



An evaluation of the Critical Skills Programme in Jersey was commissioned by the States of Jersey Department for Education, Sport and Culture in September 2003. At that point over two hundred teachers had been trained over a period of two years and it was considered important to assess whether the programme was achieving its aims in providing learners with the skills, values and attitudes to become independent and interdependent life long learners in the 21st Century. Professor Ted Wragg led the evaluation team and he, Dr Caroline Wragg and Dr Rosemary Chamberlin conducted the evaluation over two and a half terms, completing the report in September 2004.

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Jersey Critical Skills Programme

An Evaluation

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Executive Summary of the Evaluation

The Jersey Critical Skills Programme has been conceived with a view to preparing children for the complex rigours of adult life in the 21st century, as well as helping them enhance and enjoy their studies. This evaluation was undertaken so that its effectiveness could be assessed. The principal focus was on how appropriate the programme was for its purpose; how well teachers were being prepared to teach it; the views and experiences of those centrally involved, including pupils, teachers, headteachers, and those responsible for the initiative; and on making recommendations about future action.

In total there were 1,463 consultations, a large sample in any context, and 26 lesson observations in primary and secondary schools. The sample of questionnaires and interviews was made up as follows:

Questionnaires from pupils	744
Questionnaires from teachers and heads	142
Teachers' training course evaluations	374
Interviews with pupils	129
Interviews with teachers, heads and others	74
TOTAL	1,463

An independent parallel evaluation of critical skills teaching in eight primary schools was undertaken by Dr Rosemary Chamberlin. Her findings corroborated and amplified those of the main evaluation.

The training courses for teachers were thorough and inspiring. Teachers were overwhelmingly enthusiastic about them, a number saying it was the best INSET course they had ever attended. In general almost all teachers used similarly positive adjectives, such as “excellent”, “inspirational”, “challenging” and “fantastic”. Even the word “exhausting” was used in a positive context.

The questionnaires completed by teachers and heads showed that 96% rated their training ‘extremely effective’ or ‘somewhat effective’, while only one teacher said it was ‘ineffective’. Participants particularly appreciated the experiential nature of the training and the high degree of professionalism of the trainers. Lesson observations confirmed that teachers did put into practice what they had learned.

A sample of 744 primary and secondary children completed questionnaires about their attitudes to and experiences of critical skills lessons. What is notable about their replies is that they are strongly skewed towards the positive end of each dimension. The overwhelming majority of children see critical skills lessons as helpful in their learning, and also enjoyable. Only ten per cent say they do not like them. They detect that their teachers enjoy such lessons as well. Three quarters feel the programme has boosted their confidence, though a third sometimes find the lessons boring and a quarter find it hard working in a group.

Their greatest concern, expressed by two thirds, appears to be that some children spoil it for others by misbehaving. In general, however, children give a very strong endorsement to their critical skills lessons. Primary pupils are especially enthusiastic and girls are slightly more positive than boys, though approval is notably high amongst all groups. The

most popular features are: working in teams, doing challenges, having a quality audience, and giving a presentation. Least liked are brainstorming, getting feedback, and debrief, but even these are only unpopular with about 20% of children.

Teachers were extremely positive in their attitudes towards the critical skills programme and their attitudes remained very positive well after their training course. On most items in the attitudes part of the questionnaire completed by 127 primary and secondary teachers, some 80% to 90% of their responses were at the positive end of each statement. The belief that the critical skills programme would develop lifelong learning and that it was suitable for the age groups they were teaching was especially noteworthy.

About 85% of teachers said that they had changed their teaching as a result of the programme, which is unusually high, as is the figure of 96% describing it as either 'very influential' or 'somewhat influential' on their classroom teaching. Teachers engage, on average, in 1,000 or so exchanges in a single day, which means 5,000 in a week, 200,000 in a year, several millions in a career. It is hard to unscramble the daily habits that result, which is why many programmes show what one writer has called 'innovation without change'.

Teachers' high degree of commitment is confirmed by their strong agreement that heads and fellow teachers should also receive training. They are split on whether teachers who have not done the training understand what is involved. There was a considerable desire amongst the untrained teachers we interviewed to become trained because of the enthusiasm of those who had been on courses, though a few teachers were more sceptical.

The support of most elements of critical skills teaching was high, and in some cases was huge, every single teacher saying that brainstorming was 'very useful' or 'quite useful'. Virtually unanimous approval was also given to self-designed challenges, quality audience and direct feedback. Few features received a low rating, though about half said they did not use comment box and challenges from the website. There was a high degree of trust that critical skills lessons did make an impact on their children's attitudes, learning and behaviour. It was felt that attitudes and learning would benefit more than behaviour, but even then, only 13% said they would have no impact on behaviour.

About 90% of teachers had shared their experiences informally with other members of staff in their school, while three quarters had discussed critical skills face to face with other teachers in the island. There was less sharing, however, with parents, some 40% of teachers saying they had made no contact at all with them about critical skills, though 16% had held meetings and 16% sent letters. Only one per cent believed that critical skills did not fit in with other initiatives in Jersey. About three quarters of teachers said they would use a dedicated critical skills programme Jersey website to share challenges.

Headteachers, like teachers, were in the main very positive about critical skills. All fifteen who completed a questionnaire felt it had had a very positive or positive effect on pupils' attitudes to lessons and, apart from one head, that it had a positive or very positive impact on pupils' behaviour during lessons. A similar picture was apparent for the perceived impact, in general, of the critical skills programme on pupils' learning. In general all heads, with only one exception, said that the critical skills programme had been either 'very' or 'somewhat' influential on their school. These views were confirmed in interviews with heads.

Dr Rosemary Chamberlin conducted an independent appraisal in eight Jersey primary schools. Her conclusions are similar to those in the main evaluation:

The headteachers, teachers and children interviewed were enthusiastic about critical skills. Critical skills activities and challenges were seen to develop independence, co-operation, communication, responsibility and motivation. While teachers all agreed that it improved the way children worked together, there was some difference of opinion over whether it also improved the quality of the finished work. Those who thought it did tended to be among the more experienced CS teachers. Critical skills is appropriate for all age groups, from nursery children to adults. Some headteachers used it in staff meetings to solve problems such as producing school policies.

Most teachers felt confident to adapt the CSP to suit their personal preferences or school circumstances. A few ran what could be called critical skills classrooms, while most used it to a greater or lesser extent when they thought it appropriate. Humanities, Science, English and PHSE/Citizenship were considered the most suitable subjects for challenges. Maths was commonly though not universally thought to be difficult.

The time taken to prepare challenges was seen as a disadvantage. Experienced teachers said this became easier but newly trained teachers found it time-consuming. Heads and teachers looked forward to the time when all staff were trained. Having some teachers in a school trained and others not creates problems for planning and for continuity. Teachers want to plan across year groups and to inherit children from and pass them on to trained teachers. Teachers said they would appreciate the opportunity to share practice and ideas with others. Some felt that this would be more valuable than the second three days of training. Critical skills is fun.

Ten questions were posed about areas of investigation at the beginning of this evaluation. Brief summaries of the findings on each of them are given below:

1. Does the critical skills programme engage children's attention and commitment?

It certainly gains a high degree of support from most of them, and lesson observations confirm their involvement. They prefer some aspects rather than others, but elements such as teamwork, facing challenges and giving presentations received especial approval. Girls were more enthusiastic than boys and primary pupils more effusive than secondary, but the amount of approval all round was very high.

2. Are they being equipped with the sort of valuable tools they will need for the future?

Both the main evaluation and Dr Chamberlin's independent assessment concluded that this was the case, insofar as one can judge. A broadening of the base to include other perspectives would be even more beneficial.

3. Does the programme amplify the conventional subject curriculum in a positive way?

This varies with the individual teacher, and the programme cannot be expected to turn a less competent teacher into a star, but in general it did seem to add positively to teaching, though both children and teachers reported different experiences and needs

for different subjects, especially in secondary schools. Maths help was thought to be a particular need. Very few pupils or teachers queried the relevance of the critical skills approach to learning subject matter.

4. *Since every school has been encouraged to take part, are heads and teachers keen on it, or are they reluctant participants?*

There is a very high degree of commitment all round and very few are sceptical. Headteachers in particular are supportive, especially when they themselves have been on the training, and some teachers even describe themselves as ‘messianic’.

5. *Are teachers being appropriately trained?*

Training was rated very highly indeed by participants and observation of courses confirmed this approval. The contribution made by the trainers was especially esteemed. There was also a high degree of implementation in the classroom, much more than has often been the case with other kinds of initiative.

6. *Is implementation being properly supported?*

A good network of support is in place, especially from Clare Downey in the Department, and there are only minor quibbles from teachers and heads about resources and the need to integrate with other initiatives. More subject specific support would be appreciated, especially in secondary schools and three quarters of teachers said that they would ‘probably’ or ‘definitely’ use a Jersey based website.

7. *Do parents and other members of the community understand what is happening?*

This seems to be the area of greatest variation. Some schools have informed parents, but 40% of teachers say they have not communicated anything to parents, clearly an aspect that needs further thought. Attention to the wider community, including further education and the business community, might be worth considering.

8. *Does the programme make an impact on how teachers teach and children learn?*

The vast majority of teachers said that they had changed their teaching as a result of taking part in the critical skills programme, which is unusual, because many studies of classrooms have shown little change flow from external initiatives. The success in this case is probably explained by the direct involvement of heads and teachers by the Department, and the enthusiasm of teachers themselves. Children’s responses suggested that the changes have been for the better. Lesson observations confirmed that teachers were implementing the principles of the programme and that it is a programme which empowers both teachers and pupils, not one that restricts them.

9. *Is there sustainability, or will the programme fade away after initial enthusiasm?*

There was no sign of teachers trained in the early stage of the programme losing interest. Indeed, it was their enthusiasm that persuaded others to sign up for training. Whether the novelty will wear off in future cannot be known, but recommendations made in this report have the intention of sustaining energy and enthusiasm.

10. *How can the programme be improved?*

A number of recommendations are made which should enable improvements to be made, especially about involving the wider community, broadening the base of critical skills work, and strengthening the support and self-help network.

The neatest summary of the programme comes from children themselves. The last question in the questionnaire filled in by 744 of them asked what they thought in general about the critical skills programme. The scale was skewed towards the positive end, because it had already become clear in interviews that most children took a favourable view, so three categories 'good', 'very good' and 'excellent' were offered at the positive end of the scale, to permit finer discrimination. Analysis of their responses showed that 86% rated it as 'good' or better, while only 3% said it was 'poor'.

Our overall conclusion is that the critical skills programme in Jersey empowers, rather than inhibits teachers, enhances pupils' learning, and is appropriate for its purpose of preparing children for adult life in the 21st century. While there are aspects which can be improved still further, these are minor in comparison with the successes. What has been achieved so far can be built on with confidence. The training of teachers is excellent and they actually carry out in the classroom what they have learned. The response of pupils is very positive, with few exceptions. Teachers and heads are showing a high degree of commitment, and many of those not yet trained are eager to take part. The critical skills programme is believed to fit in well with other initiatives in the island. The vision and drive of Clare Downey have been an important part of this success.

Recommendations for future development (abbreviated versions below, described much more fully in the report)

1. *Investigate the possibility of using other kinds of teaching skills programmes.*
2. *Try to motivate those groups that appear less enamoured.*
3. *Explain more fully the purpose and function of aspects like brainstorming.*
4. *Involve as many heads as possible in the training.*
5. *Make sure that the different initiatives cohere.*
6. *Ensure smooth transfer from primary to secondary*
7. *Amplify the resources which teachers find most helpful.*
8. *Help teachers share ideas, both within and between schools*
9. *Make time available for teachers to visit each others' schools.*
10. *Produce more resources in print form.*
11. *Create more time to access and craft challenges.*
12. *Involve parents more.*
13. *Involve the wider community as well.*
14. *Increase the 'Jerseyfication' of critical skills.*
15. *Capitalise on the enthusiasm of trained teachers.*
16. *Involve the vocational and post-compulsory sector.*
17. *Develop more ideas for children with special needs.*
18. *Engage the gifted and talented.*
19. *Undertake some co-ordinated island-wide projects.*
20. *Use the print and broadcast media as frequently as possible.*
21. *Draw up a five year plan that will take the work on to even higher levels.*

It goes without saying that we recommend that the programme be continued and enhanced. There is much to be proud of in what schools in Jersey have achieved so far, and it is hoped that these recommendations, which are not criticisms, can help point the way to sustaining and enhancing the many exciting developments that are taking place. This is pioneering work, a good inspirational news story which deserves wide publicity, both in Jersey and elsewhere.

Jersey Critical Skills Programme – an Evaluation

A Introduction - critical skills, thinking skills, ‘training the mind’

There is a possibility that some of the children attending school in Jersey today might see the dawn of the 22nd century. With improved medical treatments, it is likely that children born in the late 20th and early 21st century will, in many cases, live to be ninety, a hundred, or more. Education must, therefore, be based on a vision of the future, even though predictions can occasionally go astray. Jersey has established a critical skills approach at the centre of its vision of the future and this report constitutes an evaluation of that programme.

Many future trends are clear. The nature of employment is changing, as manufacturing industry employs fewer people, while employment opportunities in service and support become huge. Children now in school will probably have to retrain several times during their working lives, so their appetite for learning must stretch way beyond the years of compulsory schooling. In order to flourish over what could be a very long lifetime, they will need a firm foundation of knowledge, skills, attitudes and forms of behaviour, alongside positive personal characteristics, such as determination, flexibility, imagination.

They will also require the social intelligence and will to pool their strengths with those of their fellows, as well as the independence of mind to act autonomously. This strong combination of personal and intellectual qualities is particularly important, given the massive explosion of knowledge, which continues to gather pace. In the 21st century people will have to use their knowledge and skills to act and think intelligently, on their own and with others.

It is not enough, therefore, to conceive of a school curriculum as merely a flat list of subjects or topics. In order to develop the range of talents needed for a prosperous future, children must learn over a wide range and in a variety of ways. Schools must devise and provide a coherent programme for young people that recognises the many forces at work, anticipating successfully some of the needs of an uncertain future, synthesising the distilled wisdom of hundreds of generations, while at the same time sponsoring autonomy and teamwork.

If this can be done successfully, then teachers can actually help their pupils to shape the future, rather than find themselves the unwitting and impotent victims of it. The role of driver can be much more attractive than that of passenger. One important question in the evaluation of the critical skills programme, therefore, is whether it is likely to help equip children with the tools they will need to think and act both independently and with others, given the following likely features of the future, in Jersey or elsewhere in the world:

- In the 21st century, most people will work with their fellows, rather than alongside factory machines.
- There may be an undesirable trend towards less personal physical and intellectual activity and more spectating, with possible consequences for individual health.

- In home and family life, as well as work, the ability to get on harmoniously with one's fellows will be an important quality, if breakdowns in relationships are to be avoided.
- Consideration of working and social life in the future, suggests that the actual needs for both work and leisure may be similar.
- Wide knowledge of key subjects, a broad range of skills, the ability to think and act intelligently, to relate well to others, personal traits such as imagination, determination, flexibility, willingness to learn throughout life, are important for all aspects of the future.

B Background to the evaluation

These considerations formed a central part of the background for this evaluation. A programme that is being applied across the whole range of schools throughout the island is bound to invite several general, as well as specific questions, of which the following ten are just a selection:

1. Does the critical skills programme engage children's attention and commitment?
2. Are they being equipped with the sort of valuable tools they will need for the future?
3. Does the programme amplify the conventional subject curriculum in a positive way?
4. Since every school has been encouraged to take part, are heads and teachers keen on it, or are they reluctant participants?
5. Are teachers being appropriately trained?
6. Is implementation being properly supported?
7. Do parents and other members of the community understand what is happening?
8. Does the programme make an impact on how teachers teach and children learn?
9. Is there sustainability, or will the programme fade away after initial enthusiasm?
10. How can the programme be improved?

There are, of course, many other questions that are easy to ask, but much more difficult to answer. Will children actually become smarter now, or when they are adults, as a result of the programme? Inevitably it will be many years before the children grow up, and even then it would be difficult to attribute any increased brightness to the critical skills programme, rather than to the numerous other influences on them, inside and outside school. Would another type of programme be better? This is an intriguing question, to which we shall return. Do teachers implement what they have learned once they are back in their classroom? This is not a simple question, as they may carry out certain procedures faithfully while someone is observing, but not when no outsider is present.

A conference 'Learning in the 21st Century' was held in September 2001, with the intention of focusing on learning and current thinking in education. It was attended by all teachers in Jersey and was seen, in the words of Clare Downey of the Department, the co-ordinator and central driving force of the programme, as opening people's eyes to the content-driven nature of the curriculum, rather than it being about learning and learners' future needs. There were a number of keynote speakers and workshops. The desire was to move away from a content driven curriculum and, although national curriculum programmes of study would still be utilised, critical skills was seen as one 'vehicle' by which to achieve this goal. The stated aims of the new curriculum were:

- where learning was exciting, relevant and challenging for all pupils
- where pupils and staff could collaborate effectively
- where real independent learning was promoted
- where different learning styles and needs were recognised and celebrated
- where quality was important
- where everyone (including the teachers!) felt good about themselves
- where teachers were given the opportunity to take risks, use professional judgement, bring back creativity and enjoy teaching
- where children were prepared for lifelong learning.

The Critical Skills Programme (CSP) was one initiative that was trialled as a result of the conference and it was the positive reaction of this first cohort of 22 teachers, the fact that the objectives of the programme appeared to fit in with the aims of the new curriculum, and the experiential nature of the training, that led to further cohorts being trained.

The training was demand led, with teachers continuing to evaluate it positively, both at the end of the training and later when visits were made to schools by the Department. The critical skills programme began to proliferate in Jersey in 2002, since which time 274 (157 primary, 114 secondary and 3 education needs team) have done Level 1 Part A CSP training, with at least one participant from virtually every school. Two years after the conference this formal evaluation was commissioned by the Department, in order to see whether CSP was meeting its aims in terms of children developing the skills the programme was designed to nurture.

There are many different types of course available for teachers wanting to improve children's ability to think and act, some emphasising creativity and the imagination, others stressing analytical or strategic thinking. This particular approach has a strong emphasis on classroom processes. It sees learners as central in education and sets out to establish a classroom climate with the following nine principal features for pupils:

- working as a team;
- solving meaningful problems;
- publicly exhibiting learning;
- active reflection on learning and action;
- specific focus on criteria for quality;
- mediation, coaching and support from teachers;
- targeted learning standards for culture, curriculum and assessment;
- work is interconnected;
- taking responsibility for ownership of learning and classroom community.

The devisers of the programme describe it as follows (paraphrased from their literature):

The critical skills programme was designed and developed by teachers brought together by Antioch New Graduate School, Keene, New Hampshire. It was first introduced to the UK in February 2000. The programme had been developed by classroom teachers, working alongside people from the business world, who were concerned that children were not always developing the essential knowledge and skills required to be successful in school and in life. The programme attempts to provide a rigorous structure to implement the latest knowledge on brain-based

learning and multiple intelligences. The stated intention is that classrooms are developed into effective learning environments, where children work collaboratively and feel safe enough to take ‘learning risks’, and that the curriculum is delivered in such a way as to give students more ownership of their own learning and encourage them to develop ‘critical skills’, such as problem solving, critical thinking and the ability to collaborate, as well as ‘dispositions’ such as self direction.

The intention in this evaluation, therefore, is to assess the programme partly on its own aspirations, but since that might be too narrow a focus, to consider also the wider aspirations for children growing up in a 21st century society. The views and experiences of those directly involved were sought – pupils, teachers, headteachers, and those responsible for running the programme.

C Methods used, samples, analysis of data

Some evaluations make use of an experimental design: one group of children follows the experimental programme, while a parallel matched control group is set up and studied alongside it. In theory, any improvement registered by the experimental, but not the control group, is attributable to the programme. In practice things are not so simple. The CSP is taking place in virtually every school in Jersey, so other teachers know of, and indeed sometimes use the strategies of CSP, making the setting up of a genuinely independent control group very difficult. Selecting control groups outside Jersey would have brought other problems with it. In any case, experiments of this kind have a limited credibility, as most of them are shown to have worked.

The evaluation team decided that it would be much better to use a mixture of interview, observation, document analysis and questionnaire, consulting as many teachers and pupils as possible in the process. The advantage of this approach is that both teachers and pupils are closest to the process in the classroom and therefore in a strong position to evaluate what is happening. The use of lesson observation as well allowed us to witness at first hand the lessons that were taking place in primary and secondary schools. The disadvantage of live lesson observation is that people may behave differently when an outsider is present, but the very fact that evaluators see lessons can sometimes strengthen the credibility of what teachers and pupils themselves report, when they know lessons are being observed as well. Teacher and pupil questionnaires were trialled in a pilot study.

In total there were 1,463 consultations, a large sample in any context. The sample was made up as follows:

Questionnaires from pupils	744
Questionnaires from teachers and heads	142
Teachers’ training course evaluations	374
Interviews with pupils	129
Interviews with teachers, heads and others	74

In addition 26 lessons were observed in primary and secondary schools. The data were analysed principally by asking two members of the evaluation team to read comments separately and then produce a report which was based on agreed conclusions. All quantitative data were analysed using the SPSS statistical package.

This central analysis was amplified by a further strategy. A completely separate evaluation was carried out by Dr Rosemary Chamberlin, without any reference to the main evaluation. Her report is reproduced separately in Section I. There is considerable overlap with the main report, but this is a good sign, as these were two independently conducted evaluations, with no consultation between Dr Chamberlin and the other members of the team, so essentially they corroborate one another.

D Training - what teachers did, their reactions to the training programme

The training courses

The level 1 training consists of two courses (part A and part B) lasting three days each. Over 270 primary and secondary teachers in Jersey have now been trained, some to a sufficiently high level to act as mentors to their colleagues, which seems a real strength of the process. In addition to the end of day evaluations, they completed open-ended feedback questionnaires at the conclusion of each training course. These evaluations, 374 in total, were made available to the research team and two members of the team performed a content analysis on the responses. One member of the evaluation team also attended both courses and was able to observe the training process, as well as interview some of the teachers who attended.

The aims and intentions for the training are clearly laid out by Network Educational Press Ltd in both their belief statement and the four broad ideas that they provide in their marketing literature. They state, on page 2 of the marketing brochure, that the four fundamental concepts are:

- experiential learning;
- a collaborative learning community;
- standards or results-driven learning;
- problem based learning.

These are the aims of the critical skills programme for the classroom, but they are equally applicable to the training programme.

How teachers rated their training

The feedback on the training was overwhelmingly enthusiastic, a number saying it was the best INSET course they had ever attended. In general almost all teachers used similarly positive adjectives, such as “excellent”, “inspirational”, “challenging” and “fantastic”. Even the word “exhausting” was used in a positive context. The questionnaire completed by 127 teachers described later in this report shows that 96% rated their training ‘extremely effective’ or ‘somewhat effective’, while only one teacher said it was ‘ineffective’.

Many teachers, especially those feeling jaded, welcomed the initiative as offering an opportunity to make a significant change of direction professionally, with the emphasis on learning, not just teaching:

I am in great danger of feeling de-skilled by the present education structure. I felt under pressure to let the curriculum and present assessment of children lead my planning to the detriment of considering children as learners.

Later cohorts of teachers had heard from their already trained colleagues about the courses and this produced high expectations, as well as some suspicion. The degree of satisfaction, however, was universally positive, irrespective of predisposition:

I had heard great things about CSP prior to the course – these comments didn't do the three days justice.

I was somewhat cynical when I arrived but I was proved wrong.

The features of the course most commonly mentioned were:

- teachers learned a great deal, even after years of experience;
- they were eager to get back to their classroom to try out the ideas;
- it brought together the best of spontaneity and structure;
- participants liked the *experiential* nature of the training;
- good links between theory and practice;
- focus on classroom processes emphasised capitalising on children's experiences;
- gave teachers confidence as well as inspiration;
- the tutors running the course were highly esteemed.

This last point is most important, for it was a recurring theme and clearly crucial to the success of the training course. The tutors were described as very supportive, eager to answer questions, hard working and knowledgeable about their material. Their efforts to create a positive climate were much appreciated and the word "inspirational" was widely used, both about them as individuals and about the sessions they ran.

Great support and a lot of hard work on the part of the tutors.

The supportive ambience created by the group and its leaders has been inspirational.

Great support from the course leaders and especially their eagerness to ensure all of our questions have been answered fully.

It was notable that the trainers applied the same principles to the course as they were expounding for critical skills teaching in schools, hence teachers' particularly strong appreciation of the experiential nature of the training:

The experiential model really helps to take aspects on board and understand and empathise.

They encouraged us to learn through our own experiences.

Ideas and practical experiences can be taken back to the classroom.

The structure of the course is excellent, doing part 1, then trying things out and coming back to share experiences and explore further is effective.

Written comments about the second three day course were just as positive and teachers were glad of the opportunity to return for further training after the opportunity to try out the ideas in their own classroom. Only one or two felt that the follow-up might have been shorter, most finding the sandwich of training-experience-training to be about right.

A number of the attendees on the training were also interviewed during the course. When asked why they attended, teachers responded that they wanted to, often because they had heard about CSP from colleagues. They appeared to be enjoying the training and indeed during the Part B training they were asked by the trainers to comment on something that surprised/delighted them about the previous day. Aspects that had been enjoyed were the collaboration, organisation, presenters, commitment, support, professionalism, versatility, timekeeping, cohesion amongst others during the task. These same themes permeate the whole of the CSP data.

What is striking about this feedback is that it is known to be extraordinarily difficult to change teachers' daily practice. Research studies show that they can engage in 1,000 or more contacts with children in a single day. Teachers with fifteen years of experience may have had had three million interpersonal classroom exchanges and asked a million questions. The deeply grooved daily strategies that this constant process produces can be devilishly difficult to unscramble. Yet many teachers said they were sufficiently impressed to restructure their styles of teaching. As one put it: "You *can* teach an old dog new tricks. This will change the way I teach".

Critical remarks were virtually non-existent and on the very rare occasions when they occurred at all they were about the penumbra - food or furniture, rather than content and practice. Some teachers made suggestions for the future. They included:

- the belief that more headteachers should also be trained (some were already);
- booklets to be available in electronic form;
- ongoing support for participating teachers with more self-help groups;
- more ideas on the website (especially in certain secondary subjects).

The trainers' aspirations

When the trainers were asked what were the principle messages they were trying to get across, they responded:

The need to establish a strong community in your classroom ... community is the important goal. At the end of three days we want them to understand the CSP model ... We are not advocating doing it every day, what works keep, but other things, make changes, integrate and synthesise, nothing about CSP is new.

The purpose of CSP was seen as:

Giving students and teachers tools, improving learners ... CSP is like an operating system to a computer programme, an holistic way of looking at the classroom ...

They said that they tried to bring out experiential aspects within their training, which was clearly achieved and was what many teachers valued, as was mentioned above. They hoped teachers would “feel like professionals again and trust their own judgements”.

They acknowledged that the training was sometimes tough and that it could be perceived as jargon, in the early stages, which not everyone “buys into”, but they also pointed out that it takes a while for people to see how it “fits in”.

The observation of the actual training, carried out by one member of the evaluation team, also illustrated the importance of the experiential nature of it. The emphasis was seen to be on building the community, getting teachers to work in groups undertaking tasks, utilising tools, making presentations and providing feedback, in the same way that children would be expected to work in the classroom.

The diligence of the trainers in undertaking the training was also apparent in the way they individually dealt and responded to every end of day issue, both to the person concerned and during a group activity. Observation of the training showed that the issues raised by teachers were mainly about their perceptions of the training so far, queries about the CSP model, and future implementation in the classroom environment. These matters were dealt with to the apparent satisfaction of the individuals concerned. There is no doubt that the high degree of professional knowledge and competence shown by the trainers has made a very strong contribution to the successes of the CSP programme in Jersey.

E The views and experiences of pupils

Children's attitudes

Pupils' views and experiences were obtained through a mixture of interviews and responses to a multi-item questionnaire which posed a number of questions about their attitudes to the classroom processes involved in the CSP. Some of the questions were similar in nature to those asked of teachers. The views of teaching expressed by children, even by those who are quite young, have often been shown to be consistent and largely reliable measures.

The sample of 744 pupils came from 27 schools, distributed across different types and covering both primary (492) and secondary (252). There were 335 boys and 409 girls. The first question asked if pupils knew what a lesson involving critical skills actually was and 93% said that they did. This confirmed what had been discovered in interview, but it does mean that a small number of children may not understand fully, while some may have said that they did understand when they didn't and vice versa.

Table 1 shows their attitudes to a number of aspects of the critical skills approach. Both positive and negative statements were assembled, some taken from statements made by children in interviews. The use of positive and negative statements like this helps to establish the validity of children's responses, as there ought to be a strong negative correlation between people saying, for example, that they “really like using critical skills” and their response to an attitude statement like “critical skills lessons are a waste of time”. The actual questionnaire items have been slightly amended to fit into the table.

Table 1 Attitudes of 744 pupils to the critical skills programme.

	<i>strongly agree</i>	<i>agree</i>	<i>neutral</i>	<i>disagree</i>	<i>strongly disagree</i>
	%	%	%	%	%
Teachers seem to enjoy CS lessons more than other types of lesson	14	45	36	4	1
CS lessons are a waste of time	3	5	10	40	42
I prefer lessons involving CS more than other types of lesson	19	36	29	11	5
The CS approach works in some kinds of lessons, but not in others	8	47	29	13	3
Some children disrupt lessons that involve a CS challenge and it spoils it for others	27	39	18	12	4
Children work harder in CS lessons	20	36	29	12	3
I would like to do more challenges	39	32	18	7	4
It is hard working as part of a group	8	17	27	30	18
I really like learning using CS	26	39	25	6	4
It is sometimes boring in CS lessons	10	27	24	24	15
I dislike CS lessons	3	7	15	42	33
CS lessons help you learn	31	50	15	3	1
I prefer working on my own rather than as part of a group	7	9	30	29	25
Lessons involving CS make me feel more confident	23	40	27	7	3

What is notable about these replies is that they are skewed towards the positive end of each dimension. The overwhelming majority of children see critical skills lessons as helpful in their learning, and also enjoyable. Only ten per cent say they do not like them. They detect that their teachers enjoy such lessons as well. Three quarters feel the programme has boosted their confidence, though a third sometimes find the lessons

boring and a quarter find it hard working in a group. Their greatest concern, expressed by two thirds, appears to be that some children spoil it for others by misbehaving. In general, however, children give a very strong endorsement to their critical skills lessons.

When it comes to the various individual features of the programme there is further strong support, as Table 2 reveals. Most popular features are: working in teams, doing challenges, having a quality audience, and doing a presentation. Least liked are brainstorming, getting feedback, and debrief, but even these are only unpopular with about 20% of children.

Table 2 Percent of 744 pupils saying how much they like twelve different features of critical skills lessons (ranked according to 'like it a lot' response).

<i>How much do you like . . . ?</i>				
	<i>a lot</i>	<i>a little</i>	<i>don't like</i>	<i>don't know</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
1 working in a team	68	24	5	3
2 doing challenges	60	29	7	4
3 having a quality audience	55	28	9	8
4 doing a presentation	50	31	15	4
5 check in	35	28	13	24
6 chunking the challenge	32	32	15	21
7 thumb tool	30	40	13	17
8 sweep	28	37	18	17
9 getting feedback	24	46	19	11
10 brainstorming	22	52	22	4
11 debrief	19	40	19	22
12 carousel	15	50	15	20

Pupils were also given the opportunity to add anything else about lessons that use critical skills. In total 744 pupils had completed the questionnaire, 55% of whom were girls and 45% boys. Two thirds were primary aged and the remainder were secondary aged pupils. The quotes below are drawn from an intensive analysis of comments made by just over a third of pupils. More primary pupils chose to write comments about critical skills than their secondary counterparts and just over two thirds of the comments were made by girls.

As Table 1 and 2 indicated, the overwhelming majority of comments were positive, illustrating that children enjoyed critical skills lessons and found them fun. Some were content to just say that they enjoyed it and that they would like to do more critical skills, others were particularly effusive:

I love critical skills. I wish we did more I absolutely love it. (primary boy)

I feel the lessons are the best lessons we have. (primary boy)

The almost evangelical way it had been adopted by some teachers had clearly had the same impact on some of the pupils:

I love critical skills it is my favourite thing in school. I like it a lot. I think the school is good for critical skills challenges, we should do them more often. Thank you for my critical skills lessons. (primary boy)

It has made me feel a lot more confident. I have learnt lots of new skills, which help me an awful lot in challenges. I love critical skills it is a new and lovely way to learn different things. (primary girl)

Others commented that they enjoyed critical skills because it helped them to learn new skills. It was primarily working in groups that the children commented on:

I really like having the responsibility/a job to do in the group. It makes the classroom environment much happier because we work together as a team. (secondary girl)

Presentations were an element of critical skills that a number of pupils commented on, most liking them and, indeed they were an aspect of critical skills that many relished and looked forward to, but for some individuals it was clearly nerve racking and this may in part be attributed to adolescence and increased embarrassment as pupils got older:

I enjoy it when we work in groups to do challenges and I like it at the very end, when we can present our challenge to the class. (primary girl)

I like most lessons to do with critical skills, however, I intensely dislike doing presentations and speeches, they're also pointless. They make many students feel uncomfortable and it's not as informative as a handout sheet or poster you can look at or get information from in your own time and pace. (secondary girl)

Linked to the presentation element and groupwork was the increase in confidence that some pupils had experienced since operating within a critical skills environment. The use of a quality audience, listening to others' opinions and learning from working together were other aspects of critical skills that pupils had benefited from:

I think critical skills help people who are shy and don't talk a lot. (secondary boy)

I think critical skills is really fun and don't want to stop it because in a way working in a group can make you feel more confident about yourself because it has worked with me. (primary girl)

Critical skills lessons are a good idea, because people who are dyslexic can work with other people. (primary boy)

This last point also came out during interviews with secondary pupils who had special educational needs, three of whom were interviewed. Two were especially enthusiastic about how the nature and structure of the teamwork and group activities had helped them improve their behaviour in class:

It's helped me accept criticism and get along with people. You can express your opinions and learn better. (secondary boy)

I really enjoy challenges in English. We had to understand Macbeth's personality. There's a deadline to meet and I like that. (secondary girl)

Indeed, it was the teamwork and co-operative learning in particular that pupils enjoyed:

I like working in groups because you improve working together (primary boy)

Very good to work with other people. Understanding other people's views finding out what other people think. (primary girl)

There is a lot of communicating when we use critical skills. This way everyone gets a chance to say their ideas and everyone usually has a chance to speak when we are all using critical skills (primary girl)

I quite enjoy critical skills lessons because I feel that I can know what other people think and if they feel the same way as me. (primary girl)

I like working as a team because I find it easier because my friends can help me. I find it fun (primary boy)

Although a few were aware that not everyone pulled their weight during groupwork activities:

I think that some people spend too much on the computer and bring nothing back. (primary boy)

Challenges were a particular aspect of critical skills that pupils enjoyed although it was not seen as a 'soft option'

Challenges are OK, but sometimes they are hard! (primary girl)

I really like critical skills lessons because I like working as a team and doing fun challenges. I think the teacher enjoys it too! (primary girl)

A challenge is good when you're not working with uncooperative people. (primary girl)

Pupils sometimes saw it as means of acquiring the skills for later life and when they got a job:

You use critical skills everyday. Teamwork, leadership it is all great! (primary girl)

Critical skills is great because it gives us freedom. (primary boy)

Critical skills has moved my learning forward by getting me to think around issues and also working in a team. It also helps you out of the classroom in everyday life.

When I am older I am going to be a critical skills teacher because I know it has moved my learning forward. (primary girl)

As a learning style it was also seen as an improvement on some of the more traditional methods of teaching:

Critical skills has moved my learning on a lot and it lets you get on with your research and is much more fun than a worksheet. (primary girl)

I think its good to have a challenge because it gets your mind working. When we did the science critical skills it was fun because you had to work out how to get the magnets to move the object or objects. (primary girl)

I think it was really interesting and fun doing our science challenge on the magnets. I also think it's excellent when we put all our work together and it's loads of fun making things. We have done many challenges in each of our subjects. It's a fun and exciting experience. It's great because it get your mind working. We like doing and using tools too. (primary girl)

Not all students saw the benefits of this way of working, although they were in a distinct minority. They either found it boring, or needed convincing of the skills that they were meant to be acquiring, indeed for a few they saw it as distracting them from their 'real work':

It benefits some, but there are many students find it not as useful and are unmotivated to participate e.g. carousel! (secondary boy)

They take up time in class that could be used for proper learning! (secondary girl)

The role of the teacher did not go unnoticed and some wanted more choice in selecting groups, others with dealing with behaviour, change of frequency of challenges and sometimes the teacher's own attitude to critical skills:

Sometimes it can be boring – the teacher needs to be enthusiastic. (secondary girl)

We should pick our own groups, but people who do wrong should be put in a separate group. (secondary boy)

Teachers should make it more interesting. (secondary girl)

I would like to do critical skills more often because it helps you to get to know your teacher better. (secondary girl)

The nature of work in different subjects is an important issue in secondary schools. A number of pupils pointed out which lessons they enjoyed and which they did not. In interview, one group of pupils named a subject they found particularly boring, which they felt was only slightly better when critical skills were involved.

Critical skills had initiated pupils into a new way of working that they had sometimes felt unsure of. However, the outcome had demonstrated to them that this method of working was effective for them:

I really thought it is a brilliant process and you look forward to the outcome at the very end. Critical skills is great fun and shows what you are capable of. I think we should do critical skills more often. (primary girl)

I really enjoy doing critical skills. Sometimes you think that what you are doing isn't going to work out, but in the end it turns out great. I think that we should have a little bit of time to plan our presentation because if you don't have time to plan, it might go wrong. I also like using the critical skills tools: thumb tool and sweep. (primary girl)

I really enjoy working in groups, we might get into fights but then we get the job done. (primary girl)

Sex and age group differences

A comparison between the views of boys and girls showed a number of statistically significant differences. Boys tended to take a slightly more negative view than girls. Among the most notable differences (all significant, using a chi-square test, at above the one per cent level, i.e. only likely to happen by chance less than once in a hundred times) are the following:

Boys More likely to say lessons were a waste of time, were boring, that they disliked them and that group work was hard.

Girls More keen on lessons, more likely to say some pupils disrupted lessons, more keen on brainstorming, presentations and challenges.

Primary More likely to say they worked harder in CS lessons, wanted more challenges, really liked CS, that it helped them learn and that their confidence had increased. More keen on all of the individual features of CS lessons.

Secondary More likely to say CS lessons were a waste of time, were boring and that they disliked them.

However, these differences must be put in proportion. For example, 30% of boys dislike brainstorming, compared with 17% of girls, while for presentations the figures are 20% of boys disliking them, and 12% of girls. The overwhelming majority actually approve of these features. The same applies to primary and secondary pupils' reactions. Secondary pupils are more likely to rate negatively, a common feature when the bubbling enthusiasm of primary children is matched against the more low key reactions of adolescents. Yet only 4% of secondary pupils rate CS lessons 'poor' compared with 2% of primary children. Again the overwhelming majority approve. These same features of enthusiastic primary children and more guarded secondary pupils came out in interview, but approval from secondary students was high, nonetheless, though expressed in more muted form.

F The views of teachers

Teachers' views were elicited through questionnaires and interviews. The sample of 127 teachers who responded to the written questionnaire about attitudes and practices came from 32 schools. Over 60 teachers were also interviewed, individually or in small groups. As is the case generally the sample of questionnaire respondents consisted of more women than men (25% male, 75% female). Two thirds of teachers came from primary schools and one third from secondary. There was a wide distribution of teaching experience, with about 20% having five years or less, and roughly 40% each in the 5-16 years and 16 years-plus categories. One in six had completed Level 1 Part A training, while nearly half had done Level 1 Part B and a third were at Level 2 or Intern stages.

Teachers' attitudes

Teachers were extremely positive in their attitudes towards the critical skills programme. Sometimes the enthusiasm of training courses can evaporate when teachers face the harsh reality of daily classroom life, but in this case their attitudes remained very positive. On most items in the attitudes part of the questionnaire some 80% to 90% of their responses were at the positive end of each statement. The belief that the critical skills programme would develop lifelong learning and that it was suitable for the age groups they were teaching was especially noteworthy. Table 3 shows teachers' responses in detail.

Table 3 Attitudes of 127 teachers to the critical skills programme.

	<i>strongly agree</i> %	<i>agree</i> %	<i>neutral</i> %	<i>disagree</i> %	<i>strongly disagree</i> %
CSP is likely to develop the skills needed for lifelong learning	52	44	2	2	0
CSP is suitable for the age group I teach	49	47	2	2	0
CSP is only applicable to certain subjects	4	19	5	63	9
The head should also have done the training	37	44	12	7	0
Teachers need to do the training rather than be inducted by other trained teachers	44	42	4	9	1
Colleagues who have not been on the training have little understanding of CSP	15	40	8	36	1
My teaching generally has changed as a result of the CSP	15	70	7	8	0
All teachers would benefit from CSP training	41	50	3	5	1

The figure of 85% of teachers agreeing or strongly agreeing that they had changed their teaching as a result of the programme is unusually high. In a differently worded item, asking how much impact the programme had had on the way they teach, 96% described it as either ‘very influential’ or ‘somewhat influential’. By comparison, a large-scale study of the impact of performance-related pay we carried out in England, showed that hardly any teachers said they altered what they did as a result of threshold assessment.

Teachers’ high degree of commitment is confirmed by their strong agreement that heads and fellow teachers should also receive training. They are split on whether teachers who have not done the training understand what is involved. We did interview some teachers who had not been trained, and they too held mixed views. In general there was a considerable desire to become trained because of the enthusiasm of those who had been on courses, though one or two teachers were more sceptical. When it came to the specific features of critical skills lessons the support of most elements was high, and in some cases was huge, every single teacher saying that brainstorming was ‘very useful’ or ‘quite useful’. As Table 4 shows, virtually unanimous approval was also given to self-designed challenges, quality audience and direct feedback. Few features received a low rating, though about half said they did not use comment box and challenges from the website.

Table 4 Percent of 127 teachers saying how useful they find twenty-two different features of critical skills lessons (ranked according to ‘very useful’ response).

<i>How useful do you find . . . ?</i>		<i>very useful</i>	<i>quite useful</i>	<i>not very useful</i>	<i>don’t use</i>
		<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
1	brainstorm	72	28	0	0
2	challenges you designed	70	29	1	0
3	quality audience	67	30	1	2
4	direct feedback	66	33	0	1
5	debrief	65	25	4	6
6	carousel	63	32	2	3
7	building a community	63	30	3	4
8	sweep	62	29	3	6
9	teams	61	34	2	3
10	distillation of brainstorm	59	34	2	5
11	thumb tool	58	23	7	12
12	quality conversation	53	37	2	8
13	task roles	52	41	3	4
14	check in	47	30	4	19
15	chunking	44	44	1	11
16	full value contract	35	45	12	8
17	choice	28	45	5	22
18	huddle	22	42	9	27
19	PMI	22	41	7	30
20	IP3	16	46	6	32
21	Comment box	13	28	12	47
22	Challenges from website	3	32	11	54

More to the point, Table 5 shows the degree of trust teachers had that critical skills lessons did make an impact on their children's attitudes, learning and behaviour. It was felt that attitudes and learning would benefit more than behaviour, but even then, only 13% said they would have no impact on behaviour.

Table 5 Percent of 127 teachers saying how much impact they believe critical skills lessons have on their pupils (ranked according to 'very positive' response).

<i>How much impact do you think CSP has on pupils' . . . ?</i>				
	<i>very positive</i>	<i>positive</i>	<i>no impact</i>	<i>negative effect</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
1 attitudes to lessons	39	58	3	0
2 learning	30	67	3	0
3 behaviour during lessons	22	64	13	1

We also asked about wider matters, such as informing parents, communicating with fellow teachers and the relationship between critical skills and other initiatives. Table 6 shows their answers to these questions.

Table 6 Teachers' percent responses to five general items on parents, teachers and initiatives (some items do not add up to 100% because more than one answer was permitted).

1 Have you shared your experiences with other members of staff in your school?

At staff meetings (44%) informally (90%) never (1%)

2 Have you discussed your experience with other teachers in the island?

Face to face (78%) by phone (15%) by e-mail (7%) other method (6%) no (19%)

3 Have you informed parents of pupils in your class about the CS programme?

Meeting (16%) informally (41%) by letter (16%) no, but we plan to (12%) no (39%)

4 How well does the CS programme fit in with the Assessment for Learning Initiative?

A lot (56%) to some extent (36%) a little (3%) not at all (1%) don't know (4%)

5 Would you use a dedicated CS programme Jersey website to share challenges

Definitely (33%) probably (45%) not sure (14%) probably not (7%) definitely not (2%)

Teachers were also asked if there were any aspects of the critical skills programme they would like to change. Comments that focused on the training were based around

suggestions for improvement, which included comments about some of the Americanisms/jargon that were used and that it was sometimes difficult to remember what the different terms meant.

American jargon. Find some of the challenge layouts way too complex – would like more simplicity. (secondary teacher)

Just some of the ‘Americanisms’ (primary teacher)

Less jargon to remember (primary teacher)

I would make some of the ‘American’ based language more Jersey friendly! I think there should be more opportunities to share good practice as some teachers who have completed CSP become discouraged easily and lose motivation and some ‘give up’. We need to keep feeding the process. (primary teacher)

There were also occasional questions raised as to its appropriateness to a UK setting and in some cases to the ages of the pupils concerned and whether critical skills was suited to all school age children. Some staff wanted to see how it directly related to the age group and area in which they worked and therefore saw it as more logical to have training that related specifically to their age range and in the case of some secondary staff they wanted more subject specific training.

Would like it to be more secondary and subject orientated. (secondary teacher)

Subject specific would be good. (secondary teacher)

Secondary and primary institutes could be separated. I often found that the course was directed more towards the primary teachers and I was constantly having to think about how I could adapt things for older students. (secondary teacher)

Maybe just look at how critical skills is used in KS1. (primary teacher)

As a reception teacher much of what I do day to day encompasses critical skills although I do not necessarily formalise it. However, it would have been nice to see some challenges for younger children. (primary teacher)

A few comments were made about some of the activities that had been undertaken as part of the training which focused on not valuing the role play, silly walk or undertaking presentations:

Is there any way of getting points over without ‘role play’ type activities. I find them embarrassing and a traumatic experience. I hate circle activities – I’m not an extrovert, except in front of children ... (primary teacher)

Some wanted to decrease the amount of time the training took, while others wished for more time to consolidate. Another suggestion was to include more input from Jersey teachers. In the future suggested directions included to link it to other initiatives, have more sharing practice sessions and more time in school to develop resources.

More time ... with Department colleagues and together prepare challenges to take us through the year – forward planning.

Not all teachers chose to offer suggestions, one commented:

None, I think it is an excellent vehicle for improving lifelong skills. I am really enjoying the journey! (primary teacher)

It was very apparent that teachers could see that critical skills had had a positive impact on learning, pupil attitudes and behaviour, but teachers were also asked to be specific about what aspect of the programme had had the greatest influence on their teaching generally. Teachers focused on a wide range of the skills they had been taught, with most of the tools being mentioned, as well as comments on children's autonomy, their confidence, motivation and behaviour.

Quality audience, full value contract, being able to work in teams. (primary teacher)

Allowing students greater independence allows me to help groups rather than stand at the front and teach. (secondary teacher)

Standing back and letting the children explore themselves and take responsibility for their own learning. Allowing them to make mistakes without intervening. (primary)

Way pupils have grown in maturity, confidence, ownership over their own learning, belief in their own ability to 'fly'. I have learnt to 'let go' and give the children greater opportunities to try things for themselves and take risks in their learning. (primary teacher)

They also discussed their own reflection on how they taught and their exploration of different teaching and learning styles, the assessment used, time management, more focused thinking which also included clearer objectives. There were also comments on skills for life and a number of comments on the building of communities in the classroom:

Providing pupils with life skills not just teaching for the sake of it. Establishing a respectful community. (primary teacher)

Less teacher talk/direction/control. Taking the risk and letting go and being amazed at the results. Provided another dimension to my teaching. (secondary teacher)

Less teacher led. Greater expectations. Attaching greater emphasis to evaluation/feedback. (secondary teacher)

Teachers were asked about the evidence they had about whether critical skills had been a success or failure in their school judging by the reactions of others. Most of the comments highlighted the positive impact of the programme, although there were also perceived pitfalls. Pupil enthusiasm, enjoyment and increased motivation were obvious

indicators of the impact, which included their love of challenges and their ability to collaborate and work as part of a team. Discussion of the quality of the product and outcome of pupils' work was also evidence of the programme's success. It was not only the pupils who were seen to be enthusiastic about the programme, other staff in school also discussed it positively. Where there were perceived shortfalls these were only occasional and focused on the negative impact on some pupils' behaviour, the difficulties for those who don't like working as part of a group, not always seeing critical skills as appropriate and the occasional difficulty with the end product. However, overall pupils were seen to be enthusiastic about the programme, particularly the challenges, but these needed to be planned and not utilised with too much frequency.

Teachers were asked what they thought their school could do to develop the critical skills programme further. The responses mainly centred around the need to get more teachers trained, have more sharing practice sessions, adoption of a whole school approach, the need for more time, particularly to prepare and plan challenges.

We are setting up workshops to secure and develop the skills of those who have been trained. It's important to keep sharing ideas and to keep the energy and motivation that comes from being on the course. (secondary teacher)

Teach the generic skills and terminology to all Year 7s in order to avoid repetition later on. Develop a whole school approach to learning the specific skills at certain times. (secondary teacher)

Need to increase numbers who have attended training to ensure consistency and whole school approach:

All staff to attend Level 1 training with a view to developing a school policy. Look at planning – highlight opportunities for working challenges into each module. (primary teacher)

It was not just about how the schools could develop the programme that teachers were asked to comment on, they were also asked if there was anything they thought the Department could do to develop the programme further. Most teachers who commented requested an opportunity for sharing practice sessions. These would sometimes be configured differently. Some wanted them to be by year group, some by subject, a couple suggested visiting the mainland and others wanted the more experienced to work with the less experienced.

Schools/teachers to be aware of or to be offered in class support/team teaching with skilled practitioners on (the) island.

Shared practice sessions or planning sessions for each curriculum area e.g. training day across key stages for specialist areas – to develop resources for each area – small ideas and challenges – even materials. This must continue e.g. constant reminders/ideas/newsletters.

It was also mentioned by a couple of teachers that these should not just be twilight sessions, nor should they rely on goodwill. Time was therefore also required to develop critical skills further within schools:

Give school inset time for crafting.

Allow time for departments/colleagues to work together to develop schemes around the programme. Refresher sessions.

More support from those who are 'steeped' in classroom situations, to observe/guide in a non-threatening way.

Some called for more training, of all teachers:

It will be good once *everyone* is trained.

One secondary teacher we interviewed was the only person in her department who had not been trained and she was desperate to go on the training as her colleagues were so enthusiastic. Secondary teachers in general were likely in interview to stress the need for more subject-specific ideas and help.

There were a few comments about initiatives and the need to merge initiatives, provide support, longevity and direction:

Assure us that this is the way forward and that we won't be re-directed on a different path in a year's time. Integrate it into a skills' based curriculum to give critical skills a permanent identity.

Perhaps skilled subject leaders could support everyone in planning the curriculum based on critical skills and the UFA and produce some exemplar schemes which will meet assessment criteria. We really need an island wide teaching and learning and assessment policy.

Help with developing/monitoring newly trained teachers to ensure that they are still motivated and encouraged. To ensure that people are actually using the skills effectively and not moving too far away from the outlined practice. Critical skills would then be watered down too much!

Most teachers who responded were therefore looking for more teachers to be trained, opportunities to share practice within their schools, with other teachers on the island and occasionally on the mainland. They suggested the need for time to develop their critical skills work, to craft challenges and to attend refresher sessions. There were also occasional requests for help with materials, the opportunity to undertake masters, a bank of challenges and videos. One teacher also suggested training for Learning Support Assistants. The overwhelming tone of the suggestions was positive and the fact that teachers wanted to share practice further suggests that they wished critical skills to develop further on the island. Only one teacher was overtly negative:

If the department thinks it is a worthwhile programme so be it. I think it's an immense amount of money to spend on something that has not got universal relevance or approval and doesn't impact on higher ability learning or learners.

The general view was almost unanimously enthusiastic, however, about all aspects, summed up by this experienced teacher:

After 27 years it has been the best, most useful practical training I have ever had. I was doing some of it, but this has revitalised and hopefully 'bettered' what I have been doing.

The few reservations tended to be about the number of initiatives, cost of resources, lack of impact on gifted and talented pupils and the problem that some pupils had had working in this way.

I think rather than a critical skills programme we need a single policy that incorporates Paul Ginnis, UFA, CSP and AFL. They are introduced as separated initiatives when they could be merged into a single initiative, pursued by all staff.

G The views of headteachers

Headteacher survey

Headteachers who had attended the critical skills training were also sent a copy of the questionnaire. Fifteen completed it, of whom two thirds were female and a third were male. They were mainly heads of primary schools who had been headteachers for ten years or less. Most had done level 1 training, with four having also undertaken level 2 training. Two thirds found the training extremely effective, the remaining third saw it as somewhat effective.

All the heads agreed or strongly agreed that it was important that the headteacher had also done the training and all but two heads agreed or strongly agreed that teachers needed to attend training first hand rather than be inducted by other trained teachers. When asked whether they agreed with the statement that colleagues who had not been on the training had little understanding of the critical skills programme heads mainly agreed, but five disagreed. Apart from one headteacher who disagreed, the remaining headteachers agreed that all teachers would benefit from being trained through the programme.

As with the teachers, the headteachers who responded were in the main very positive about critical skills. All felt it had had a very positive or positive effect on pupils' attitudes to lessons and apart from one headteacher they also felt that it had a positive or very positive impact on pupils' behaviour during lessons. A similar picture was apparent for the perceived impact, in general, of the critical skills programme on pupils' learning.

Headteachers were also asked what aspect of the critical skills programme had had the greatest influence on teaching in their school generally. A range of responses were given, some felt it was aspects of the tools that pupils and in some cases staff at meetings now used, others commented on the challenges that had been designed. They also discussed the skills that pupils had developed such as increased independence, peer assessment, collaborative learning and ownership/responsibility for their work. A number of heads commented that critical skills were cross-curricular, catered for different learning styles and increased motivation:

(The) cross curricular aspects generally – (the) use of ICT as an integral part of learning. (It) has enabled children to discuss their learning, encouraged creativity, has given the children ownership of their work. (It has) encouraged collaborative learning but with in built support.

It was not just the pupils who the following heads thought had benefited:

Teachers' ability to think up new exciting ways of delivering established curriculum content. Inspires teamwork between staff as well as pupils.

Engendered professional enthusiasm for teachers – teachers felt invigorated. (It is) inclusive for pupils – challenges can give a role for all. Confirmed opportunities for areas of the curriculum to be delivered in a cross-curricular/relevant way. The enjoyment and team building/supportive feelings that the children have felt.

Headteachers were also asked what evidence they had of the success of failure of the critical skills programme in their school. The responses were primarily based on students' reactions, which heads had observed both formally and informally:

Students speak warmly of lessons based on the programme. Observations of NQTs also suggest student engagement is high in lessons where CSP approach is being used. I observed this first hand both this year and last year as part of teacher effectiveness observations ...

It was not just pupils who spoke positively about critical skills. Heads had also received positive feedback from staff and on occasion parents and even visitors to the school:

(It is) obvious that children are enjoying their learning. A high level of achievement - acknowledged by visitors ... Children's own passion – some shared this with Year 7 staff. Parents' enthusiasm in response to their children's level of motivation. Development of more cross-curricular approaches.

Critical skills style challenges and presentations formed a basis for a science week. Children presented to parents in lieu of an open day. Very positive response all round.

Heads agreed with the statement that the critical skills programme was likely to develop the skills needed for lifelong learning, that it was suitable for the age group of the pupils in their schools, that, apart from in one case, that it wasn't only applicable to certain subjects and with one exception that the teaching of those trained had changed as a result of being trained.

Critical skills had clearly been discussed at a number of levels by headteachers, at staff meetings, informally with members of staff, with other headteachers and to a lesser extent with other teachers on the island and other education professionals. A third of the heads had informed parents about critical skills at a meeting, but two thirds had discussed it with parents more informally. About half had written to parents about the programme and nearly a third who had yet to inform parents indicated that they had plans to do so.

In terms of impact of the critical skills programme on the teaching in the school, five headteachers thought it had been ‘very influential’, nine ‘somewhat influential’ and one that it had not been very influential. It was seen as fitting in well with the Assessment for Learning initiative by over two thirds of heads and to some extent by all except one.

The headteachers were also asked about future development both within their own school and on how they felt it could be developed by the department further. Within their own schools there were a number of areas of future development. These were most likely to include some type of sharing practice session, increasing the number of staff who had been on the training and in a couple of cases involving parents further and linking critical skills with other initiatives:

Involve parents in a more active way – share more information with them about critical skills. When all staff are trained, review as a staff and agree ways forward as a team. More challenges undertaken across year groups. Using tools more frequently in various settings i.e. ‘check in’ to support emotional literacy. Much of this (has) started already....

Linking to A4L – focused observations properly recorded. Hoping to have all teachers trained....

We are going to use key ideas across the school e.g. What makes a quality audience? as part of our pastoral curriculum next term. Also planning more sharing good practice sessions.

Suggestions on how the department could support further development included appointing a school co-ordinator to encourage sharing of good practice, use of local teachers to consolidate the programme further and continued support for training. One headteacher had a number of suggestions:

- Develop confidence/share challenges via subject and/or year group meeting of teachers
- Produce a parental guide/pupil guide
- Consolidate training by using local teachers
- Produce own training/resource materials – e.g. video of sample lessons
- Try to knit together in one ‘package’ UFA(UAK), Sharon Ginnis (creativity) and critical skills
- Promotion of Learning/Teaching policy that gives validity to this approach
- Media information, public display of work – to raise awareness that there are ‘many ways to skin a cat!’ – no one way of learning or teaching.

Just over half indicated that they would definitely encourage teachers to use a dedicated Jersey website to share challenges, a third said they would probably encourage it and only one headteacher was not sure.

The heads were also asked whether there were any aspects of the critical skills programme that they would like to change. Most heads did not feel the need to suggest changes, though two mentioned decreasing the time out for training. One suggested sharing practice, one suggested reducing the Americanisms in the programme and one felt it was important that parents were able to see the individual contribution of their

child. When asked if they had further comments to add, a number of headteachers took the opportunity to reiterate the positive influence the programme had had in their school:

Critical skills is a major influence in our school. One particular class who have had a critical skills teacher for two years are working at a very high level and have developed a real sense of ‘community’ within the classroom.

Another headteacher explained how they thought critical skills worked and how its usage could best be implemented and sustained:

Critical skills provides a means of making children stakeholders in their own learning/process of learning. (It) requires confident, reflective teachers (and) needs a reasonable pragmatic approach – not a means of teaching everything to all children all the time. (It is) most successful when the curriculum vehicle/learning objectives are reassessed in terms of learning intentions/behaviours of children as an aspect of the curriculum/process of learning is focused on! Critical skills needs to be planned for and needs to be seen as developmental.....(You) cannot convert staff to the approach, they need to be committed to having a go and recognising the approach is more than shared investigations or collaborative learning.

H Process - what teachers did in their classrooms

During the evaluation 26 lessons were observed in primary and secondary schools. It was notable that some of the warmest responses and most faithful implementations of the CSP principles occurred in classrooms where teachers were already committed to that particular style of teaching. The essence of the process can be seen to be working well through the eyes of one primary teacher observed during the evaluation. She described herself as a “huge critical skills evangelist”, believing that it had not necessarily revolutionised her teaching, as she felt she had always taught in this way, but that it had provided “greater rigour” and enabled her to see how far she could push what she was doing. It empowered people.

She underlined the importance of the individual’s response to a group programme:

My worry is that there are so many people who have training, but at different levels. We need to be aware of this - some are not quite critical skills . . . Sometimes it takes longer for people to evolve. It’s very deep. To try and get success you need to understand it.

Within her classroom she felt they had worked hard at developing a supportive community which the pupils saw as ‘safe and secure’ She had incorporated it into many aspects of the primary curriculum. Her vision for the future was an island where everyone was trained and people were equally passionate about it, but where teachers also understood the depth of critical skills. Some, in her mind, misunderstood it, seeing it as merely “making posters”. She felt her own pupils were passionate about it and this was borne out in the interviews with and observations of her pupils. They were able to articulate clearly what they were doing and what they had done.

Observation of her teaching showed faithful implementation of the principles of the CSP: the assessment rubric worked as planned, with the teacher assessing, the pupils assessing and the peer group all assessing. At the end of the lesson, each group discussed their work, showing a number of the skills that the programme aimed to develop: teamwork, problem solving, decision making, communication, organisation, as this account shows.

Group A

Pupil, reporting back: "When we started our group we had a bit of trouble, we did a sweep, people wanted different things. We had a vote . . . Martin's been the best person because he got on with the work".

The teacher asks if anyone else wishes to add comments.

One pupil from another group comments that they have worked around their problems really well.

Teacher asks: "When you have your group dynamics worked out, do you think you do more collaboratively or on your own?"

Pupil: "I don't have all the qualities ... but we can mix our qualities together to make a good presentation".

Teacher: "Need anything more be said!"

Group B

Teacher: "I've been very impressed with this group. They planned meticulously. Sean is going back to the planning sheet regularly. Very careful thinking. Mark and Craig have been like beavers, really getting stuck in. Are you proud of yourselves?"

Pupil: "Yes. We went back because we were going too far with the humour and not the challenge, but not answering the question, so we went back".

Teacher: "How mature to re-focus".

Within the pupils topic books there was also evidence of how the teacher was applying the CSP assessment, utilising positive comments, post-its and questions. Examples of her comments include:

Clear, concise information clearly distilled.

Obvious focus on the question, learning intentions and success criteria, couldn't ask for anything more.

Pupils themselves seem to be well aware of the dynamics and rationale, which appears to be a real strength of the programme when it goes particularly well. In interview one pupil, so enthusiastic she actually woke up in the night with ideas, was able to articulate clearly how critical skills was organised for the class, while another welcomed the opportunity to carry out some research:

It's important to organise ourselves into team roles, the assistant helps with ideas. Let people be the role they know they will be good at. Mary has been a good team leader so far. She goes "stop arguing". We have lots of votes, distilled them, so we have the best ideas. We've decided we are going to do a powerpoint, a song ... a map and a booklet. We adapted words from a play. I woke up in the middle of the night. We're all sorted at the moment . . . We do a sweep, when everyone's got lots of ideas, it's a bit like circle time, but different.

It's about freedom really. In year 4 I didn't like topic (work) and so I thought it was great, because instead of copying out of a book, you get to research . . . Some people say critical skills is all about posters, but this term we have done one challenge with a poster, so it's not true.

When asked how they thought critical skills might help them when they left school another pupil was equally clear:

Lifelong skills, creative thinking, presentations look attractive, helps you get a job, critical thinking, communication, and all the critical skills are good for that.

The classroom observations in general showed a high degree of implementation of the programme's essential principles. Moreover there was a very high degree of pupil involvement. Although occasionally a member of a group might distract others, this was soon discouraged by fellow pupils, not always successfully. Children did not like such distractions, as their questionnaire answers above showed.

Secondary teachers were also observed implementing the programme with enthusiasm. In one department all the teachers had been trained, except for one, and she was very keen to join in, saying how disappointed she was that she had not yet been able to go on a training course. The department had made critical skills a central part of its strategy. Pupils spoke with enthusiasm about their lessons, saying, for example, how the approach had made the study of *Macbeth* so much more understandable and enjoyable. The school was so confident about the positive impact on its students that a number of children with special needs, some with behaviour problems, were selected to give their views to the evaluators. They were extremely positive about the good effects these kinds of classroom process had exerted on both their learning and their behaviour, and were amongst the most enthusiastic students we interviewed. A key element here was also the enthusiasm of the headteacher, who was giving the programme strong support across all departments.

Sometimes children and pupils will behave differently when they are observed, but often this unusual behaviour becomes apparent as the lesson progresses. What we observed seemed fairly natural, rather than staged, though it is understandable that people will want to be seen at their best. The lessons were busy and were being enjoyed and these elements are not easily faked. Anyone watching would have been impressed by the degree of industrious application taking place, especially with older secondary students, among whom some pupils might have been expected to be disaffected and detached. Instead the degree of application observed was higher than is often the case.

I An independent evaluation

One way of trying to verify an evaluation is to establish a second parallel, but independent study, and then see if the two appraisals concur. Dr Rosemary Chamberlin is a longstanding member of Professor Wragg's research team and a very experienced primary teacher. She was asked to carry out an independent evaluation in eight primary schools, without any reference to what the main evaluation team was doing or finding. Below is her report exactly as she wrote it. It agrees substantially with the main report, which is strong corroboration of what this evaluation has found.

Dr Rosemary Chamberlin's account
Critical skills teaching in eight Jersey Primary Schools

This report was compiled after visits to eight Jersey primary schools made during four days in March and May 2004.

During these visits:

- ◆ 14 observations of lessons or parts of lessons were carried out in classes from Nursery to Y6.

Semi-structured interviews were conducted with:

- ◆ 7 headteachers
- ◆ 1 deputy headteacher
- ◆ 14 teachers from Nursery to Y6
- ◆ 1 critical skills co-ordinator
- ◆ 11 groups of pupils from Y1 to Y6

All the teachers (though not all of the headteachers) had undertaken critical skills training. The teachers ranged from one who had just attended the first three days of training, through to two teachers who were among the first on the island to be fully trained and who had been teaching critical skills for nearly three years. The sample included teachers who undertook one main challenge a term and those who used challenges for much of the children's work and ran the classroom on critical skills principles. All the teachers had volunteered (with varying degrees of enthusiasm) for training and so were possibly more open to the concept of critical skills and to new ideas in general than their colleagues who had not put themselves forward for training. The untrained headteachers were not unenthusiastic about critical skills but had thought it was better for the people doing the actual teaching to have the opportunity to go first.

Some of the groups of children who were interviewed had been selected by their teachers and included those who could be relied upon to voice an opinion. As most groups were whole critical skills teams, however, there was still a mix of abilities within the group. Other groups were selected randomly by the interviewer during lesson observations.

In addition:

- ◆ 6 teachers provided written thoughts about critical skills;
- ◆ 1 teacher provided accounts children had written about critical skills;
- ◆ 1 after school meeting between approximately 20 teachers and the training team was observed;
- ◆ a discussion was held with the two trainers.

The Context

One of the schools visited had nine out of twelve teachers who had been trained, another had seven out of nine, but most schools had a less favourable ratio of trained to untrained teachers. Several teachers mentioned this as a disadvantage, particularly where only one teacher in a year group had been trained as this made joint planning problematic. Because of the gradual introduction of critical skills training, most of the teachers and pupils had

not been using critical skills for very long and so the children were not passing from one trained teacher to another, developing their experience and deepening their understanding of working in a critical skills classroom as they moved up through the school. Most, whatever their age, were at a similar stage, learning to use critical skills with a teacher who was still getting used to teaching in that way. Several headteachers and teachers looked forward to the time when the children would pass from one teacher trained in critical skills to another, with one headteacher saying:

When they have been using critical skills right through from the beginning, it is hard to imagine what they will be able to do by Year 6.

In most classes, the impression was that critical skills was, if not exactly an add-on, at least just one way of working that would be used two, three or four times a term. Aspects of the programme, such as the check-in or requests for a quality audience had, however, been adopted into most classroom routines to a greater or lesser extent, and most classrooms had notices referring to critical skills concepts such as a Quality Audience, but there was some resistance to adopting the teaching method wholesale.

I think it is a very valid teaching and learning tool which should be used alongside other teaching and learning aids. It adds variety and interest to teaching and learning. (Y6 teacher)

I want to keep it as occasional, not too often. (Y5 teacher)

We will cherry pick. We will take what we think is best practice and fit it in...If the critical skills teaching is found to be better or more effective in certain areas then we will use more of it. (Headteacher)

For a few of the teachers, however, critical skills had become a full part of their normal way of working. While not all work was set as a team challenge, the ethos, language, routines and strategies of CS appeared to permeate the class.

Perceptions of critical skills

Teachers and Headteachers

The most common reaction of teachers and headteachers to critical skills was enthusiasm. Asked about the advantages of this teaching method they had no problem in producing a long list. Perceived advantages for the children were that it promoted independence, responsibility and enthusiasm for learning. It gave the children more freedom and the power to make choices.

It allows the pupils freedom to organise themselves and work collaboratively. (Y6 teacher)

It encourages independent learning and team work. (Y4 teacher)

It gives them huge amounts of independence and they end up challenging the teacher. (Y6 teacher)

The children are engrossed. The teacher can sit back and watch sometimes, which is very useful. (Y1 teacher)

It develops respect for oneself and for others. (Y6 teacher)

One headteacher said:

I've been quite bowled over sometimes by the vocabulary that's used by the children to organise themselves.

Critical skills was seen to improve children's motivation, with children choosing to stay in and work or take work home and share it with their parents. Interviewees said it helped children's emotional and social development; it helped teachers and pupils focus on the method of learning rather than the content of what was learned and, as such, it was felt to be a welcome change from the over-prescriptive National Curriculum and Literacy and Numeracy Hours. One headteacher mentioned that the older teachers recognised aspects of the child-centred way they had been trained to teach, but that it was new and different for the younger teachers who were not used to teaching across the curriculum. Headteachers also noticed advantages for their teachers:

It gives back to teachers respect for their professionalism and their judgement. It gives them permission to stand back and watch.

It is good for teachers too. They are pleased and proud.

It's enabled us to open up the debate on what we're all about.... It's opened up the door to fresh thinking.

Most of the disadvantages the interviewees could think of were theoretical - consequences that might arise if teachers were not sufficiently well-trained or thoughtful, rather than disadvantages that they had actually experienced. They were concerned that some teachers might get the idea that they should use the approach for everything and that it might, therefore, be used inappropriately. A headteacher said:

This school is fairly traditional in some ways, though progressive in others, and so we didn't want to lose the strengths we have. All the staff will be trained but I am not becoming a critical skills school. I am giving my teachers skills to teach, *one of which* is critical skills. A part of how we teach here will involve what we believe to be the best parts of critical skills.

Another was concerned that, to work well, it needed confident, well-trained teachers and that some teachers might not feel comfortable working in that way.

As I see it the critical skills programme is very flexible and I think one of the problems is that people don't believe in that flexibility. They think of it as a set of things to do and that if you do them you'll be able to deliver it and it needs a degree of confidence to say 'that didn't work for me, so I'm going to do it differently next time'. (headteacher)

Certainly, that headteacher's fear was borne out by the comments of one recently trained teacher who said she did not like the 'rigidity' of the programme. She wanted to take the best from it, but was not sure how flexible she could be.

One actual disadvantage that several heads and teachers mentioned was the time it took to plan challenges, though experienced critical skills teachers said that this became much less of a problem once they had got used to the critical skills method. A headteacher remarked that:

The teachers we've got who've done it [the training] believe in it, but those people who haven't had the training perceive it as being a great deal more work and a great deal more of a change than in fact it is for people who are good practitioners in the first place.

The disadvantage of initiative overload was mentioned too, with one teacher wondering if critical skills was 'just another bandwagon' they were being expected to jump onto. In contrast to that view, several heads and teachers thought that the critical skills programme fitted well with other initiatives. They mentioned, variously, the University of the First Age, formative assessment, brain gym, mind-mapping, citizenship education and the development of school councils all as 'being on the same wave-length'. When asked why they had volunteered for training themselves or offered the opportunity to their teachers, several heads indicated that it 'tied-in nicely' with their current thinking on teaching and learning. A few teachers indicated that they had taught in that manner already, but the CSP had given them more structure and taken them further.

Teachers were divided in their views about the quality of the finished product of the children's work. One said that 'some children sit back in group work and don't do much unless the teacher is pushing them'. Some believed that the work was not as good as it would have been if the teacher had exercised more direct control and this was seen as a potential problem, particularly if parents did not understand. One teacher said,

It isn't suitable if you want a specific learning outcome. You can't be sure that they will get the content you want.

Other teachers felt that the children's work was better, and not only because it was more creative, developing in ways the teacher might not have envisaged. They believed that, because children were introduced to the ideas of a quality product, they became more critical of their own work and more demanding of themselves and their team-mates. One Y6 teacher wrote,

I am finding the quality of the final product is getting better and better each time the children do a challenge. This might be because they are more experienced with the approach or, possibly, because they are working harder, safer and fairer.

The Pupils

Most children shared the enthusiasm of their teachers for critical skills. When asked what it was about, older children identified: working together; listening to one another; solving problems; organisation; helping one another; creative thinking; communication; leadership; decision making; time management; assessing their own work; co-operating; creating something you can all be proud of; meeting deadlines; using everyone's different abilities; and learning how to do presentations and speak out in front of the class. Younger children were more likely to say that it was about challenges, and then to describe the tools and routines such as the thumb tool. Nevertheless, they were also aware that it was about working together.

One teacher provided written work from a previous class who had been asked to write about critical skills. One child had written:

Firstly I learnt about the main parts of critical skills. In the tasks you have to learn to do:

- ◆ problem solving
- ◆ decision making
- ◆ critical thinking
- ◆ creative thinking
- ◆ communication
- ◆ organisation
- ◆ management
- ◆ leadership.

Later on I found that critical skills is making new friends and working with other people, not just your friends. It was hard at first because everyone had different opinions on each other, but in the end people agreed and became friendly.

Another said:

Having critical skills has helped me to work quicker and better, on my own and in my home team. I have also learnt that critical skills gets you to work in different teams and with new people.

Critical skills had obviously made an impression, as most children were able to remember a variety of challenges they had done and what their contribution had been. Asked if they thought critical skills would help them when they were older, the children agreed that it would. They cited learning to work to deadlines, communicating clearly, working with other people (even if you do not like them) and learning to be inventive as skills that would be useful in the world of work. Older children with several years' experience of a different way of working were able to make comparisons with the way they had worked previously. A girl from Y5 said that their finished work was better now they were using critical skills 'because of the mix of ideas. One person has an idea and another one takes it further.' There were drawbacks if team-mates were bossy or lazy or for the minority of children who preferred working alone. A boy from Y1 said there was too much writing, but mostly the children enjoyed it. When asked, 'Is there anything else you can tell me about critical skills?' several children said, 'It's fun'.

The teams

Picking teams

Although most classes had 'Home Teams' which remained the same, children did not work in these all the time. In some classes, children were occasionally allowed a free choice of teams but teachers usually used a variety of ways, some quite complicated and original, of generating groups randomly. The CSP training manual (2001, P. 35) suggests that:

There could be an expectation that students have to solve a quick line-up problem before they leave. Examples: line up in alphabetical order of first names without talking, by hair colour, by shoe size or by birthday.

Some teachers used those or similar ideas to get the children in a line and then allocate groups by numbering off. For example, one Y5 class was asked to line up in reverse alphabetical order of surnames. The teacher then asked them to pair off along the line and then asked each pair to find another pair. This gave the children an element of choice and the only restriction was that each group had to contain at least one boy and one girl. Children from a year 4 class remembered with amusement having to line up according to shoe size without talking. Teachers placed importance on ensuring the groups were not the same as they had been for the previous challenge and one teacher said his expectation was that everyone would work with everyone else at some time during the term.

One teacher said that he sometimes 'tweaked' the randomly generated teams, either to ensure a mix of abilities or temperaments or to make sure the groups were different from the previous ones. Another had made a whole team out of the 'passengers' - the children she had noticed who were not pulling their weight in other teams. Though their finished product was not up to the standard of the others, the teacher was quite pleased as, 'They did produce something. They finally realised they would have nothing if they didn't get going.'

The teachers used different sized teams depending on the requirements of the challenge or the age and experience of the children. For example, a challenge which needed a lot of use of the computer might have teams of three children while other challenges could have four, five or occasionally six. Younger children, or those just introduced to critical skills, were more likely to be in smaller groups.

Pupils' Views on team work

The children's views on working in teams varied. A few found it difficult. One Y6 pupil identified 'working with people you don't like or people who don't work' as the thing he did not like about critical skills. A boy from Y4 preferred working alone. When his group was asked 'What happens if you cannot agree what to do?', most said they 'go with the majority' but he did not think this was always fair. He articulated a classic problem of democracy:

The one person might have a better idea than the others. Just because there are more of them doesn't mean they are right.

Another pupil from Y3 had found:

It's difficult to get on with some people. You have to try to make them behave or you can tell the teacher.

Mainly, however, the children liked working in groups. A girl from Y6 said that teachers should pick the groups otherwise people could feel left out if they were not chosen. The opposite view was put by a Y3 girl who said that she would prefer it if they rather than their teacher chose the teams, but, interestingly, this was not so that they could be with their friends but so that they could 'choose sensible people.' She added that it was good to have mixed groups, however, as 'boys and girls think differently'. Not everyone agreed. A girl from Y1 said that the thing she did not like about doing challenges was 'if a girl has to be in a boy team'. Almost all of the children who said critical skills would help them in adult life identified 'working together' as one of the benefits.

It helps you learn to be friendly and work together. (Y2)

Not shouting and moaning when we can't get our own way. (Y1)

Working as a team. (Y4)

Working together and communicating. (Y6)

You work with people of different abilities (Y6)

A girl from Y5 summed up her feelings, saying:

It depends a lot on the group. Some people do nothing and you think 'Why would I want to work with this person?' Some people push their own ideas. Some facilitators are bossy, but we haven't too many control freaks and we are getting better at it.

One element of the CSP which differentiates it clearly from traditional group projects is the allocation of specific roles within the team. In order to reinforce the idea of the roles, younger children wore badges to show who was the timekeeper, facilitator, etc. Sometimes the roles were allocated by the teacher, but older children usually sorted them out for themselves as one of the first tasks of the challenge. Several children mentioned their favourite roles, though teachers were conscious that children should not have the same roles for every challenge. Despite that, one Y4 boy who was colouring a picture confided that he usually got to do the illustrations because he did not like writing much and a Y3 group thought they usually got the same jobs. One teacher mentioned how hard it was for natural leaders to have to let others be the facilitator, but that, of course, was part of the learning process.

There are some arguments about who does what, but then you can pick a name out of a hat. (Y3 pupil)

When you have a good idea you feel cross if other people don't like it but you're not going to get anywhere moaning and arguing. (Y3 pupil)

Teachers appear to have emphasised that facilitators or organisers were not leaders and most of the children knew this intellectually, though their frequent comments about bossy organisers showed that some found it difficult to live up to the rhetoric.

The Challenges

Most of the challenges observed and read were science or humanities projects, and several teachers said that they found those subjects, together with literacy and ICT, the most successful. Music and PE were identified by some teachers as problematic, while Maths was the most frequently mentioned as a difficult subject to use. The perception about what is suitable and what is difficult may depend more on the teachers' individual strengths rather than any intrinsic incompatibility between Maths and critical skills. Primary teachers tend to be more artistic and literate than mathematical and so some teachers may not have the confidence or mathematical imagination to see how they could create a Maths challenge.

The difficulty of finding good Maths challenge was not a universal perception, however. One Y4 class had been challenged to find out if the Mafia was infiltrating the world of football and betting on the goals scored in the last ten minutes of the games. The boys' job was to analyse the previous weekend's football results, collate the information, present it on a spreadsheet and then create a chart to support the findings. The challenge finished with 'You have only two weeks to complete your task before the suspected criminals escape to Brazil. Good luck. This information will self destruct in 3 days!!' It is not hard to understand why the children (and the teachers) say that critical skills is fun.

Some teachers had mentioned that one of the things they liked about critical skills was that they could set the children real problems with a genuine purpose beyond that of satisfying the teacher or inculcating knowledge. One such was Year 4 Challenge to make a Guide Book about Jersey for 7 - 11 year-olds. The teams were tackling various aspects of the subject and the teacher had plans to get the book published. The children were obviously enjoying this challenge, which they worked on most days. Another was to make a presentation to introduce their school to children from a neighbouring school with which they had a link. Helping or informing younger children featured in several challenges, such as making board games or story books for the nursery or reception classes, or a display board near the Y1 classroom.

A 'real-life' challenge, for a Y6 class whose teacher was an experienced critical skills teacher, was to make a Quality PowerPoint presentation for the school's Open Day. The children were given a list of topics from which to choose, including 'Working in a critical skills Classroom'. The challenge was set out as a letter beginning 'Dear Year 6, Welcome to your team' and after the teachers had signed off with a 'Good Luck' message there was a list a reminders of what the children needed to know, do and be like. The steps that needed to be taken were also set out, showing what would be done as a whole class and what needed to be done in groups. The classroom was well-resourced and the children appeared to have worked out ways of sharing out computer time. This was helped by the teacher stopping the class for a moment (with a request for a quality audience) and pointing out a group which was sharing well.

The children interviewed enjoyed this challenge, possibly partly because they liked working on the computer. Several chose it as the challenge they had liked best, though

this may have been influenced by the fact that they were working on it at that time. When children in that class were asked if there were any challenges they had not enjoyed a girl said, 'No, they have all been fun' while the question as to how the lessons could be improved brought the reply 'They're pretty good as it is'. Despite this, their teacher did not think that the PowerPoint Challenge would be as successful as he had hoped because the children were more interested in the 'buttons, colours and sounds' than the content. Anyone who has sat through PowerPoint presentations will know that this tendency is not restricted to children and appears to be a stage that everyone using PowerPoint has to go through!

Reality was not always possible and, at first glance, many of the challenges seemed not dissimilar from cross-curricular projects or topics of ten or fifteen years ago. History challenges on, for example, Queen Victoria, a Victorian inventor, the Occupation of Jersey, steam engines, after a visit to a steam museum and making a booklet about a family, based on the information from the 1861 census, were topics that might have been found in many schools. There were, however, significant differences. Not only were the routines and strategies of the CSP in evidence - the sweep, carousel, use of thumb tool etc. - but most children appeared aware that the *way* they worked was as important as the end product. This was emphasised throughout the challenges, from the way the original challenge was set out, often with a list of Product Criteria and Process Criteria, through to the debriefs which, again, featured both process and product. There might be reminders, too, about what a quality product would need to contain and how to organise the group. Some groups contained a Quality Checker but even when there was not a specific holder of this role the children knew that evaluating the quality of both product and process was an integral part of the challenge.

Another important difference from traditional group project work was the deadline, something which produced mixed reactions in the children. Some liked the feeling of rising excitement as the deadline approached. Others said they would prefer not to feel rushed. They recognised, however, that this was an aspect of the CSP which would be useful to them in their adult working lives. Two teachers mentioned that assessing how long the children would need to complete a challenge was one of the most difficult parts of their planning. As the set time was so much a part of the challenge, it was difficult for teachers to give extra time if it was needed and so it was important they got it right.

Because of the importance of team work in the CSP, challenges about teams were popular, particularly at the beginning of a year or when introducing critical skills to a class for the first time. One such team-building challenge, for a Y4 class, was to prepare a presentation of five minutes in which to introduce all members to the team to the rest of the class. The children had an hour to prepare the presentation and to make a team name, logo and badges for each child. The presentation had to include information about the children's family and interests, the strengths that each individual would bring to the team and the way the team would work together.

Explaining the critical skills programme itself was the subject of two observed challenges. The choice of it as a PowerPoint presentation for parents has been mentioned. In addition, a Y5 class had been challenged 'To create a product/symbol/image that explains the qualities a critical skills classroom has'. The class had spent the two previous years with trained critical skills teachers and were now working with a teacher who had been one of the first on the island to be trained. This depth of experience was unusual and

gave a glimpse of what the future of critical skills teaching and learning might look like when children and teachers are experienced and thoroughly immersed in a critical skills culture.

The children's worksheet said:

'You have got the morning session to create a product that contains all the key words that your team thinks is important in our critical skills community. Your image/symbol is very important - choose it wisely. It must look attractive and be informative. A visitor to our school should be able to understand the key qualities of our **critical skills classroom** just by looking at your product. Be prepared to present your product back to the class, explaining your choice of words/qualities.'

It also included a list of form criteria and content criteria.

All the groups in the class appeared very busy. They had previously done a carousel about what they see and hear and how they behave and feel during critical skills activities. They had allocated roles within the teams and the materials managers were busy collecting and distributing card.¹ The teacher watched the class working and then circulated, placing comments based on her observations on post-it notes on their tables. Some praised specific behaviours: 'Well done for making sure everyone is involved and valued': 'Well done. Everyone is busy and focused': 'Excellent use of the thumb tool.' Some made suggestions or asked questions: 'Make sure everyone is valued in team decisions'; 'You need to remember what job you have been assigned': 'Has everyone in your team got a task?'

One team had decided to make a picture of four children sitting in a row at a table. The outer arms of the children on each end were extended and circled round in front of the table, on which was written 'Team Work'. Arched above their heads was the heading 'This is a critical skills class'. The children deliberated over whether that really showed everything they needed to show, or if they should change it. Another group discussed the key words they wanted to use and decided on 'communication' and 'respect'. The teacher appeared to be almost redundant, though this was most definitely not the case. She was occasionally approached for help, but mostly she observed and unobtrusively placed her post-it praise, suggestions and reminders for the teams.

One headteacher had said that it had been important to show the staff that critical skills could be used with Nursery children, so that no-one could say it was not suitable for their age group. It was interesting, therefore to see how it worked with three and four year-olds. In some respects, critical skills was less of a novelty for Nursery teachers than it was for some of their colleagues, as so much of their teaching already emphasised process rather than product and was geared to teaching skills and to the social goal of helping children to work together. The two nursery teachers interviewed said that critical skills fitted in well with the way they wanted to work. They felt that, as well as developing co-operative behaviour, they were introducing their pupils to the tools and routines of critical skills so that they could use them in a more developed form later on.

¹ Incidentally, critical skills needs a generous allocation of materials and one teacher mentioned the importance of having a separate supply of card for critical skills to avoid emptying the Art cupboard and upsetting the Art co-ordinator.

The debrief to one Nursery challenge started with the children sitting in front of a large picture they had made, a collage of animals on a coloured background. The challenge had been to work with a partner, choose an animal, decide what colour it should be and paint it together. The children's decisions had been recorded on a plan. The teacher asked who could see the animal they had painted. Several put up their hands and one was chosen. He said who his partner had been and the teacher found their plan and showed it to the others. They pointed out their animal on the collage. The teacher had taken photos of the children working and showed the class the book of photos to remind them of the process. She used a glove puppet and asked it who it had seen working well together. The puppet identified one pair who had disagreed at first about which animal they wanted to paint but had made a decision and shaken hands. Everyone clapped the couple, who looked suitably pleased and proud. A few other pairs were picked out as having settled problems about whether they should choose a tiger or an elephant or whether it should be orange or grey. As they were working in pairs there was no use of majority voting and agreement had been reached by one child letting the other have its way. The accommodating child was praised and clapped.

The teacher told the class that their World of Colour Challenge was finished and said, 'Show me your thinking faces. What did we do really well?' She had a flip chart with columns for 'Worked Well' and 'Next time'. With prompting ('Did one person do it? No, we did it together, didn't we?'), they suggested that they had worked well together and that the plans and animals were good. Suggestions for improvements showed that the children were thinking of their product rather than the process, as they suggested picking different animals, using different colours and doing a big animal. The teacher picked up on that last suggestion to ask how they could do a bigger animals and then to draw out the answer that they would have to work together with friends.

The teacher in the other nursery class observed also used elements of the critical skills in the classroom organisation as well as when doing challenges. As an introduction to the idea of quality, the children had discussed 'Quality Sitting' and had a list of the criteria which the teacher planned to illustrate to help children whose first language was not English. When the children had finished a co-operative clapping game with partners, the teacher was able to remind them what they had decided quality sitting would look like and a few of the wrigglers and kneelers returned to the proper position for a minute or two.

The children all looked at a spider the teacher had brought in and then, after the word 'minibeast' had been introduced, tried to think of other minibeasts. The teacher dealt tactfully with the suggestions of ant, snail, puppy, worm, snake, ladybird and fish and then broke the children into three groups of about eight - each with an adult for a carousel brainstorm. They spent three minutes at each of three tables answering the questions 'what colour are minibeasts?' 'How do minibeasts move?' and 'Where do minibeasts live?' Each group had a different colour pen, and the adult recorded the children's ideas on a large sheet of paper. A visiting student acted as timekeeper and rang a bell each time the three minutes were up. The groups then moved on to the next table and added their ideas to those already written.

The classic critical skills carousel brainstorming had obviously been adapted to suit the circumstances. The children needed a scribe, so the numbers of groups had to be limited to the numbers of available adults. They were, therefore, larger than the recommended

size. Nevertheless, the three and four year-olds were working in groups and using, with help, brainstorming, the carousel and timekeeping. After the carousel they returned for some more quality sitting while their ideas from the carousel were read out and they then went outside with magnifying glasses to search for minibeasts.

Tools, Routines and Vocabulary

Teachers' attitudes to and use of the tools, routines and vocabulary of critical skills varied a little. The vocabulary was, perhaps, the least popular aspect of the CSP, with teachers considering it too American and unnatural. Once it was introduced, however, the children seemed to have no problems with terms such as 'success criteria', 'quality product', 'product standards', 'process standards', 'facilitator' etc. and some had also been introduced to the idea of different ways of learning and knew about visual and kinaesthetic learners.

All the classrooms visited had some outward and visible signs of critical skills: notices enjoining children to 'Work hard, safe, fair' or setting out the criteria for a 'quality audience' or a 'full value contract'. The routines of checking in and debriefing were incorporated into many classrooms, too, even when the children were not engaged in a challenge, as was the use of carousels, brainstorming and community building activities.

One teacher, who felt she could do with a refresher course, said:

I don't feel I'm using the tools properly. It's more task to product, missing out some of the behaviour bits. (Y6)

Quality control was important, with the children considering what had worked well and what could be improved. Some teachers waited until the final debrief, but at least one class was issued with a set of rubrics so that the children could make their own quality assessments as they went along. These were divided into 'Wow', 'Well done' and 'All right' and the children had to assess, for example, whether they had 'made outstanding use of several sources: books, internet, tape and video' (Wow), 'used a couple of research sources' (Well done) or 'used just one source of information' (All right). At the end of challenges the teachers helped the children to look at the product and the process and decide, with slightly more sophisticated versions of the Nursery's 'What did we do well?' and 'What shall we do next time?' what to keep and what needed to be changed. This was considered one of the most important parts of critical skills.

The visibility of the tools, routines and vocabulary of critical skills meant that some untrained teachers had incorporated elements of critical skills teaching into their own classrooms. This was seen as a mixed blessing. On the one hand it helped teachers who planned together across year groups, provided a common experience for their classes and aided continuity. It meant, too, that more children in the school experienced some elements of critical skills teaching and learning. On the other hand, it would be easy to pick up the externals of the method, to train children to make posters and stick up their thumbs, without understanding the underlying principles. The critical skills co-ordinator in one school was clear that although trained teachers could tell their colleagues about critical skills, they should not attempt to cascade the training down: teachers needed to experience the training themselves.

Training

As the training uses the very method it teaches, most teachers thought that it was necessary to have the full course. Interestingly, it was teachers who had only done three days' training who were more inclined to say they did not need any more training, while those who had done the full course were more likely to say that it was necessary. Some thought that the opportunity to visit critical skills classes in other schools would be useful, and perhaps more so than the second three days' training.

Having done level 1, I feel I would learn more by talking to teachers or observing lessons given locally or even in this school. (Y3 teacher with 3 days training)

Even though the training was free some headteachers found the cost of supply teaching a disincentive and, on an island, the logistics of finding supply teachers at the same time as other schools could be difficult. One headteacher was worried that training would not continue to be free.

It's hampered by funding. The authority funded the first group that went through but they're not able to do that in the future and that's going to cause us difficulties in the future because it will be a larger commitment than we'll be able to make. People want to go on the course and they like what the children get from it. Ideologically most people in the school are committed to that style of teaching, but financially - that's the constraint.

Two teachers questioned whether the training was good value for money. One said:

It is one tool for teachers to use but seems to have taken a lot of time to train. Six days is too much.

Another said:

I do not think critical skills is a waste of money but I wonder if it is value for money at a time of financial constraint.

Despite their reservations, however, both teachers enjoyed teaching challenges and thought that critical skills had many interesting and worthwhile features.

Conclusion

The consensus view from headteachers and teachers was that critical skills develops independence, co-operation, communication and responsibility and improves children's motivation. These views were expressed by all the teachers interviewed, even those who had some reservations about the programme. Some heads and teachers also saw benefits for the teachers, saying it refreshed the way they approached teaching and 'livened things up' as well as giving them a renewed sense of pride and professionalism.

Most children were very positive in their view of critical skills also and identified many of the same benefits that their teachers recognised. Though, on occasions, children can parrot the views they have heard expressed by their elders, they do not usually pretend to be interested and enjoying themselves when they are not. Their genuine enthusiasm for

critical skills was evident from observations when they were seen planning, negotiating and working eagerly.

While teachers all agreed that critical skills improved the way children worked together, there was some difference of opinion over whether it also improved the quality of the finished work. Some felt that the standard of work was higher when children were pushed and teachers had more direct control. Others, who tended to be among the more experienced critical skills teachers, thought that critical skills improved the product as well as the process. The quality of work seen in classrooms was usually high and in some cases extremely impressive, though there was no way of comparing this with that achieved by previous or different teaching methods.

Critical skills teaching was employed successfully in all year groups, including the nursery. Indeed, two headteachers said that they sometimes used it in staff meetings, if there was a difficult problem to solve. One described how, after days of struggling to write a school policy, she set it as a challenge at a staff meeting and it was completed in under an hour. Critical skills also appeared to be successful with children of different abilities and from different socio-economic groups, though no schools in very disadvantaged areas were in the sample.

Teachers held a variety of views on the training. Some thought it overlong and some wondered if it really provided value for money. Most of those who had done six days training, however, thought that these had been necessary and they appreciated the fact that they had experienced critical skills rather than just being told about it. A desire for refresher sessions and the chance to share ideas with teachers from other schools was mentioned by several teachers. One said that just talking about critical skills with a group of her colleagues and the interviewer had rekindled her interest and enthusiasm. Several teachers spoke of the length of time it took to plan challenges and most had some subjects which they found more difficult than others. It might be helpful, therefore, for teachers to share examples of challenges they had found successful, as this would give inspiration to others and cut down the time spent planning. It would not be desirable, of course, for all teachers on the island to reproduce the same challenges, but some pooling of ideas would almost certainly be popular.

Planning is easier when teachers are able to share the task with their colleagues who taught the same year group. For this reason, teachers appreciated being able to plan with others trained in critical skills, and headteachers and trained critical skills teachers looked forward to the time when all staff would be trained. They anticipated benefits of continuity and progression, enabling teachers to inherit classes already experienced in critical skills and children to develop further than is currently possible. How far this will be possible will depend on whether Jersey continues to offer training to all teachers and encourages or requires them to take it up.

The introduction of the critical skills programme into Jersey's schools appears to have been successful and popular. It is liked by the teachers who use it, though as volunteers for training, they were, perhaps, predisposed to appreciate it. There were no real converts among the interviewees from people who had not expected to be impressed or who had experienced a Damascene road conversion to a different way of teaching. They liked critical skills because it fitted in with their educational philosophy and how they wanted to teach, but took them further and gave them a structure for development. They also

liked it because they could see positive results in the children they taught. Whether critical skills will prove as popular and successful with the teachers who remain to be trained is uncertain. As one headteacher said,

‘The ones that are left will be the hardest’.

Main Points

- ◆ *The headteachers, teachers and children interviewed were enthusiastic about critical skills.* The teachers were CS volunteers and it cannot be assumed that all Jersey teachers would be as keen to adopt this way of working. The children, however, were not volunteers and they liked it too.
- ◆ *Critical skills activities and challenges were seen to develop independence, co-operation, communication, responsibility and motivation.* While teachers all agreed that it improved the way children worked together, there was some difference of opinion over whether it also improved the quality of the finished work. Those who thought it did tended to be among the more experienced CS teachers.
- ◆ *Critical skills is appropriate for all age groups, from nursery children to adults.* Some headteachers used it in staff meetings to solve problems such as producing school policies.
- ◆ *Most teachers felt confident to adapt the CSP to suit their personal preferences or school circumstances.* A few ran what could be called critical skills classrooms, while most used it to a greater or lesser extent when they thought it appropriate.
- ◆ *Humanities, Science, English and PHSE/Citizenship were considered the most suitable subjects for challenges.* Maths was commonly though not universally thought to be difficult.
- ◆ *The time taken to prepare challenges was seen as a disadvantage.* Experienced teachers said this became easier but newly trained teachers found it time-consuming.
- ◆ *Heads and teachers looked forward to the time when all staff were trained.* Having some teachers in a school trained and others not creates problems for planning and for continuity. Teachers want to plan across year groups and to inherit children from and pass them on to trained teachers.
- ◆ *Teachers said they would appreciate the opportunity to share practice and ideas with others.* Some felt that this would be more valuable than the second three days of training.
- ◆ *Critical skills is fun.*

End of Dr Chamberlin’s independent report.

J Summary of main findings and conclusions

The Jersey Critical Skills Programme has been conceived with a view to preparing children for the complex rigours of adult life in the 21st century, as well as helping them enhance and enjoy their studies. This evaluation was undertaken so that its effectiveness could be assessed. The principal focus was on how appropriate the programme was for its purpose; how well teachers were being prepared to teach it; the views and experiences of those centrally involved, including pupils, teachers, headteachers, and those responsible for the initiative; and on making recommendations about future action.

In total there were 1,463 consultations, a large sample in any context, and 26 lesson observations in primary and secondary schools. The sample of questionnaires and interviews was made up as follows:

Questionnaires from pupils	744
Questionnaires from teachers and heads	142
Teachers' training course evaluations	374
Interviews with pupils	129
Interviews with teachers, heads and others	74
<i>TOTAL</i>	<i>1,463</i>

An independent parallel evaluation of critical skills in eight primary schools was undertaken by Dr Rosemary Chamberlin. Her findings corroborated and amplified those of the main evaluation.

The training courses for teachers were thorough and inspiring. Teachers were overwhelmingly enthusiastic about them, a number saying it was the best INSET course they had ever attended. In general almost all teachers used similarly positive adjectives, such as “excellent”, “inspirational”, “challenging” and “fantastic”. Even the word “exhausting” was used in a positive context.

The questionnaires completed by teachers and heads showed that 96% rated their training ‘extremely effective’ or ‘somewhat effective’, while only one teacher said it was ‘ineffective’. Participants particularly appreciated the experiential nature of the training and the high degree of professionalism of the trainers. Lesson observations confirmed that teachers did put into practice what they had learned.

A sample of 744 primary and secondary children completed questionnaires about their attitudes to and experiences of critical skills lessons. What is notable about their replies is that they are strongly skewed towards the positive end of each dimension. The overwhelming majority of children see critical skills lessons as helpful in their learning, and also enjoyable. Only ten per cent say they do not like them. They detect that their teachers enjoy such lessons as well. Three quarters feel the programme has boosted their confidence, though a third sometimes find the lessons boring and a quarter find it hard working in a group.

Their greatest concern, expressed by two thirds, appears to be that some children spoil it for others by misbehaving. In general, however, children give a very strong endorsement to their critical skills lessons. Primary pupils are especially enthusiastic and girls are slightly more positive than boys, though approval is notably high amongst all groups. The

most popular features are: working in teams, doing challenges, having a quality audience, and giving a presentation. Least liked are brainstorming, getting feedback, and debrief, but even these are only unpopular with about 20% of children.

Teachers were extremely positive in their attitudes towards the critical skills programme and their attitudes remained very positive well after their training course. On most items in the attitudes part of the questionnaire completed by 127 primary and secondary teachers, some 80% to 90% of their responses were at the positive end of each statement. The belief that the critical skills programme would develop lifelong learning and that it was suitable for the age groups they were teaching was especially noteworthy.

About 85% of teachers said that they had changed their teaching as a result of the programme, which is unusually high, as is the figure of 96% describing it as either 'very influential' or 'somewhat influential' on their classroom teaching. Teachers engage, on average, in 1,000 or so exchanges in a single day, which means 5,000 in a week, 200,000 in a year, several millions in a career. It is hard to unscramble the daily habits that result, which is why many initiatives show what one writer called 'innovation without change'.

Teachers' high degree of commitment is confirmed by their strong agreement that heads and fellow teachers should also receive training. They are split on whether teachers who have not done the training understand what is involved. There was a considerable desire amongst the untrained teachers we interviewed to become trained, because of the enthusiasm of those who had been on courses, though a few teachers were more sceptical.

The support of most elements of critical skills teaching was high, and in some cases was huge, every single teacher saying that brainstorming was 'very useful' or 'quite useful'. Virtually unanimous approval was also given to self-designed challenges, quality audience and direct feedback. Few features received a low rating, though about half said they did not use comment box and challenges from the website. There was a high degree of trust that critical skills lessons would make an impact on their children's attitudes, learning and behaviour. It was felt that attitudes and learning would benefit more than behaviour, but even then, only 13% said they would have no impact on behaviour.

About 90% of teachers had shared their experiences informally with other members of staff in their school, while three quarters had discussed critical skills face to face with other teachers in the island. There was less sharing, however, with parents, some 40% of teachers saying they had made no contact at all with them about critical skills, though 16% had held meetings and 16% sent letters. Only one per cent believed that critical skills did not fit in with other initiatives in Jersey. About three quarters of teachers said they would use a dedicated critical skills programme Jersey website to share challenges.

Headteachers, like teachers, were in the main very positive about critical skills. All fifteen who completed a questionnaire felt it had had a very positive or positive effect on pupils' attitudes to lessons and, apart from one head, that it had a positive or very positive impact on pupils' behaviour during lessons. A similar picture was apparent for the perceived impact, in general, of the critical skills programme on pupils' learning. In general all heads, with only one exception, said that the critical skills programme had been either 'very' or 'somewhat' influential on their school. These views were confirmed in interviews with heads.

Dr Rosemary Chamberlin conducted an independent appraisal in eight Jersey primary schools. Her conclusions are similar to those in the main evaluation:

The headteachers, teachers and children interviewed were enthusiastic about critical skills. Critical skills activities and challenges were seen to develop independence, co-operation, communication, responsibility and motivation. While teachers all agreed that it improved the way children worked together, there was some difference of opinion over whether it also improved the quality of the finished work. Those who thought it did tended to be among the more experienced CS teachers. Critical skills is appropriate for all age groups, from nursery children to adults. Some headteachers used it in staff meetings to solve problems such as producing school policies.

Most teachers felt confident to adapt the CSP to suit their personal preferences or school circumstances. A few ran what could be called critical skills classrooms, while most used it to a greater or lesser extent when they thought it appropriate. Humanities, Science, English and PHSE/Citizenship were considered the most suitable subjects for challenges. Maths was commonly though not universally thought to be difficult.

The time taken to prepare challenges was seen as a disadvantage. Experienced teachers said this became easier but newly trained teachers found it time-consuming. Heads and teachers looked forward to the time when all staff were trained. Having some teachers in a school trained and others not creates problems for planning and for continuity. Teachers want to plan across year groups and to inherit children from and pass them on to trained teachers. Teachers said they would appreciate the opportunity to share practice and ideas with others. Some felt that this would be more valuable than the second three days of training. Critical skills is fun.

Ten questions were posed about areas of investigation at the beginning of this evaluation. Brief summaries of the findings on each of them are given below:

1. *Does the critical skills programme engage children's attention and commitment?*
It certainly gains a high degree of support from most of them, and lesson observations confirm their involvement. They prefer some aspects rather than others, but elements such as teamwork, facing challenges and giving presentations received especial approval. Girls were more enthusiastic than boys and primary pupils more effusive than secondary, but the amount of approval all round was very high.

2. *Are they being equipped with the sort of valuable tools they will need for the future?*

Both the main evaluation and Dr Chamberlin's independent assessment concluded that this was the case, insofar as one can judge. A broadening of the base to include other perspectives would be even more beneficial.

3. *Does the programme amplify the conventional subject curriculum in a positive way?*

This varies with the individual teacher, and the programme cannot be expected to turn a less competent teacher into a star, but in general it did seem to add positively to teaching, though both children and teachers reported different experiences and needs for different subjects, especially in secondary schools. Maths help was thought to be a particular need.

Very few pupils or teachers queried the relevance of the critical skills approach to learning subject matter.

4. *Since every school has been encouraged to take part, are heads and teachers keen on it, or are they reluctant participants?*

There is a very high degree of commitment all round and very few are sceptical. Headteachers in particular are supportive, especially when they themselves have been on the training, and some teachers even describe themselves as ‘messianic’.

5. *Are teachers being appropriately trained?*

Training was rated very highly indeed by participants and observation of courses confirmed this approval. The contribution made by the trainers was especially esteemed. There was also a high degree of implementation in the classroom, much more than has often been the case with other kinds of initiative.

6. *Is implementation being properly supported?*

A good network of support is in place, especially from Clare Downey in the Department, and there are only minor quibbles from teachers and heads about resources and the need to integrate with other initiatives. More subject specific support would be appreciated, especially in secondary schools and three quarters of teachers said that they would ‘probably’ or ‘definitely’ use a Jersey based website.

7. *Do parents and other members of the community understand what is happening?*

This seems to be the area of greatest variation. Some schools have informed parents, but 40% of teachers say they have not communicated anything to parents, clearly an aspect that needs further thought. Attention to the wider community, including further education and the business community, might be worth considering.

8. *Does the programme make an impact on how teachers teach and children learn?*

The vast majority of teachers said that they had changed their teaching as a result of taking part in the critical skills programme, which is unusual, because many studies of classrooms have shown little change flow from external initiatives. The success in this case is probably explained by the direct involvement of heads and teachers by the Department, and the enthusiasm of teachers themselves. Children’s responses suggested that the changes have been for the better. Lesson observations confirmed that teachers were implementing the principles of the programme and that it is a programme which empowers both teachers and pupils, not one that restricts them

9. *Is there sustainability, or will the programme fade away after initial enthusiasm?*

There was no sign of teachers trained in the early stage of the programme losing interest. Indeed, it was their enthusiasm that persuaded others to sign up for training. Whether the novelty will wear off in future cannot be known, but recommendations made in this report have the intention of sustaining energy and enthusiasm.

10. *How can the programme be improved?*

A number of recommendations are made which should enable improvements to be made, especially about involving the wider community, broadening the base of critical skills work, and strengthening the support and self-help network.

The neatest summary of the programme comes from children themselves. The last question in the questionnaire filled in by 744 of them asked what they thought in general about the critical skills programme. The scale was skewed towards the positive end, because it had already become clear in interviews that most children took a favourable view, so three categories ‘good’, ‘very good’ and ‘excellent’ were offered at the positive end of the scale, to permit finer discrimination. Table 7 shows that 86% rated it as ‘good’ or better, while only 3% said it was ‘poor’.

Table 7 Rating by 744 pupils of their critical skills lessons.

	excellent	very good	good	average	poor
	%	%	%	%	%
What do you think in general about lessons that use critical skills?	29	30	27	11	3

Our overall conclusion is that the critical skills programme in Jersey empowers, rather than inhibits teachers, enhances pupils’ learning, and is appropriate for its purpose of preparing children for adult life in the 21st century. While there are aspects which can be improved still further, these are minor in comparison with the successes. What has been achieved so far can be built on with confidence. The training of teachers is excellent and they actually carry out in the classroom what they have learned. The response of pupils is very positive, with few exceptions. Teachers and heads are showing a high degree of commitment, and many of those not yet trained are eager to take part. The critical skills programme is believed to fit in well with other initiatives in the island. The vision and drive of Clare Downey have been an important part of this success. Suggestions for future development are made in Section K below.

K Recommendations for future development

It is self-evident from this report that we recommend the programme be sustained and enhanced. Since no programme is perfect the suggestions below should not be interpreted as veiled criticisms. They are simply ideas which grow out of feedback from heads, teachers and pupils, and from lesson observations.

1. *Investigate the possibility of using other kinds of teaching skills programmes.* Now that the CSP is becoming so well established, teachers and children have an appetite for using their imagination and linking thought and action. Programmes that emphasise specifically developing creativity and the imagination might be considered, though this kind of approach should not be overdone.
2. *Try to motivate those groups that appear less enamoured,* like secondary boys in particular. Time spent finding out what such groups and individuals like best and

least about critical skills would be time well spent. Many children mentioned their dismay when one pupil disrupted the work of a team that was working hard.

3. *Explain more fully the purpose and function of aspects like brainstorming*, which teachers like, but which children find less appealing. Again it is worth taking the time to do this as an investment for the future.
4. *Involve as many heads as possible in the training*. Those heads who have trained speak warmly about their enthusiasm, and teachers like to feel that heads understand what they are doing. As heads are especially busy people, already suffering from information overload, some caution must be exercised.
5. *Make sure that the different initiatives cohere*. Jersey is pioneering a number of new developments and it is important that they stay in step with each other, rather than get out of synch.
6. *Ensure smooth transfer from primary to secondary*. Some primary teachers did try to link with secondary schools, but others were concerned that children might leave primary education with enthusiasm and expertise in critical skills and then find that either they started afresh in secondary, or that there was little continuity.
7. *Amplify the resources which teachers find most helpful*. Lack of time is the usual constraint, but there was a special plea for more ideas in subjects like maths, in which some teachers find it harder to devise worthwhile challenges. Self-help groups would be helpful here.
8. *Help teachers share ideas, both within and between schools*. Once trained, many lose contact with fellow members of the course, so keeping them in touch would be useful. Relatively few use e-mail to communicate with each other, so e-mail clusters of teachers working in similar situations (e.g. reception, secondary maths) need to make a greater impact, thus reducing the burden on individuals to dream up fresh ideas. Access to other interest groups directly through a website, rather than solely through an e-mail generic, might be more user-friendly. Short refresher courses would be welcomed by some, though not necessarily twilight sessions, and these would give teachers a chance to meet up again.
9. *Make time available for teachers to visit each others' schools*. A good way of gaining ideas is to watch someone else at work. Visiting fellow practitioners helps all to share best practice and, in the long run, can be well worth the cost.
10. *Produce more resources in print form*. Since some teachers still find web-based and e-mail material less accessible, it would be useful to have a bank of challenges, specific to Jersey, available in print form.
11. *Create more time to access and craft challenges*. Time was said by many people to be a constraint; one big need is for time to think about and make up challenges.
12. *Involve parents more*. Some 40% of teachers said they had made no contact with parents, yet families would no doubt find the whole critical skills approach fascinating. Parents meetings during which they actually do similar challenges to

those undertaken by their children could be very engaging, especially if children are in attendance as well, which usually increases the audience.

13. *Involve the wider community as well.* Jersey has a strong business sector which ought to be interested in what schools are doing. Indeed, some of the challenges witnessed during lesson observation might have originated in a business context.
14. *Increase the 'Jerseyfication' of critical skills.* Some teachers do not like the American jargon, and many said they would welcome a dedicated Jersey website of ideas and information, an idea well worth piloting.
15. *Capitalise on the enthusiasm of trained teachers.* Although some go on to act as mentors, many are clearly converting their fellows by their own zest for this way of working. There may be a midway role, short of becoming a co-ordinator, that allows enthusiasts to gain some credit for the influence they have on their fellows.
16. *Involve the vocational and post-compulsory sector.* Critical skills would be most suitable and useful in vocational programmes, yet the FE sector does not appear to be as engaged as the school sector, so some pupils leave school and are not able to continue with this way of working, even though they would like to.
17. *Develop more ideas for children with special needs.* In some schools children with learning or behaviour difficulties have found the critical skills approach to be very appealing, but others are more bemused by it. Best practice should be shared.
18. *Engage the gifted and talented.* Critical skills can be very attractive to those of high or special ability, as it allows their imagination and mental acuity to flourish. A special initiative would be worthwhile.
19. *Undertake some co-ordinated island-wide projects.* Imagine the impact if a whole cohort of children in different schools undertook a similar challenge and then published their results. It would probably be of great interest to the public at large and to the media.
20. *Use the print and broadcast media as frequently as possible.* This is pioneering work, a good inspirational news story which deserves wide publicity, both in Jersey and elsewhere.
21. *Draw up a five year plan that will take the work on to even higher levels.* In the short term a revolution in pedagogy has been achieved by many teachers. That is why it is worth taking the time to think a little further ahead, beyond the training of the next few cohorts, to see how this kind of work generally, not just the critical skills programme, might develop. There is no reason why Jersey should not be giving a lead to the rest of the world on securing change for the better in schools. It is already in a prime position to do so.