher training. They represented a bridge between initial and post qualification teacher training.
- The *PGCE Plus* courses were valued by participants because of the high quality of teaching experienced on the courses, and the opportunity to exchange ideas with trainee teachers sharing a similar interest in gifted and talented education.
- The *PGCE Plus* courses provided valued further training in the theory of gifted and talentedness, strategies for developing gifted and talented provision, and techniques for effective teaching and learning in the classroom.
- The CPD element of the *PGCE Plus* pilot underwent redesign over the life of the pilot. Participants were not provided with gifted and talented mentors, but were given the opportunity to attend Termly Meetings held by NAGTY at the University of Warwick. Delays in implementing this change caused some unease among the 2004 cohort, and attendance at the Termly Meetings by this cohort in particular was not as high as it might have been.
- The majority of *PGCE Plus* participants were interested in taking advantage of the masters level opportunity provided by NAGTY and the WIE. However, workload considerations were likely to limit the numbers who would undertake this additional CPD.
- The *PGCE Plus* participants' experience of gifted and talented provision in their schools varied. School contexts were central to the ability of *PGCE Plus* teachers to impact upon gifted and talented provision. A spectrum of contexts was experienced, with some schools being engaged by gifted and talented issues, while others were indifferent, and a few were hostile.
- The experience of *PGCE Plus* participants who taught in school contexts that were not entirely supportive of gifted and talented education indicated that NAGTY had less influence over the later stages of the programme.
- Notwithstanding differences in school contexts, *PGCE Plus* participants typically maintained their enthusiasm for pursuing a gifted and talented agenda both in their schools and their careers.

- *PGCE Plus* participants noted that the additional skills that they had acquired on the *PGCE Plus* courses proved to be applicable across the ability range; typically, for example, they spoke of successfully employing enhanced differentiation techniques and Socratic questioning (two elements covered in the *PGCE Plus* courses) with students of all abilities.

1. Introduction

1.1 *The PGCE Plus pilot:*

The Post Graduate Certificate of Education Plus (*PGCE Plus*) pilot ran from 2004-2006. This pilot was run by the National Academy for Gifted & Talented Youth (NAGTY), and was funded by the Gatsby Charitable Foundation's Technical Education Projects (GTEP). *PGCE Plus* focused on two areas of teacher shortage (in mathematics and science), and offered an enhancement to initial teacher training for PGCE graduates with an interest in provision for gifted and talented pupils. The three week (2004), and two week (2005 and 2006) residential courses were offered at the universities of Warwick (mathematics) and Canterbury (science), and were run in conjunction with NAGTY summer schools for gifted and talented pupils. In total, 46 mathematics and 30 science participants attended the *PGCE Plus* courses. The participants were also offered two years of continuing professional development (CPD) support, including three Termly Meetings a year, held at the University of Warwick, access to e-resources, and CATs points to be used in conjunction with study for a Masters degree offered by Warwick Institute of Education (WIE).

The *PGCE Plus* concept was innovative in that it extended the postgraduate initial teacher training course, the Postgraduate Certificate of Education (PGCE), in subjects which experience teacher shortages (mathematics and science) by offering a two-week summer course, which was subject specific and focused on the needs of gifted and talented youth, and a further two years of support for professional development. Funding from the Gatsby Foundation allowed for support for newly qualified teachers in these subject areas to be linked to their interest in catering for the needs of gifted and talented students.

1.2 *The Evaluation:*

Gatsby commissioned the Centre for Educational Development, Appraisal and Research (CEDAR), the University of Warwick, to undertake a three year independent evaluation of *PGCE Plus*. CEDAR produced two interim reports, in March 2005 and April 2006, and this final report, February 2007. The interim reports indicated that the project was, in overall terms, successful, especially as a method of delivering enhanced teacher training. Problems which occurred in the first year of presentation were satisfactorily addressed in the second year. There were some problems also associated with changes made by NAGTY to the CPD element of *PGCE Plus*, but the changes were carried through and successfully implemented.

This was particularly the case with the shift from individual *PGCE Plus* mentors to the Termly Meeting programme.

Having established the validity of the *PGCE Plus* pilot, CEDAR has begun to focus on dissemination of findings. An academic article on *PGCE Plus* as a model of continuing professional development has been submitted. A second academic article on the experiences of *PGCE Plus* participants in their NQT years is currently in preparation. In addition, papers on the pilot will be given at the CEDAR Conference, 'Enhancing Gifted and Talented Education in Secondary Schools, a one day conference for gifted and talented co-ordinators and senior managers', May, 2007; and, pending acceptance, at the British Educational Research Association (BERA) Annual Conference, September, 2007.

2. Main Findings

2.1 The participants' experience of PGCE Plus:

The participants' experience of *PGCE Plus* can be understood in terms of three stages of their development from post *PGCE* student to Newly Qualified Teacher (NQT) status and beyond in schools. These areas are: (i) the *PGCE Plus* course itself; (ii) *PGCE Plus* CPD, and (iii) experience in schools. Within these three areas, a number of salient issues were identified:

(i) The *PGCE Plus* course:

- Overall, the *PGCE Plus* course was a successful model – in terms of *PGCE Plus* as an enhancement of initial teacher training, and as preparation for future gifted and talented providers.
- *PGCE Plus* participants felt that the courses improved their understanding of how to apply their subject knowledge in the classroom. They indicated that their understanding of the term 'gifted and talented' and their ability to meet the needs of gifted and talented students had developed.

(ii) *PGCE Plus* CPD:

- NAGTY delivered a follow-up programme as part of the *PGCE Plus* package, including the provision of M level CPD for *PGCE Plus* teachers, accredited by the Warwick Institute of Education.
- The *PGCE Plus* participants exhibited a mixed response to the CPD element of the programme.

(iii) *PGCE Plus* participants' experiences in schools:

- The degree to which *PGCE Plus* teachers were able to contribute to gifted and talented provision in their schools depended on the particular context of each school.
- *PGCE Plus* teachers found that their additional understanding of teaching and learning, derived from the *PGCE Plus* programme, enabled them to improve their provision for students across the ability range.
- *PGCE Plus* teachers continued to envisage being able to take on wider roles relating to gifted and talented education in their schools.

2.2 *The PGCE Plus course:*

The *PGCE Plus* course was presented to three cohorts from 2004-2006. In each year of presentation the course was deemed to have been a success, and improvements were made in the delivery of the course from one presentation to the next. The courses consisted of several elements: a taught component, self-study, observations of NAGTY Summer School children, and teaching opportunities. The largest element was the taught component, and participants from all three cohorts were very positive about this aspect of the course. Typical comments from participants were:

'It's been fantastic. It's been difficult but I think it's been difficult in the way that it's been *challenging* me in a way that my PGCE did not do. There have been times that I've been really kind of full up because there's so much information that has been thrown at me [...] For probably the first time ever, I have, I think, actually been stretched by something, had to think about it.'

'The tutors were knowledgeable and excellent teachers themselves, very good role models [...] I feel very positive about teaching in general, and G&T in particular.'

Participants' views on the self-study elements of the courses varied depending on their approach to the reading and work that was provided as guidance, rather than instruction. The majority of participants appreciated the self-study materials, and the tutors' approach to that part of the *PGCE Plus* experience:

'We're given a lot of reading and [are] advised that "This would be of relevance for tomorrow's session", but it's not, "You must now go ... and read

this or you will not pass tomorrow". It's offered and how much you put in is really very much up to yourself... I very much appreciate being treated like an adult'.

The linkage between the *PGCE Plus* courses and the NAGTY Summer School gifted and talented courses, or strands, was, to some degree, problematic. Overall, *PGCE Plus* participants felt that they did not get enough access to the NAGTY students, see enough of the Summer School strand teaching and learning, or have sufficient opportunity to teach the NAGTY children. These issues were never really resolved to the full satisfaction of the *PGCE Plus* participants.

2.3 *PGCE Plus participants' understanding of gifted and talented issues:*

PGCE Plus participants indicated that they found that their understanding of gifted and talented issues was greatly enhanced by the courses, and that their knowledge enabled them to be more effective teachers, not just gifted and talented pupils, but across the entire ability range. The participants finished the courses believing that they were better equipped than they had been at their PGCE courses to meet the needs of gifted and talented pupils:

'I'm better equipped to meet [the needs of gifted and talented] pupils because of the range of techniques we've been introduced to'.

'[The course has] given me ideas and opened my eyes to different methods I can use to enthuse my gifted and talented pupils'.

The participants were pleased to discover that their hopes were realised once they reached the classroom.

2.4 *The CPD experience:*

The CPD elements of the *PGCE Plus* pilot underwent a significant change from that originally planned. The initial intention had been to provide participants with one-to-one mentor support once they were in schools. However, NAGTY were unable to recruit mentors, arguing that a sufficient pool of experience gifted and talented mentors did not exist. This component of the CPD package was replaced with Termly Meetings held at the University of Warwick, aimed at updating the *PGCE Plus* participants on developments in gifted and talented provision, and support available from NAGTY. Additional support also came in the form of school visits by the NAGTY

PGCE Plus project officer, but only in 2004/5. In addition, in the second year of its presentation, *PGCE Plus* participants were given the opportunity to register for a masters degree at the Warwick Institute of Education, with CATs points entitlements arising from their completion of the *PGCE Plus* course.

The change from the promised personal mentoring scheme to the Termly Meetings was not universally welcomed by the *PGCE Plus* students. Further, the Termly Meetings took time to bed down, and participants' feelings regarding the value of the meetings were mixed. For the 2004 cohort in particular, the CPD element of *PGCE Plus* was slow to develop, and this problem led to some unease among that cohort in 2004/5. Participants were concerned about the usefulness of the NAGTY project officer's visits, the lack of personal mentors, and poor communications from NAGTY about CPD:

NAGTY project officer's visits: 'In terms of school, [the NAGTY staff member] has not been able to offer me any support that could facilitate taking on a bigger role in G&T. He was more interested in what my school and I could offer other *PGCE Plus* students.'

lack of personal mentors: 'I have had no visit from the *PGCE Plus* mentor and no follow up, which would have been great and would have really helped!'

poor communications: 'I haven't heard anything about [the mentor]. I'm not sure if, maybe, that's due to the fact that I haven't contacted them and told them my mentoring school, and they, consequently, haven't allocated it, so I'm not even sure if I am still considered part of this course.'

The first Termly Meeting was held in June 2005, and was followed by three more meetings. Each meeting was a mix of NAGTY updates, presentations, and subject-specific workshops. The participants valued the opportunity to attend the meetings, although attendance from the first cohort, of 2004, dropped away noticeably from the second meeting onwards, with, for example, only 6 participants from the 2004 cohort (out of a total of 19) attending the second Termly Meeting in November 2005.

The masters level opportunity was generally welcomed by the participants. For example, of the 2006 cohort, 11 of the 12 science respondents to the post course

questionnaire, and 8 of the 9 mathematics respondents said that they were interested in taking advantage of the masters opportunity.

2.5 *PGCE Plus participants' experiences in schools:*

The *PGCE Plus* pilot aimed to enhance teacher training in two subject areas, and, as a result, to boost the profile of gifted and talented provision in schools in which the *PGCE plus* participants would subsequently teach. The intention was for pupils of *PGCE Plus* participants to benefit from their enhanced *PGCE Plus* knowledge and training, and for those participants to act as ambassadors for gifted and talented provision in their schools. Follow-up questionnaires and interviews with *PGCE Plus* trained teachers indicated that the particular school contexts in which they sought to deliver gifted and talented education were of primary importance to their success, or lack of success, in beginning the process of embedding such provision within mainstream schooling.

Of the three cohorts, the 2004 cohort had the most extended school experience related to gifted and talented provision. All of the ten 2004 mathematics *PGCE Plus* cohort who were interviewed in both 2005 and 2006 felt that improvements could be made in terms of provision for gifted and talented pupils in their schools. Five of the ten interviewees described school contexts that indicated that there were notable issues to be addressed in terms of gifted and talented provision. In these cases, the *PGCE Plus* teachers felt that there was a lack of interest in gifted and talented education that ranged from disinterest to hostility. These *PGCE Plus* teachers felt that there was a lack of direction at school level, and, in seven cases, this was exacerbated by hostility to the idea of gifted and talented provision on the grounds that it was elitist. For example, one respondent explained that their attempts to improve provision for able pupils had been largely unsuccessful, as a direct result of hostility among colleagues and senior staff to the concept of gifted and talented provision. This *PGCE Plus* teacher noted:

'I think we have a slight problem in the school [in] that I think some of the senior management who have been here for almost 30 years don't think much of G&T, they think it's elitist so I have hit repeated brick walls about trying to do anything about it, and now the government has said that they have to do it and they've got all this money for it, they do it, but in a very just-write-a-list-and-put-it-in-a-folder kind of way'.

2.6 *PGCE Plus participants' understanding of teaching and learning, and its impact in schools:*

The evaluation showed that *PGCE plus* was a successful model of enhanced initial teacher training. Participants reported that the *PGCE plus* courses provided them with valuable new insights into teaching and learning. Further, the follow-up interviews and questionnaires showed that these insights proved to be important for all the teaching undertaken by the *PGCE Plus* participants, not just in teaching gifted and talented pupils.

PGCE plus participants from all cohorts commented on the differences between their experience of PGCE courses and *PGCE Plus*. Participants commented positively on course content, staff, and the collaborative learning that characterised the *PGCE plus* courses:

collaborative learning: 'All the knowledge I've gained here is fantastic, and ... it's enthusiasm, it's kind of inspirational stuff that I just never got on my PGCE, and just these people that we've met here [the *PGCE Plus* staff] are amazing [...] it's made me want to have a career like theirs.'

staff: 'My expectations have been exceeded. The tutors were knowledgeable and excellent teachers themselves, very good role models. [...] I feel very positive about teaching in general, and G&T in particular.'

course content: 'My PGCE course dealt with a lot of theory work which was largely irrelevant to what you do in the classroom. And half of that I found a waste of time, frankly. [The *PGCE Plus*] dealt a lot more with issues of actually, "how would you teach a gifted and talented pupil?''

Although the central focus of *PGCE Plus* was on enhancing the skills base of the participants in terms of their ability to teach gifted and talented pupils, the participants reported that, once in schools, they found that *PGCE Plus* had boosted their ability to provide for children across the ability range. For one teacher from the 2004 cohort, the insights that he had gained on the *PGCE plus* course had, he felt, prevented him from being complacent or having negative preconceptions about teaching lower sets. Others said that they had higher expectations with regard to all pupils, and that they found differentiation easier:

'I think it [*PGCE plus*] definitely makes me have higher expectations of all my pupils, even those ... near the bottom end. I'd still set them open-ended problems just to see who can shine with those questions.'

'I think it's fairly fair to say that all those techniques that I've read about and heard about, which are designed to help the gifted and talented in their thought processes and everything else, are equally applicable to the whole spectrum. And...although initially, my intention was to bring out those...naturally gifted and talented...it's actually helped everybody.'

The typical experience of the *PGCE Plus* trained teachers was that they taught across the ability range, and only had a small number of classes containing gifted and talented pupils. This experience matched their expectations as newly qualified teachers. Nonetheless, the *PGCE Plus* participants envisaged having a larger role in their schools' gifted and talented provision in future years. For example, all of the 2004 cohort involved in the follow-up work indicated that they were, a year after the *PGCE Plus* course, still interested in gifted and talented issues, even if current workloads mitigated against wider gifted and talented roles in their schools:

'At this stage I cannot become more involved, and the reason? Just a large amount of workload, other than not having time to really address it.'

'I've found that it's become quite a struggle [to prioritise gifted and talented issues] [...] I think by the end of the year, if you asked me the same question, it would be more of a priority than it is now, and I think that next year I'll be looking to make it more of a priority, particularly if there is the opportunity in the school to do that. I think there will be opportunity in the school, because there doesn't seem to be a great deal of knowledge amongst staff for gifted and talented.'

In some cases, the *PGCE Plus* participants were extremely eager to pursue wider gifted and talented roles in school:

'I still want to go forward with it [...] and I'm desperately trying to get involved with this specialist college project, which will be really focused on the gifted and talented, and I certainly shared my ideas with my head of department and people at the school, so they know where my interest [is focused].'

3. Conclusions

The *PGCE Plus* pilot was, overall, a successful programme that delivered enhanced teacher training in the field of gifted and talented mathematics and science provision. In addition to developing skills and knowledge in the area of gifted and talented education, the programme also represented a successful model of interphase teacher training between the initial and post-qualification stages. The teaching experiences of the *PGCE Plus* participants indicated that the impact of the programme was twofold. Firstly, participants found that, as teachers, they had a high level of conceptualisation of gifted and talentedness. Secondly, they felt that the skills they had developed to differentiate their teaching of gifted and talented pupils were transferable for differentiating their teaching of pupils of all abilities. The *PGCE Plus* programme therefore had a wider impact than might, at first, be suggested by the focus on gifted and talented provision. Further, the *PGCE Plus* participants were enthused by gifted and talented education by their involvement in the project. This was a valuable outcome, especially for those *PGCE Plus* participants who found that their schools were not wholly supportive of the gifted and talented agenda. This was an illustration of the fact that the influence of NAGTY decreased over the three stages of the *PGCE Plus* programme. Whereas NAGTY had full responsibility for the initial residential courses, it had little control over what happened in schools. This accentuates the importance of the CPD component of *PGCE Plus* to help support participants in maintaining their enthusiasm and continuing professional development.

In summary, the CEDAR evaluation of the NAGTY *PGCE Plus* pilot indicated that:

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The CEDAR evaluation, interim reports:

Arweck, E., Cullen, M.A., Cullen, S., Lindsay, G., *The National Academy for Gifted and Talented Youth: Evaluation of PGCE Plus 2004, Interim Report 1*, CEDAR, University of Warwick, March 2005.

Arweck, E., Cullen, S., Hartas, D., Lindsay, G., *Evaluation of PGCE Plus 2005, Interim Report 2*, CEDAR, University of Warwick, April 2006.