Estyn

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a Hyfforddiant yng Nghymru

Her Majesty's Inspectorate
for Education and Training in Wales

Innovation in key stage 3

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- careers companies;
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Introduction

1 This report has been produced in response to a request for advice from the Welsh Assembly Government in the Minister's annual remit to Estyn for 2009-2010. The focus of the report is on the extent to which the revised national curriculum in key stage 3 is having a positive impact on innovation in curriculum and pedagogy.

2 The report:

- evaluates the extent to which the implementation of the revised curriculum is having a positive impact in schools;
- identifies case studies of innovative practice; and
- makes recommendations for further development.

3 The report is intended for the Welsh Assembly Government, senior managers and staff in secondary schools, and local education authority officers and advisers. It will also be of interest to institutions that train teachers and to church diocesan authorities.

4 Inspectors visited a representative sample of 24 secondary schools and two special schools across Wales, mostly selected by their local authority as having innovative practice at key stage 3 or identified as having innovative practice in recent Section 28 inspection reports. During visits to schools, inspectors interviewed teachers and leaders, observed lessons and talked to pupils. Inspectors also sent a questionnaire to 14 local authorities, two advisory services and one university about their support to these schools.

Background

The revised key stage 3 curriculum

5 In 'The Learning Country' (2001) and its successor, 'The Learning Country: Vision into Action' (2006), the Welsh Assembly Government sets out its vision that all young people should have the opportunity to reach their full potential. New curriculum arrangements for key stage 3 were introduced for schools in Wales on 1 August 2008 for Year 7 and Year 8 and on 1 August 2009 for Year 9. The revised curriculum updated the subject orders for key stage 2 and key stage 3 to ensure relevance to the twenty-first century and manageability for learners and teachers.

6 One of the main aims of the revised curriculum is to reduce prescription and give schools and learners greater control over what is taught. In almost all subjects, the prescribed content has been reduced and there is more flexibility for schools to implement the curriculum in the way that best suits the circumstances and needs of their pupils. There are no constraints about time allocations or organisation of subjects, but schools must meet the statutory requirements to assess all learners at the end of the key stage. They must also ensure continuity and progression in learning and that all learners have access to the whole programme of study.

7 When planning the curriculum, schools should use the Welsh Assembly Government guidance on 'Making the Most of Learning' (2008) which explains how to use the revised National Curriculum subject orders alongside the non-statutory Skills Framework and other frameworks, such as the:

- Framework for Personal and Social Education for 7 to 19-year-olds;
- Framework for Careers and the World of Work for 11 to 19-year-olds; and
- National Exemplar Framework for Religious Education.

8 In addition, the Welsh Assembly Government has produced an information document, 'Effective Practice in Learning and Teaching: A Focus on Pedagogy' (March 2009). In the document, a model for pedagogy is developed that aims to enhance successful learning through coordinating three key elements: the learning process, teaching strategies, and relationships and environment. Schools should develop and share good pedagogical practice through engagement in networks of professional practice. These networks are a key element of the School Effectiveness Framework[1].

Aiming for Excellence at Key Stage 3

9 In 2002, Estyn, working with the Welsh Assembly Government, published 'Aiming for Excellence in Key Stage 3'. This guidance document is one of a series of

[1] http://wales.gov.uk/topics/educationandskills/publications/guidance/schooleffectivenessframework/?lang=en

publications to help local education authorities and schools to improve the learning experiences of pupils. In particular, the 'Aiming for Excellence' programme focuses on making the work in Year 7 build more effectively on what pupils had done in primary school and initiatives based on the following aspects of learning:

- learning and thinking skills;
- the key skills of literacy, numeracy and ICT; and
- assessment.

10 Estyn reviewed the programme in 2007, reporting that initiatives that focused on learning, thinking and key skills had reinvigorated teaching and improved pupils' work. However, few schools took a whole-school approach to developing learning, thinking and key skills in all lessons, systematically trained all staff or routinely evaluated the impact of changes in teaching and learning on pupils' work.

11 A full list of relevant Estyn publications appears in the appendix to this report.

Main findings

12 Innovation by itself does not necessarily lead to improvements in standards. However, introducing the right kind of innovative curriculum and teaching practices in key stage 3 often has a positive impact in enthusing pupils and in developing their collaborative skills. Pupils' enjoyment of their work increases, their attitudes improve, and they develop a greater confidence and independence in lessons. There are also benefits for the teachers involved in these innovations. Teachers are re-enthused, their teaching skills are broadened, and subject barriers are broken down. The schools included in the survey have all made innovative changes to teaching and learning in key stage 3, but this is not representative of practice in all schools in Wales.

13 The success of the innovations seen in the schools visited largely depends on key leaders and teachers offering leadership and taking enthusiastic ownership of the developments. Leaders have often set up action-research projects that help teachers to reflect on new approaches to teaching and learning and encourage evaluation and review. Local authority officers have arranged conferences and good practice groups so that good practice is beginning to be shared more widely within and between schools.

14 The National Curriculum balances the need to make sure that all provision meets a minimum standard with allowing enough freedom for innovation in the application and interpretation of its statutory requirements. While schools are not always clear about the freedom they have to introduce innovation, they have broadly welcomed the revisions to the National Curriculum Subject Orders in key stage 3. The focus on skills development has helped teachers to make links across the curriculum. The impact of the revised curriculum has been reduced in secondary schools because of the priority given to 14–19 developments. Schools have to plan the key stage 3 curriculum carefully in order to link with the 14–19 curriculum.

15 Transition arrangements between primary and secondary schools have developed well in recent years resulting in closer working relationships between teachers from each phase. Most of the schools visited in the survey have adapted the Year 7 curriculum so that it more closely resembles primary school practice. Subjects are grouped together and taught jointly so that pupils learn through themes that cut across subject boundaries. The number of thematic lessons taught reduces as pupils' progress through key stage 3, where subject skills become more specialised in preparation for pupils' option choices at age 14 and timetabling constraints make it difficult to sustain project-based learning.

16 Within this thematic learning, many schools focus on developing pupils' skills, including learning and thinking skills. However, a few schools do not check the skills that Year 7 pupils have already acquired in their primary schools. More and more schools are introducing courses leading to key skills qualifications for learners in key stage 3 as a way of providing consistent support for skills development. Schools have used the Skills Framework to help develop thinking skills across the curriculum and many also use the Department for Children, Education, Lifelong Learning and

Skills (DCELLS) Developing Thinking and Assessment for Learning[2] programme. Other schools have used commercial schemes.

17 Schools have not radically altered the length of lessons or the school day or introduced new subjects into the key stage 3 curriculum. Although most local authorities have encouraged schools to take different approaches to the key stage 3 curriculum and to teaching practices, most have been careful to align curricular change with each school's capacity to deliver change. Hence, they have not prescribed a particular curriculum model at key stage 3 that all schools must follow.

18 Schools provide too few opportunities for independent learning particularly for more-able and talented pupils where some tasks are not sufficiently challenging for these pupils.

19 Modern accommodation and resources generally make innovating easier. However, ICT has a limited impact in improving pupil standards. Teachers have not received enough training on how to use ICT programmes and equipment to support innovation in the key stage 3 curriculum beyond what they are familiar with using in the mainstream curriculum.

20 Taster courses in vocational subjects and opportunities to start GCSE courses early are offered to Year 9 pupils in a few schools. However, only a few schools have detailed transitional arrangements at the end of key stage 3 to help learners transfer to their individual learning pathways in key stage 4.

21 Very few schools have robust evaluation procedures to assess the impact of new curricular or teaching approaches on pupil outcomes. Not enough schools consult pupils on what and how they wish to learn. While a majority of schools evaluate pupils' skills, there is little evidence otherwise on whether changes in the curriculum at key stage 3 are having a positive impact on pupil outcomes. Most local authorities have not formally evaluated the effect of the revised curriculum in their schools.

22 Most changes schools have made to the key stage 3 curriculum are sustainable. The main barriers to change are finding enough time for planning and for building the confidence and capacity of teachers. A variety of approaches have been used to encourage teachers to understand and use new teaching and learning strategies. Most schools surveyed have school improvement groups that focus on small-scale action-research projects. There is not enough sharing of training and good practice between schools, including those visited that have been participants of the School Effectiveness Framework pilot.

[2] www.wales.gov.uk/topics/educationandskills/curriculumassessment/thinkingandassessmentforlearning/?lang=en

Recommendations

23 To improve the curriculum and teaching in key stage 3:

Schools should:

R1 share their best curriculum and teaching practice more often with other schools;

R2 consult more with learners on what and how they want to learn;

R3 monitor and evaluate the impact of innovations on learner outcomes;

R4 plan the end of key stage 3 more carefully in order to prepare learners better for their individual learning pathways in key stage 4; and

R5 provide more professional development opportunities for teachers to increase their confidence and capacity to be innovative, including in the use of ICT;

Local authorities should:

R6 support and challenge schools that are not effective or innovative in their curriculum planning and delivery;

R7 lead the development of professional learning communities for sharing best practice in innovation between schools;

The Welsh Assembly Government should:

R8 consider introducing greater flexibility in the National Curriculum to encourage more innovation;

R9 provide more guidance and support for innovation in key stage 3 and during transitions from key stage 2 and to key stage 4; and

R10 work with local authorities to make sure that all schools have access to better resources, particularly Welsh-medium resources.

What changes have schools made to the curriculum?

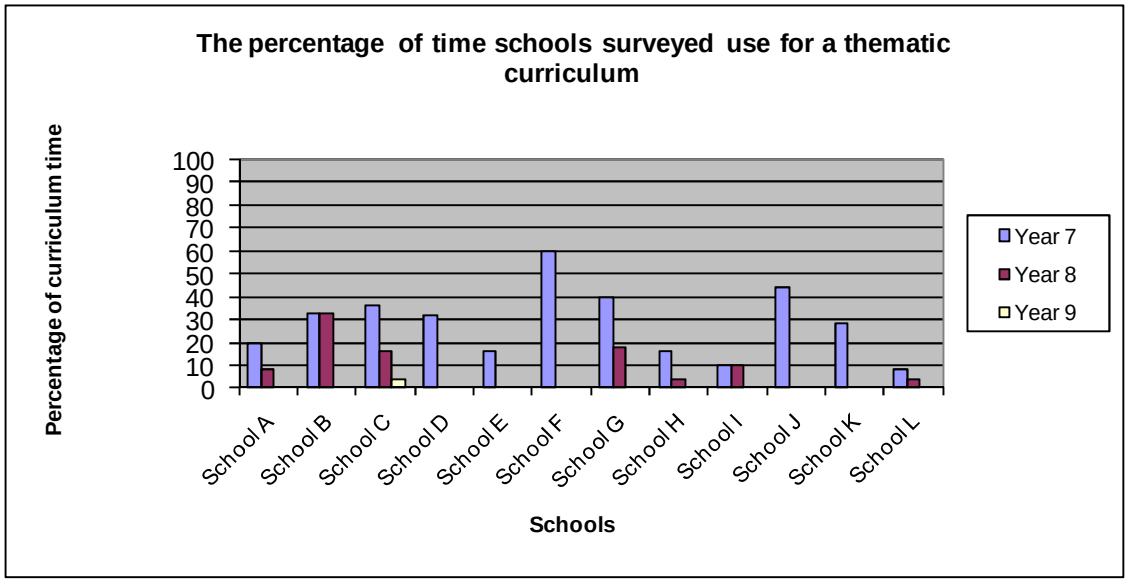
24 While schools are not always clear about the freedom they have to introduce innovation, they have broadly welcomed the revisions to the National Curriculum Subject Orders in key stage 3. Schools have been encouraged to be innovative in making changes to the curriculum. However, innovation by itself does not necessarily lead to improvements in standards. Innovation is likely to be more successful when it has a clear purpose and focus. The National Curriculum balances the need to make sure that all provision meets a minimum standard with allowing enough freedom for innovation in the application and interpretation of its statutory requirements.

A thematic curriculum

25 A majority of the schools visited for the report have altered their Year 7 curriculum by combining several subjects. In this way, several themes or topics are studied during the year and pupils develop personal, learning and key skills in a more integrated way. Many of the schools that have adopted such a thematic curriculum for Year 7 have organised the learning around English and humanities subjects. Themes are typically studied for six to eight weeks, with whole days at the start or end of the topic where specific skills or learning approaches are introduced or consolidated. Sometimes, the curriculum is based on commercial approaches such as 'Building Learning Power', 'Critical Skills' or developing specific thinking skills and strategies for pupils to assess their own learning. Although it is too early to judge whether combining these subjects has a positive or negative impact on subject standards, there have been positive gains in generic skills for the pupils involved.

26 Schools in the survey have varied in the amount of time given to teaching in a thematic way from just eight per cent of the Year 7 timetable in one school to 60% in another school[3]. In one Welsh-medium school, less-able pupils are taught by three teachers, covering English, Welsh and mathematics. The English and Welsh lessons cover the programme of study for humanities and drama subjects, and mathematics lessons focus on number, including some ICT and science.

[3] See Appendix for case studies of schools' thematic curriculum



27 Most schools reduce the amount of time for thematic study as pupils progress through the key stage. For many of these schools, the Year 7 curriculum is viewed as a transition period from the primary phase. The form tutor delivers several subjects through a skill-based approach, or introduces pupils to particular thinking and learning skills strategies to develop them as independent learners.

28 The Year 7 form tutor role has changed in many schools. They may, for example, also teach a mixed-ability form group for an increasing number of lessons, either through the thematic or skills-focused curriculum. This follows the primary practice of having fewer teachers who get to know their Year 7 pupils. In one school, each of the Year 7 form groups is made from combining pupils from two primary schools. The Year 7 tutors are chosen in the previous January. They teach in the primary schools and meet parents to build relationships before the pupils arrive in September.

Pontypridd High School, 930 pupils, Rhondda Cynon Taff

Activity: 'Opening Minds' thematic lessons

Pontypridd High School develops learning skills by focusing on critical skills competences. These 'critical skills' lessons use 20% of curriculum time and are taught by 'Opening Minds' tutors, who may also be Year 7 form tutors. These lessons are in addition to the National Curriculum subjects, which are taught discretely. The programme started in September 2006.

Five topics are studied through the year:

- learning to learn (focus on skills and competencies);
- healthy me;
- my community (brings in history and geography of local area and visits to Big Pit, along with ICT);
- team learner (focus on working with others, monitoring progress, peer/ self-assessment, giving team roles); and
- sustainability (draws on geography, science and personal and social education curriculum).

Personal and social education is subsumed into the lessons, but Year 7 also have a separate personal and social education lesson.

Impact

- Pupils have clear roles in their group activities. They understand the responsibilities with these roles and work well together.
- Activities are given a 'real' audience – for instance, by requiring pupils to respond to a formal letter from the government advising the school on the healthy eating campaign for school meals.
- Most pupils explain their views on healthy school meals clearly, developing very good group-work skills in collaboration and working with others.
- Many pupils are confident in presenting their views to the rest of the class, with clear delivery and eye contact.

Connah's Quay High School, 1020 pupils, Flintshire

Activity: Year 7 thematic curriculum

Connah's Quay High School teaches English, humanities, ICT and personal and social education subjects in an integrated delivery. These lessons take a third of curriculum time and are taught by one or more teachers.

Six topics are studied through the year:

- smart brain (learning to learn approaches, covered in Autumn term);
- slavery;
- time;
- fair trade;
- global affairs; and
- breaking news.

Impact

- Year 8 pupils, who studied the thematic curriculum in Year 7, are much better at group work. As a result, teachers are more confident in organising group work activities.
- In Maths, pupils are better at explaining reasons for their thinking/answers, both in a whole class setting or one-to-one.
- For half-termly assessments pupils have improved their revision skills by referring to mind maps and assessment for learning techniques to help them.
- The school reviewed the impact of the first half-term's thematic curriculum for Year 7: as pupils developed their skills, especially with collaborative-working and group work, teachers noted positive improvements in pupil confidence and independence in learning.

For further case studies, see appendix 1.

Carousel arrangements

29 Some schools organise blocks of subjects in a carousel[4] where, for example, pupils receive three hours per week in one subject for 12 weeks, then change subjects for the next 12 weeks. Two schools have piloted this approach in Year 7. In one school art, religious education and design technology are taught in this way. This enables

[4] A carousel is where two or more subjects share the same curriculum time. Pupils study one subject for a fixed period of time, then swap to studying the other subject for a similar period of time.

the three departments to engage in more intensive, longer-term projects. Early evaluation from this school indicates that pupils are grasping issues earlier and remembering them better. Teachers in each subject get to know the pupils better and are finding it easier to teach and monitor key skills. In another school, pupils focus on one of three humanities subjects for a term and are assessed at the end of the 12 week programme.

Introducing new subjects

30 Most schools in the survey have not introduced new subjects into the key stage 3 curriculum. However, two schools have introduced Social and Emotional Aspects of Learning[5] materials into personal and social education lessons or humanities lessons. One special school has introduced a bicycle maintenance course to develop key skills, particularly in communication, working with others and problem-solving into a more practical subject.

[5] Social and Emotional Aspects of Learning - http://nationalstrategies.standards.dcsf.gov.uk/secondary

St. Christopher's School, 240 pupils, Wrexham

Context and background

This special school offers Year 8, Year 9 and Year 10 pupils a bicycle maintenance course as a two-hour afternoon lesson, one day a week for a six week course, as a carousel. The aim is to get pupils interested in technology as well as to develop their skills of problem-solving and working with others. The school works closely with the local police throughout the course. Between six and 10 pupils are involved.

Activity: Bicycle maintenance course

The brief is for the pupils to find the cheapest, most environmentally-friendly way of travelling, using a bicycle.

The course develops all pupils' skills as they work together to repair and re-build bicycles donated by the police. Nine bicycles are reconditioned to make six useable bicycles for pupils to ride in a sponsored bike ride at the end of the course.

Impact

- The pupils have to come up with their own success criteria in lessons and show thinking skills in deciding how to mend the bicycles. They work together to repair the bicycles, and write up evidence of the skills they have used, together with photographic evidence.

- Year 8 and Year 9 pupils are very enthusiastic and are questioned through 'hot-seating' at the end of the lesson on the key skills they have demonstrated and whether they have met all their success criteria.

- The links with the police force have provided the biggest benefit – pupils prepare questions to ask the community police officer as well as writing letters to the police and this helps to build trust and positive relationships

- Pupils conduct research into the history of the local BMX track and make visits to it and to a local mountain bicycle shop for community links.

- Pupils take their cycling proficiency test at the end of the course and have a certificate that lists aspects of the key skills they have achieved.

Changing the timetable

31 Secondary schools have not radically altered the length of lessons or the school day. To accommodate project-based learning, a few schools timetable these lessons in two-hour blocks. One school has changed the start of the school year to accommodate its extended 14–19 Learning Pathways programme which introduces GCSE subjects into Year 9. The school year now begins in June with pupils from Year 7 following their new Year 8 timetable. At present, this arrangement does not mean that Year 6 pupils join the school early.

32 Many schools suspend the timetable for a day to focus on skills or an aspect of the curriculum. This enables pupils to experience out-of-school activities related to topics they are studying or focus on particular skills for different year groups. Pupils find these days very enjoyable and helpful in understanding and applying their knowledge of particular learning and thinking skills. In some schools, these days are used for end-of-unit assessments or to gather evidence for key skills qualifications. The number of these days varies in schools from just one a year, to one every half term.

33 In a few schools, the timetable is suspended for a whole week to focus on skills or a cross-curricular theme. In two schools, this is arranged at the beginning of term as a transitional activity for all years in key stage 3, with a focus on skills, using many practical activities. One school aims to enable particular pupils to achieve the key skills level 1 qualification in working with others through practical activities based on the Keep Wales Tidy[6] campaign. One Welsh-medium secondary school suspends the timetable for two or three days at the end of term to focus on developing skills in Welsh.

Ysgol Aberconwy, 1107 pupils, Conwy

Activity: Curriculum enrichment days

In Ysgol Aberconwy, the timetable is suspended for one day every half term to develop particular skills or 'learning to learn' approaches. Each year group focuses on a different theme with subjects linked together. One Year 8 activity involved mathematics, ICT and business studies departments working together on a version of 'The Apprentice', while Year 7 explored the local mountain, developing team and character-building skills as well as learning to learn approaches.

Impact

- These days have had a positive impact on developing pupils' wider key skills of working with others and problem-solving.

[6] www.keepwalestidy.org/

Changing the curriculum in Year 9

34 Many schools do not make detailed arrangements to aid the transition from key stage 3 to key stage 4. In only a few schools are taster courses in vocational subjects offered to Year 9 pupils before they choose their options. Starting the GCSE course in some subjects, particularly core subjects, is another way that individual groups of Year 9 pupils are challenged at the end of the key stage.

35 A few schools use Year 9 as a transitional stage in developing the core elements of the Welsh Baccalaureate Qualification including gaining key skills qualifications. In these schools, they aim for pupils to achieve level 1 in the core key skills by the end of Year 9. One school aims to get all Year 9 pupils achieving level 1 in all six key skills. However, it is too early to judge how successful these schools are in achieving their targets. Another school has recently introduced the Welsh Baccalaureate Qualification for sixty Year 9 pupils in order to challenge and extend their learning.

Maesteg Comprehensive School, 1124 pupils, Bridgend

Year 9 Enrichment Programme: Personal, Learning and Thinking Skills

Activity: The Llynfi River Project

This project began in September 2008 and was completed in May 2009. Pupils were given one lesson per week for the project as well as personal and social education lessons and tutor time. Modern foreign languages, art, ICT, science and physical education were involved in this cross-curricular project, taught as a carousel to form groups. Physical education looked at the recreational uses of the local river and the school involved the Keep Wales Tidy organisation. Art created plaques along the river using mosaic tiles. Modern foreign languages compared the town with the local authority's twin towns and pupils created a vocabulary of useful words for overseas visitors walking on the riverbank. Science conducted a habitat survey and ICT helped pupils prepare presentations for the project.

All Year 9 pupils were involved in a presentation of their work for this project in May 2009. The more-able and talented pupils gave presentations to an audience of local councillors, teachers, parents and governors. Other Year 9 pupils were grouped around stalls for each subject and showed their work.

Impact

- Pupils develop good wider key skills through the project activities.
- More-able pupils improve their communication skills through the formal presentations at the end of the project.

36 A very few schools group Year 9 and Year 10 pupils together in the same class for particular subjects. In one special school, the Year 9 technology lessons are offered in a carousel providing taster courses in subjects such as textiles, fast food and silver service courses, car washing and retail. Year 9 and Year 10 pupils are mixed on

these courses, some of which are provided by the local further education colleges. In two secondary schools Year 9 and Year 10 pupils are taught together for two GCSE or BTEC courses. Many pupils, particularly those in Year 9, benefit from these mixed classes. The pupils enjoy studying the vocational subjects and having extended lessons, often two and three hours long.

37 Some schools end the teaching of certain foundation subjects for whole cohorts a year early for Year 8 pupils to choose one or two GCSE subjects. One advantage of starting GCSE courses in Year 9 is that pupils can study vocational subjects which may offer a more appropriate learning style and delivery. This can motivate pupils who may be disaffected by more formal, academic teaching. Pupils who start GCSEs in Year 9 may have more flexibility to study at their own pace and ability, with, for example, more-able pupils taking examinations at the end of Year 9 and selecting additional courses for Year 10 and Year 11. In addition, subjects which have been dropped in Year 9 can be retaken in Year 10 or Year 11. Starting GCSEs in Year 9 can also offer pupils more variety of option choices, particularly for new subjects and vocational courses.

38 However, this practice may affect the school's statutory requirements to assess all learners at the end of the key stage against the programmes of study in those subjects which pupils are no longer studying. Also, ending the teaching of one or two National Curriculum subjects a year early may narrow pupils' future option choices, especially if they intend to take up the subject in Year 10 and have not studied the subject since Year 8. Pupil progress and standards of attainment will be limited if pupils are given formal assessments at the end of Year 9 in subjects which they have not been taught for a year. Schools may be cutting out key aspects of the programmes of study if they give teacher assessments based on the standards pupils have attained in Year 8 for subjects which will no longer be studied in Year 9. Another consequence may be that schools do not provide a 'broad and balanced' curriculum for Year 9 if pupils drop languages or other foundation subjects.

How is teaching changing?

What changes to teaching and learning have accompanied curricular changes?

39 The most significant change in half the schools visited has been the closer focus on strategies for pupils to assess their own learning and develop thinking skills. Many schools and authorities that have been involved in the DCELLS Developing Thinking and Assessment for Learning programme[7] have planned whole-school training for teachers on new strategies to develop thinking skills and have found the programme's resources useful. Many schools have adapted resources to suit the needs of their particular pupils or created their own resources, while others have had specific support from their local authority or advisory service. Schools have developed resources following training days with high profile speakers.

40 Effective features of lessons observed by inspectors, include those where:

- most pupils are actively engaged in the lesson, often involved in a problem-solving task;
- many pupils work collaboratively in groups, where they have assigned roles and work effectively within these roles;
- there is a greater emphasis on pupils' skills in conducting presentations and good oral feedback; and
- thinking and learning strategies and 'tools' develop pupils' abilities to reason, hypothesise and consider different viewpoints.

41 Schools do not always provide pupils with enough opportunities for independent learning. The most common relevant change of approach to learning within the curriculum involves a greater emphasis on thinking and learning skills. Homework projects that are research-based also provide more independent learning as well as web-based research through schools' virtual learning environment[8] developments. However, pupils in a minority of schools have limited opportunities for independent learning.

Mapping skills across the key stage 3 curriculum

42 Many schools have mapped how specific skills are taught across the curriculum. The most common are communication skills, particularly linking with literacy programmes, and thinking skills. Departments have used training days to revise their schemes of work and identify opportunities to teach skills. In a few schools, different subject areas have identified particular skills in schemes of work to contribute to key skills qualifications.

[7] www.wales.gov.uk/topics/educationandskills/curriculumassessment/thinkingandassessmentforlearning/?lang=en

[8] A virtual learning environment is a computer software system which works through webpages on the internet to support teaching and learning.

43 Many schools found the Skills Framework useful in signposting the four skill areas in subject schemes of work and in creating cross-subject thematic projects for Year 7 and Year 8 pupils. The Skills Framework has been used to change teaching methods by focusing on developing opportunities for more thinking and learning skills. A majority of schools have devoted training days to review skills, particularly thinking skills, with support from local authorities.

44 Where schools adopt a curriculum that focuses on developing 'learning to learn' skills, many have mapped these skills against the Skills Framework. However, a few schools have not mapped skills across the key stage in all curriculum areas. A very few schools are confused about the non-statutory nature of the Skills Framework and have focused on planning other learning skills such as 'resilience' rather than using the Framework.

45 A few schools are unclear about how to support pupils in making progress in their skills. They do not check the skills Year 7 pupils have already acquired in primary schools. However, joint training days with primary colleagues in a few schools has led to the development of subject and key skills 'bridging' units, taught to primary pupils in Year 6 and completed in Year 7 when they are in secondary school. One school encourages discussion in the summer term between Year 7 form tutors and Year 6 teachers on pupils' learning styles and progress. Gaps in pupils' skills are identified and addressed by jointly planning and delivering a four-week programme to improve skills. In another secondary school, Year 8 form tutors interview pupils using the learning skills vocabulary to discuss progress. Their mid-year report to parents focuses on the development of pupils' learning skills.

Activities for more-able and talented learners

46 Tasks which involve pupils in investigating and researching information have extended the breadth of activities for more-able and talented pupils.

47 Secondary schools are getting better at using information from their partner primaries, especially for identifying pupils that need additional support. Nevertheless, only in a very few schools are more-able and talented pupils identified through data received from primaries or are offered opportunities to extend their learning as they enter key stage 3.

48 There is more emphasis on developing more-able and talented pupils' presentational skills. In one school, these pupils prepare presentations to real audiences, such as local councillors and parents. To extend the more-able and talented pupils, a few schools enter these pupils for GCSE examinations at the end of Year 9, particularly in creative or performing arts, music and languages.

49 Enrichment programmes, both in designated lessons and out-of-hours provision, are used to encourage more-able and talented pupils, through competitions and using outside providers in after-school clubs.

Cwrt Sart Comprehensive School, 550 pupils, Neath Port Talbot

Activity: Beacon For Wales Project

The aim is to raise aspirations for going to university. Over 20 more-able and talented pupils in every year group in key stage 3 are selected. They attend two or three evenings every half term with their parents, working on tasks with departments from Cardiff University. They also attend extra days at the university. Parental feedback from the first of these events shows that all pupils are now inspired to go to university.

The project focused on communication skills and made a documentary film with students from the University's School of Journalism. The school has planned three more days, including a physics project that will look at the impact of the school on the local environment.

Impact

- A 'meta-blog website' has been created recently where pupils can contact named undergraduates directly, posting their work to them and asking for their comments.
- Undergraduates are keen to mentor these pupils.

50 In one school the PreVent[9] programme targets a group of more-able girls in developing their skills in number and science. A variety of methods are used including the TASC wheel[10] where pupils use their thinking skills in a group problem-solving approach. Female teachers and older pupils provide support in order to provide positive role models for the girls.

51 However, despite these examples, a group-focused, discovery approach to teaching and learning may take longer than other more direct methods of presenting knowledge and information. Some of these group tasks are not sufficiently challenging for more-able pupils. In knowledge-dependent subjects such as science, tasks are not well-adapted to meet the needs of individual more-able pupils in extending their understanding.

The impact of ICT and accommodation

52 The use of ICT to support the delivery of the revised curriculum varies too much. Several schools use their virtual learning environment to aid research and share resources. One special school used RAISE[11] funding to provide more targeted intervention for skills using a virtual learning environment with small groups of pupils. This approach is highlighted on the RAISE website[12] as good practice. Two schools are currently developing teachers' skills in using ICT effectively in lessons by making

[9] http://wales.gov.uk/topics/educationandskills/educationskillsnews/2974591/?lang=en
[10] TASC wheel from Thinking Actively in a Social Context – www.tascwheel.com
[11] http://www.raise-wales.org.uk/raise/raise-about.htm
[12] www.raise-wales.org.uk/raise.htm

its development a performance management target. One school, which encourages all staff to undertake action-research projects, is using a training day to develop teachers' use of ICT in lessons.

53 Many schools have ICT suites or timetabled sessions to develop ICT skills across the curriculum. In one school's recent inspection report, ICT resources was judged to have impacted positively on standards and the quality of teaching. This school widely uses Moviemaker and makes films from pupils' poetry and other presentations for parents' evenings using equipment donated from their Media4Schools[13] project.

54 Despite an increase in the number of interactive whiteboards, there is little evidence of an impact on pupil outcomes. ICT, is not a driver for improvements in the quality of pupil outcomes. Sometimes, this is because it is the teachers, rather than the pupils who use the whiteboards in the lesson. Subject departments are aware of their role in helping to develop pupils' ICT skills. However, many schools are not training teachers on the effective use of ICT programmes to support innovations in the key stage 3 curriculum.

55 Most schools commented that the quality of accommodation had a significant influence on the delivery of the curriculum. In many schools there are good facilities for key stage 3 pupils. Often, these pupils are given a base room which is well suited to group work and there are good ICT facilities available. Seven of the schools visited were relatively new, from just three weeks old to under ten years old. The design of the classrooms, availability of ICT facilities and ability to accommodate particular teachers and year groups together was a significant factor in the development of a thematic curriculum in these schools.

56 In schools with older buildings, substantial refurbishment of classrooms has enabled the Year 7 curriculum to be modelled on best practice from the primary phase. Many lessons are taught in a base room where the organisation of equipment enables pupils to work together and independently.

57 However, a few schools have very small classrooms or lack ICT facilities. This has a negative impact on innovation in the curriculum as the cramped conditions allow few opportunities for group and project work. In a very few schools pupils have little access to ICT facilities and this has a negative impact on their attainment. In schools with smaller classrooms, open areas in and around the buildings have been used more imaginatively to support new teaching practices.

[13] www.media4schools.co.uk

How are innovations led and supported?

How have developments been managed?

58 The drive and vision schools have shown in taking developments forward was judged to be outstanding in half the schools visited as part of this survey. In these schools, senior leaders lead and manage innovation in key stage 3 across the curriculum and make sure that key teams focus on developing new teaching and learning approaches to support the particular initiatives involved.

59 The success of the programmes developed in these schools depends on the leadership of key teachers with responsibilities for programme projects. Many schools have appointed transition managers, key skills coordinators and teaching and learning coordinators to manage the projects. In a few schools, these key teachers and leaders meet regularly to review the projects as well as communicating developments to staff in training days.

60 Many schools do more monitoring of pupils' progress as these new programmes develop. Year 7 and Year 8 tutors know pupils very well. The Year 7 tutor-based curriculum emulates good primary practice in that, because tutors also teach the form group they take, they can identify and deal with issues more quickly.

61 A majority of schools use pupil questionnaires and end-of-unit evaluations to review the new approaches at key stage 3. A very few schools have other ways of consulting pupils through focus groups, lesson observation and in discussing teaching approaches. In these schools, pupil responses to curriculum changes have been very positive.

62 However, a minority of schools only consult pupils informally about the changes to teaching and learning, and do not have teaching and learning as a regular item for meetings with the school council or other pupil groups. In these schools pupils feel less engaged with what they are taught.

Caerphilly Local Authority

Activity: Pupil Learning and Teaching Forum

This local authority is developing a 'listening to learners' programme in its schools. They feel that learners' views are important in finding out what teaching approaches are most effective. Learners in key stages 3 and 4 from ten secondary schools are involved.

This programme links to the 'Pupil Learning and Teaching Forum' which the authority has set up. They want learners to influence the strategy, training and development of teaching and learning in schools. The forum takes ideas back to schools and enables schools to share ideas.

63 In a very few schools the changes to the curriculum have not been significant enough and pupils find it difficult to connect the skills learned in one area to the rest of the curriculum. This is most apparent when the developments have been made by one teacher rather than involving a team.

Monitoring and evaluation

64 A majority of schools evaluate skills in the curriculum through year reviews, project reviews and audits of skills provision. However, a minority of schools are at an early stage in evaluating and reviewing the delivery of skills.

65 A few schools have robust and detailed self-evaluation procedures to assess the provision and impact of new skills-focused curriculum programmes. Pupils, parents, governors and primary and secondary teachers are involved in activities that include:

- completing questionnaires;
- evaluating pupil attitude and self-perception surveys;
- observing skills development and opportunities in lessons;
- assessing the quality of pupils' work; and
- conducting pupil trails[14].

66 From these evaluations, schools have qualitative evidence that pupils are making progress in their use of key skills in lessons. Pupils are more confident when communicating in lessons and working with others, and their presentational skills have improved. Senior leaders and teachers with management responsibility for key skills or key stage 3 carry out most of the reviews. Teachers have changed their practice as a result of reviewing Year 7 thematic programmes and teaching practices.

67 A minority of schools have developed skills' booklets or 'passports' for recording skills across subjects. These booklets have been evaluated by pupils and teachers to judge their effectiveness. Following these reviews, schools have improved the process of pupils' recording their skills, including more of a focus on pupils' gaps in skill development.

68 At present, it is too early to judge how far the innovative changes in the curriculum at key stage 3 have had a positive impact on pupils' skills outcomes. However, in two schools, with integrated learning skills and thematic programmes, good or better standards in learning and the quality of teaching were indentified in their recent inspections.

69 In evaluating these approaches, many schools use pupil questionnaires. In many schools these have identified increased pupil enjoyment and positive attitudes. Pupils' skills have improved, especially in working with others in team activities and having a greater confidence and independence in lessons.

[14] Pupil trails involve a teacher following a pupil or group of pupils for several lessons to evaluate the pupils' experience of the curriculum and teaching.

70 However, very few schools have robust procedures to assess the impact of these approaches on pupil outcomes. To some extent, it is difficult to assess the impact on standards as many schools have only recently adopted new approaches to teaching and learning. In schools which have developed their thematic curriculum over the past three years, a majority have not evaluated the programme thoroughly. Other schools have recorded an improvement in attendance and behaviour, which is partly due to the different approach to Year 7 teaching.

71 Most local authorities have not yet formally evaluated the effect of the revised curriculum in their schools. Many local authorities either plan to evaluate new key stage 3 developments in the coming year or consider that it is too early to judge the impact due to their schools' cautious approach to making changes. A few authorities are using their routine visits to schools to monitor the schools that have made radical changes.

What forms of professional development have been used?

72 Schools and local authorities have arranged appropriate planning and training to implement the new teaching and learning approaches which support innovation in the key stage 3 curriculum. A few schools have worked on building teachers' capacity to lead action-research projects or establishing new positions of responsibility, such as leading teacher effectiveness. These schools have used a significant amount of time on planning new approaches and training teachers.

73 Schools have used a variety of approaches in developing teachers' knowledge and on how to apply new teaching and learning methods. These include:

- action-research projects on, for example, assessment for learning, thinking skills, including Philosophy for Children[15] (P4C), developing SEAL and emotional intelligence approaches and 'PDSA'[16] cycle (plan, do, study, act) with evaluation as an integral part of the project;

- DCELLS Developing Thinking and Assessment for Learning programme where teachers were coached by DCELLS and local authority advisers and action-research projects which resulted from the programme were monitored and evaluated;

- joint training days between local secondary schools, or partner primaries schools on critical skills, emotional intelligence and 'Habits of Mind'[17];

- team teaching, tutoring and peer lesson observation;

[15] www.p4c.com
[16] http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/plan_do_study_act.html
[17] www.habitsofmind.co.uk

- local authority and advisory service support, particularly for developing 'Thinking Actively in a Social Context (TASC)'[18], thinking skills and developments in national curriculum subject orders; and

- staff handbooks with comprehensive sections on teaching approaches and good classroom practice including summaries of key publications, thinking skills and differentiation.

74 The most significant change at key stage 3 is developing training for thinking skills. Several local authorities have organised conferences for both primary and secondary schools to launch training on new teaching approaches, with key note speakers.

75 Many local authorities have assessed the effect of new teaching approaches on pupils' learning through their school monitoring and review visits. However, in a few schools, the leadership team lacks commitment in supporting key stage 3 developments.

76 There are inconsistencies in the way that schools and local authorities have used the model for pedagogy[19] issued by the Welsh Assembly Government. Around half the local authorities surveyed have not developed training or support in helping schools to use the model effectively. In a few schools, the model has begun to be considered in school improvement or teaching and learning groups. In these schools, there are opportunities in the meetings to reflect and review learning. Local authorities, often those which have been part of developing the Welsh Assembly Government pedagogy strategy, have reviewed the model with school leaders and are developing guidance.

77 However, two schools have used the model in an innovative way to support teaching and learning developments. One school has adapted the model for their teaching and learning strategy group. Within this group, teachers take responsibility for aspects of reflective practice, thinking skills, initial teacher training and the curriculum. In another school, the headteacher uses the model as the centre of the school's performance management structure. Each aspect or heading is adapted into a series of self-assessment questions for teachers to ask themselves about their practice. This helps them to focus on areas to develop. Some departments have completed this exercise as a group to create departmental performance management targets.

What partnerships have schools made in developing new approaches?

78 In preparing for the new curriculum, many schools visited other schools in Wales and England that had made significant changes. Schools used these visits as a catalyst to initiate change.

79 The most common established partnerships are with the feeder primary schools. Few schools have made significant partnerships with other secondary schools that have developed similar innovations at key stage 3. Sharing training and good

[18] www.nace.co.uk/tasc/tasc_home.htm
[19] 'Effective Practice in Learning and Teaching: A Focus on Pedagogy' (March 2009).

practice among similar secondary schools is in an early stage of development, even among schools who have been involved in the School Effectiveness Framework pilot.

80 A majority of schools have opportunities to share their practice within their local authority through good practice groups and a few authorities have networks of professional learning communities which specifically address key stage 3 developments.

81 Other links have been created through International Networking for Educational Transformation (iNET)[20] conferences and this organisation's 'Developing Leaders' course.

[20] http://www.ssat-inet.net/

The impact of innovation

82 The changes to the key stage 3 curriculum and teaching practices has had a positive impact. Pupils' wider key skills have improved, particularly in working with others and in developing greater confidence and independence in lessons. Pupils are more:

- confident orally;
- engaged, independent and co-operative;
- prepared to make mistakes;
- enquiring and are starting to see links between subjects; and
- aware of the need to develop certain skills.

83 Pupils contribute more in lessons, and have increased motivation and enthusiasm. In several schools attendance has increased and levels of disruptive behaviour decreased. Many schools give greater prominence to listening to the views of pupils on teaching and learning approaches.

84 In our visits to schools, pupils were enthusiastic about their lessons. They enjoyed lessons which offered a challenge or have more practical tasks. Pupils were knowledgeable about the success criteria for their work. They felt that they were working better and were aware of their targets and how they could improve. Pupils felt that they were better supported as they now had more individual time with their teachers. Pupils felt that they were more confident and not worried about expressing their opinions in lessons.

85 There are several benefits of innovation in the curriculum and teaching practices for the teachers involved in the projects. Teachers had broadened their teaching skills and they concentrate more on the quality of their teaching methods. They ensure that all pupils are involved in the lessons and that they develop a greater range of skills. The action-research approach to curricular change has made some teachers more enthusiastic as they can see the new developments improving both the pupils' and their own classroom experience. New approaches have broken down subject barriers by bringing teachers together to create more exciting ways of developing pupils as learners.

86 Innovation has involved taking calculated risks and many schools have organised substantial training before they introduce new initiatives. In many of the schools visited teachers have become more willing to experiment as the changes to the curriculum have rekindled their enthusiasm. Innovation has made some teachers more self-critical and willing to evaluate their teaching methods.

87 Small-step improvements in teaching and learning and well-planned enrichment days have contributed to the improvements in pupils' engagement and attitude to learning.

Training between local authority advisers and schools, or groups of schools sharing good practice within authorities has been successful in a minority of authorities.

88 A key factor in successful partnership-working at key stage 3 has been the support and contributions from feeder primary colleagues. Transition arrangements in many of the schools surveyed are well-established and relationships between the sectors are now based on mutual respect. One school also benefited from the challenge and support offered by DCELLS pilot 'Developing Thinking and Assessment for Learning' network group.

Appendix 1: Case studies of thematic learning in Year 7 and 8

Examples of particular approaches taken by schools to deliver an integrated curriculum for Year 7 and 8 are detailed below.

Tasker Milward VC school, 1110 pupils, Pembrokeshire

Year 7 and 8 thematic curriculum

Pupils in Year 7 are taught for 40% of curriculum time in the same mixed-ability group using a thematic approach, although a number of subjects are delivered by subject specialists.

Themes in Year 7 include:

- new school/ new beginnings;
- me, myself and my community;
- Wales, Europe and the world;
- enterprise and fair trade.

In Year 8 the skills lessons are reduced and only occupy 18% of curriculum time.

Themes in Year 8 include:

- government and politics;
- global citizenship;
- thinking skills;
- finance and banking;
- media and entertainment; and
- health and wellbeing.

The school tries to ensure that the same skills teacher follows the pupils through from Year 7 to Year 8, although this is not always possible.

Connah's Quay High School, 1020 pupils, Flintshire

Year 8 'Habits of mind'

In this school, there is an integrated English and humanities-based thematic curriculum for Year 7, but in Year 8, humanities subjects return to discrete lessons. Every curriculum area develops a 'habit of mind'. A member of staff with responsibility for developing thinking skills introduced this approach to Year 8 pupils in a curriculum-focused day, where the timetable was suspended.

Pupils will take different activities in each subject area focused around thinking skills and 'habits of mind' learning skills. Each curriculum area focuses on a different 'habit of mind' to develop with pupils during the year. Tutorial and personal and social education lessons also reinforce this approach.

Barry Comprehensive School, 1400 pupils, Vale of Glamorgan

Year 7 form tutors

All English department teachers are Year 7 form tutors. In each fortnightly cycle of 50 one-hour lessons, they teach English and personal and social education to their own form for eight lessons.

The personal and social education programme is also delivered through the 20 minute tutor period (four times a week) which also includes the daily act of collective worship. The pupils' base is their own English room.

Each English teacher is linked with one of the feeder primary schools and has transition responsibility.

Cwrt Sart Comprehensive School, 550 pupils, Neath Port Talbot

Year 7 Learn Your Way programme

This is a skills-based 'learning to learn' approach where Year 7 tutorial periods are planned and linked to the learning skills programme. There is a permanent Year 7 tutor team and a transition manager who leads the team. Pupils complete a log book in tutor periods, linked to the learning and thinking skills they have developed each week.

All subjects contribute to the programme with pupils developing specific thinking and learning skills and strategies in lessons. There is one 'Learn Your Way' lesson a fortnight to reinforce the skills and learning approaches. Additionally, the school collapses the timetable at certain times of the year to spend a whole day on developing a particular skills approach.

Appendix 2: Relevant Estyn publications

This report builds on other Estyn publications, including:

- Transforming Schools, (Estyn, 2007);
- Developing thinking across the curriculum, (BBC Wales/Estyn/Welsh Assembly Government/ACCAC, 2007);
- Y Cwricwlwm Cymreig Phase 2, (Estyn, 2006);
- Review of the contribution of the Aiming for Excellence Programme to the raising of standards in Key Stage 3, (Estyn, November 2006);
- Changes in teaching and Learning promoted by the Aiming for Excellence programme 2005-2006, (Estyn, May 2006);
- Changes in teaching and Learning promoted by the Aiming for Excellence programme 2004-05, (Estyn, 2005);
- Moving On … Effective Transition from Key Stage 2 to Key Stage 3, (Estyn/Welsh Assembly Government/ACCAC, 2004);
- Moving On…Improving Learning, (Estyn/Welsh Assembly Government/ACCAC, 2004);
- The bilingual video package Raising Standards in Information and Communication Technology in Key Stage 3, (BBC Wales/Estyn/Welsh Assembly Government/ACCAC, 2004);
- The bilingual video package Raising Standards: Transition from Key Stage 2 to Key Stage 3, (BBC Wales/Estyn/Welsh Assembly Government/ACCAC, 2004);
- Bridging the Gap - Developing and using bridging units to support effective transition from Key Stage 2 to Key Stage 3, (ACCAC/Welsh Assembly Government/Estyn, 2004);
- A survey of Welsh as a second language in keys stage 3 and key stage 3 and transition, (Estyn 2004);
- The bilingual video package Raising Standards in Literacy and Numeracy in Key Stage 3 (BBC Wales/Estyn/Welsh Assembly Government/ACCAC, 2002); and
- Aiming for Excellence in Key Stage 3, (Estyn 2002; reissued, 2004).

Appendix 3: Glossary/references

Assessment for learning	Formative assessment strategies, as developed by the Assessment Reform Group: 'Inside the black box: raising standards through classroom assessment', Paul Black and Dylan Wiliam (1998) and Assessment for Learning: beyond the black box' (1999).
Building Learning Power	Learning skills programme developed by Guy Claxton based on 'learning to learn' principles.
Critical Skills	This programme develops lifelong learning skills and dispositions with problem-solving challenges built into its teaching method.
Developing Thinking and Assessment For Learning (DCELLS)	Set up and funded in 2005, working in partnership with 9 LEA advisers, 1 special schools' officer and 42 partner schools across Wales (28 primary, 10 secondary and 4 special schools) the programme focused on the development, implementation and dissemination of good practice in the teaching of developing thinking and assessment for learning strategies.
Habits of Mind	Created by Art Costa; a series of patterns of critical and intellectual behaviours linked to values, attitudes and skills.
P4C	Philosophy for Children – an approach which aims to develop a 'community of inquiry' – a reflective approach to classroom discussion.
SEAL materials	Social and Emotional Aspects of Learning – curriculum resources produced by DCSF to develop children's social, emotional and behavioural skills
TASC Learning Wheel	Thinking tool taken from National Association for Able Children in Education's programme, 'Thinking Actively in a Social Context' developed by Belle Wallace.

Appendix 4: List of schools visited

Ysgol Aberconwy, Conwy
Barry Comprehensive School, Vale of Glamorgan
Birchgrove Comprehensive School, Swansea
Bishop Vaughan RC School, Swansea
Brecon High School, Powys
Ysgol Gyfun Bro Morgannwg, Vale of Glamorgan
Connah's Quay High School, Flintshire
Corpus Christi High School, Cardiff
Ysgol Gyfun Cwm Rhymni, Caerphilly
Cwrt Sart Comprehensive School, Neath Port Talbot
Ysgol David Hughes Porthaethwy, Ynys Môn
Ysgol Dyffryn Teifi, Ceredigion
Ebbw Vale Comprehensive School, Blaenau Gwent
Ysgol Eifionedd, Gwynedd
Ysgol Gyfun Morgan Llwyd, Wrexham
Maesteg Comprehensive School, Bridgend
Michaelston Community College, Cardiff
Newport High School, Newport
Pentrehafod Comprehensive School, Swansea
Pontypridd High School, Rhondda Cynon Taff
St. Christopher's School, Wrexham
Tasker Milward VC School, Pembrokeshire
Ysgol Gyfun Tregib, Carmarthenshire
Treorchy Comprehensive School, Rhondda Cynon Taff
Ysgol Ty Coch, Rhondda Cynon Taff
Ysgol Ystalyfera, Neath Port Talbot

Appendix 5: The remit author and survey team

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