

Creating the Conditions for Exceptional Performance

Professor Deborah Eyre

February 2009

Overarching Themes

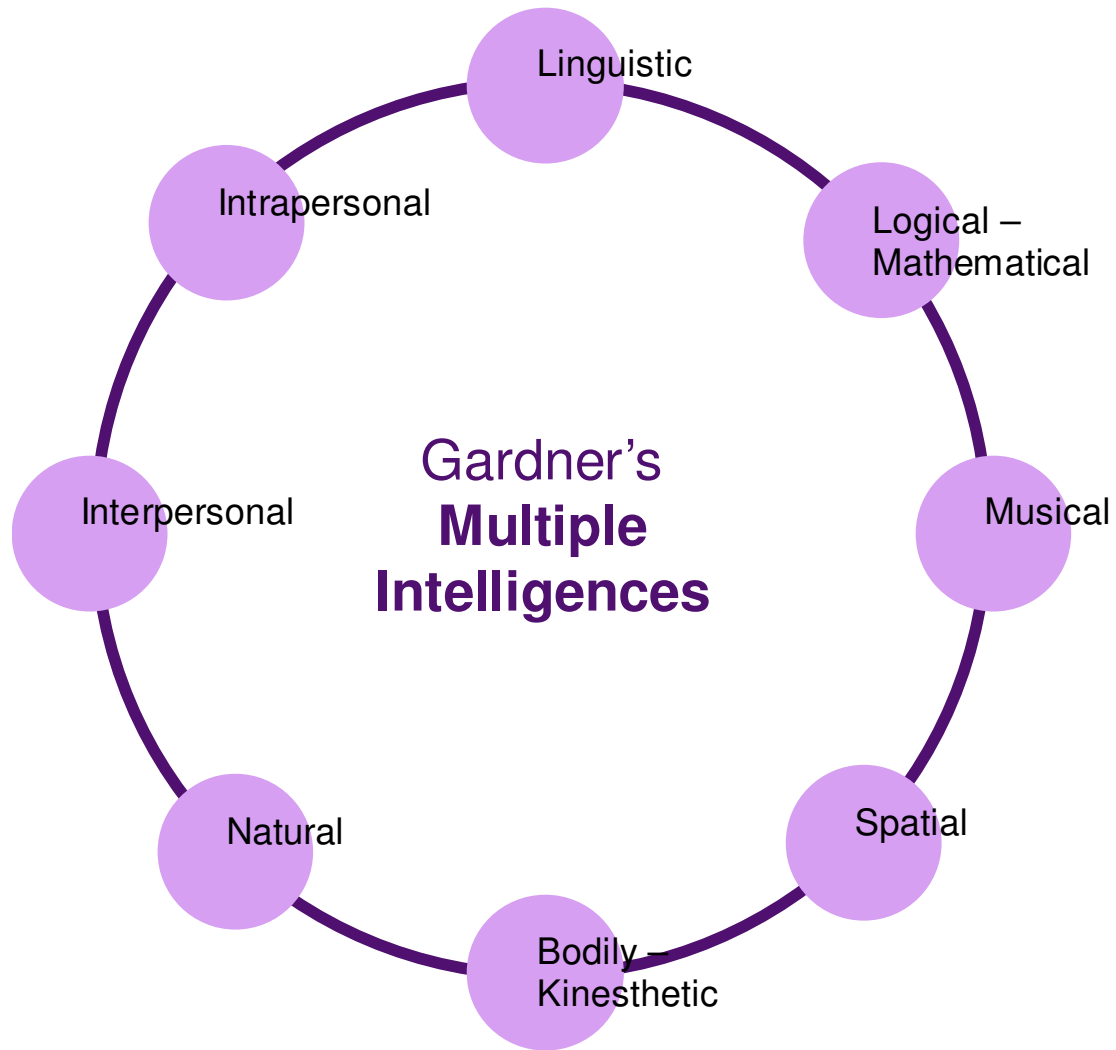


The psychology of giftedness

- conceptions of giftedness
- personality and cognitive features
- study of the subjects in childhood and adulthood.

Views on Ability

- **Horowitz** (1994) - field cannot agree on definition or how to measure ability
- **Lykken** (1998) - ability genetic and can be measured
- **Ericsson** (2007) no evidence of innate constraints in reaching high performance
- **Gardner** (1983) – ability is multidimensional
- **Sternberg** (2005) ability is intelligence, creativity and wisdom



Sternberg's Triarchic Theory

Analytic Intelligence = general intelligence. Ability to do I.Q. and similar tests.

Creative Intelligence = to think what others don't think (children are very good at this)

Practical Intelligence = ability to bring your intelligence to bear on practical problems or situations



Dispelling myths about gifted people

Bloom's (1982) contrary to popular belief, gifted adults were seldom child prodigies

Lohman. D.F., Korb. K.A. (2006) when cohorts of children are tested at a young age plus regularly retested over time, the scores show substantial year-to-year regression, disproving the common myth that a child considered gifted at aged 6 would still be considered gifted at 16.

Over the past one hundred years of study, psychological opinion re conceptions of giftedness has fragmented rather than converged and definitions are now numerous and often conflicting.

What are educators looking to identify?

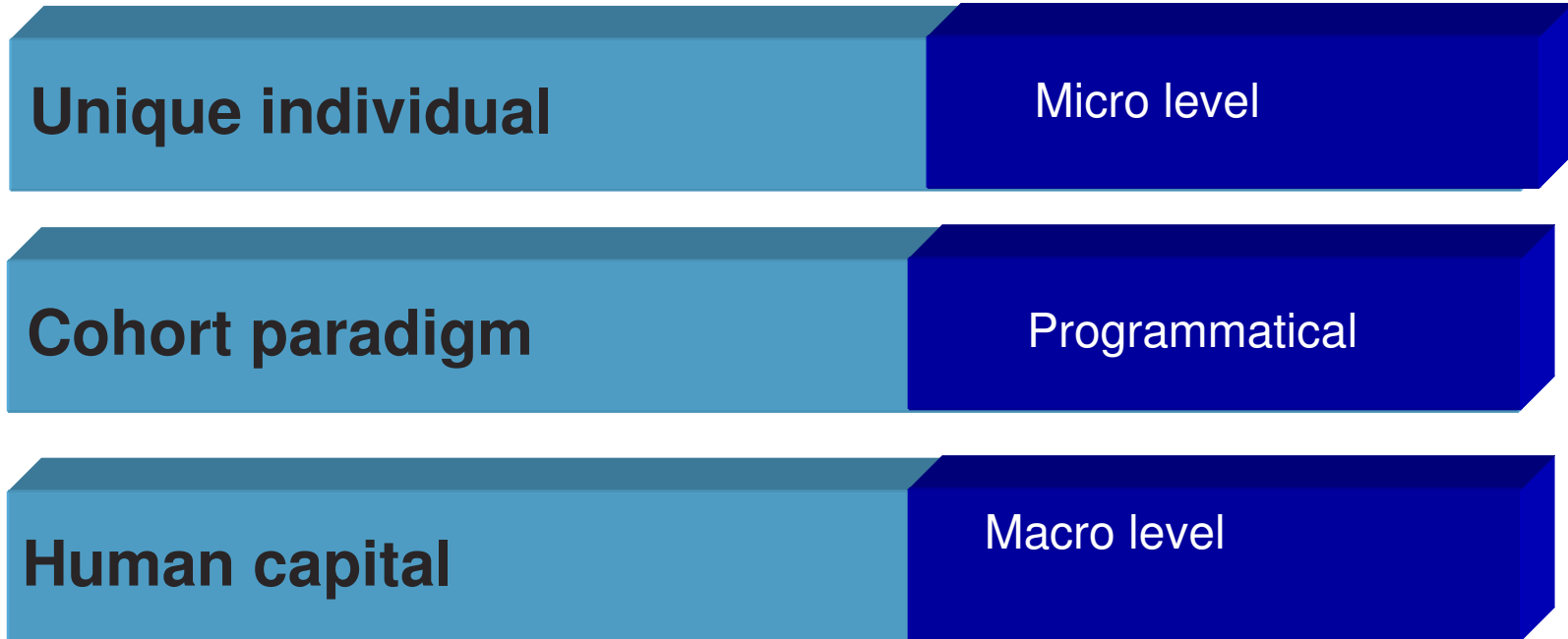
cognition – which elements, linguistic, spatial, numerical?

creativity – can it be measured?

general ability (g) - or is it multiple intelligences?

intellectual potential or current performance?

Three broad educational paradigms



Unique individual – child genius

- Micro level
- Unique education pathway for special person
- Education system of little importance



Cohort Paradigm

- Common characteristics of this group and differences from others
- Common learning needs
- Educational programmes for the gifted cohort
- Programmes separate from normal schooling: different in terms of concepts and content covered, skills developed and learning attitudes nurtured.



Key Issues for educators using the cohort paradigm

- Choosing the cohort
- Defining the learning conditions needed
- Designing the optimal curriculum offer
- Recognising the personal burdens that exceptional ability might bring

Educational Objectives for Gifted Programmes

- Gifted children should master important conceptual systems that are at the level of their abilities in various content fields.
- Gifted children should develop skills and strategies that enable them to become more independent, creative and self-sufficient searchers after knowledge.
- Gifted children should develop a joy and excitement about learning that will carry them through the drudgery and routine that is an inevitable part of learning.

Gallagher (1985 p80)

Arguments for and against the cohort paradigm

Benefits	Criticisms
Structurally coherent and hence ease of implementation	Inequality and bias in cohort selection
Raises awareness of the educational needs of gifted students	The effects of labelling on the individual
Provides an educational laboratory for developing 'gifted' pedagogy	'Gifted' pedagogy good for all not just the gifted
	De-motivating effect on those not in the cohort

Sternberg's view

- Traditional education tends to “shine the spotlight” on certain students almost all of the time, and on other students almost none of the time.
- The result is that some students are placed in a much better position to achieve than are others.
- The students who are not placed in an optimal position to achieve may be just as able to achieve at high levels as the students placed in a position to achieve.
- Moreover, the advantaged students will not necessarily be more successful later in life.

(Sternberg,2007)



© Professor Deborah Eyre 2009

The question?

We need a far greater proportion of our students to achieve at high levels.

Is it possible?

The Human capital paradigm

© Professor Deborah Eyre 2009

Meta-analysis of able pupils' learning

- Gifted pupils do not seem to use strategies that others never use
- Gifted pupils differ from others in the creativity and extent to which they draw upon a repertoire of intellectual skills that are nonetheless available to others
- They demonstrate expert performance by using met cognition, strategy flexibility, strategy planning, hypothesis, preference for complexity, extensive webbing of knowledge about both facts and processes
- They think like experts even though they may lack some of the skills of experts

Expert Performance

“The expert performance approach starts by identifying reproducibly superior performance and then works backwards to explain development of the mediating mechanisms.”

(Anders Ericsson et al June 2007)

It does not place a numerical limit on the number of students seen as capable of achieving exceptional levels of performance.

"From the outside, it seems like talented people don't have to put in a lot of effort. They make it look so easy," said Ericsson in a recent interview. "But when you look closely, the opposite is actually true. The best performers are almost always the ones who practice the most. I have yet to find a talented person who didn't earn their talent through hard work and thousands of hours of practice."

The Cambridge Handbook of Expertise and Expert Performance

(Ericsson et al, 2006)

The question?

How we create the conditions in schools that encourage exceptional levels of performance?

Is it possible?

The 4 minute mile analogy

1. **Diet** – right diet for right outcome
2. **Training, including practice** – properly devised and followed training regime
3. **Sports psychology** – aspiration, self-belief, self-knowledge, drive

The 4 minute mile analogy as related to education

1. Diet – **qualifications and curriculum framework**
2. Training, including practice – **pedagogy and skills development**
3. Psychology – **aspiration, self-belief, self-knowledge, drive**

How do we get to exceptional performance?

- 1. Structures**
- 2. Organisational culture**
- 3. Talent management**



National structures

Priorities of General Education

Expert Performance Dimension

School Improvement

Number of pupils reaching top grades in a school

Pupil Progress

Top pupils achieving good progression

Personalisation

Entitlement to challenging, individualised opportunities

Vocational Education

Diversity of arenas for success

School structures

- Advanced curriculum running alongside normal curriculum
- Advanced curriculum characterised by problem-solving, enquiry and creative tasks
- Teaching focused on developing high levels of subject knowledge plus the ability to 'use and apply' it
- Learners in active dialogue with their teachers encouraged to challenge ideas and deal with cognitive conflict
- Offer personalised wherever possible to offer choice
- No age-related ceilings imposed on achievement

Culture

- Ambitious aspirations on behalf of all students
- Rewards for high achievement in a variety of contexts
- Emphasis on striving and persisting and overt rewards for doing so – practice, practice, practice
- Openly appreciative of individuality – students and staff
- A learning environment where staff demonstrate the value of learning through their own engagement
- An academic climate that aims to build intellectual confidence in individuals and enables them to practice articulating and defending ideas

Management of Individuals

- Use of 'assessment for learning' techniques
- Regular review meetings between students and personal tutor (coach)
- Identified 'SMART' targets for improvement and timeframes for achievement
- Access to e-library of information, advice and guidance for secondary students
- Use of diagnostic tools to identify strengths and weaknesses



Human Capital

- Macro (system) level
- Gifted = those reaching high levels of performance
- Development significantly influenced by environmental and personality characteristics
- Advanced performance in a specific field as well as more generally (not g)
- Education provision primarily domain specific and integrated



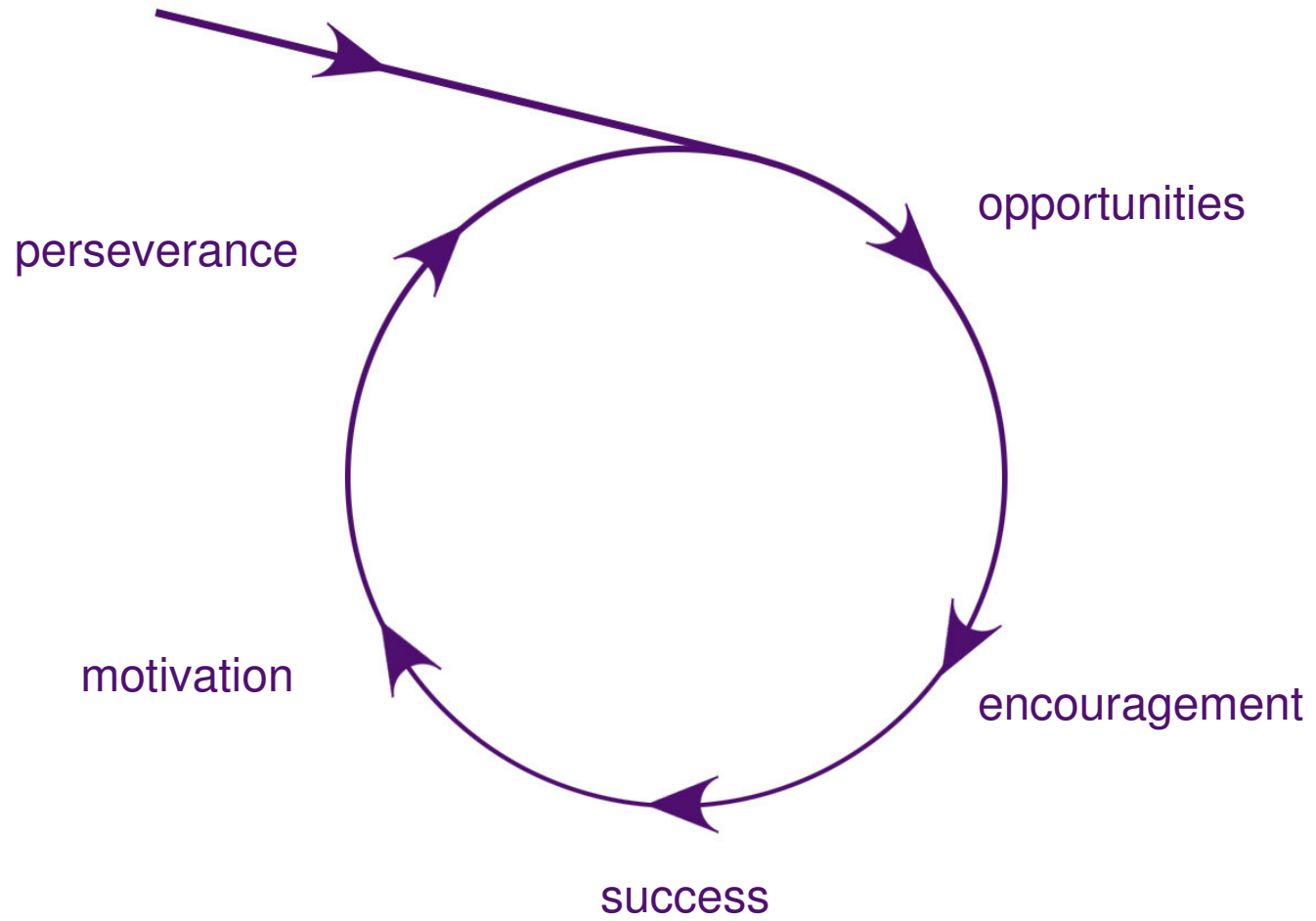
Arguments for and against the human capital paradigm

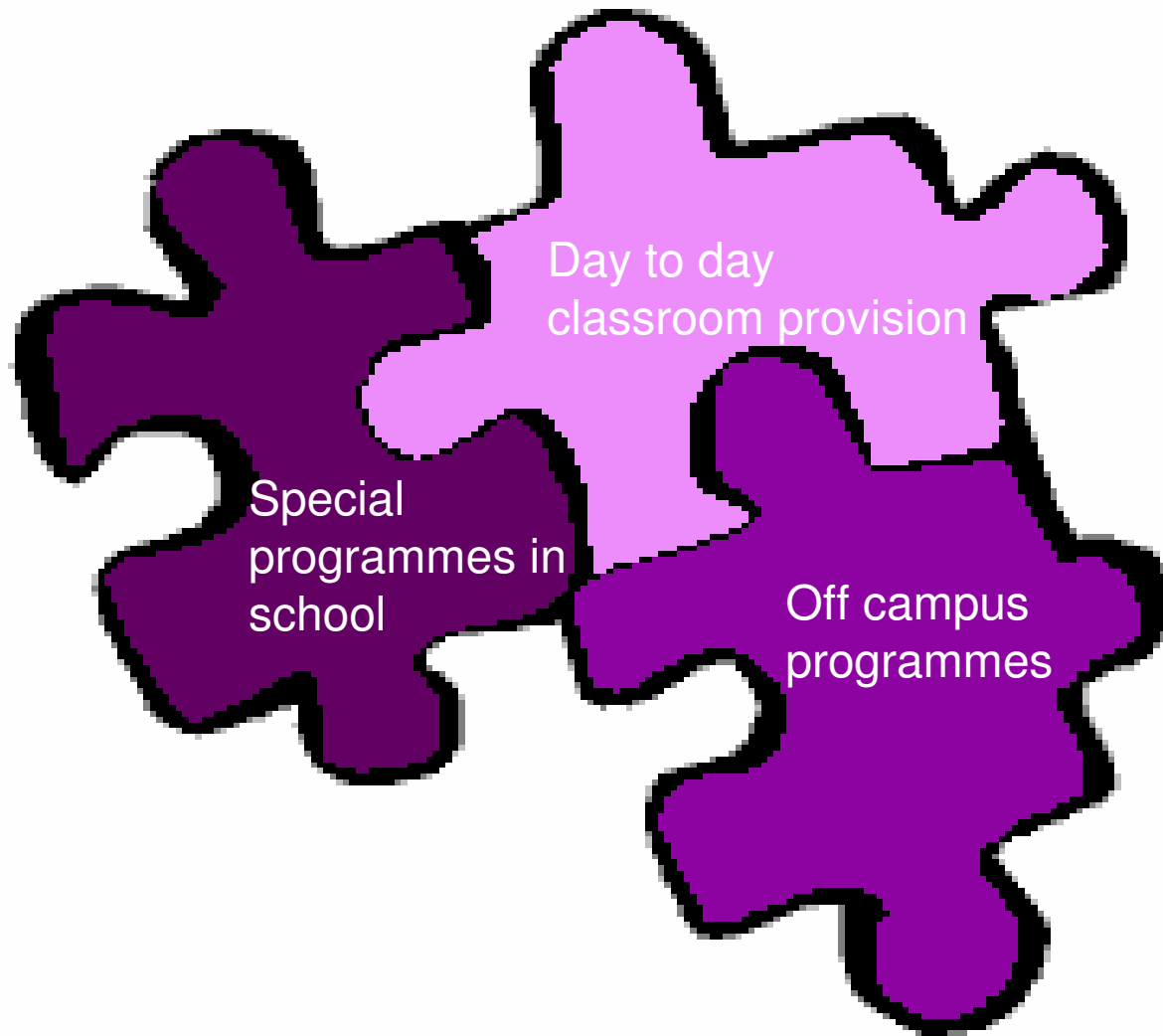
Benefits	Criticisms
Inclusive and part of overall school provision	Ambitious - less easy to implement fully and consistently
More comprehensive educational offer	Less coherent approach - complex
Allows for diversity within the cohort -can accommodate minority groups	Some elements of gifted education less visible
Less need to select at early stages	Relies of high quality teaching force
No cap of numbers seen as potentially gifted	May spread resource too thinly

“Meeting the educational needs of the gifted and talented is about building on good general school provision, not about providing something entirely different.”



Eyre (2001)





What might hold us back? (UK)

- 1. Beliefs about capacity to achieve** – outdated views on inherited ability
- 2. Fate and destiny in relation to educational outcomes** - socio-economic background and expected educational performance
- 3. Over focus on ‘floor level targets’** – insufficiently aspirational diet and training regime for the majority
- 4. Disconnect between academic and vocational** – all endeavours not seen as having both academic aspects and skills

Eyre's English Model





© Professor Deborah Eyre 2009