

**ITT Conference 11 November 2011**

**DR MICHAEL DAY**

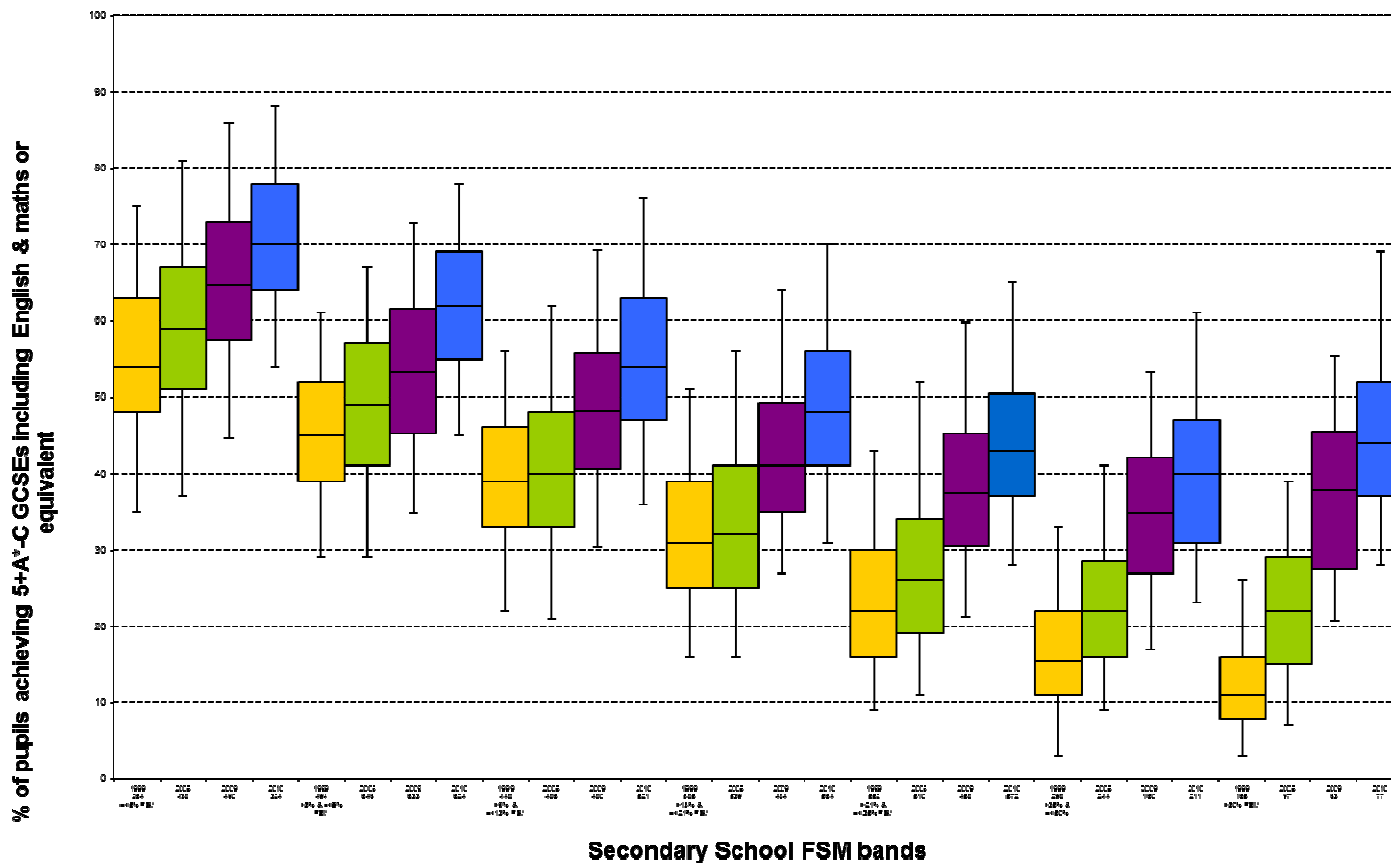
*developing people, improving young lives*

# Dimensions of teacher quality

Teacher Quality = IQ + EQ  
+ Body of Knowledge  
+ Craft Skills



# The range of achievement by schools with similar socio economic profiles:1999/2006/2009/2010



Maintained mainstream schools excluding Grammar Schools.



# Teacher quality/performance

International comparative study in mathematics teacher training  
David Burghes

Primary Audit Means	
Czech Republic	29.2 (6.1)
England	32.2 (7.39)
Finland	33.0 (6.9)
Ireland	33.9 (7.3)
Hungary	35.1 (8.0)
Russia	41.7 (7.9)
China	43.1 (5.0)
Japan	52.9 (3.2)

Secondary Audit Means	
Hungary	24.9 (5.9)
England	26.0 (7.0)
Czech Republic	27.7 (5.0)
Singapore	32.0 (4.6)
Japan	33.5 (3.6)
China	33.8 (3.5)
Russia	34.7 (4.6)

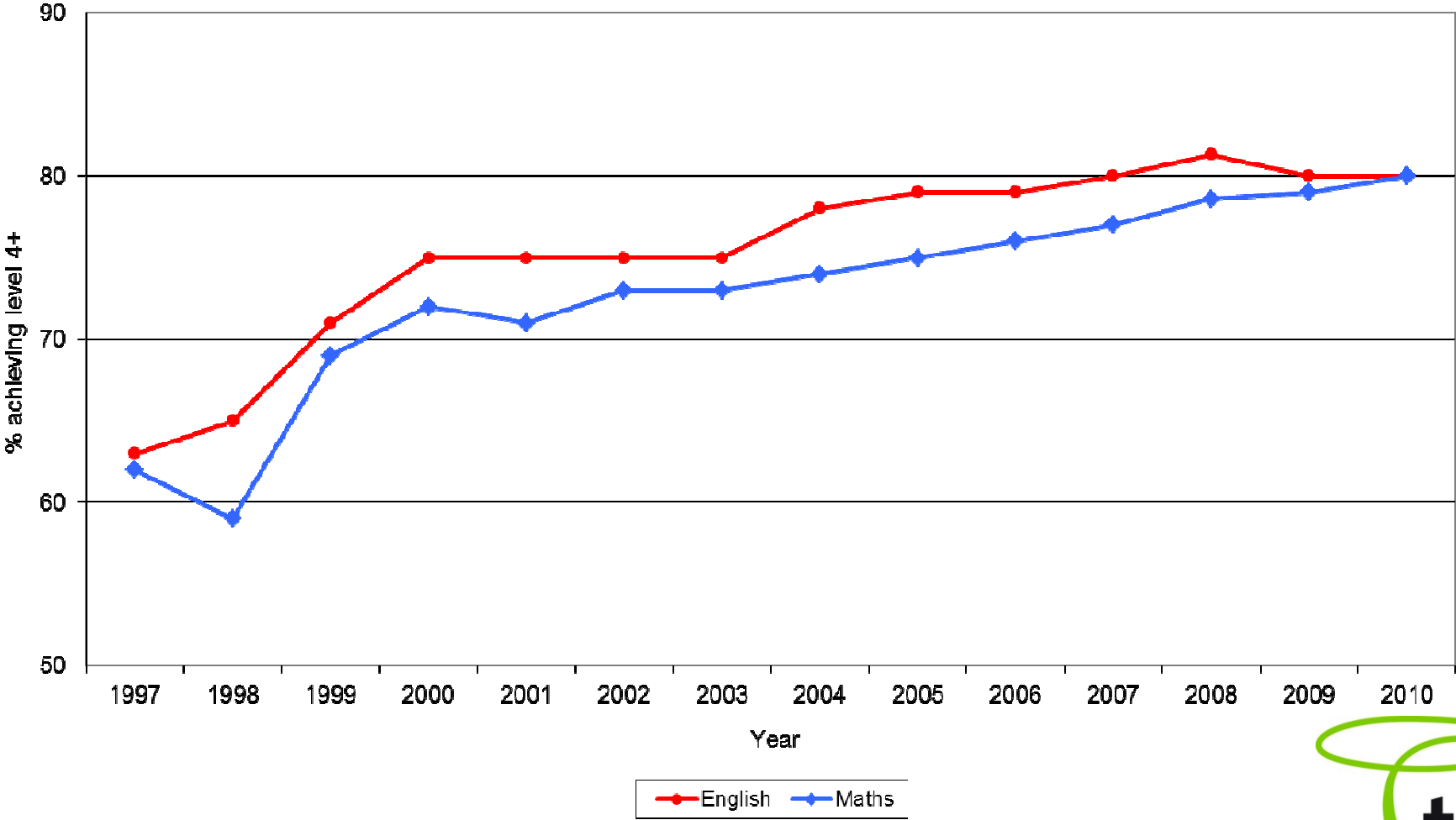
Ofsted – in 50% secondary schools and 43% primary schools, teaching no better than satisfactory

Only 2% of first class honours graduates from Russell Group universities chose teaching

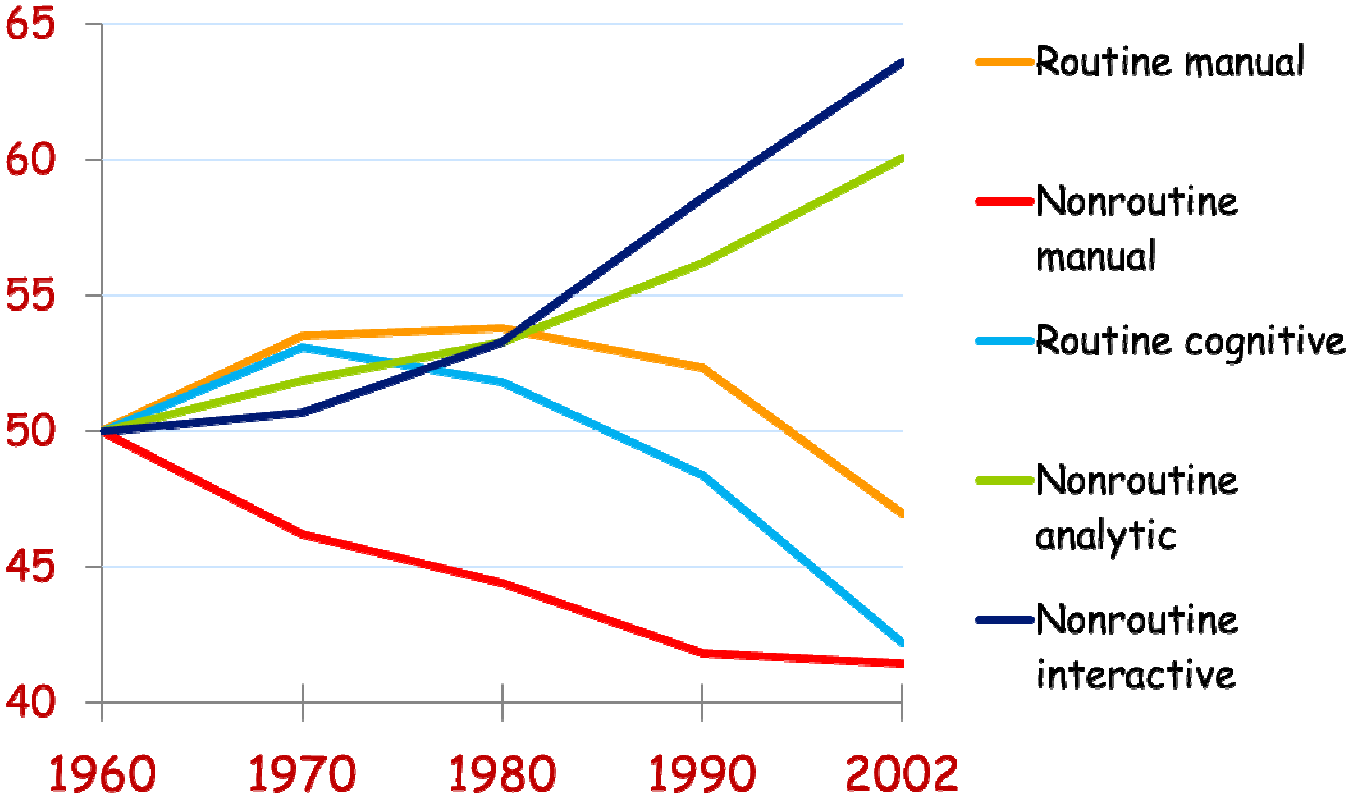


# Challenge of the KS2 plateau

Proportion achieving level 4+ at Key Stage 2, 1997-2010



# Changes in labour market demand: OECD countries



# OECD: Education reform trajectories

**The old bureaucratic system**

Student inclusion

**The modern enabling system**

Some students learn at high levels

All students need to learn at high levels

Curriculum, instruction and assessment

Routine cognitive skills, rote learning

Learning to learn, complex ways of thinking,  
ways of working

Teacher quality

Few years more than secondary

High-level professional knowledge workers

Work organisation

'Tayloristic', hierarchical

Flat, collegial

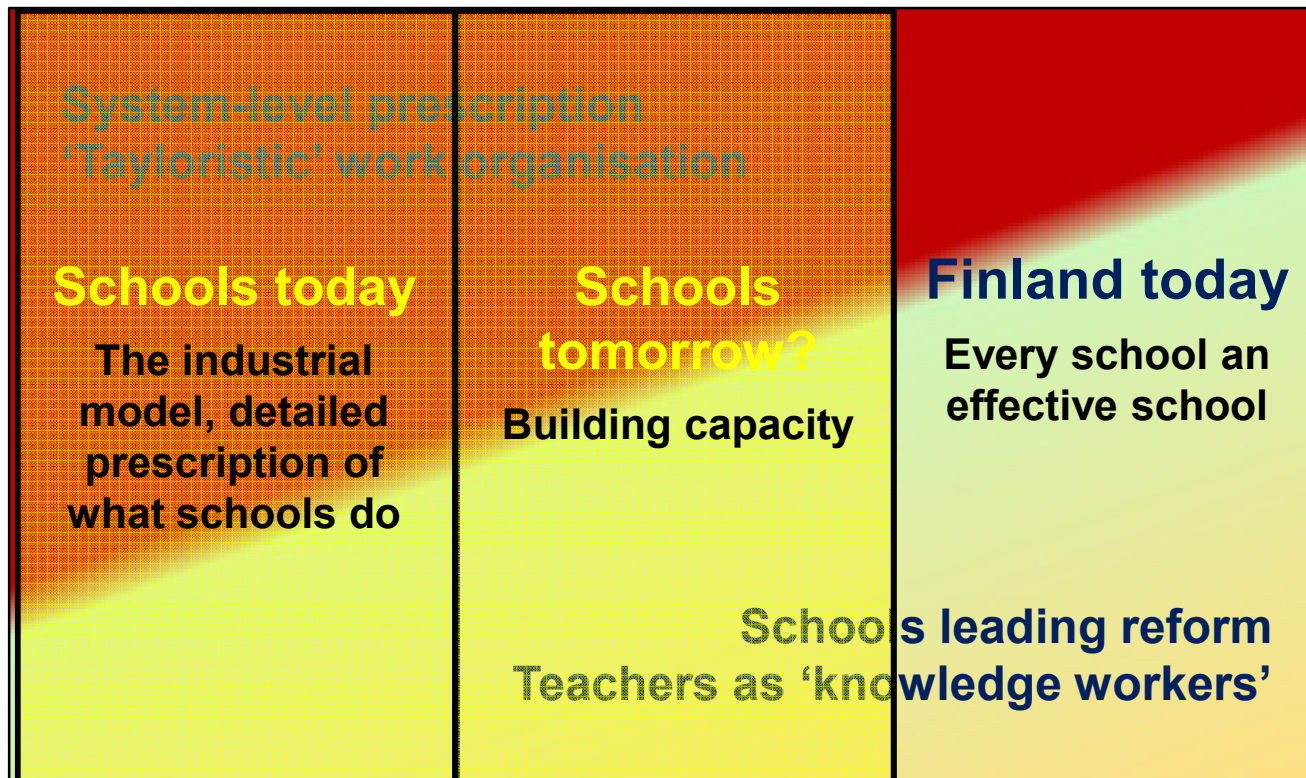
Accountability

Primarily to authorities

Primarily to peers and stakeholders

# Local responsibility and system-level prescription

Trend in OECD countries 





# Strong performers and Successful Reformers: Raising the status of teaching

Marc Tucker NCEE has summarised the lessons of PISA for improving the status of teaching and effectiveness of teacher preparation:

- Raise standards for entry into teacher education to internationally benchmarked levels, including standards for general intelligence, level of mastery of subject matter content and ability to relate to young people, with rigorous selection processes
- Move teacher education out of second and third tier institutions and into the major research universities
- Insist that teachers of all subjects at all levels have a depth and breadth of mastery of the subjects they will teach comparable at the bachelors degree level to that of the people who will go on to graduate education in those fields



# Strong performers and Successful Reformers: Raising the status of teaching

- Make sure that prospective teachers have excellent skills in diagnosing student problems and prescribing appropriate solutions
- Design the teacher preparation program on a clinical model, with plenty of clinical experience under the constant supervision of master teachers in real settings
- Raise the criteria for teacher licensure to internationally benchmarked levels and never, under any circumstances, waive the licensure standards in the face of a teacher shortage
- Construct multiple career pathways for teachers one of which is into school administration, at least one of which is in teaching and all of which provide for merit-based advancement with increasing responsibility and compensation
- (Marc Tucker: Standing on the Shoulders of Giants: NCEE: 2011)

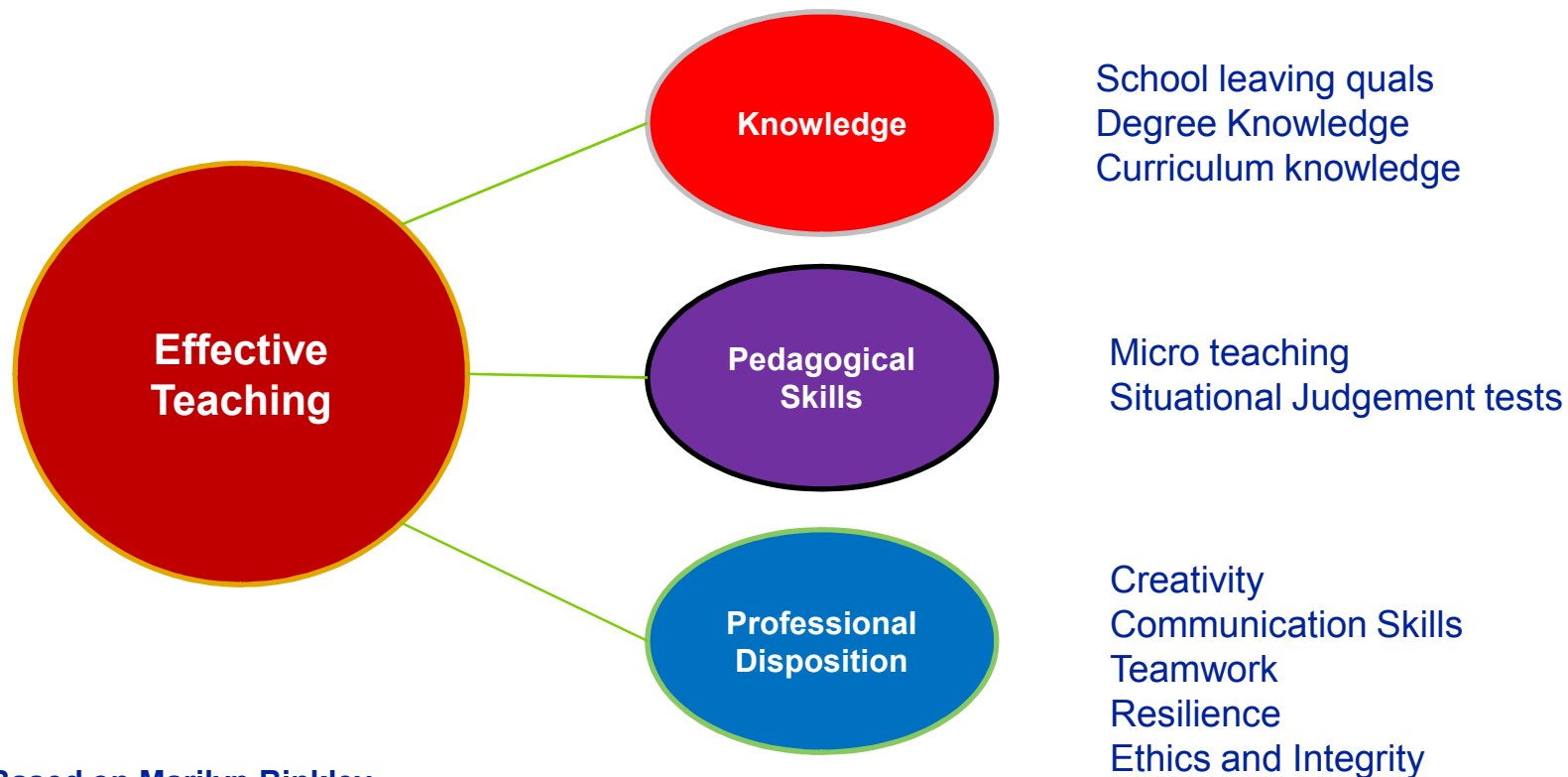


# Recruitment of high quality graduates

Teacher Quality = **IQ + EQ**  
+ Body of Knowledge  
+ Craft Skills



# New Approaches - Methods of Measuring Components of Effective Teaching



Based on Marilyn Binkley,  
University of Luxembourg:  
ENTEPE Paper 2011

# Market testing : Characteristics of those expecting/achieved 1<sup>st</sup> Class Hons Degrees

## Type 1 Gauche academics

- Consumed by / expert in their subject area
- Science and research biased
- Very likely to go on to further study
- Want to stay / work in academia
- More confident of achieving a 1<sup>st</sup>

## Type 2 Hard working achievers

- Majority of sample
- Academically capable – but driven to work hard more by fear of failure
- Mixed state and independent sector educations
- Self-effacing - typically ‘surprised’ by success (wouldn’t have predicted a 1<sup>st</sup>)
- Not all clear what to do next – more options than had expected
- Not all keen to go on to further study – keen to earn money/pay off debts; want break from hard study
- Not all thought about / ready to be leaders

## Type 3 Ambitious and assured

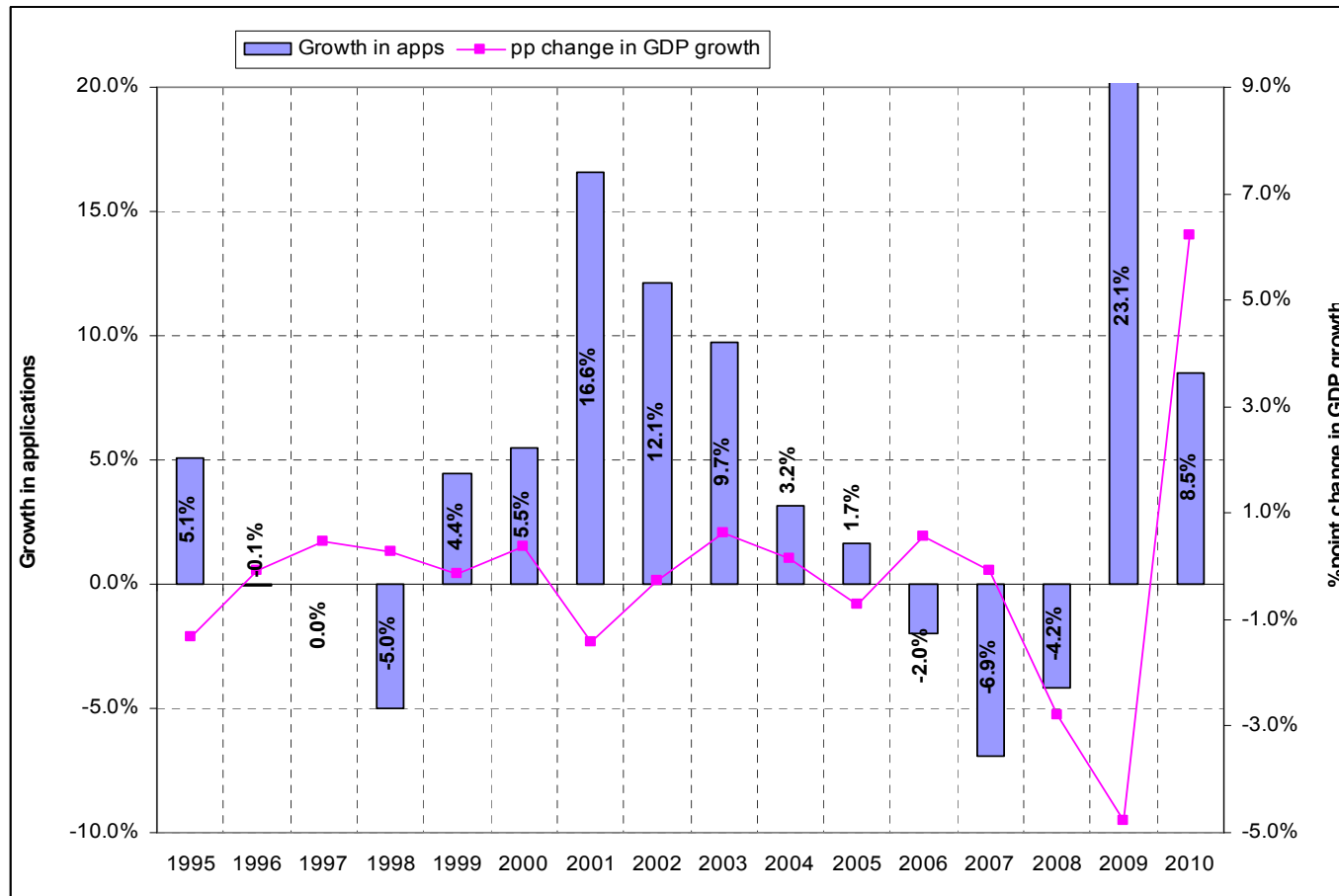
- Academic achievement expected from young age
- Often more privileged background – more likely to be privately educated
- Confident, self-possessed
- More likely to believe they will/would get a 1<sup>st</sup>
- More likely to have a life plan - keen to get a well-paid or rewarding job
- Confident and seeking early leadership opportunities

# New Approaches – building the brand of teaching to attract high fliers

Career qualities	Type 1 Gauche Academics	Type 2 Hard working achievers	Type 3 Ambitious and assured
Variety	?	✓ 	✓
Responsibility	✗	✓	✓ 
Leadership	?	? 	✓
Travel	✗	✓	? 
Good salary	✗ 	?	✓
Security	✓	✓ 	?
Meaningful	✓	✓	?
Making a difference	? 	✓ 	? 
Challenge	✓	✓	✓
Dynamic/exciting	?	✓	✓
Interactive	?	✓	✓



# Relationship GTP growth to teacher recruitment



# Key issues in raising the quality of entrants

## Challenges

- How to recruit more people with the intellectual skills to work in professional structures creating knowledge, not just in Tayloristic structures transmitting knowledge
- How bursaries, recruitment, training and career routes can be used to raise the status of teaching
- How to build capacity of schools to play much fuller role in recruiting and selecting trainees
- How to offer the best graduates an attractive career
- How to recruit sufficient high quality maths, physics, chemistry and ML trainees
- How to ensure strong BME candidates have equal opportunity to enter profession





# Key issues in raising the quality of entrants

## Levers

- Bursaries
- Schools direct, incl requirement to employ trainees
- Physics and maths pilot
- Targeting of engineers
- Single language ML programmes and SKE
- New marketing campaign stressing quality of recruits
- Employability measures in Ofsted grading and in allocation methodology
- GTP as high quality career changer route
- Teach First Expansion
- More challenging skills tests, and introduction of psychometric testing
- New career structures for 'master teachers'



# Dimensions of teacher quality

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## Challenge of Richard Elmore:

### **‘Education is a profession without a practice’**

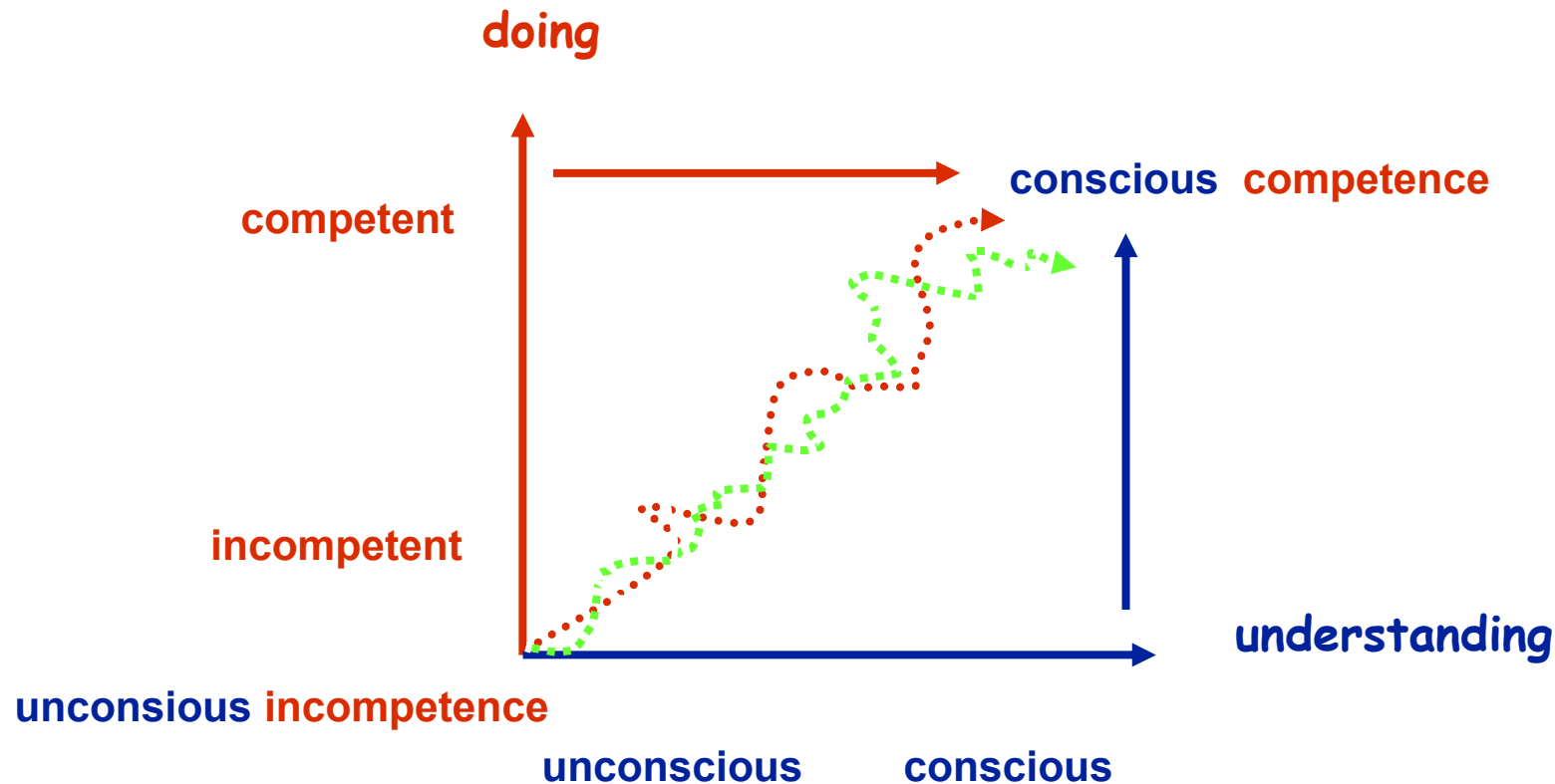
Weakness of the profession is the mistaken notion that  
Autonomy = professionalism

“Within a true profession an individual does not have autonomy over it’s body of knowledge and it’s practice” – which would appear to be the case for education. Yet other professions such as medicine, law, dentistry or accountancy have a body of practice and knowledge, which must be learned, mastered and implemented within agreed and non-negotiable norms.



# Professional Development is about acquiring and testing the knowledge base for teaching

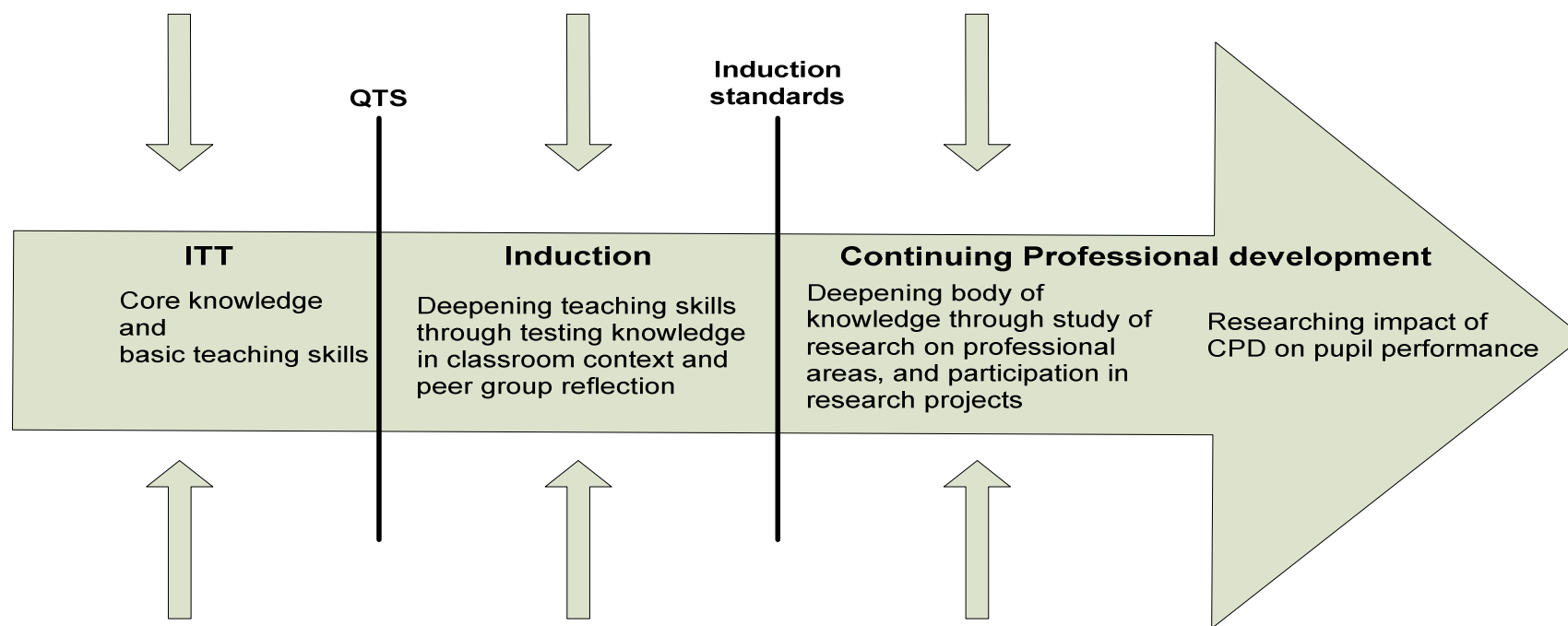
From „unconscious incompetence“ to „conscious competence“



# Developing and deepening the teacher's body of knowledge through working with others, research and enquiry

## Tacit knowledge derived from school context

Detailed, concrete, integrated context specific knowledge - 'craft of teaching', mentoring, diagnostic skills including AfL



## Research derived professional knowledge

Public, sharable, storable and accessible, generalisable, verifiable and improvable knowledge



# Key issues in improving trainees' body of knowledge

## Challenges

- Ensuring all trainees have strong subject, subject pedagogy and pedagogy knowledge
- Working with subject associations and subject experts to agree expected core of subject knowledge and create audit tools to check trainees knowledge on entry to and exit from ITT courses
- Ensuring trainees receive strong phonics, behaviour and mathematics training
- Developing research projects from small scale to national scale to develop pedagogy – not 'teacher researchers', but teachers as participants in major research project
- Creating capacity in schools and HEIs to develop subject knowledge

## Levers

- Creating clinical academic posts at a senior level in HEIs
- Concentrating teacher education in certain subjects to create 'centres of excellence'
- Creating senior subject/phase leaders as a career path for teachers, building on the 'Master teacher' standards, following the Singapore model
- Linking training more closely to 'what works' data bases and research resources
- More formal testing of trainees body of knowledge
- Agreeing 'core curricula' for ITT

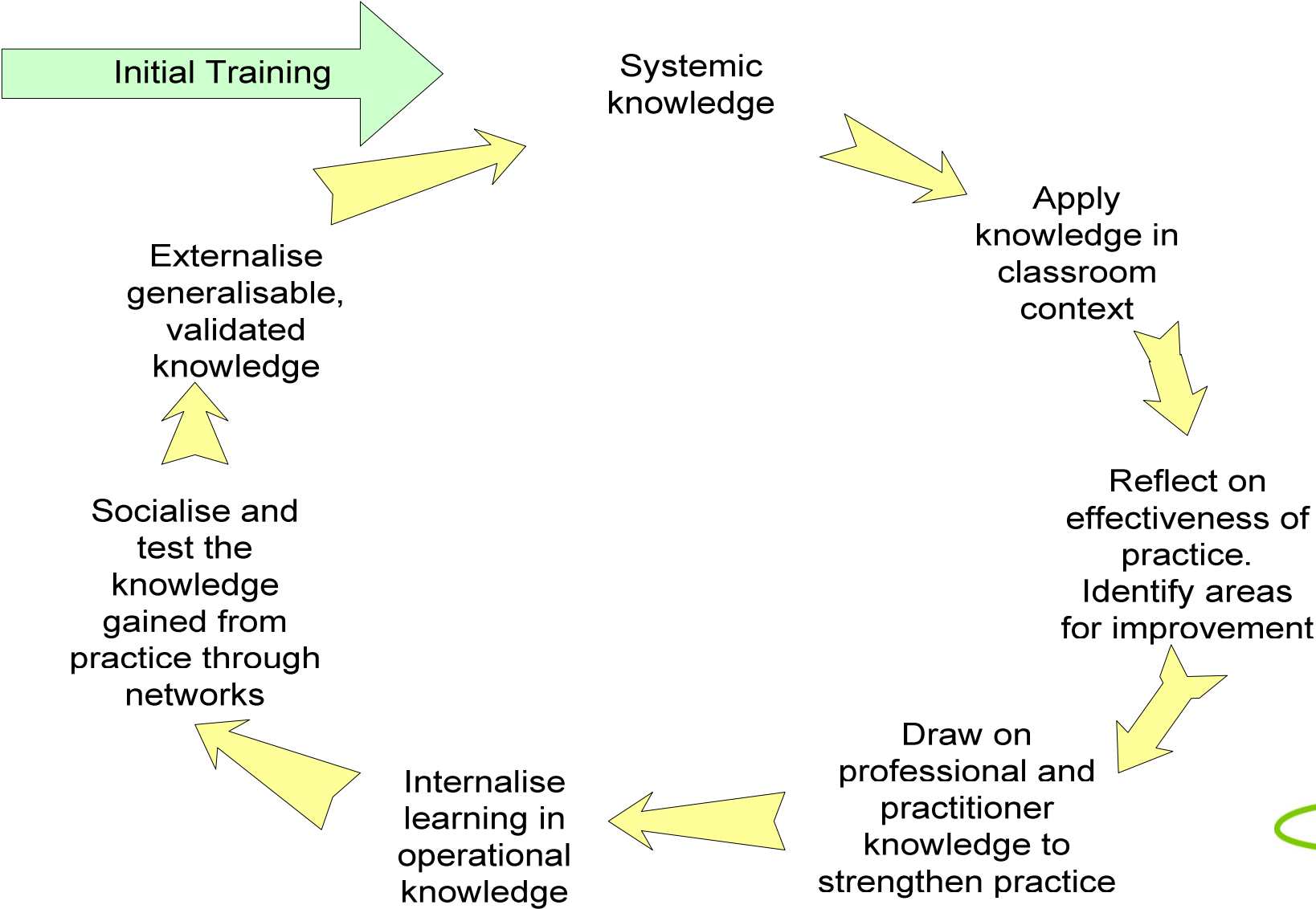


# Dimensions of teacher quality

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# Improving practice through 'learning by doing' and deriving explicit knowledge from operational knowledge





# Closer Integration of university and school elements of ITT

Increasing integration of HEI and school elements of training



Facilitation  
model of  
school  
placement  
'lending a  
class'

Jointly  
designed,  
closely  
integrated  
programme  
in schools  
with strong  
HEI link

Joint  
school/HEI  
appointments  
leading ITT  
and trainees  
mainly school  
based

UTS -  
University  
staff  
teaching  
and  
training in  
school and  
HEI



# Good to great – master/apprentice approach to mentoring and ‘craft skill’ acquisition

Medical school model – hospital based training by consultants

Increasing the quality and professionalism of mentoring



Mentoring as CPD for ‘jaded’ teacher

Mentoring as first responsibility for early career teachers

Mentoring by experienced teachers trained by HEI

Teaching school identifying ‘master teachers’ across alliance to demonstrate and analyse aspects of excellent practice



# Key issues in improving trainees' craft skills

## Challenges

- Ensuring that trainees observe excellent practice in schools, and are mentored by outstanding teachers able to exemplify the best practice and discuss it effectively with trainees
- Ensuring that the increased role of schools in all aspects of ITT is reflected in the allocation of the funding for ITT
- Greater integration of courses, such as through problem based learning
- Developing stronger diagnostic skills to identify and tackle barriers to learning
- Linking craft skills more closely to research – using examples such as surgeon training

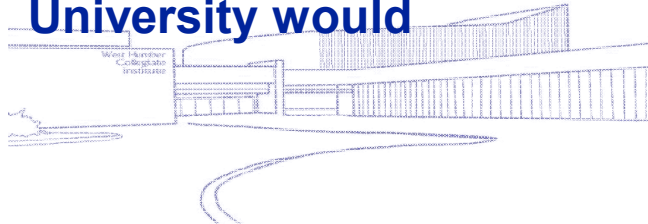
## Levers

- Introduction of 'Schools direct' to give schools power to commission training and negotiate allocation of funding
- Accredite academy chains and teaching school alliances to devise and deliver ITT
- Rewarding innovation in school based/led provision and stronger partnerships through increased allocation of ITT places
- Ofsted quality gradings reflect excellence in mentoring and craft skill/diagnostic skill development



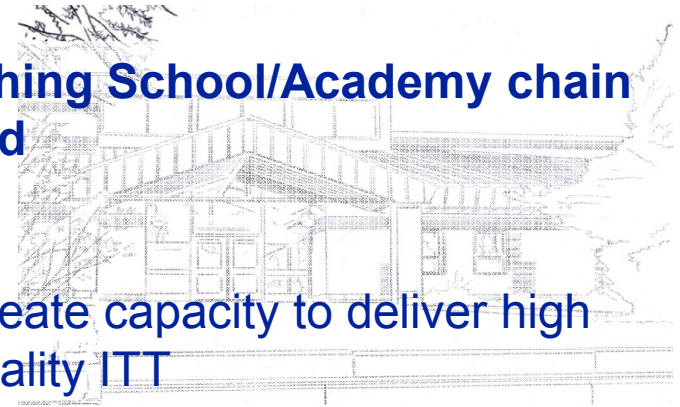
# Making it happen - Schools Direct

## University would



- Validate and award academic qualification /QTS designed with schools
- QA programmes
- Lead practice based research
- Develop and provide 'consultant level' expertise in subjects, phases and pedagogy

## Teaching School/Academy chain would



- Create capacity to deliver high quality ITT
- Assess requirement for new teachers across the Alliance
- Bid for and receive 'School Direct' places
- Recruit high quality graduates
- Commission HEI as partner in training programme
- Deploy outstanding teachers to demonstrate excellent practice and mentor across schools in the alliance

Joint appointments, clinical professors, ITT resources matched to relative contributions



# Discussion

