THE REAL GAME

EVALUATION OF THE UK NATIONAL PILOT

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Executive Summary

This summary describes an evaluation study undertaken by NICEC on behalf of the Department for Education and Employment into the national pilot of The Real Game, a career exploration programme for 12/13-year-olds, which was developed in Newfoundland by Bill Barry and Susan Wright. The aim of the evaluation was to determine the extent to which the UK version of The Real

Game achieved its intended learning objectives, and to identify the critical factors associated with its successful delivery and management. It builds upon two earlier NICEC evaluation studies into the implementation of The Real Game in Kent, both of which were more in-depth qualitative studies.

The quantitative part of the present study offers two kinds of evidence: first, opinions of, or attributions of effects to, The Real Game obtained directly from pupils; and second, a quasi-experimental examination of its effects on career-related beliefs and knowledge. The data are drawn from 16 schools which piloted the programme with part of the year cohort, allowing a comparison of results between experimental and control groups. The instruments used were the World of Work Questionnaire, which forms part of the programme, and a supplementary questionnaire aimed at determining whether the programme led to other learning outcomes.

For the qualitative part of the study, the evaluation team visited twelve schools. The visits included interviews with teachers who had taught The Real Game, and where possible, with headteachers, deputies or senior teachers. In some cases, further interviews were conducted with link careers advisers. In addition, questionnaires were sent to teachers from all 37 schools in the pilot as well as to each participating careers service.

The field trials had an important limitation. Due to a late start, the majority of schools did not complete the entire programme, and in most cases only just reached the halfway stage. The Facilitator's Guide recommends between 25 and 30 hours to complete the game. Only one school in the evaluation achieved 30 hours; two others totalled 20 hours; most schools averaged around 12 hours of delivery time. Therefore the present study must be regarded essentially as an evaluation of a partial implementation of The Real Game and not of the full programme as intended by its designers.

Most teachers thought that The Real Game was well suited for use with year 8, although a number of schools also experimented with use in years 7, 9 and 10. In most schools it was linked primarily to Personal, Social and Health Education (PSHE). It was seen as strengthening the Careers Education element of the programme, at an age when this was usually given limited attention. In addition, teachers were generally positive about the game's potential to develop pupils' skills and knowledge relevant to other subjects such as English, Drama, Mathematics and Geography. Its relevance to Citizenship, and its potential to enhance pupils' Key Skills, were also acknowledged.

The length of time required to teach the whole programme was a major issue in the schools, largely because of the late starting date. Some schools adopted creative timetabling methods to enable as much of the programme to be completed as possible. Some teachers simply felt that the game was too long.

The Real Game was taught in a variety of settings, including PSHE lessons, tutorial periods, lunchtime clubs, enrichment activities, Social Studies lessons, and collapsed timetable periods (usually for a day or more). In several cases a combined approach was adopted utilising several of these methods. There did not appear to be an overall consensus about the most appropriate model, but the combined approach was noted to offer some advantages.

Where senior managers maintained an active interest in The Real Game, advantages were apparent. In particular, they could help to ensure curriculum time and support.

There appeared to be clear benefits in having a designated Real Game Co-ordinator with a mandate to oversee the game's implementation. Such co-ordinators need a range of skills if they are to discharge this function effectively. Since the co-ordinating role might naturally fall within the domain of several key members of staff, clarity is needed about roles and responsibilities. The Real Game benefits from a team approach. Fewer problems were encountered where teams met regularly to plan and review their work.

A few schools took an innovative approach to monitoring and evaluation, but overall this aspect appeared to be neglected, partly due to shortage of time. Some involved pupils in the exercise of feedback and review. Careers advisers were sometimes able to support evaluation activity. It is desirable for schools to demonstrate the effectiveness of The Real Game in objective and quantifiable terms.

Regional events and internal briefings were the normal method for meeting training needs. The careers service usually supported the training for teachers. However, not all staff received training prior to teaching the game. Improvements were identified for the future designed to ensure that all teachers delivering the programme understand its educational objectives and pedagogical approach.

Careers co-ordinators recognised the issues for progression that would follow the introduction of The Real Game. This has a bearing upon what precedes as well as what follows it in Careers Education, PSHE and (potentially) Citizenship. There was a desire to see the impetus from The Real Game carried through into later years.

Despite the time constraints and the concomitant frustrations, the overall response from teachers to The Real Game was very positive, though with a few dissenting voices. The attitudes of teachers delivering the game were key to its successful delivery. Teachers needed to be motivated by the ideas and comfortable with the pupil-centred approach. Team-teaching approaches were used to good effect in some schools.

Most teachers indicated that the majority of pupils enjoyed The Real Game and were capable of learning from it. However, enthusiasm for, and success in, The Real Game were not automatic. Some topics were more challenging to teach than others. Teachers needed to be resourceful in finding creative methods to help pupils to successfully complete certain tasks. The Real Game contains several thresholds that pupils need to surmount in order to maintain their motivation and commitment to the game. Teachers identified a range of effective teaching skills and strategies that helped pupils to remain engaged.

There is further potential to make greater use of parents and members of the business community. Limited use was made of external partners during the pilot, although there were good examples to be found in some schools.

Even though so few schools completed the programme, teachers' perceptions of the learning outcomes achieved were generally very favourable, especially in relation to career-related skills. This was borne out by the views of pupils.

There was also clear objective evidence of gains on relevant knowledge and opinions. In addition, there was an effect upon career beliefs, but this was relative to decline in the comparison sample and was inconsistent across schools. Measures of 'employability beliefs', self-efficacy for job exploration, for occupationally-relevant self-awareness, and for career planning, together with measures of information needs and knowledge of and access to sources of information, failed to show gains relative to the comparison sample. This may tell us more about what was left out by teachers than about the potential of fully-implemented programmes. It is also possible that different approaches to the conceptualisation and measurement of factors in these domains, based upon the qualitative data now available in this report, might yield different results. In the end, it is perhaps not surprising, and may be reassuring, that the clearest effect identified in the quantitative study concerned the central objectives of The Real Game, rather than other factors.

Some teachers saw the potential for The Real Game to provide an open-arching framework for a PSHE and/or Careers Education programme. The extent of the evidence on career-related learning, together with the extent of the game's perceived coverage of career-related outcomes at key stage 3, suggest that there is a case for the game to be used as a framework for Careers Education at this level. The parallel case in relation to PSHE, though, is more equivocal.

Most schools had plans to use The Real Game in one context or another during the ensuing school year. However, given the conclusions from the second Kent report that intended improvements in subsequent years are not always followed through, a measure of caution is needed here. Some schools will need ongoing support to ensure that improvements take place.

In order to move the programme forward, there are at least four steps that need to be taken within schools:

1. Schools must decide whether they are going to implement The Real Game in full or in a reduced form; and whether they intend to make it a framework for PSHE and/or Careers Education, or to use it as a resource for these programmes of study.

2. Senior managers need to play a lead role in formulating these policy issues and in supporting the programme to ensure that curriculum and staffing needs are provided for.

3. A Real Game Co-ordinator needs to be appointed who possesses the skills and credibility to lead a team and manage the programme.

4. Preparation for teaching the programme needs to be thorough so that teachers are fully aware of the educational objectives of the game and of the pedagogical style needed to motivate and engage pupils of all ability levels.

1 **Introduction**

1.1 **Context**

Simulations have been widely used in work-related learning in UK schools (Jamieson, Miller & Watts, 1988). Boocock & Coleman (1966, pp.215-236) argue that one of their chief virtues is that 'they bring the future into the present, allowing a child to play roles in a largely differentiated society of which he [or she] otherwise hardly gets a glimpse. Thus they surround a child with an environment which is artificial for the present, but realistic for the future' (p.218). This indicates their potential for Careers Education in particular. An early precursor of The Real Game, the Life Career Game, was developed in the USA by Boocock (1967, pp.328-334): it comprised a game in a more strict sense of that term1. Another early development in the USA was work-simulation kits (Krumboltz & Sheppard, 1969). In the ensuing three decades, however, the use of simulations in this field did not grow as rapidly in North America as might have been anticipated. The emergence of The Real Game represents a major revival of interest.

The Real Game was developed in Newfoundland by Bill Barry and Susan Wright. Between 1994 and 1996, it was tested and refined by the National Life/Work Centre in Canada and the National Occupational Information Co-ordinating Committee in the USA. Interest spread following the North American launch of the Real Game in January 1996. The policy of the National Life/Work Centre (which manages the development of The Real Game) is to reach national agreements with other countries wishing to promote and distribute the game. In the UK, the first step in this process was the piloting of a 10-hour version of the Real Game in the Kent Careers Services area in 1997/98. An evaluation of this first phase was carried out by NICEC (Edwards & Watts, 1998), and helped to inform the adaptation of The Real Game for the UK market. The results were sufficiently encouraging for Kent Careers Services to launch a phase-two pilot in which an 18-hour version was made available to Kent schools during 1998/99. The evaluation of the second phase was also carried out by NICEC (Barnes & Edwards, 1999).

At the same time as the second-year piloting of The Real Game in Kent, the Department for Education and Employment awarded a contract to Kent Careers Services to manage a national pilot scheme. It is the evaluation of this national pilot that is the subject of the present report.

The Real Game is a career exploration programme for 12/13-year-olds. For part of the game, pupils take on the role of a worker and experience the vagaries of chance and change in their working lives. The class or tutor group becomes a simulated society made up of small local communities. While in role, pupils experience personal financial planning, choosing a holiday and coping with enforced job change. Also in their 'communities', pupils do quizzes and worksheets on topics such as the career relevance of school subjects, gender equality, time management, occupational awareness and the changing world of work. Depending on the choices and adaptations made by the school, pupils may be given opportunities to meet a range of adult workers - for example, if a career day is held. At the beginning and end of The Real Game, pupils complete a questionnaire to find out how their career knowledge and understanding have improved. Running through the game are five key messages: 'change is constant', 'learning is ongoing', 'focus on the journey', 'follow your heart', and 'access your allies'. A more detailed outline of the structure and content of the pilot version used in the 1998/99 field trials is presented in Figure 1.

In a UK context, the distinctive features of The Real Game include:

- Intermittent role-taking over a sustained period.
- Linking Careers Education to Personal Finance Education (issues related to, for example, the differential likely income levels in different occupations have tended to be underplayed in UK Careers Education programmes).
- An extensive (and therefore time-hungry) learning programme which is comprehensive enough, and potentially flexible enough, to provide not just an element of a PSHE or Careers Education programme but a framework for the whole programme with a particular year-group.

It should also be noted that The Real Game is aimed at an age-group for which Careers Education provision has traditionally been limited. The Office for Standards in Education (1998) reported that there was very limited Careers Education and Guidance provision in years 7 and 8, and that 'where it occurs, the emphasis is on the development of skills with reference to self-awareness, decision making, team building and communication skills' (p.17). The Real Game embraces these areas but also extends beyond them.

1.2 **Aims and objectives of the evaluation**

The aim of the evaluation was to determine the extent to which the UK version of The Real Game achieved its intended learning objectives, and to identify the critical factors associated with its successful delivery and management.

The objectives were:

- To ascertain the extent to which The Real Game achieved its specified objectives for Careers Education and Guidance and work-related learning, and to identify how the learning outcomes associated with The Real Game related to broader educational objectives, such as those required for Personal, Social and Health Education, Citizenship, and Key Skills.
- To enquire into the pedagogical and organisational factors that were most closely associated with successful and unsuccessful learning outcomes.
- To evaluate different curriculum models used in the implementation of The Real Game.
- To examine any implications which The Real Game had for curriculum planning and management.

1.3 **Evaluation methodology**

A total of 37 schools were involved in the field trials. These schools were drawn from most regions of the country and from a variety of urban and rural contexts. The group included comprehensive schools, high schools, community colleges and technology colleges.

The evaluation consisted of both quantitative and qualitative strands.

Quantitative evaluation. A total of 16 schools agreed to participate in the quantitative part of the evaluation. Schools were identified which were piloting the programme with part of the year cohort, so allowing us to compare results between experimental and control groups. In each school, mixed-ability tutor groups were selected (by school staff) to act as a comparison to the mixed-ability groups participating in The Real Game. Nominal samples were approximately balanced within the schools, giving 546 Real Game participants and 559 comparison subjects.

The instruments used were the existing World of Work Questionnaire, which forms part of the Real Game programme, and a supplementary questionnaire aimed at determining whether the programme led to specific career-related learning outcomes. Schools were requested to administer the two questionnaires at the beginning (t1) and end (t2) of their Real Game programme.

All schools were sent clear administration instructions for the t1 and t2 questionnaires, including an administration script for use with both experimental and control groups. However, the standard of questionnaire administration varied considerably between schools. Some teachers experienced difficulties in finding time to administer the questionnaires, especially when the total time available for teaching The Real Game was already limited. Thus t2 questionnaires were not administered to some tutor-groups. In some instances, too, the wrong questionnaires were administered, even though they were clearly marked.

In addition to administering these questionnaires, each school was asked to provide the evaluators with data relating to each pupil's age, gender, SAT scores, entitlement to free school meals, and missed sessions. This information was not provided by all schools.

In the light of these various factors, the effective sample size depended on the kind of analysis being undertaken. As the absence of information was systematic, it was possible to construct sub-samples based upon reduced numbers of schools. This reduced the number of young people available for analysis, according to the kinds of comparisons made. But within the schools retained in each analysis, rates of sample attrition were acceptable. This was a much more tolerable situation than would have been the case if fragmentary information had been available from all schools and rates of sample attrition had been high within each school. The results are presented in Section 9.

Qualitative evaluation. Twelve schools were visited by a member of the evaluation team. Of these, 10 were also involved in the quantitative aspect of the evaluation; the other two were chosen to provide insights from schools that had delivered The Real Game across the entire cohort. One of the 10 'core' schools was chosen because it had delivered the programme on a collapsed timetable basis. The 12 schools selected were fairly evenly distributed across the country.

Each of the 37 schools in the pilot was sent copies of a questionnaire inviting all teachers delivering the programme to identify the actual and potential learning outcomes from the game, including those which related to career learning, PSHE, Citizenship and Key Skills. A total of 42 respondents returned these questionnaires, from just over half of the schools involved: we estimate that this represented a response rate of just over 30%. The results are presented in Section 8.

The 15 careers services 'attached' to Real Game schools were also sent a questionnaire. Replies were received from 23 careers advisers in 13 services. A summary of these responses is presented in Section 6.

Preparation for the school visits began nearly two months in advance. Each school was first approached by telephone to agree the visit in principle and was then sent a follow-up letter confirming the aims and requirements of the visit. Each evaluator made contact during the fortnight prior to the visit to confirm the arrangements in more detail. It was expected that the evaluators would meet as many relevant staff as possible, with the intention of gathering feedback from:

- Internal co-ordinators responsible for managing The Real Game.
- Teachers involved in classroom delivery.
- Headteachers or other senior managers.
- Careers advisers.
- Observing lessons in progress (time permitting).

Most schools had prepared for the visit as best they could and were very helpful, but it was not always possible for the evaluators to meet as many staff as they would have liked, especially senior managers. Neither was it possible to meet all of the teachers involved in teaching the programme. Interviews often had to be compressed within the timeframe of a 'free period', which was not entirely satisfactory. There was limited scope for classroom observation. Despite these limitations, the visits generated a substantial body of valuable information about the implementation of the pilot.

In addition, regular feedback from schools was obtained through the general process of co-ordinating the evaluation. Exchanges of correspondence and telephone conversations provided useful insights into each school's experience of piloting the programme.

Short case-study examples drawn from the visits are included in the text to provide details of good or interesting practice.

1.4 **Limitations of the trials**

It is important to note that a number of factors placed limitations upon the field trials. Schools had expected to have up to two full terms of curriculum time, but the packs did not arrive in schools until half-term in February 1999, which significantly reduced the teaching time available. One consequence of the delay was that only three of the 18 schools involved in the two evaluation strands claimed to complete The Real Game in its entirety; and in two of these instances, some sessions appeared to have been omitted. About half of the schools exceeded 12 hours of teaching time for the game. Two schools achieved 20 hours' contact time, but only one school reached the recommended time allocation of between 25 and 30 hours. At the other end of the scale, one school recorded only between five and six hours' contact time, and others managed only eight. In practice, therefore, many barely completed half of the programme, and some completed only a third. In several cases, key features such as Equal Opportunities, the Disaster and the Job Creation Scheme were missed. These points have a considerable bearing upon the findings in this evaluation.

1.5 Structure of the report

The remainder of this report is set out as follows:

Section 2 describes aspects of the trial which are relevant to the way in which The Real Game is managed in schools.

Section 3 discusses teachers' attitudes towards The Real Game and identifies the kind of teaching strategies that are needed to make the game effective.

Section 4 examines how schools located The Real Game in the curriculum and investigates the relative merits of different timetabling models.

Section 5 focuses upon the implications which The Real Game has for classroom-management issues, and the important tasks of forming groups and job-role allocation.

Section 6 examines the role and contribution of the careers service in supporting schools piloting The Real Game.

Section 7 summarises the extent to which schools used parents and/or business and community partners to support the game.

Section 8 outlines teachers' perceptions of the learning gained from the programme, and its relevance to Careers Education, PSHE, Citizenship and Key Skills.

Section 9 describes the results of the quantitative evaluation of the impact of The Real Game upon pupils.

Section 10 summarises schools' intentions regarding their future use of The Real Game.

Section 11 details a set of recommendations arising from the evaluation.

More detailed information on the quantitative evaluation, together with copies of the questionnaires and interview schedules used in the study, are provided in Killeen et al. (1999).

Several references are made in the report to the two earlier evaluation studies conducted by NICEC on behalf of Kent Careers Services (Edwards & Watts, 1998; Barnes & Edwards, 1999). These are referred to in the text simply as the first and second Kent reports.

2 Managing The Real Game

2.1 Senior management involvement

Feedback from headteachers and senior managers proved possible in five of the 12 schools visited, although some of the discussions took place on a fairly brief and informal basis. Three headteachers, two deputies and two senior teachers participated in these discussions; further feedback was collected from several members of this group through a series of informal telephone conversations. The evidence presented here draws mainly from these discussions, and presents a senior management perspective on the matters discussed. Many of the issues are returned to later in the report, where they are addressed from a wider variety of perspectives.

Deciding to participate. Information typically came to schools about the pilot from their careers service company or LEA. In the majority of cases, the decision to pilot The Real Game was made by the headteacher or a deputy, although the careers co-ordinator had usually instigated the proposal. The rationale for piloting The Real Game varied between schools. Reasons included:

- Meeting a short-term curriculum need.
- Developing careers work lower down the school.
- Providing a Careers Education programme for year 8.
- Complementing existing PSHE work.
- Motivating and engaging pupils.
- Staying at the forefront of new developments.

Getting involved. Usually senior managers had heard good reports about the game, either from a member of staff or from the careers service. The potential relevance of the game to promoting pupils' confidence and self-esteem was regarded as important. Some saw The Real Game's potential in helping to make Careers Education and Guidance more focused earlier in the school. Although primarily a programme centred on Careers Education, the game's capacity to demonstrate added value to other curriculum priorities was also seen as valuable.

Feedback. A number of managers made a point of following the game's progress by either direct or indirect methods. Teachers were asked for feedback, and sometimes a manager deliberately chose to observe sessions or seek feedback from pupils outside lesson time. There were some examples of teachers deliberately involving senior managers in the game. On one occasion, for example, a deputy headteacher was asked to deliver the redundancy notices in the Disaster session.

Only one headteacher expressed disappointment, though this related not to The Real Game itself but to what he saw as the limited imagination and methods of the two staff involved in teaching it.

Benefits of the programme. Senior managers' perceptions of the potential benefits of the programme were fairly consistent with the declared aims of the game itself. These centred upon a variety of curriculum gains, especially added realism and relevance. The game's ability to promote individual and team skills and to increase pupils' awareness of adult life and responsibilities were valued. Improved target-setting and planning skills were also identified as benefits.

Curriculum strategies. Senior managers were sensitive to the curriculum and staffing implications of The Real Game (see Section 4) and adopted a range of strategies to ensure its successful implementation. One manager specifically tried to ensure continuity of provision by avoiding interruptions to the programme. Attempts were also made to ensure continuity of teachers, although

this sometimes proved difficult to achieve due to competing timetabling demands. In one instance, responsibility for the delivery of PSHE was transferred from the tutorial system to a dedicated specialist teaching The Real Game because it was felt that this might improve the quality of delivery.

Managers could see the potential for extending curriculum links between the game and other subjects, although one headteacher was resistant to this idea on the grounds of complexity and curriculum demands. Suggested ideas included establishing links with English and Geography as a means of creating some additional time to complete the programme in other subject contexts. There was also interest in forming a link between The Real Game and Citizenship.

The value of inviting parents' involvement was noted, as well as the future potential of bringing in 'outside experts' to help supplement the game (see Section 7).

Potential was also recognised for starting Careers Education in year 8 instead of year 9, although it was recognised that this would mean reviewing year 9 provision to take account of the fact that pupils would now 'hit the ground running'.

Policy concerns. Although the potential benefits of the game were well recognised, other external factors were identified that might have a bearing upon schools' capacity to use the game in the future. Concerns were expressed relating to funding the costs of materials for large numbers of groups, and to the time available from the careers service to support the programme. One senior manager was especially keen for The Real Game to be given national status, with opportunities for good practice to be disseminated as widely as possible.

Benefits of senior management support. It was evident from the interviews during our visits that the endorsement of the headteacher or a senior manager was a necessary pre-requisite for introducing The Real Game. Most, however, subsequently played a peripheral role in its implementation. It appeared to be more typical for the head of year or head of PSHE to take the responsibility for organising curriculum provision. As one teacher noted: 'It would not be necessary for the headteacher to get involved... Responsibility for curriculum planning for PSE has been devolved to the staff concerned.'

Where senior managers showed a continuing interest, there appeared to be advantages. For example, senior managers had:

- identified potential benefits from The Real Game that had relevance for school-wide aims and objectives;
- nominated key staff to teach The Real Game who had the interest, enthusiasm and skills to make it work;
- ensured curriculum time and space to pilot the programme;
- ensured that the game could proceed with as few interruptions as possible;
- identified broader curricular options and possibilities for the future delivery of The Real Game;
- allowed 'off-timetable' time for training and review.

The second Kent report also stressed the importance of senior management support, emphasising that for permission to be granted to run the game for a large number of sessions, a clear demonstration was needed of the game's all-round curriculum benefits.

2.2 The Real Game Co-ordinator's role

Once The Real Game had been launched, day-to-day management responsibility usually passed 'down the chain'. There was scope for confusion about management roles and responsibilities. The Real Game might legitimately fall within the domain of the careers co-ordinator, head of PSHE or head of year - none of whom might actually teach the programme.

In the event, all schools had an internal Real Game Co-ordinator. Very often this was the teacher responsible for Careers Education and Guidance; occasionally it was a senior teacher or deputy head. Sometimes the role was shared and involved other colleagues with a responsibility for PSHE. One school reported that the local careers adviser managed the pilot.

Careers co-ordinators usually led the teaching, albeit as part of a team arrangement; where the game was delivered to only one or two groups, they usually had exclusive responsibility. Team approaches seemed to work well. A few teachers were clearly working in isolation, sometimes by choice and sometimes due to circumstances. For example, a couple of schools temporarily 'lost' their careers co-ordinator during the pilot due to health-related reasons: this meant that other colleagues had to pick up responsibility for the programme, with minimal support or training (see Case Example 1).

Case Example 1

In one school, the handling and administration of The Real Game was a near disaster. The careers co-ordinator (who had had the training) went off on long-term sick leave before being able to start it off; although she tried to set it up so that it could run efficiently in her absence, the late arrival of the materials prevented this. The person who thereafter co-ordinated The Real Game was not that closely involved. The form chosen for the pilot initially had a student teacher who administered the t1 questionnaires and taught the first five sessions. The form tutor (a Maths teacher in her first year at the school) picked it up at session six with one day's notice.

The second Kent report found that the Real Game Co-ordinator could help to set the tone for the programme by using a range of management skills, e.g.:

- vision-setting, e.g. to influence pupil and staff perceptions of The Real Game and what it could do;
- time-management skills, e.g. to control the pace and progress of the game in order to enable pupils to achieve a broad range of experiences and outcomes;
- planning and organisation skills, e.g. to supply staff with all the materials they needed for their Real Game sessions;

- staff tutoring skills, e.g. to run effective briefing and debriefing sessions for those involved in delivering The Real Game;
- evaluation skills, e.g. to find out what the school could do differently or better next time the game was played.

Where, in the present study, the Real Game Co-ordinator provided practical administrative support to colleagues by ensuring that all of the materials were prepared in advance, this function was much valued. Some co-ordinators, on the other hand, provided support on a fairly low-key basis by 'just making sure it happened'.

2.3 **Monitoring and evaluation**

The Real Game includes a questionnaire which pupils complete at the beginning and the end of the programme. This instrument is intended to provide teachers and pupils with a basic method of evaluating what has been learned from the game (see Section 9). Apart from this questionnaire, little formal guidance is given about how to approach the process of monitoring and evaluating learning. Schools therefore had to formulate their own approach to these tasks. Some schools attempted to address this issue, even though the process was 'squeezed' by the shortage of time. Other schools did not really tackle it at all. Given that the majority of schools did not complete the game, and that the pilot was being externally evaluated, the lack of school-based evaluation is probably unsurprising.

Monitoring took place on largely informal basis, with individual teachers left to organise it for themselves. In a few schools, regular teacher meetings provided an important opportunity for reviewing progress and for sharing observations and concerns. Careers service personnel also assisted in this process (see Section 6.4).

Schools that were concerned to monitor the programme effectively benefited from engaging pupils in this process. Some schools clearly attached importance to feedback from pupils. In one instance, for example, the teachers acknowledged to the class that the Disaster episode had not worked out well and that the end had been an anti-climax.

One form, in preparation for the evaluator's visit, spent a short time in their Real Game lesson preparing small-group presentations about their own reflections on the pilot. Two groups produced OHTs and negotiated extra time from other teachers to complete this preparation. The pupils and the team almost totally concurred in their evaluation of the game.

In another school, pupils spent an English lesson writing an essay based upon their reflections on the game, although there was no indication of how Real Game tutors used this material.

For the future, it would seem desirable to encourage teachers to produce their own list of intended outcomes written in language which would be immediately accessible to their pupils. This would have the added advantage of enabling teachers to prioritise the learning objectives which they are seeking from The Real Game. Without this, there is a danger that The Real Game is played as a series of fun activities without a proper learning focus. None of the schools visited for the present

evaluation study had devised their own intended learning outcomes as part of their curriculum planning.

2.4 Staff training

The Real Game Co-ordinator had usually attended one of the regional training events on the game organised by Kent Careers Services. Internal arrangements for training colleagues varied, depending upon the number of staff involved. Co-ordinators commented on the short lead-in time available, which curtailed their scope for organising training well ahead of the game starting. This was a concern for some, but not for others who appeared to take a more 'laid-back' approach.

In those instances where teams met regularly to plan and review, few problems were encountered - a view supported by both Kent studies. Training from the regional events was sometimes cascaded down to other teachers, often involving a contribution from careers advisers. Regular networking meetings for sharing additional materials were a common feature of such arrangements.

Two careers co-ordinators had little direct involvement in teaching The Real Game but provided a support role to other colleagues. This support function could be handled in different ways. One method is outlined in Case Example 2.

Case Example 2

In the early weeks the careers co-ordinator and careers adviser met with the two teachers fortnightly to de-brief them and to look ahead at the next units. This slipped to every three weeks and subsequently meetings were organised on an 'if needed' basis. Both the careers co-ordinator and careers adviser were available when required, and were also involved in most of the lessons with the two teachers. Thus a background of support was available throughout.

The support role of careers advisers is discussed in more detail in Section 6.4.

Some teachers wanted to be left to their own devices and to teach the game in their own way. Others clearly preferred to network and share ideas, even if this was ad hoc and informal. Unsatisfactory communications occasionally created an unnecessary sense of isolation, as illustrated in Case Example 3.

Case Example 3

One PSE teacher reported that she did not receive any training and only saw the careers co-ordinator from time to time. It was the careers co-ordinator who had the link with the careers adviser. The PSE teacher had no direct contact and only later discovered that the careers adviser had attended a training course.

Several training implications for the future were identified by Real Game Co-ordinators:

- The training needed to be 'experiential' and to give teachers time to work through the game properly.
- Some teachers needed training on how to work and teach in teams.
- Training might also be needed on how to plan and co-ordinate the game and make links with other curriculum subjects.
- Practical planning sessions should be organised.
- If the whole year group was involved, teachers would need to be supported and enthused; in this respect, heads of year and/or other senior members of staff could play a vital role.

2.5 **Progression issues**

Careers co-ordinators recognised the issues for progression which would follow the introduction of The Real Game. If the game became a permanent feature of the year 8 programme, there would be a need to review what preceded as well as what followed it, both in relation to the PSHE programme as a whole, and more specifically in relation to the Careers Education programme from year 9 onwards. One teacher noted that there was a danger of an anti-climax in year 9, with the careers component of PSHE seeming very 'flat' by comparison. Pupils had been introduced to 'new ways of working', which were quite novel for some, and in many respects more stimulating. Maintaining this dynamic and active learning environment in Careers Education was, for some careers co-ordinators, both a key aspiration and a challenge for the future. Some, therefore, were now anticipating a major review of pedagogical methods as well as of core teaching objectives for year 9 onwards. One possibility mentioned was to spread the game through year 8 to finish early in year 9, with the intention of overcoming this sense of anti-climax. Another was bringing forward introductory sessions to the careers library and doing more work in year 9 on budgeting and finance, with a view to exploring how work fitted into life as a whole.

More generally, there was a question as to whether the impetus gained from The Real Game would be carried through or whether it would quickly fade. The findings from the second Kent report suggest that this latter effect could easily occur unless steps are taken to prevent it doing so.

3 **Delivering The Real Game**

3.1 **Teachers' responses to The Real Game**

In the main, and despite the time constraints and the concomitant frustrations, the overall response from teachers to The Real Game was very positive. Some teachers were extremely enthusiastic:

The Real Game is the best thing that has arrived on the PSHE scene. It is hard to describe the energy and enthusiasm it has generated here. Even though we could only do it in dribbles, relatively speaking, the pupils maintained their interest to the end.

The Real Game was regarded as successful even with 'difficult-to-motivate' pupils:

The group I had was very difficult. They are a dysfunctional group and without doubt, one of the hardest in the school. But once you've got two-thirds of them motivated, the others fall into line...

Teachers were asked to indicate whether all pupils learned from The Real Game, or whether there were some pupils that it did not reach. Teachers from most schools thought that The Real Game was capable of involving all pupils:

Everyone would have learnt something from it, even those not too keen.

In year 8 there has been 100% - everyone has enjoyed it.

All students got something out of it.

All (pupils), but they gain in different areas and ways.

All students were involved; the small group model gives them no choice but to get involved.

One teacher noted that his pupils were enthusiastic about the 'fun' aspects of the game, but less enthusiastic about actually doing the work involved:

It reaches them all but when the nuts and bolts come into it - maths and writing - you can have a problem, you start to lose them a bit.

However, teachers working in schools with a preponderance of average- and below-average-ability students were somewhat less positive. They were more likely to comment adversely on issues such as the length of the game in terms of sustaining students' interest, the presentation of the materials, the number of worksheets, and the reading and numeracy requirements.

Some teachers reported that the experience was as motivating for them as it was for their pupils. Even though there were limits to the available curriculum time, in several instances The Real Game was seen as meeting a real gap in provision and was much welcomed as a result.

Where there were differences of opinion between teachers, these appeared to be far more marked between different schools than within individual schools. This suggests that training and support arrangements make a crucial difference to how the game is received and implemented.

The second Kent report, which was a more in-depth qualitative evaluation, noted that not all teachers were in sympathy with the perceived values of the game. Some of these teachers felt that the game encouraged too much of a materialistic outlook, with insufficient stress on other values. Other teachers saw the game's strength as representing life as it really was. These views were echoed, but not elaborated further, in the present study.

3.2 **Orientations to teaching and learning**

The attitudes of teachers delivering The Real Game were key to its successful delivery. Teachers needed to be motivated by its ideas and comfortable with the pupil-centred approach. The game required an enthusiastic style of delivery and teachers who were prepared to tolerate more classroom noise and movement than normal.

The Real Game therefore appealed to some teachers' preferred style of teaching more than to others'. Both Kent reports drew similar conclusions. For those who enjoyed active learning, the game presented few challenges beyond those of an organisational nature. But one teacher noted that not all colleagues were likely to be equally comfortable with an approach to teaching that was primarily pupil-centred:

It's got staffing implications... you need staff who are interested in what the kids do rather than staff who come in and teach and walk out again.

A number of schools reported using team-teaching approaches, sometimes made possible with the support of 'floating' members of staff, or by the availability of careers advisers. The experience of team teaching caused one teacher to change her own classroom techniques:

I've changed my ways a bit in the classroom.

Where teachers ran into difficulties, time pressures were usually cited as the main cause. Most teachers seemed keen to complete the programme. Some were disappointed not to have had more teaching time to devote to the game and frustrated by insufficient scope to allow groups of pupils to talk things through.

Teachers were asked to identify the characteristics that they felt were associated with very effective and less effective teaching. Those specified as effective included (in alphabetical sequence):

- Ability to set ground rules and maintain order without attempting to control or stifle pupils.
- Arithmetical ability.
- Being relaxed with the class.
- Being comfortable about not knowing all of the answers.
- Co-ordinating ability.
- Enthusiasm - critical, including a 'belief' in the value of the game.
- Facilitating, not 'teaching'.
- Flexibility in classroom management and delivery styles.
- Inventiveness - such as ideas for involving community partners.
- Patience.
- Planning.
- Pupil-centred approach - willing to allow pupils to take a lead.
- Rapport with pupils.
- Tolerance of noise.
- Understanding pupils' needs.

Less effective characteristics were typically the opposite of those listed above. Insistence on quiet and stillness with an emphasis on control was considered problematic. Lack of ability to vary one's

teaching style was identified as a further limitation; so too was the desire to want to teach alone, since the programme benefited from a range of inputs.

In some instances it appeared that the ability level of the pupils was a factor influencing their level of interest and motivation and the way in which they engaged with the programme. In practice, this meant that some pupils needed extra classroom help and guidance in completing specific tasks. The 'difficulty' of the budgeting activity was frequently cited by teachers as the most technically challenging topic for pupils to deal with:

The maths in the budgeting was too hard for many of them, and it seemed difficult to imagine they could get much from it. But they seemed to grasp the main concept.

A number of teachers dealt with this problem by providing additional support or resource materials or by seeking help from colleagues. Here and elsewhere, the attitudes and resourcefulness of teachers in relation to the game seemed particularly important.

A number of teachers tried to vary the pace at which the game was 'taught'. Others introduced incentives to improve motivational levels (see Case Example 4).

Case Example 4

Both teachers kept a tally of the Spin Game scores. Extra points could be won by groups if they were all wearing their badges. Points could be lost for bad behaviour by individuals in the classroom. The teachers gave an extra packet of sweets to the winning group at the end of the game. All groups got a packet of sweets along with their diplomas.

For a right answer, one teacher rang a realistic bell sound. For a wrong answer, her colleague went up to the group who had answered incorrectly and blew a plastic trumpet at them, which made them squeal with delight!

Motivation levels could also be boosted by making use of features of the The Real Game that lent themselves to 'dramatisation' (see Case Example 5).

Case Example 5

Another interesting adaptation was observed when the jobs were allocated. They held a mock leavers' assembly and the headteacher gave a talk, after which she presented them with their jobs which had been rolled up like a scroll.

Classroom behaviour could be challenging, which meant that teachers needed to be both confident and competent in handling new and dynamic learning contexts. Since the participative style of The Real Game suited some teachers more than others, this has implications for who teaches the game as well as for the support processes that deal with training and programme review. The importance of these factors should not be underestimated.

3.3 Resources and materials

Although the evaluation did not expressly address the question of resources and materials, most teachers appreciated the quality of the pack and were very pleased to have everything they required available for immediate use.

During the pilot, Kent Careers Services undertook a review of the game's content and invited all schools to provide specific feedback to them about individual activities. This report does not therefore aim to present teachers' detailed views on the content of the game. Rather, it indicates some of the additional responses made by teachers in the course of our interviews with them. These broadly concur with the findings in the first Kent report:

The amount of photocopying required was excessive and expensive.
The presentation and style of the materials were thought by some teachers to be 'too fussy'.
The materials needed to be kept up-to-date. Some thought that they were 'showing their age' already.
Some materials needed to be 'less wordy', especially the job descriptions.
Activities such as the Disaster needed to be easier to handle.
More relevant items needed to be included in the Wish List.
Some items were gender-stereotyped: these needed to be removed.

Some teachers noted that the timings in the Facilitator's Guide assumed that pupils could do the relevant arithmetical calculations without difficulty, whereas this was not always the case. They recommended that the manual should give more guidance on this point.

Several teachers took the view that the end of the game needed a stronger climax. Some felt that the programme should conclude with the Career Day.

Teachers and careers advisers were aware that the use of The Real Game had implications for the school's careers library, including both its content and access to it. The importance of this point was also noted in both Kent reports.

These and the other findings in the present report were made available to those responsible for revising the pack for publication.

4 Curriculum Matters

4.1 Curriculum location and timetabling arrangements

Age groups. Most teachers thought that The Real Game was well suited for use with year 8 pupils. At least half thought that it had relevance for year 9, where some thought pupils would handle the concepts more easily; and in one school the materials had been used successfully with lower-ability year 10 pupils. On the other hand, another school in the pilot used the materials with year 7: the

outcomes were reportedly mixed, but we are unclear how much of this was due to shortcomings in the arrangements for delivering the game or to the 'immaturity' of the pupils. Mostly, however, teachers felt that year 8 was definitely the right age to use The Real Game, since it could help to motivate pupils by encouraging them to look towards the future, reinforcing the point of their education, at a formative time.

Curriculum location. Only a few schools in the study undertook any other career-related work before year 9, which meant that for the majority The Real Game represented a significant curriculum innovation. PSHE was seen by the majority of teachers as the obvious place to locate the programme.

Curriculum links. A fair proportion of teachers identified definite links between The Real Game and existing aspects of PSHE, and possibly with Citizenship and Key Skills too. The nature of these links is explored in more detail in Section 8. The links were seen more clearly by schools which had taught more of the game. In most cases, therefore, it was too early to draw hard-and-fast conclusions about the way in which The Real Game was likely to be used in connection with these related curriculum areas. Many schools had not yet had sufficient time to formulate a view about this, although a few indicated it as a priority for the beginning of the following school year.

Curriculum framework. The potential of The Real Game to act as a curriculum framework was also explored. It would seem that two broad models are feasible:

1. The Real Game is used as an over-arching framework for an integrated PSHE and/or Careers Education programme. Citizenship may well also figure in a model such as this.

2. The Real Game becomes a discrete component of the PSHE and/or Careers Education programme and is allocated a proportion of curriculum time for this purpose. In effect, this may result in The Real Game being used in a reduced form and regarded as another resource for adaptation, rather than an integrative framework.

Some teachers thought it could provide a framework for both the year 8 and the year 9 PSHE programmes 'since it provides "jumping off" points into new topics'. In contrast, other teachers felt that whilst it was possible to use aspects of The Real Game as resources for other PSHE curriculum topics, it was unlikely that the game could provide an integrating framework of this kind. Some expressed concern about the game's displacement of other topics, especially those relating to the 'personal' side of PSHE such as sex education. One teacher stressed that in order to achieve integration, new materials would have to be created that could 'hook' into the key themes running throughout the game. Suggestions included lessons on the impact of drug misuse on working capability and prospects and on the downward spiral into homelessness.

There is a dilemma here. If schools opt to run The Real Game in its entirety without some form of integration, the risk of distorting the PSHE programme increases. However, if schools cut sessions from the game in order to accommodate other topics, the cumulative impact of the game could be substantially lessened, thereby undermining the very reason for using it in the first place.1 During the pilot, some schools seemed to be seeking to resolve the dilemma by taking creative and flexible

approaches to timetabling and curriculum mapping. This should be achievable by more schools in ensuing years, with more planning time at their disposal.

We will return to this issue at the end of Section 8.

4.2 **Merits and de-merits of different timetabling approaches**

In Canada, The Real Game is taught largely through a designated programme of Social Studies, which is a more developed part of the curriculum than in the UK. In the UK pilot, schools used a wider variety of curriculum contexts. As outlined in Section 4.1, in most situations the game was incorporated into curriculum time allocated for PSHE. However, a range of other curriculum contexts were also used. These included:

- Tutorial periods.
- Social Studies lessons.
- Cross-curricular approaches.
- Enrichment activities.
- Lunchtime clubs.
- Condensed timetabling.
- Collapsed timetabling.

Although limited, the evidence from the pilot indicates some of the possible strengths and weaknesses of these different timetabling arrangements.

PSHE periods. By introducing The Real Game through PSHE, schools could ensure that it was delivered as part of the mainstream curriculum, usually with dedicated curriculum time each week. PSHE provided the necessary structure for continuity and, as already noted, could serve as a framework within which schools could locate other programmes of work. Sometimes it formed part of the tutorial programme, so that it was the responsibility of form teachers to teach the game along with their other tutorial responsibilities. Other schools used a specialist team of teachers to deliver PSHE, who were perhaps better motivated to teach a programme of this kind.

Tutorial periods. One school attempted to deliver The Real Game during three weekly tutorial sessions, each lasting between 15 and 20 minutes. Although 30 or more sessions were used in total, they were frequently interrupted by the need to deal with other tutorial business. Where longer tutorial periods were combined or integrated with PSHE, the situation was potentially more favourable. The main advantage of using tutorial periods was that they allowed follow-up in relatively short timeframes. One school suggested that The Real Game had the potential to enhance tutors' relationship with pupils, which was particularly important in this school since the tutors stayed with their groups throughout their school career. This arrangement meant that the effects of The Real Game could add valuable cohesion to the careers programme in subsequent years, although not all schools structured their tutorial system in this way.

Social Studies lessons. Only one school operated this model. This school reported a very positive experience of The Real Game.

Cross-curricular approaches. There was interest in several schools in the possibility of some parts of the game being included in other subjects, although there had been limited opportunities for operationalising these links this time around. Links with English, Drama, Mathematics and Geography were particularly noted. For example:

If we do it again it would be nice to enlist the Mathematics department to make sure they have understood the concept of money and can do percentages.

As noted in Section 2.1, one headteacher was opposed to this kind of cross-curricular development due to the amount of curriculum co-ordination it required. This was, however, a minority view.

Enrichment activities. In one school, time available for enrichment activities was used for The Real Game, alongside other timetabled arrangements. This added valuable flexibility.

Lunchtime clubs. This arrangement was chosen in one school in the absence of formal curriculum time. Despite an encouraging start, attendance tailed off to such a degree that the groups were soon no longer viable. This 'voluntary attendance' model may be useful as a supplementary session for pupils wishing to undertake enhancements of the game, but is no substitute for designated curriculum time for the game's core elements.

Condensed timetabling. In one school, a group of teachers delivered the game during two-hour sessions over four days. They did not feel this was satisfactory, although it might have worked more favourably had such sessions been extended over a longer period, thus enabling more of the game to be completed.

Collapsed timetabling. Within the pilot, three schools used between one and three full days to teach the programme, whilst two others included it in an 'activities week'. This had the merit of giving pupils the time to immerse themselves in the game. Schools noted that this helped to keep motivation and involvement high, although it did not allow much scope for linking other activities to the game, such as visits, exploration of job roles, or the use of visiting speakers. The other potential drawback was lack of maturing time. Sustaining pupil interest over a concentrated period also made high demands upon teachers' energy and skill levels.

Combined approaches. A few schools which taught the programme through the PSHE curriculum also arranged for a collapsed timetable day to enhance the experience. In one of these cases, further work on the game was made possible as part of an enrichment activity. There were also examples from several schools of how lessons from other subjects were used for continuation purposes. Some teachers thought that an off-timetable day either at the beginning, or at an important mid-way point, could help to motivate pupils and sustain their engagement with the game.

There was no overall consensus about the preferred model of timetabling arrangement, but it seemed that a combined approach offered advantages in terms both of flexibility and of varying the pace. Most teachers recognised that there was scope for improvement in the arrangements they had adopted.

Session time and interruptions. The total number of sessions devoted to The Real Game averaged around 12, usually spanning periods of between 40 and 60 minutes. As noted in Section 1.4, the total number of sessions available in most schools was far short of that needed to complete the game. Several schools reported losing time for a host of different school activities, such as examinations, school visits and sports events. In general, teachers clearly did their best to protect the time available as much as possible. Occasionally teacher absences interrupted the game when no other members of staff were able to step in and keep the programme running.

Schools were more likely to encounter time pressures and constraints than might typically be expected if the programme had the benefit of starting earlier in the school year. Teachers agreed that more forward planning was needed in future to ensure that sufficient curriculum time was allocated and that these sessions were protected for the exclusive delivery of The Real Game.

4.3 **Staffing issues**

The Real Game posed staffing issues for some schools but not all. Where The Real Game was taught to a whole year-group and within the context of tutorial or PSHE periods, staffing was relatively straightforward, although the attitudes of teachers to the game were crucial. Some schools, on the other hand, benefited from implementing a more limited trial because it gave teachers a choice about whether they wished to be involved or not:

The staff who did it this year volunteered... they were over the moon about it. Quite how it would work for someone for whom it just appeared on the timetable...

Where more teachers were involved, the need for training increased, especially for staff who at the outset were less interested or motivated to teach this kind of programme.

Team-teaching approaches, which offered a variety of pedagogical styles, were more difficult to timetable, and therefore tended to suit situations in which the game was being taught to only one or two groups. Careers advisers sometimes played a valuable role in such teams.

One school formed a Real Game team of three teachers, knowing that only two would be required at any one time. This provided extra support and a stronger guarantee of continuity in the event of staff absence. Elsewhere, a student Mathematics teacher floated between groups to help pupils with calculations and share the work with the main class teacher. Similar arrangements were found in other schools:

The two floating staff were in groups but not as dedicated support - a mix of observation and 'mucking in' on occasions.

Teachers delivering the game came from all kinds of subject specialisms. Their motives for teaching the game were sometimes quite pragmatic. Two English and Drama teachers, for example, volunteered because they had lost some of their examination classes and were promised that if they did so they would not be 'nabbed for the supply cover rota'.

5 Classroom Issues

5.1 Physical environment

Some teaching areas proved more conducive to The Real Game than others. Rooms with fixed benches and tables were problematic. Teachers experimented in order to find the 'optimum' room layout. One teacher found a circular setting the most effective.

Where possible, teachers liked to have a form base where The Real Game could be taught. One school 're-jigged' arrangements to ensure that teaching groups had the same location throughout the game to help build an association with one room. Each room chosen had display space for posters. One teacher noted how other pupils using these rooms also learned something from the Real Game posters on display. Such ideal arrangements appeared, however, to be quite rare.

The availability of display boards and filing cabinets for storage was important. Absence of display space was a particularly significant restriction.

There were examples of pupils being encouraged to leave the classroom and go to the resource centre or IT suite to complete particular Real Game tasks.

5.2 Classroom dynamics

Some teachers mentioned problems concerning the pace of The Real Game. While they wanted to keep the game moving, they had to give extra time to pupils who were taking longer than expected on a particular topic. A balance also had to be found between keeping a tight control on time, keeping up pace, while also allowing pupils to dwell on the activities they really enjoyed and benefited from.

Maintaining classroom dynamics was a key challenge for some teachers. Manipulating the highs and lows of the game was especially important, given that the game contained certain 'thresholds' that needed to be crossed if pupils' enthusiasm and motivation were to be maintained. The budgeting exercise was particularly significant in this respect:

We only got just past the 'budget section'. This section caused a lot of problems with students being away and with students having no basic maths knowledge. After this section, students started to dread the Real Game days.

It appeared that pupils' ability to cope positively with the budgeting exercise was a key determinant in their attitudes and responses to the rest of the game (see also Section 3.2): both of the Kent reports concur with this finding.

The questionnaire, the allocation of jobs and the staging of the Disaster were other examples of key 'threshold' points. The use of the World of Work Questionnaire was a necessary ingredient of the evaluation, but was largely unpopular with pupils. Some teachers reported that this and the

supplementary questionnaire dampened pupils' enthusiasm both at the beginning and at the end of the game.

Teachers found the structure of the game easy to work with but the need to map the programme as a whole was seen as essential by some. As the second Kent study showed, there was a significant difference between having a clear and progressive overview of the game and preparing just one session ahead. Pupils recognised when teachers were ill-prepared and this could cause an adverse reaction to the game.

Given the freedom to do so, pupils were willing to criticise those features of the game which they either disliked or found wanting. Sometimes, for example, pupils would question the realism of prices, or the wages paid to certain occupations. It was important that teachers could draw upon a repertoire of strategies for dealing with these concerns in a positive and effective manner, in order for the momentum of the game to be maintained.

5.3 **Forming neighbourhood groups**

A key feature of the game is its focus on teamwork and collaborative working. In approximately half of the schools visited, pupils had had prior experiences of co-operative learning as part of their PSHE or tutorial programme. One school especially stressed the enquiry-based approaches that it used in Geography and History, as well as discussion and role-play in English and group work in Design and Technology. Elsewhere, teachers from different schools explained how pupils undertook tutorial work in teams, sometimes based on friendships groups. Many pupils were therefore not unfamiliar with such forms of collaborative working.

Although teachers varied in their method of forming the neighbourhood groups, three broad approaches were evident:

Random: Pupils were allocated to groups by their teacher on a purely random basis.

Balanced: Pupils were allocated to groups by their teacher on the basis of achieving a balanced gender and/or ability and/or social mix.

Friendship: Pupils were allowed to form their own groups, usually with friends.

The 'balanced' approach was the most common. Certainly there seemed to be benefits from mixing ability levels, since pupils could then help each other in relation to tasks like the budgeting exercise. Also, mixed-gender groups were essential if neighbourhood groups were to reflect the composition of real communities. Groups based solely on friendship patterns limited the scope for new forms of social interaction, although - as the second Kent study showed - there was value in each pupil having at least one friend in their group. Sometimes teachers altered the arrangements as the game progressed. Occasionally, for example, groups were broken up and re-formed to ensure a more balanced mix.

Factors affecting group effectiveness. Teachers were asked what helped a neighbourhood group to function well. Answers included:

- Mixed-gender groups.
- Mixed-ability groups.
- Friendship groups, especially when pupil confidence was low.
- Ensuring that groups could cope with the demands of the game.
- Ensuring the presence of a 'natural leader' within a group.
- Giving the group a clear focus - e.g. completing their 'Hello' worksheets in their neighbourhood groups before going to talk to others.
- Supporting groups in working together effectively as teams.
- Allowing sub-groups to form inside larger groups.
- Arranging seating before the lesson began.

5.4 **Role allocation**

As noted in Section 5.2, the allocation of pupils to job roles was a 'threshold' that needed to be crossed if pupils' interest and motivation were to be engaged. The Facilitator's Guide recommends that job roles should be allocated on a random basis. Sometimes there were difficulties with this:

One boy got 'entrepreneur' - he didn't understand it and wasn't comfortable with it. He stuck with it, however. Pete (tutor) had made up his mind that he wouldn't let any of them change their jobs because it is not crucial to their enjoyment of the game.

Elsewhere, a teacher noted that 'there is a slight risk that some will switch off if they don't get a job they like'. One girl wanted to be a vet, like her best friend: her teacher agreed to this, and the other pupils accepted it - 'probably because they knew that neither of the girls was very bright'. Another teacher thought that it might help the potentially disaffected and those with low aspirations if they were allocated job roles that raised their sights:

It can be a real eye-opener for a child who is allocated a professional/managerial job if their parents have a modest or low-level occupation.

In a further instance, there was some 'manipulation' in relation to gender, e.g. mechanic and lorry driver were deliberately given to girls.

One girl did not like her original selection (gardener) and for the first few weeks asked to change, because she saw it as low-status. She changed her mind when she realised the potential for increased earnings in the summer months, which she saw as a 'plus' in comparison with fixed incomes.

Although pupils might have been more positive had they been able to choose their own job roles, this could have had other unhelpful consequences that would have been contrary to what was perceived as being the purpose of Careers Education and Guidance in year 8. In particular, it would reinforce the grading of the group into higher, middle and lower achievers.

5.5 **Role-taking**

Pupils' willingness to 'buy into the story' of the game was an important factor in determining their levels of motivation. As both Kent studies show, some pupils question the implicit ambiguity in the game, in the sense that it claims to be like real life, but is clearly artificial. In order to engage with the game, pupils need to accept the 'fiction' but to recognise the reality which it simulates.

An interesting feature of The Real Game is the extent to which pupils identify with their occupational role throughout the game, and the effects, both positive and negative, that may follow as a result. Several teachers were fairly cautious about this question:

Difficult to tell. They accepted the role they were given but it wasn't a play-acting scenario.

I don't think there's been a lot of that... getting into character. To some extent they play with it, but it's not as strong as I would like.

One teacher felt that his pupils did not take their work-roles seriously beyond the actual sessions in which they were adopted. Others said that the relatively short sessions meant that pupils faced a challenge even in assuming their roles in the time available.

In contrast, around half of those interviewed had detected changed pupil behaviour related to their assumed roles:

They became the people whose jobs they took.

Nearly all take their roles to heart.

Two teachers noted that some pupils

... felt more worthy because they were paid more, whereas others felt a sense of stigma, although this may have been counterbalanced by the sense of working together, helping each other along.

Teaching strategies could be adopted to enhance the process of role-taking. Case Example 6 illustrates how teachers from one school organised an activity that required pupils to act out a short scene in role.

A number of pupils suggested other enhancements that would enable them to develop their roles. One idea was having a day when they could dress in role in school. Others liked the idea of inviting speakers into school, or having the opportunity of going on work shadowing to see what their particular job would be like 'for real'.

The importance of pupils being able to 'switch roles on and off' was identified by one teacher. The Spin Game was regarded as useful in this regard because it was 'out of role'.

Case Example 6

Thirty-nine pupils were split between two classes. After completing the 'Hello' sheet, the main activity was to act out a short scene with the pupils in role. The teachers asked them to think of a realistic situation in which they might all meet each other. Suggestions included:

- In a lift which breaks down (one of the occupants is a mechanic and repairs the lift; another is a doctor who administers first aid to a further occupant who hurts himself when the lift suddenly stops).
- At a protest meeting.
- In a pub quiz team.
- In a McDonalds outlet.
- In someone's garden (the TV programme maker calls in the building contractor and landscape gardener to carry out improvements on her house and garden).

Pupils then improvised conversations in which they would tell each other things about themselves, derived from the job cards, with the proviso they had to be realistic conversations.

Although teachers were quite aware of the part played by role-taking in the game, there was little evidence to suggest that they had anticipated the need to brief or debrief pupils in this respect.

5.6 Classroom behaviour

Given that The Real Game is a highly active and participative programme, it seemed likely that pupils would behave differently from the normal classes. Teachers found that they had to accept higher levels of classroom noise than they might typically allow. Evidence from several schools suggested that the impact of the game on classroom behaviour had been largely positive:

The behaviour of the class has changed dramatically - groups have gelled, they have calmed the noisy ones down... the more able have supported the less able.

Pupils enjoyed the programme and had more opportunity to contribute and share than in normal lessons. Sometimes increased excitability led to more disruptive behaviour. Pupils' attitudes were also affected by their response to their allocated job, and the extent to which this engaged their interest. Generally, interest levels seemed higher than usual:

Pupils took more responsibility than normal, even in Maths where they put in more effort.

In general, there was no suggestion that behaviour in general had been adversely affected, although the group dynamic could vary. Speaking about this, one teacher noted that classroom behaviour 'was about the same or slightly better up to half way', after which a degree of restlessness became slightly more evident.

Pupil behaviour cannot be divorced from effective teaching and learning strategies (see Section 3.2) and a suitable physical environment in which to teach the game (see Section 5.1).

5.7 **Dealing with complications**

Teachers were asked about what effect, if any, the following factors had upon their ability to manage and deliver The Real Game, and how they dealt with them:

- Pupil absences.
- Uncompleted work.
- Progression rates.
- Reading difficulties.

Absences were handled more easily in some schools than others, and difficulties were more noticeable when there was minimal time for catching up. This could be a particular problem if key sessions were missed, such as budgeting:

They have to keep up. It's the way the game is built... they see the point in keeping up.

Where motivation was high, the group would often be supportive of each other and ensure that anyone who was missing received copies of the materials. Some teachers relied upon pupils helping each other to catch up:

Two absentees from yesterday - they caught up quickly. It hasn't been allowed to become a problem. Some things have been glossed over.

A few schools offered formal catch-up sessions where possible - e.g. in tutorial periods.

In some instances, uncompleted work was given as homework, or pupils took work home to complete of their own accord. In some schools, lack of time meant that work was left unfinished.

A difference in progression rates was noted in relation to the budgeting exercise in particular. Teachers observed the frustration this caused:

Unless they are very motivated, some pupils will give up.

The 'threshold' nature of this part of the game has been mentioned earlier (Section 5.2). In terms of individual ability, the budgeting exercise is probably the most demanding task in the game, and some pupils clearly required extra arithmetical support.

One school reported that some of their pupils encountered reading difficulties with the original job profile. The amount of writing was also cited as a potential cause of uncompleted work for some pupils. Overall, however, few seemed to regard the reading level of the materials as a problem.

6 The Careers Service's Role

6.1 Introduction

Careers services have shown a great deal of interest in The Real Game since its introduction. It was anticipated that many would provide direct support to schools piloting the game and this has proved to be the case. The support role offered by the careers service potentially provides a distinctive feature of implementing The Real Game in the UK: there is no comparable service equipped to offer similar support in Canada or the USA.

Accordingly, each careers service associated with a pilot school was invited to contribute their views to the evaluation. All respondents were individual careers advisers or advisory teachers working for the careers service. As noted in Section 1.3, a total of 23 replies were received, mostly from advisers who had had direct contact with the schools concerned.

This section indicates careers advisers' perceptions of The Real Game, and how their role in supporting schools developed during the pilot. The discussion also outlines what careers advisers considered as distinctive about their contribution and their view of its resource implications.

6.2 Reasons for supporting the programme

It is clear that most of the careers services knew about The Real Game before their link schools, and that they took the initiative in alerting schools to the opportunity it presented. There appeared to be at least four reasons why careers services were keen to promote The Real Game.

The first and most prominent of these was the link to pre-existing or newly-developing company policies about supporting curriculum initiatives in schools that would lead to improved Careers Information, Education and Guidance:

It links with our CIEG policy, strategy and priorities for development... One of these goals is to provide support for the planning, delivery and development of CIEG which encourages the use of innovative approaches to engage the commitment and interest of learners.

Secondly, the initiative was seen as having potential relevance for the careers service's own changing operational priorities in the light of Government policy to focus its main energies on disaffected learners:

We saw this as an excellent opportunity, particularly given the refocusing agenda.

Thirdly, some respondents attributed the decision to a company ethos that was concerned to be seen to be at the forefront of innovative developments:

We are a proactive careers service and are keen to be involved in new initiatives.

Finally, there were more personal motives where careers advisers could see benefits for personal development, for developing new skills, or for building stronger ties with individual schools. These sometimes resulted from careers advisers attending one of the regional training days hosted by the Kent Careers Services in preparation for the launch of the pilot.

6.3 **Careers advisers' perceptions of The Real Game**

There appeared to be a clear consensus among the careers advisers that The Real Game had had a significant impact upon the pupils involved. Advisers also noted its innovative approach, which combined enjoyment with a serious educational purpose, capable of involving and 'stretching' the majority of pupils:

Feedback from students both verbal and in terms of general attitude is very positive. They 'enjoyed' playing the game and found it challenging. It increased their knowledge and understanding of the roles and responsibilities of adults. They acknowledged a better understanding of finance, wages, taxes and salary levels. They became more aware of post-16 options and the opportunity to train and learn after year 11. It has increased their motivation to achieve...

By and large they have enjoyed it. They have also engendered a healthy attitude of co-operation (the more able helping the less able), and competition, plus lots of imaginative variations on a theme - house sharing, giving lifts to work, employing each other.

One careers adviser reported how pupils voted to continue with the game after the planned end of the programme.

Some advisers pointed to the game's ability to help raise pupils' self-esteem and motivation. In particular, they indicated its potential with less motivated pupils:

It has been used with a 'difficult' year 8 group who have been enthusiastic and keen to play The Real Game each week. They are now talking about 'networking' and 'transferable skills', and have worked tirelessly on their budgets.

This reinforces teachers' comments to the same effect (Section 3.1).

Careers advisers brought a different perspective from teachers to the game. Their responses particularly focused on potential benefits for individuals. The ability to share this perspective with pilot schools appeared to have been of value in shaping the schools' implementation strategies and ensuring that individual needs were addressed.

6.4 **Support for schools: the role of careers service staff**

In some schools, careers advisers were central figures and actively involved in delivering aspects of the game. In others, careers advisers played no active role at all. In broad terms, however,

respondents' answers suggest that the nature of careers advisers' support for schools can be viewed in terms of four possible models: leadership, partnership, associateship, and marginal support.

Leadership describes at least one and possibly two situations in which careers advisers and sometimes advisory teachers (employed by the careers service) helped to initiate and drive the programme forward. This role could encompass training for staff, help with programme planning, and shared delivery in the classroom:

One school used three members of the careers service to lead the delivery of The Real Game as a 'block' during May.

In these instances, schools welcomed the careers service's expertise and their availability to help lead the programme:

The school was keen to have me present for as much of the pilot as possible.

Partnership describes situations in which careers service staff negotiated and agreed complementary roles with schools to help deliver aspects of the programme. Again, this could include a training function and specific contributions to classroom delivery. This model also emphasised team-working and shared decision-making.

Associateship was the most common model reported by respondents. This describes arrangements in which careers advisers contributed to parts of the game but assumed no responsibility for managing or directing the programme.

Marginal support describes situations in which the careers adviser's role in relation to The Real Game pilot was slight or peripheral. This may have been because the scope for the careers adviser to play a key role was limited by lack of time or because the school chose to be more independent. In some cases, stronger forms of involvement were offered to the schools but were declined:

Careers service staff were not involved in delivery. A member of the development team offered support but was not called upon by schools.

A few Real Game Co-ordinators felt that their careers adviser did not have the appropriate manner or skills to help pupils in the classroom.

Careers advisers were frequently involved in training, usually for school staff who were going to teach the programme. This was possible at the beginning because careers advisers had more information about the game. Where careers advisers had attended the regional training events, they could cascade the training down to schools. On occasions, careers advisers also ran training sessions for other careers service staff.

In relation to careers advisers' role in classroom delivery, three different approaches were distinguishable: team-teaching approaches; specialist inputs; and classroom support.

Team-teaching approaches describe situations in which careers advisers taught pupils alongside the classroom teacher during part of the programme:

Three careers service staff were involved in the delivery of The Real Game.

I assisted in delivering some sessions.

Co-delivered some sessions.

Specialist inputs describe circumstances in which careers advisers contributed to a particular session, usually because it was more closely related to their own area of specialist knowledge or expertise:

Three careers advisers were involved in a full day event, which involved CV preparation and interviewing for projects. This was invaluable.

Careers advisers' occupational knowledge was in particular demand when pupils were being encouraged to learn more about their job roles.

Classroom support refers to contexts in which careers advisers assisted the classroom teacher through more individual or specific forms of support:

She supported the form tutor who delivered The Real Game. She worked with groups to reinforce with one-to-one: to assist less able pupils, particularly with calculations.

On most of the sessions, I assisted the teacher who led the session. I gave short talks on topics as they arose, e.g. different qualifications.

Gave careers interviews to those students who were made redundant.

It also has to be recognised that there are important logistical difficulties involving a careers adviser's availability, especially when the game is being taught to several classes simultaneously. Schools are well aware of this constraint, as the second Kent study showed.

Careers advisers also contributed in support and evaluation roles. One spent an hour a week acting as a facilitator with the form tutor and careers co-ordinator. Two played a similar role in helping to monitor and review the programme with teachers. Others attended lessons as observers rather than as contributors. One careers adviser took a whole class for an evaluation session. Two suggested that they could provide helpful feedback about the usefulness of the materials, and even develop new activities:

Building up additional activities to the existing sessions... to support students who are not engaged in learning.

Others pointed to their networking links that could help to disseminate good practice across schools.

With a few exceptions, careers advisers valued their role in supporting schools and believed that they could make a distinctive contribution to the implementation of The Real Game:

Careers advisers can provide up-to-date local information... They can be a human resource in the classroom. They can offer support and training for teachers in those particular areas... We feel that the partnership between the teacher and the careers adviser is crucial.

A high proportion of respondents cited the value of their occupational knowledge which could support activities such as the Spin Game in helping pupils understand more about individual occupational roles. One adviser stressed the value of being able to relate situations in the game to the local environment through his knowledge of local employers and employment opportunities. Another felt that the presence of a careers adviser in the classroom helped to raise the game's status. Several felt that pupils also benefited by getting to know the careers adviser earlier than would typically be the case:

It is also a useful way of introducing the careers adviser, as hopefully they will associate careers and the careers adviser with something which is fun and interesting.

Despite their overall enthusiasm for The Real Game, most respondents questioned whether they would have sufficient time to support the programme in the future. A few doubted whether it was a valid use of a careers adviser's time, although this was very much a minority view. Most recognised that their contribution could be focused in a productive way:

The Real Game is very time-consuming, but I don't feel that careers advisers need to be present at all sessions. Key sessions could be chosen for their input.

Another more practical concern related to careers service targets and whether time allocated to classroom work would be counted in this respect.

Some careers advisers were conscious of the cost of the game and how this could affect future usage. Several had already started internal representation with a view to securing sponsorship for schools. Others pointed to their role in introducing the game to schools and encouraging its use elsewhere. This further illustrates how the careers service perspective takes account of some of the more strategic issues surrounding curriculum innovation of this kind - in this case, the need to sustain and extend the initiative. Careers services, however, have to formulate their own policies in relation to their role, responsibilities and resourcing, and to communicate these to the schools concerned. For the future, much depends on the priority accorded to activities like The Real Game within these policies.

7 Community Links

7.1 Parental involvement

Most schools wrote home to participating pupils' parents with an explanation about the game. The Facilitator's Guide provides a specimen letter for this purpose. Some teachers encountered anecdotal evidence of pupils discussing the game with their parents:

Certainly evidence of many discussing their Real Game experiences and job roles with parents.

In one instance, pupils were asked to discuss budgeting and finance with their parents, and - to add realism - to find out about household costs by bringing in examples of shopping bills. In another case:

They were asked to talk to three adults at home who work, as part of the 'Hello' activity.

In at least one instance, parents were invited to make a direct contribution to a classroom session (see Case Example 7).

Case Example 7

Two parents were invited to talk about their occupational roles, which pupils found very interesting. Both parents stayed throughout the rest of the session and helped groups of pupils with the budgeting activities. This added realism to the activity because the parents were able to talk about the need for budgeting from their own experience. Pupil feedback on this parental involvement was very positive.

Both Kent reports similarly showed how most schools sent letters home and encouraged pupils to discuss the game with their parents. There were, however, few instances of extended parental involvement.

One teacher thought that The Real Game could help to tackle the low aspirations that some parents held for their children, and could help to improve their understanding of topics such as modern apprenticeships and vocational training; some careers advisers echoed this view. Another teacher suggested that in future it might be useful to invite parents to complete the Real Game questionnaire at a parents' evening.

7.2 Business and community partners

Schools seemed to take a fairly cautious approach, in the first year of the game, with regard to bringing external partners into school to support the programme. Shortage of time was again cited as a reason. The use of community partners was, however, very successful in a few schools (e.g. Case Example 8) and showed what could be achieved.

Case Example 8

One school brought in staff from a building society that helped pupils with budgeting. They also invited the Youth Affairs Officer (Police) who talked about health and safety in the community and Neighbourhood Watches. She linked her presentation to the context of The Real Game and described something of her own job and her transferable skills.

In another school, The Real Game was linked to a new Breakfast Club for year 8 pupils, which involved people from the outside community coming in to speak to pupils about their work. A further school used a Youth Theatre Company to deliver some aspects of The Real Game and this reportedly worked well.

A number of teachers suggested ideas for extending community links. These included:

- Visiting a maritime museum to help pupils learn about time changes.
- Bringing in speakers who could talk about jobs relevant to the occupational profiles.
- Inviting a travel agent to speak about currency and traveller's cheques.

Careers advisers also recognised the potential to make closer links with employers and were willing to use their contacts for this purpose.

As teachers become increasingly familiar with The Real Game, it is possible that they will feel more confident about involving business and community partners. Certainly careers co-ordinators and senior managers recognised the value of involving members of the business community and saw this as an important potential development for the future. This expectation was, however, less marked in the second Kent study, in which some teachers expressed reluctance to make business links, either because they could not see the point or because of perceived difficulties in making arrangements. This suggests that schools' initial plans to extend involvement of outside partners may not be followed through unless they are explicitly supported.

8 Perceived Learning Outcomes

8.1 Methodology

One of the main aims of this evaluation study was to find out the range of learning outcomes achieved by pupils taking part in The Real Game. Alongside the quantitative measurement of the outcomes achieved by pupils (see Section 9), teachers involved in teaching The Real Game were invited to complete a Teachers' Questionnaire indicating their perceptions of the learning outcomes achieved by pupils. Details of the procedures adopted have been given in Section 1.3.

No comprehensive map exists of the full range of learning outcomes to which The Real Game gives access. It is probably an unrealistic expectation that a definitive map could be devised which would accurately represent what pupils could learn from an experiential and, therefore, open-ended and unpredictable activity.

Nevertheless, five possible frameworks were identified which seemed relevant to reviewing the learning outcomes from The Real Game:

- A topic-by-topic list of intended outcomes drawn from the tutor's handbook and written by the developers of The Real Game. This list has the advantage that it ties learning outcomes closely to the teaching and learning processes which give rise to them.
- A list of career-related learning outcomes devised by the authors of this evaluation study at the request of the Department for Education and Employment. It is based around the three main areas of career learning identified by the Qualifications and Curriculum Authority: self-development, career exploration and career management (QCA, 1999b). (It is interesting to note that the developers of The Real Game have undertaken a similar mapping exercise based around the American "Guidelines" and Canadian "Blueprint" of career-related competencies).
- A list of learning outcomes taken from the relevant sections of the draft non-statutory framework for PSHE (QCA, 1999a). The aim of using this framework was to discover the extent to which The Real Game could contribute to the achievements of the objectives for PSHE at key stage 3.
- A list of Key Skill outcomes based on guidance from QCA. The purpose here was to discover the extent to which The Real Game helped pupils to acquire and demonstrate the capabilities needed for personal, social and learner effectiveness in adult and working life. At the time the present study was undertaken, the specifications for Problem-Solving were not available: it seems likely that The Real Game could also make a contribution to the development of this Key Skill.
- A list of skills and aptitudes related to Citizenship taken from a report by QCA (1998, p.49). DfEE will be publishing a programme of study for Citizenship as part of the revised National Curriculum and it seemed likely that schools would be interested in the contribution which The Real Game might make to its delivery.

The questionnaires reveal teachers' perceptions of the outcomes achieved by their pupils. This may or may not be the same as the actual outcomes achieved by pupils (see Section 9).

When interpreting the responses to the Teachers' Questionnaire, it is important to remember that the achievement of outcomes was likely to be affected by a number of variables which remained hidden in the anonymous returns from schools. These included:

- the selection of topics (see Section 1.1);
- the availability of time and other resources;
- the previous learning and experience of pupils;
- the quality of teaching.

Not all respondents completed the entire questionnaire. Some sections of the questionnaire were left blank. It is possible that one explanation for gaps in teachers' responses was 'questionnaire fatigue', due to the length and level of detail of the questionnaire, especially in those sections which invited an extended answer. It is also apparent that when completing the first section (specified Real Game outcomes), some but not all teachers left blank those questions that related to topics which they had not covered with their students. In the case of Key Skills, the low response rate may reveal teachers' lack of familiarity with Key Skills, which are still relatively new. In a few instances, partial completion appeared to be attributable to negative experiences of The Real Game.

8.2 **Reported outcomes**

Specified Real Game outcomes. Teachers reported a generally high level of achievement of Real Game outcomes, especially those relating to the topics covered in the first half of the game. Table 1 shows the percentage indicating that over half of the group had achieved the intended outcomes. This percentage did not fall below 74% for the intended outcomes in topic sessions 1-6. Tutors felt that The Real Game was particularly effective in delivering the outcomes related to topic session 3 (the Wish List) and topic session 4 (Occupational Profiles). Some of these outcomes were less commonly achieved by all students, and there seemed a variety of reasons for this. It is possible that some of the outcomes were achieved less strongly because they were not prioritised by teachers. 'Students absorbed information about a variety of occupations and working styles' (outcome 8) is an intended outcome of topic session 5: schools which organised a 'getting to know you' party with fizzy drinks and crisps may have delivered this outcome more effectively than schools which organised a ten-minute 'mill and grab' using the 'Hello! Who am I? Who are you?' worksheet. In the case of equipping pupils to define elementary budgeting terms (topic session 6), some teachers did not formally set out to teach the economic concepts involved, but simply hurried towards completion of the budgets.

Table 1: Specified Real Game Outcomes

	Real Game outcomes, drawn from the Facilitator's Guide	**Percentage indicating over half of the group achieved this outcome***
1	Students learned the foundation concepts used throughout the programme and new terminology relating to the world of work (s1)	80% (A:9) (H:24) n=41
2	Students gained an understanding of the relevance of school subjects to the world of work (s2)	79% (A:12) (H:21) n=42
3	Students learned new terminology relating to the world of work (s2)	90% (A:16) (H:22) n=42
4	Students explored dreams and values and practised decision-making skills (s3)	93% (A:23) (H:16) n=42
5	Students gained an insight into at least one occupation and working style (s4)	95% (A:29) (H:11) n=42
6	Students learned about the inequalities and differences in the working world (s4)	90% (A:25) (H:11) n=40
7	Students explored how education is related to occupation and how occupation relates to income and leisure time (s4)	81% (A:18) (H:16) n=42

8	Students absorbed information about a variety of occupations and working styles (s5)	86% (A:9) (H:27) n=42
9	Students learnt how to apply maths skills to a real life situation (s6)	74% (A:15) (H:16) n=42
10	Students practised and learned the importance of making decisions (s6)	78% (A:19) (H:13) n=41
11	Students explored their values in relation to material possessions (s6)	80% (A:19) (H:14) n=41
12	Students examined how occupation, income and lifestyle affect each other (s6)	79% (A:18) (H:15) n=40
13	Students could define elementary budgeting terms (s6)	80% (A:10) (H:22) n=40
14	Students practised teamwork and decision-making skills (s7)	78% (A:21) (H:10) n=40
15	Students learned how communities are formed (s7)	62% (A:5) (H:19) n=39
16	Students continued to explore the connection between school subjects and the world of work (s7)	58% (A:11) (H:12) n=41
17	Students were able to review and reflect on the material covered (s7)	69% (A:9) (H:18) n=39
18	Students learned that opportunities to enjoy leisure time vary with different occupations both with regard to how much time different occupations will allow and how much money they provide for spending on leisure activities (s8)	77% (A:15) (H:15) n=39
19	Students were able to examine the truth behind the adage 'there's more to life than money' (s8)	71% (A:3) (H:24) n=38
20	Students were able to compare using leisure time for enjoyment and for personal or career development (s8)	53% (A:4) (H:16) n=38
21	Students were able to use maths and decision-making skills (s8)	69% (A:13) (H:14) n=39
22	Students were able to practise teamwork, decision-making, negotiating, listening, problem-solving, communication, research, time-management and budgeting (s9)	73% (A:19) (H:11) n=41
23	Students were able to learn about other countries, cultures and languages (s9)	31% (A:4) (H:7) n=36

24	Students were able to discover more about their own country, and other counties (s9)	25% (A:2) (H:7) n=36
25	Students learned more about a variety of occupations in the travel industry (s9)	23% (A:3) (H:5) n=35
*	(numbers in brackets show the respective numbers indicating that all (A) or over half (H) achieved the outcome)	
26	Students were able to explore the connections between school subjects and the world of work (s10)	59% (A:7) (H:16) n=39
27	Students were able to learn more terminology relating to the world of work (s10)	76% (A:11) (H:18) n=38
28	Students learned about the changing domestic and work roles of men and women (s11)	53% (A:9) (H:10) n=36
29	Students could explore non-traditional work roles (s11)	57% (A:6) (H:14) n=35
30	Students gained an understanding of gender stereotyping (s11)	53% (A:10) (H:9) n=36
31	Students were able to explore the relationship between personality and satisfaction with a work role (s11)	57% (A:8) (H:12) n=35
32	Students were able to understand how job satisfaction related to interests and aptitudes (s12)	60% (A:9) (H:12) n=35
33	Students learned how to analyse the pros and cons of occupations (s12)	76% (A:10) (H:18) n=37
34	Students were able to explore their feelings when discovering that job loss can affect anyone at any time (s13)	42% (A:6) (H:8) n=33
35	Students learned that there are solutions and tools to deal with job loss (s13)	50% (A:7) (H:9) n=32
36	Students learned new vocabulary (s13)	95% (A:25) (H:10) n=37
37	Students learned that career plans can be upset by unforeseen events (s14)	66% (A:11) (H:10) n=32
38	Students learned that there are ways of coping with the most dire events (s14)	42% (A:5) (H:8) n=31

39	Students learned about events that challenge the economy either locally or nationally and discover a variety of responses to them (s14)	41% (A:6) (H:6) n=29
40	Students learned how to identify and apply their transferable skills (s15)	55% (A:8) (H:9) n=31
41	Students learned to cope with the unexpected (s15)	63% (A:5) (H:11) n=30
42	Students were able to look ahead to their futures (s16)	68% (A:9) (H:12) n=31
43	Students could see how education, work and family life fit into the journey of life (s16)	61% (A:12) (H:8) n=33
44	Students could examine why it is important to enjoy the work they choose to do (s16)	70% (A:11) (H:12) n=33
*	(numbers in brackets show the respective numbers indicating that all (A) or over half (H) achieved the outcome)	

Notes:

Teachers were invited to indicate the extent to which the outcomes of The Real Game as defined in the Facilitator's Guide had been achieved. There were five possible responses: (1) all of the group achieved this; (2) over half of the group achieved this; (3) under half of the group achieved this; (4) none of the group achieved this; and (5) don't know.

The 's' numbers in the left-hand column refer to each Real Game topic session (see Section 1.1). For example, topic session 4 (s4) is 'What's My Line?'. Each of the outcomes in the centre column has been extracted from individual topic sessions, e.g. outcomes 5, 6 and 7 represent the objectives for topic session 4.

Only one response was received relating to Topic 17 (Career Day). Three questions were asked about the benefits to students of finding out about the world of work from guest speakers, comparing their experience of the world of work in The Real Game with 'real' people and sharing their reflections on the programme with the guest speakers. The respondent indicated that over half of the group achieved the learning objectives for this session.

No questions were included relating to Topic 18 (Close Down). In this final session, students play a further round of The Spin Game (the focus of questions 3 and 27) and complete the World of Work Questionnaire again.

After topic session 6, the ratings began to decline somewhat. Out of the four intended outcomes for topic session 9 (Getting Away), only one (outcome 22) was achieved strongly. Less than a third of teachers stated that their pupils learned more about their own country, about other countries and their cultures and languages, or about occupations in the travel industry. It may be that the printed

materials were not very exciting, though one school supplemented them by encouraging pupils to find tourist information on the Internet, while another invited travel agents into the classroom. It appears that this and subsequent topics in the game were completed by far fewer teachers than the earlier topics. The exception was a second round of The Spin Game (topic session 10): here teachers reported reduced impact in comparison with the first time it had been played (compare outcome 27 from topic session 10 with outcome 3 from topic session 2).

Even fewer schools reported on the outcomes related to the first wave of redundancies, the Disaster, the work projects and the Circle of Life (topics sessions 13-16); and only one school organised a Career Day (topic session 17). The teachers who covered these topics reported that the intended outcomes were achieved more unevenly. Some items are open to question. An example is the high rating given to outcome 36 from topic session 13. It is easy for teachers to tick that 'students learned new vocabulary' because the statement uses such vague terms. Future editions of the Facilitator's Guide need to ensure that outcome statements are specific and observable.

Careers Education and Guidance outcomes. Table 2 shows that The Real Game was reported by teachers to have had a high impact on the achievement of career-related outcomes. The percentage of teachers indicating that The Real Game had some or considerable relevance to particular objectives only fell below 78% in one of the 14 areas of learning: careers information. Only 72% reported that The Real Game had some or considerable influence on this objective. This may reflect the choices made by teachers. Lack of time may have prevented them from expanding this activity or visiting the careers library. Some schools, on the other hand, gave this area considerable attention: one, for example, took time out for reflection and review, inviting the careers adviser to help pupils think about the range of possible sources of careers information.

Table 2: Relevance to Careers Education and Guidance

	Area of career learning	**Outcome statement** **Pupils can**	**Combined percentage of respondents***
1	Future self	indicate the kind of future they want for themselves	100% (26) (13) n=39
2	World of work	appreciate how the world of work is changing and how this affects what skills and qualifications they may need	97% (21) (16) n= 38
3	Self-awareness	explain their basic likes and dislikes	92% (26) (10) n=39
4	Job satisfaction	identify the advantages and disadvantages of different jobs	95% (28) (8) n=38
5	Lifelong learning	understand the meaning and importance of lifelong learning	82% (19) (12) n=38
6	Equality of	explain why men and women may be	82% (21) (10) n=38

	opportunity	equally suited to the same work opportunities	
7	Managing change	understand why change occurs and how to deal with it	78% (18) (10) n=36
8	Employability	explain what employers are looking for	86% (15) (15) n=35
9	Careers information	identify the sources of careers information that they may need	72% (11) (15) n=36
10	Career planning	appreciate the value in planning for future options and choices	89% (24) (9) n=37
11	Financial planning	appreciate how basic budgetary skills can help in decision making and planning	92% (32) (4) n=39
12	Team work	work effectively in a team	90% (26) (9) n=39
13	Communication	express their ideas confidently and clearly	95% (24) (11) n=37
14	Self-presentation	appreciate the need to present their skills, achievements and experience in a positive way	89% (19) (12) n=35

* Combined percentage of respondents indicating that The Real Game has considerable (C) or some (S) relevance to this objective (figures in brackets refer to the numbers of teachers who gave these answers)

Note: There were four possible response categories: (1) the Real Game has considerable relevance to this objective; (2) the Real Game has some relevance to this objective; (3) the Real Game has little or no relevance to this objective; and (4) unsure.

PSHE outcomes. The evaluation study was also interested in finding out if The Real Game might make a positive contribution to the achievement of intended outcomes in the proposed national framework for PSHE. One of the benefits of making this connection is that it would help schools to justify the amount of curriculum time needed to play The Real Game (see Section 4.1).

Table 3 shows that teachers were generally more positive about the contribution of The Real Game to the achievements of aim 1 of the PSHE framework than aim 3. Teachers indicated in particular that The Real Game linked well with such year 8 topics as self-awareness, economic awareness, career planning, respect for individual differences, and communication skills.

Key Skill outcomes. Most teachers who responded to these questions indicated links between The Real Game and the Key Skills of Communication, Application of Number, Working with Others,

and Improving Own Learning and Performance (see Table 4). However, in general, the response rate for this section of the questionnaire was low.

Particular topics were highlighted as providing good opportunities to develop and practise different Key Skills. Topic session 6 (Budget Sheets), 8 (Leisure Time) and 9 (Plan and)

Table 3 Relevance to PSHE

	Key stage 3 PSHE learning outcomes: skills, knowledge and understanding	**Percentage of respondents***
1	To develop self esteem, confidence, independence and responsibility and make the most of their abilities, pupils should be taught:	
	a. to reflect on and assess their strengths in relation to personality, work and leisure and set realistic targets and review them	91% (31) n=34
	b. to respect the differences between people as they develop a sense of identity	86% (30) n=35
	c. to know how others see them, and be able to give and receive constructive feedback and praise	74% (25) n=34
	e. to relate changing job opportunities to personal qualifications and skills, and understand how choices made at key stage 4 should be based on knowledge of personal strengths, aptitudes and the changing world of work	76% (26) n=34
	f. to prepare and plan for realistic choices for key stage 4, seek out information and ask for help in relation to career plans	85% (29) n=3
	g. to understand what influences how we spend or save money and become competent at managing personal money	94% (32) n=34
3	To develop effective and fulfilling relationships and learn to respect the differences between people, pupils should be taught:	
	b. how to empathise with people different from themselves and to make and keep friends	67% (22) n=33
	c. to understand some of the cultural norms in society including the range of lifestyles and relationships	67% (22) n=33
	e. to understand the role and feelings of parents and careers and the value of family life	50% (17) n=34

f. to negotiate within relationships, recognise that personal actions have consequences, and make compromises	73% (24) n=33
h. to communicate confidently with peers and adults	82% (28) n=34

* indicating that The Real Game has either considerable or some relevance to this objective (figure in brackets refers to the combined number of teachers who gave these answers)

Note: Response categories as for Table 2.

Budget for a Holiday) were cited as good opportunities for enabling pupils to demonstrate Application of Number at level 1. Some schools in the survey mentioned that they already recorded Key Skills in pupils' organisers and planners; one school attached stickers to pupils' work to show when they had used a particular Key Skill.

It appears that many teachers found The Real Game less relevant to the Key Skill of Information Technology. However, some teachers recognised that the potential for pupils to use The Real Game to acquire and demonstrate this skill was there if required. Some tutors, for example, exploited opportunities within the game for pupils to use IT to make community wall displays and personal business cards.

Citizenship outcomes. Citizenship is shortly to be incorporated in the National Curriculum. One section of the Teachers' Questionnaire was designed to find out the extent to which teachers felt that The Real Game would enable pupils to develop the Citizenship skills and aptitudes which would be expected of them at key stage 3. Table 5 shows how teachers responded to this part of the questionnaire. The vast majority reported that The Real Game had considerable or some relevance to the first five of the draft objectives for Citizenship at key stage 3. The remaining three objectives were perceived as less relevant, though even here 70% of the respondents gave affirmative answers.

Table 4: Links to Key Skills

Key Skills	**Percentage of teachers indicating a link between The Real Game and Key Skills**
Communication	00% (22) n=22
¥ take part in discussions	
¥ produce written material	
¥ use images	
¥ read and respond to written materials	
Application of number	100% (25) n=25
¥ collect and record data	
¥ tackle problems	

¥	interpret and present data	
Working with others		95% (21) n=22
¥	identify collective goals and responsibilities	
¥	work to collective goals	
Improving own learning and performance		87% (13) n=15
¥	identify targets	
¥	follow schedule to meet targets	
Information technology		43% (6) n=14
¥	prepare information	
¥	process information	
¥	present information	
¥	evaluate the use of information technology	

Table 5: Links to Citizenship

Key stage 3: skills and aptitudes		**Percentage of respondents***
	By the end of key stage 3, pupils should be able to:	
1	express and justify, orally and in writing, a personal opinion relevant to an issue	90% (28) n=31
2	contribute to small group and class discussions on matters of personal and general significance and present the outcome to a class	94% (31) n=33
3	work with others to meet a challenge of shared significance through negotiation, accommodation and agreed action, and be able to reflect on the process	93% (28) n=30
4	use imagination when considering the experience of others and be able to role-play, express plausibly and reflect on viewpoints contrary to their own	87% (27) n=31
5	analyse, discuss and reflect on significant issues and events encountered within a community	90% (27) n=30
6	garner information about an issue from a range of sources including TV and radio news, documentary footage,	70% (21) n=30

	newspapers and new communications technologies with some understanding of the different roles these sources play	
7	demonstrate an understanding of the use of statistics	70% (21) n=30
8	take part in informal debates and have opportunities to vote on issues	70% (21) n=30

* indicating that The Real Game has either considerable or some relevance to this objective (figure in brackets refers to the combined number of teachers who gave these answers)

Note: Response categories as for Table 2.

8.3 **Other evidence on career-related learning**

During the evaluation visits to schools, teachers reported further evidence of career-related learning, to add to the questionnaire results reported in Section 8.2 above. There were several areas which the DfEE had noted as being of interest in the planning stages of the evaluation, and the opportunity was taken to investigate these further.

Evidence of impact on pupils' self-awareness. Teachers suggested that The Real Game could help to develop pupils' self-awareness in several important respects. The activities within the game required pupils to assess and re-assess their preferences and priorities through activities such as the Wish List and through choices made about housing and holidays. Self-awareness was also enhanced as pupils learned more about the characteristics of occupational roles. One teacher perceived conceptual gains in the sense that pupils were 'now more aware of why they are here and what they are here for'.

In one school, classroom discussions in The Real Game led ethnic-minority girls to challenge the cultural expectations which they felt acted against them going out to work. The debates in class allowed the girls to argue that they could have a different role, and some of the boys were openly supportive of them in this respect.

There was not much evidence, however, to suggest that schools in general had used the game's potential to enhance pupils' self-awareness systematically within the context of career-related learning. The 'gains' noted above appeared to be more a by-product of the activities than the result of a planned approach to promoting specific learning outcomes.

Evidence of enhanced career search or enquiry. Most teachers were able to identify ways in which The Real Game had prompted pupils' increased awareness and interest in career search. In some cases, these represented early signs:

I think it's too early to say but sufficient pupils have asked me about certain job areas.

I think it will happen over the next couple of months.

There has been raised awareness that they must think beyond 'going to college'.

In other cases, there was more substantial and often tangible evidence of increased career enquiry:

Definitely: that's a foregone conclusion.

Even though pupils are not introduced to the careers library until year 9, there are signs of some individuals beginning to look more closely at their own future preferences and needs in the library.

Year 8 pupils are now making use of the careers room resources.

Looking up careers information on the Internet.

The job roles opened eyes to the nature of jobs and the incomes attached. Maybe not a direct feed-through into personal job enquiry, but certainly some greater awareness of the issues involved.

They're more prepared to investigate, including chatting to mum and dad.

Evidenced via conversations with students, other teachers and parents.

In some cases, particular activities had been helpful in this respect:

In the early weeks of the game, some pupils were using KUDOS to do their own research.

Despite the fact that most schools had only implemented part of The Real Game, teachers generally viewed the programme as a stimulus in promoting pupils' curiosity and interest in work-related information. One teacher suggested that their pupils could now see the relevance of post-16 learning and planning for the future more clearly, although they considered year 8 too early to expect much in the way of concrete action.

Evidence of impact on career planning. This question was concerned with the extent to which The Real Game had increased pupils' motivation to take responsibility for their own career planning. Approximately half of the teachers spoken to in our school visits felt that it was too early to say, although several expected that the skills learned from The Real Game could find useful application in the year 9 careers programme and beyond. Other schools had observed some positive signs, albeit of a fairly tentative nature.

Evidence of other learning gains. It is also worth noting that were other learning gains reported by teachers which fell outside the outcomes typically associated with Careers Education. In particular, teachers spoke of attitudinal outcomes more closely associated with developments in pupils' maturity. For example, pupils were reported as showing a greater appreciation of others and a willingness to 'help one another out'. Pupils' ability to show more soberness towards life, in terms of having more realistic expectations and taking the future more seriously, were also stressed. Teachers equally suggested that pupils had developed a wider appreciation of life more generally, and now understood 'that life is more than a job or career'. Teachers reported, too, that pupils had a greater understanding 'of the range of lifestyles and experiences which exist in the wider

community'. Reference was also made to pupils' increased understanding of competition and collaboration and of some 'unfairness' in life. These are just some examples that illustrate the breadth of learning opportunities afforded by the game.

Debriefing. Some of the learning outcomes possible from The Real Game are only likely to be accessed by pupils if they are operating in a reflective mode. For pupils to make these higher-level learning gains, it is important that schools build in debriefing and follow-up activities. A few of the schools in the national pilot provided limited opportunities for pupils to stand back from the game, and review and reflect upon their experience and the ideas they had met. But the pressures of time meant that most had made little if any provision for such activities. This is an area that needs significantly more attention if the full potential learning yield from the game is to be realised.

Recording learning from The Real Game. Half of the schools visited appeared not to have addressed the issue of recording learning from The Real Game, although most supported the idea in principle. Several had made use of The Real Game's own certificate, and one school had laminated it. Three examples were noted:

- The inclusion of the Real Game certificate into each pupil's Record of Achievement.
- The transfer of each pupil's worksheets into their PSHE folder.
- The use of IT to record some of the work, such as personal reflections.

This, too, is an aspect of the game that would benefit from further development.

Implications. While there were many limitations in the pilot trials, the extent of the evidence on career-related learning (see also Section 9), together with the extent of the game's perceived coverage of career-related outcomes at key stage 3 (see Section 8.2), suggests that there is a case for The Real Game to be used as an over-arching framework for a Careers Education programme at this level. The parallel case in relation to PSHE, however, is more equivocal.

9 Quantitative Analysis of Learning Outcomes

9.1 Methodology

The objective of the quantitative evaluation was to measure changes in job exploration, employability, careers information, career planning and - with lower priority - self-awareness. A quasi-experimental design was adopted in which these matters were assessed before and after participation in The Real Game and, also at these times, in comparison samples drawn in the same schools. The general research hypothesis was that gains would be greater in the participant samples than in their corresponding comparison samples. In view of the quasi-experimental ('intact groups') nature of the study, a consistent pattern of gains across schools would be the most convincing evidence of a genuine effect. Analyses conducted using smaller samples, in which factors such as sex, age-within-year and ability were taken into account, would further raise confidence in such conclusions. In addition, we gathered pupils' opinions on what they had learned through a set of questions linked to the explicit objectives of The Real Game.

Part of the quasi-experimental evidence was gathered by using the World of Work Questionnaire which pupils are expected to complete at the beginning and the end of the programme. The questionnaire was written by the developers and corresponds closely to the programme's learning objectives as defined in the Facilitator's Guide (see Section 8.2). It includes both knowledge and opinion items. Many items were relevant to our evaluation criteria. The knowledge items can be considered to constitute a 'knowledge test' linked to the objectives of The Real Game.

Other scales which might in principle have been suitable were mostly American (see Killeen et al., 1994). These were not utilised due to their length as well as for copyright reasons. In view of the negligible lead-time, we decided that the best available option was to construct a supplementary questionnaire incorporating additional self-report measures, rather than to seek to devise new tests.

The basic approach was to concentrate on evaluative criteria which were not already assessed through the World of Work Questionnaire. For most, this was done in two ways: first, in terms of perceived utility, importance, or instrumentality (beliefs); and second, in terms of the levels of confidence that young people expressed in their ability to perform associated activities (self-efficacy). For example, items were devised to assess the perceived utility of career planning (beliefs) and to measure young people's confidence in their ability to engage in career planning (self-efficacy). However, this approach was not uniformly adopted, and two other groups of measures were developed, as shown below. It may help exposition to describe the measures according to these main groups, rather than in terms of the general evaluative objectives which gave rise to them.

The scales which were developed for this part of the study fell into four groups. The first was beliefs in the utility of job exploration, in the utility of self-awareness/self-exploration in relation to jobs (self-awareness was treated in relation to career, rather than abstractly) and in the utility of career planning. In each case, the utility of constituent activities etc. was rated on agreement-disagreement scales.

The second main group of items referred to self-efficacy for the performance of age-appropriate job exploration activities, self-efficacy for self-awareness (i.e. the ability to demonstrate career-relevant self-awareness) and self-efficacy for career planning. Items were rated on 'confidence' scales. Within 'career beliefs' and within 'self-efficacy', the order of items was randomised. Career beliefs items were both positively and negatively worded.

The initial expectation was that, in the short term, career beliefs would be more susceptible to influence than career self-efficacy, since the opportunity for precisely-related 'mastery experiences' might not be present in The Real Game and no actions resulting from changed beliefs might yet have been taken. In other words, an initial stimulus might have been given, but it might be too soon to see any resultant effects on self-efficacy.

The third group of items assessed 'employability'. This was addressed exclusively in terms of 'employability beliefs'. Subjects were asked whether they agreed or disagreed with a number of statements linked to this (rather generously defined) concept. These covered the importance of social skills and numeracy to employers, whether teamwork skills can be learned, the need for self-direction in work roles, etc.

'Career information' was partially subsumed within the first two main groups of items, in the form of beliefs about the utility of job exploration and self-efficacy for job exploration (see above). The underlying assumption was that The Real Game might, by raising the perceived utility of information, stimulate and thus raise the perceived need for information. Thus, a fourth, supplementary group of age-appropriate items was developed which covered perceived general need for career information, need to engage in specific career information search activities, and knowledge of related sources.

Patterns of response to the first administration of questionnaires in the earliest schools to enter the pilot were examined (n = 220). The fifty items contained in the World of Work Questionnaire included a number to which most subjects gave 'right answers'. This can give rise to a 'ceiling effect': questions which leave little or no room for improvement cannot, of course, show gains. Since items of this sort would serve little purpose in the study, and in order to make space for participant reactions to be assessed, the questionnaire was shortened to thirty questions prior to re-administration. It was also necessary to examine how the newly-developed scales behaved in practice. In consequence, a small number of items were also deleted from the additional questionnaire. Consistencies in the ways in which answers were given to these new questions did not necessarily correspond to the a priori categories to which they belonged: this was taken into account in the analysis.

Brief details of the sampling procedure have been given in Section 1.3. More detailed information about this and about the methodology in general, together with a more detailed description of the results, are presented in Killeen et al. (1999).

9.2 **Results**

Here the results are presented in three main sections: participant opinions (reported learning); effects measured using the World of Work Questionnaire; and finally, effects measured using the supplementary questionnaire on beliefs and self-efficacy.

Participant opinions. Pupils held broadly positive views of what The Real Game had taught them. Half or more of them said they had learned 'quite a lot' or 'a lot' about each of the learning objectives on which they were questioned.

When the items were ranked by means (see Table 6), the list was headed by learning relating to the relationship of qualifications and occupations. This was closely followed by the advantages and disadvantages of different jobs and occupations, sex-typing,
learning about skills for today's jobs, the value of planning for the future whilst still at school, and how important issues affect communities. Many of the items which relate to the kinds of objectives embodied in the process of the simulation (rather than its content) followed quite closely (e.g. listening to others, working with others against deadlines, contributing to discussion); a distinctive Real Game objective - learning about financial budgets - also fell into this range. At the foot of the list came employers' recruitment criteria, the impact of technological change on the world of work, self-expression, and the world of work in ten years' time.

Pupils therefore appeared to believe that they learned most about 'present-day' career-related matters relevant to their current personal situations. Large numbers also believed that they had learned about working in groups and financial budgets. But they did not feel that they had learned quite so much about what might be (for them) more remote career issues such as recruitment criteria and the future shape of work.

Table 6: Pupils' perceptions of what they have learned

	N	Mean	SD
How your qualifications will affect what occupations you can do	372	3.07	0.81
The advantages and disadvantages of different jobs and occupations	371	3.05	0.87
Whether men and women can do the same jobs and occupations	371	3.05	0.96
The type of skills that are needed in todays jobs	371	2.98	0.76
The value of planning for your future while you are still at school	371	2.96	0.85
How important issues can affect a community	373	2.95	0.92
The kind of future you want	370	2.93	0.91
Listening to others when they think differently from you	372	2.91	0.85
Working with others to meet a challenge and to agree what has to be done	373	2.88	0.89
Contributing to small group and class discussions	372	2.88	0.83
The need to keep an open mind with your future choice of occupation	370	2.86	0.82
How to use simple budgets in planning for important decisions	373	2.81	0.91
Why people might need additional education and training during their working lives	370	2.81	0.84
What might job satisfaction mean for you	374	2.74	0.90
The decisions you will face in later years at school	372	2.74	0.85
Your transferable skills	372	2.73	0.85

The most important things that employers are looking for	353	2,67	0.84
How technology is changing the world of work	372	2.58	0.93
How to say what you think, and to explain the reasons behind your opinions	374	2.52	0.86
What it might be like to be at work in 10 years' time	373	2.50	0.93
Total answering all questions	337		

Perceived learning was sufficiently independent of measured ability, sex and age (within the age group considered) for us to conclude that The Real Game appeared to be suitable for the generality of young people at this stage of their education.

The World of Work Questionnaire. There were robust results from this questionnaire. The Real Game sample showed a significant gain, relative to the comparison sample (Table 7). This was reasonably consistent across schools, and the result remained significant when the effects of school were controlled: that is to say, the results for the sample as a whole were not a product of differences in sample sizes, nor in the proportions of Real Game to comparison subjects, from school to school. In addition, when sex, age and ability (SAT scores) were controlled (in the smaller sub-sample for which this information was available) the Real Game effect remained significant. Although not all items showed gains in the Real Game sample, a high proportion of them did, and these included not only 'soft' opinion items but also items forming part of the 'knowledge test' mentioned above; indeed, the biggest gains were made, in the main, on knowledge items (Table 8). Thus a test of relevant knowledge and opinions seems to have been influenced positively by participation in The Real Game.

Table 7: Learning gains on the World of Work Questionnaire

		t1	**t2**
Real Game	Mean	14.1720	17.6306
	N	378	360
	SD	4.2276	4.9600
Comparison	Mean	14.9521	15.2022
	N	355	361
	SD	4.9438	4.8837
Total	Mean	14.5498	16.4147
	N	733	721
	SD	4.6018	5.0664

Effects on need for information, employability beliefs, other career beliefs and self-efficacy. No effects were found on need for information or knowledge of information sources. Employability beliefs were also unaffected.

For technical reasons, the other career beliefs of concern (in the utility of job exploration, of self-awareness/self-exploration and of career planning) were considered in total and at the individual item level. That is to say, the a priori scales were not considered independently of one another. In total, there was a very small gain in the Real Game sample from t1 to t2 and a small decline in the comparison sample. The gap between samples became statistically significant at t2, but this was attributable to the opposing directions of change in the samples. There was some consistency between schools in the sense that, in all except one of those for which data were available, the Real Game sample experienced either less decline, or a larger gain, than its corresponding comparison sample. However, as this implies, career beliefs scores did indeed decline in the Real Game samples in some schools, whereas a consistent pattern of increase would be more compelling. A similar pattern was revealed at the level of individual items: most showed either a greater gain or less decline in the Real Game sample, although this was not true of them all. Thus the aggregate outcome owes at least as much to less decline in some Real Game samples, as it does to gains relative to their own starting positions in others. Subject to this caveat, the effect of Real Game participation remained when school and the somewhat different effect of The Real Game from school to school were taken into account statistically. It also remained true when sex, age-within-year and ability (SAT scores) were taken into account in the sub-sample for which this information was available ($p = 0.002$).

Three a priori self-efficacy (or 'confidence') scales were employed: self-efficacy for job exploration, for self-awareness in relation to career decision-making, and for career planning. An examination of responses to the self-efficacy items indicated that it would be legitimate to employ a single summary scale and that, as a precautionary measure, effects on combinations of items other than the a priori scales should also be explored. A small gain was made in self-efficacy for job exploration in the Real Game sample; self-efficacy for self-awareness declined to a trivial degree in both samples; and a small gap opened between the samples in self-efficacy for planning, due in large measure to comparison sample decline. None of these changes were statistically significant in two-tailed tests. Aggregate change was, however, merely the resultant of sharp differences between what happened in schools. For example, for the combined self-efficacy scale, only one school demonstrated the anticipated pattern of stability in the comparison group coupled with a gain in the Real Game sample. Elsewhere, modest improvements in Real Game scores were accompanied by larger declines in the comparison sample, both samples declined, or Real Game losses were matched by comparison sample gains. All of the combinations of self-efficacy items alluded to above were examined in analyses which took school and the interaction of school with sample into account. There were no significant Real Game 'main' effects.

Table 8 Learning gains on the World of Work Questionnaire by item

Item (shortened wording in some cases)	Sample				
	Real Game			Comparison	
	Mean	N	SD	Mean	N	SD

Only those earning more than £30 000 pay income Tax***	.23	318	.60	.07	315	.61
Women can make excellent plumbers	.15	319	.52	.08	315	.55
Study after year 11 is unconnected to earnings*	.11	318	.58	.02	311	.59
Economic recession is a surge in activity**	.09	318	.40	.00	312	.38
The terms job and career mean the same thing*	.15	317	.55	.05	311	.53
Transferable skills are transferable to others***	.23	318	.55	.02	312	.40
Hating high-paying job no reason to leave it	.12	317	.60	.14	313	.59
Jobs today similar to those of grandparents*	.09	317	.54	.00	311	.52
If laid off may have to retrain to work again	.11	317	.62	.03	311	.63
When have a job it is easy to save money	.10	317	.61	.03	308	.59
The best occupations pay the most money	.12	318	.57	.08	308	.56
Gross monthly income is that left after paying bills***	.40	310	.55	.01	298	.48
The terms job and occupation mean the same thing	.05	313	.60	.04	308	.48
Many people will have many jobs during their careers	.04	313	.60	.01	308	.59
To plan successful career, treat money most important	.02	310	.58	-.01	307	.55
If work hard and do best you will never lose Your job	.03	314	.49	.03	307	.55
Will spend adult life working, so enjoy life now	.02	314	.53	-.03	310	.55
Job description tells what is done, where and hours***	.24	313	.61	.08	310	.61
One person losing a job does not affect others	.14	313	.61	.07	310	.61
Balanced budget means never spend more than earn***	.16	310	.61	-.08	297	.63
Dreaming is important to career planning***	.21	314	.61	.05	312	.60
Unless rich, starting a business is not realistic possibility	.11	313	.56	.13	308	.55
Job satisfaction infl. by hours, place, people, activities*	.09	316	.56	-.01	308	.54
Education and work will take up most of your adult life	.04	313	.59	-.02	308	.58
Gender stereotyping is a guide to best job to choose***	.17	316	.59	-.02	306	.57
If earn lots of money, always have lots of time to enjoy it**	.14	315	.55	.02	308	.53
Nursing is perfect career choice for some men	.16	316	.57	.10	307	.57
Good education, work hard, get job wanted and	.11	315	.57	.05	310	.60
Best time to start exploring and plan career is year 11	.12	313	.65	.04	310	.63
Trade is appropriate even if university graduate	.09	308	.63	.01	306	.55

Significance of the difference between the gains made in each sample is indicated as follows: *p<0.05; **p<0.01: ***p0.001

We have been able to make a reasonably good case - given the quasi-experimental nature of the evidence - for a small, generalised, 'sustaining', Real Game effect upon career beliefs: in other words, upon the perceived importance or utility of career-related activities, information, etc., of the sort which are usually addressed a little later in the schooling of the young people concerned. We have not, however, been able to demonstrate effects on job exploration, career planning, or self-awareness considered independently or through self-efficacy. Nor have we been able to demonstrate effects on 'employability beliefs', need for information, or knowledge of its sources. However, this does not mean that there are no such effects. Randomised trials of fully-implemented programmes, coupled with alternative methods of measurement, might lead to different conclusions.

9.3 **Conclusions**

The most positive results from this study relate to changes in pupils' opinions about what they had learned and to objective data on learning outcomes as measured by the World of Work Questionnaire. This seems a reasonable expectation: the game sets out to communicate certain types of knowledge and opinions, and it shows gains in these respects. On other measures, however, there is little evidence of positive effects. This may be because of the partial implementation of the game, and/or because these facets were not given sufficient attention in relation to other learning objectives.

Pupils also said that they had learned 'quite a lot' or 'a lot' about a wide range of career-related learning objectives, many of which were consistent both with the content of The Real Game and with career-related learning outcomes expected at key stage 3. An inspection of teachers' perceptions of pupils' career-related learning, as reported in Section 8, accords closely with these findings. Although these outcomes have not been measured in precisely the same terms, our analysis suggests that teachers' impressions about the game's potential to contribute to career-learning outcomes has a sound foundation.

10 **Future Plans**

During the evaluation, some schools were already beginning to think about the future. Some of their ideas were ambitious and innovative (e.g. Case Example 7).

Case Example 7

For the following year, one school planned to hold the Disaster in the classroom, and then to move into the main hall where recruiters, guidance counsellors and sixth-form peer counsellors would be

available to 'help out'. Gradually they hoped to get other areas of the curriculum involved, especially the Mathematics department.

This school was also hoping to see its careers library transformed with the benefit of a UfI grant. The library would have 25 computers. The careers co-ordinator's ambition was to put the Wish List on the network so that pupils could modify it themselves and carry out back-up job investigations using other software. A further hope was to set up videoconferences with Canadian schools running the game.

Early in September 1999, all schools visited were sent a follow-up questionnaire inviting them to describe their plans for using the game in the new school year. Several schools were planning to continue using the game with year 8 pupils:

We have incorporated The Real Game into the year 8 Social Education programme, and we are trying to find ways of using it as a framework for teaching all other aspects of Social Education, particularly Citizenship.

We shall be introducing the 'whole game' to present year 8 students.

Another year 8 form.

One was so keen that it also planned to make the game available 'remedially' to those who had not been involved in the year 8 field trials:

We propose to use the same materials (when available) for the remainder of the first year group (now year 9) and the present year 8.

One school planned to use the game with a specific year 8 group, although the reason for this approach was unclear:

Term 2 onwards - we would like to target a year 8 group during their PSE session of 50 minutes.

Three schools planned to teach the game to year 8 pupils, while extending its use to other year groups:

Awaiting publication of materials for year 9 age group. A discrete one-hour lesson is available in year 8 PSE time.

Some modules may be used with year 7 1999-2000; also with year 10 where appropriate. It is envisaged that the whole programme will be introduced into year 8 from 2000 onwards.

This present year 7 will be undertaking the game as part of their tutorial programme in the autumn term 00-01 (as year 8). The head of year and I have 'borrowed' some of the work sheets to use with year 9 later on in the year, especially the leisure activity sheets.

Two further schools planned to use adapted versions of the game with higher-year groups:

We planned to use The Real Game as a careers module in year 10, having adapted it from last year's trial.

I plan to incorporate The Real Game with a special needs group in years 10 and 11.

One school reported that the decision is still 'to be negotiated due to cost, teacher time, rooming and resources'.

A further school spoke of its plans to disseminate the game to other teachers within the LEA and to run a training day for careers advisers - an interesting role-reversal (cf. Section 6.4)!

As noted in Sections 2.5 and 7.2, the Kent evaluation reports indicate that intentions are not always converted into action. Continued support is likely to be needed if these promising school plans are to materialise.

11 Recommendations for Future Practice

11.1 Managing The Real Game

Senior managers. It is important that managers are familiar with the educational rationale for using The Real Game and are aware of its relevance to wider curricular aims and objectives. As noted in Section 2.1 and 4.2, some managers and teachers saw the potential for curriculum links, but this was typically predicated upon policy decisions. Liaison and consultation with senior curriculum managers are therefore critical if such gains are to be optimised. This reinforces the value of a team commitment and approach to the game, since the potential for curriculum extension work may have to develop 'informally' to begin with. Good examples of this approach were evident in the pilot. A whole-curriculum approach, however, requires 'joined-up' thinking: this must involve senior managers with whole-school curriculum responsibilities.

Senior managers need to be aware of the curriculum, staffing and resource implications of The Real Game. Teachers in different schools encountered a number of problems during the game which might have been resolved had senior managers been consulted earlier. Although there are no simple answers to timetabling constraints or classroom availability, managers know where there is flexibility in the system. Given the 'environmental' needs of the game, managers need to engage with these issues early in the planning process.

Senior managers need to be aware that the pedagogical style of The Real Game suits some teachers more than others. They should appreciate that individuals enlisted to teach the game will bring more to the programme when they are confident and competent in the skills required.

Senior managers should also ensure that timetable scheduling eliminates interruptions to the game wherever possible.

Real Game Co-ordinators. Schools need to make sure that a designated member of staff has operational responsibility for The Real Game. This person should have the confidence of those delivering the programme and the management skills to ensure that the programme is effectively taught and supported. The Real Game Co-ordinator should have responsibility for ensuring that:

- the team teaching the game invests adequate planning and preparation time before starting the programme, and holds regular review meetings during it;
- operational roles and responsibilities are agreed and, where possible, shared between different members of the team;
- plans to involve parents and/or members of the business community are planned in advance of the programme starting;
- good communications are maintained between those teaching the programme so that issues and concerns can be quickly dealt with and resolved;
- the team understands how The Real Game can help pupils to achieve learning outcomes related to Careers Education, PSHE, Citizenship and Key Skills;
- pupils have the opportunity to record and reflect upon their learning;
- the programme is monitored and evaluated (where possible, in objective and quantifiable terms), with opportunities for pupils to contribute directly to this process;
- senior managers are consulted and involved in the planning process and informed of the game's progress and its benefits.

Progression issues. Schools should weigh carefully the implications which The Real Game has for Careers Education, PSHE and Citizenship. Particular thought needs to be given to the related curriculum which will precede and follow the game, and the implications this has for programme planning and pedagogy.

Training. Good-quality external training is important. In addition, Real Game Co-ordinators would benefit from having a training pack or guide of their own which they could use for internal training purposes.

Since individual teachers differ in terms of their levels of competence and confidence, preparatory training is needed in order to ensure that all teachers delivering the programme are comfortable with its objectives and methodology.

Teamwork promotes shared practice and insights and is too important to be left to ad hoc arrangements. Team teaching provides individual teachers with new and different perspectives on pedagogy, and this can have benefits beyond the game itself. Training programmes could provide examples of how such methods can be used to enrich the delivery of the game.

Training should address co-operative learning and group-work methods, student self-review and evaluation activities, and the changing nature of careers and of work.

Teachers should be aware of issues related to role-taking within the game, such as how to ensure that pupils have been adequately briefed about what their role means within the context of the game.

Training should also address practical and administrative tasks such as planning and preparation, as well as techniques and strategies for monitoring and evaluating learning outcomes. This may suggest a role for other staff-development specialists both within and outside the school, perhaps including external careers advisers and advisory teachers.

The Real Game also has the potential to touch upon issues which can be personally and culturally sensitive. Preparatory training should advise teachers on where such issues may arise in the game.

11.2 **Curriculum matters**

The capacity of The Real Game to be used as an 'integrative' framework for Careers Education, PSHE and Citizenship should be considered further. This is a key strategic issue which should involve school curriculum policy-makers. Schools should decide whether they are going to use The Real Game as a framework for PSHE and/or Careers Education or as a resource in support of these programmes.

Other points that need to be considered by schools include:

- Whether some parts of the game are 'essential' in order to achieve the 'desired effect' (we have no firm evidence on this point).
- Whether benefits may accrue from spreading the game over a longer timeframe, perhaps spanning the end of one year and the beginning of another.
- Whether a range of approaches might be used to deliver the game, including weekly curriculum time, enhanced by collapsed timetable events, or as part of an extension or enrichment opportunity.
- Given the curriculum time demanded by the game, how to ensure that pupils and teachers have opportunities for reflection, instead of this being relegated to a dispensable 'add-on'.
- Developing creative and innovative methods of recording learning outcomes including, where possible, the use of IT and multi-media systems.

11.3 **Teaching The Real Game**

Teachers should be familiar with the potential learning objectives of the game as well as the core activities.

Collaboration with other subject departments should be planned for, especially with English, Mathematics, Geography and the Special Needs Co-ordinator.

Extra support materials should be developed which will help pupils cope more easily with the calculations involved in the budgeting activity. Ideally these should be incorporated into the pack. Teachers noted that the timings assume that pupils can do the mathematics without difficulty, when this is not always the case. The Facilitator's Guide should give guidance on this point. Consideration should be given to the needs of less-able pupils and the strategies that will be needed to help them with the literacy and numeracy aspects of the game.

In the case of job role allocation, teachers need to explain carefully the basis for the procedure and why it is important to 'go with the role' throughout the game.

Opportunities need to be found for pupils to discuss issues or concerns during the game such as job allocation and the Disaster scenario. Pupils should be able to discuss the values implicit in the game and points to do with the relationship of the game to the real world.

Pupils will benefit from an early familiarisation with the careers library so that it can be used as a resource during The Real Game.

Teachers need to ready to build in appropriate responses to those pupils who demonstrate low aspirations and/or self-confidence during the game.

The scope for developing and utilising ICT within the game should be encouraged.

Efforts should be made to ensure that The Real Game concludes on a high note. A Career Day could be one way of providing an effective climax.

11.4 **Careers service**

Careers advisers played a valuable role in supporting The Real Game during the pilot, although their contribution was not invariably welcomed or even understood. Further consideration should be given to explaining and developing the careers service's role, particularly with respect to the following tasks:

- Disseminating and developing good practice.
- Monitoring, reviewing and evaluating.
- Resourcing - both financial and in terms of staff time.
- Supporting teachers delivering the game.
- Offering or supporting training.

11.5 **Community links**

The scope for increasing the involvement of parents and members of the business community is considerable. Such developments assume, however, that the teacher co-ordinating the game has the vision as well as the planning time and skills to make this a practical reality. Properly managed, parental and business involvement can add great value to the game and significantly enrich the learning experience for pupils. This needs to be planned in advance of the start of the game.

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