

OUTLINE

- I. Contextualising the discussion: Building the Foundation for a Transformed Economy and Society
- II. Some key findings: from ECD to competence formation
- III. Reflections on key aspects for a social compact: a holistic system approach to skills formation in and through education


Drivers of 21st century skills

Globalization

The changing nature of the economy

Related to changing nature of the economy is the changing nature of skills requirements – the idea of the knowledge economy

Technological change and innovation impacting social and cultural capital accumulation by young people



New Realities of Work in the 21st Century Economy

A changing world of work?

Mid to Late 20th Century

- *Permanent*
- *Stable Economy*
- *Loyalty*
- *"One and Done" Education*
- *Defined Benefit Pension*
- *"Early" Retirement*
- *Safety Net for Most*

Early 21st Century

- *Temporary/Contingent*
- *Volatile Economy*
- *Ambiguity/Disaffection*
- *Lifelong Learning*
- *Defined Contribution*
- *"Never" Retire*
- *Safety Net for Fewer*

“Skills have become the currency of 21st century economies”

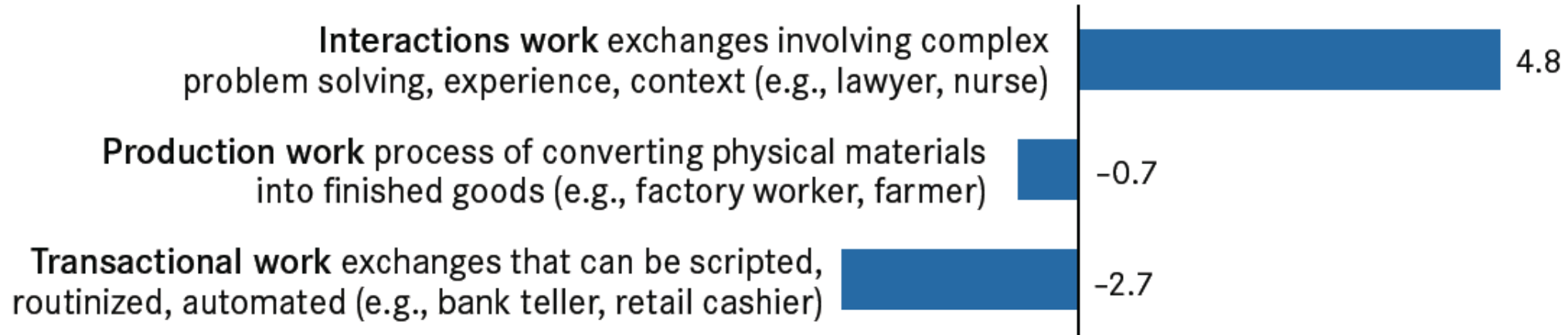
“Schools have to prepare students for jobs that have not yet been created, technologies that have not yet been invented and problems that we don’t yet know will arise”

Andreas Schleicher

Job growth across types of work

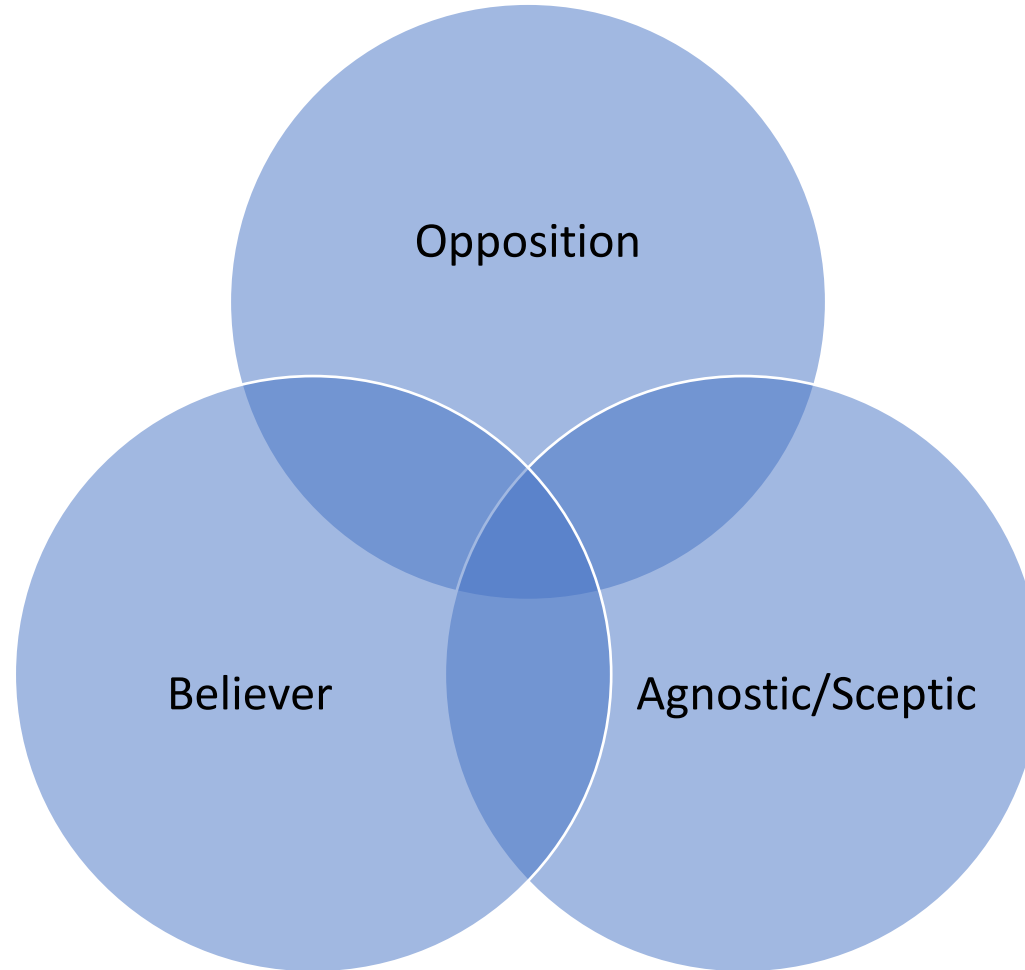
Job growth in the United States involves complex interactions, not routine production or standardized transactions.

New jobs created in the United States: 2001–2009 (millions of jobs)



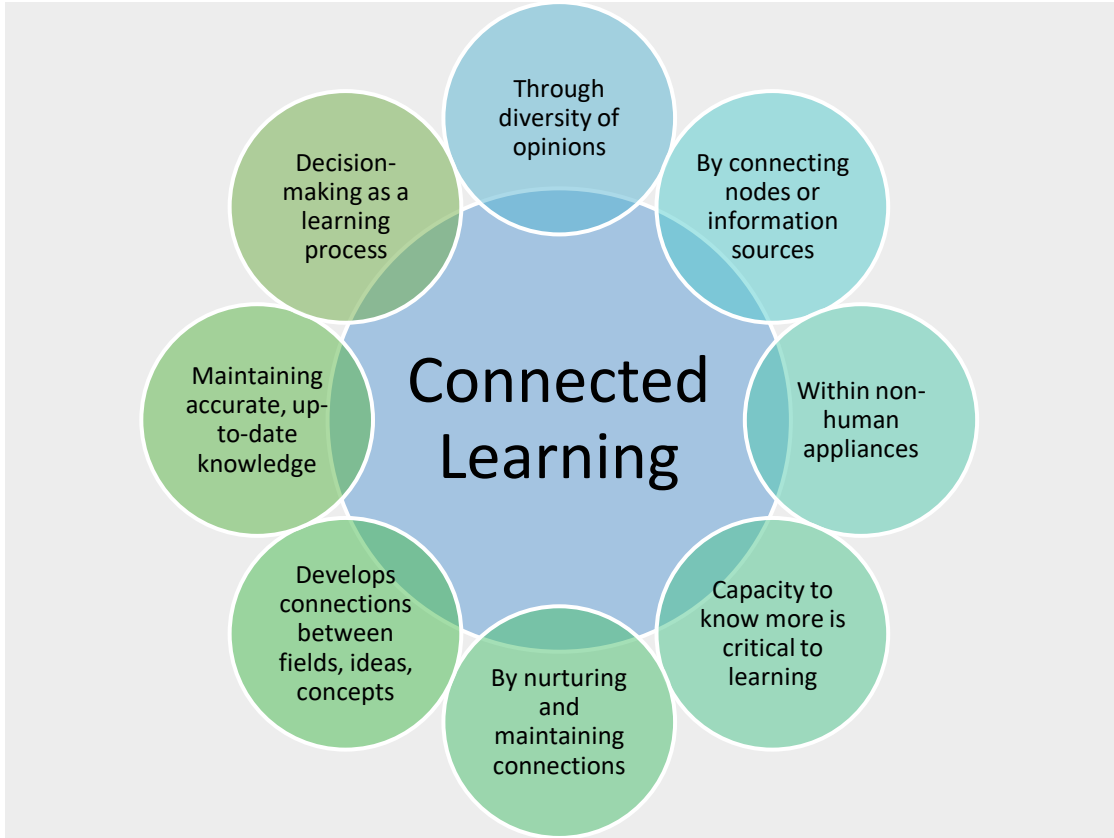
Sources: U.S. Bureau of Labor Statistics; McKinsey Global Institute analysis

Views on 21 century skills

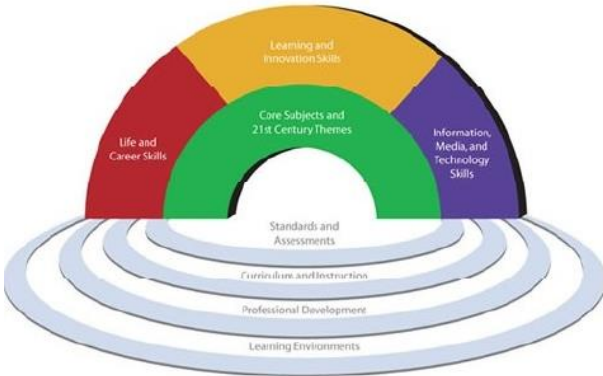


....but is this 15
years too late?

- No end to invoking the notion of 21st century as an adjective. In education
 - 21st century skills?
 - 21st century schools?
 - 21st century teaching?
 - 21st century knowledge?
 - 21st century teacher education?
 - 21st century teaching?
 - 21st century classrooms?
 - 21st century learners?
- Different positions: 'it is all the same' to everything is different'.
- From opposition to believing.
- Each generation believes that is on the cusp of history



Framework for 21st Century Learning



- Core Subjects and 21st Century Themes
- Life and Career Skills
- Learning and Innovation Skills
- Information, Media and Technology Skills

Skills & Attributes of Today's Learner

- Critical thinking & problem-solving
- Initiative & entrepreneurialism
- Curiosity and imagination
- Hope & Optimism
- Communication across networks
- Agility & adaptability
- Changes Ahead
- Grit HELLO HERE TO STAY!
- Resilience

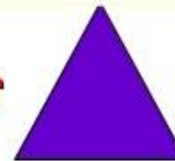
Unhelpful binaries

21st Century Learning

Teacher-directed
Direct Instruction
Knowledge
Content
Basic Skills
Theory
Curriculum
Individual
Classroom
Summative Assessments
Learning for School

Learner-centered
Collaborative Instruction
Skills
Process
Higher-order Thinking
Practice
Life Skills
Group
Community
Formative Evaluations
Learning for Life

A Better



Balance



Changing frameworks???

20th century: Knowledge stocks

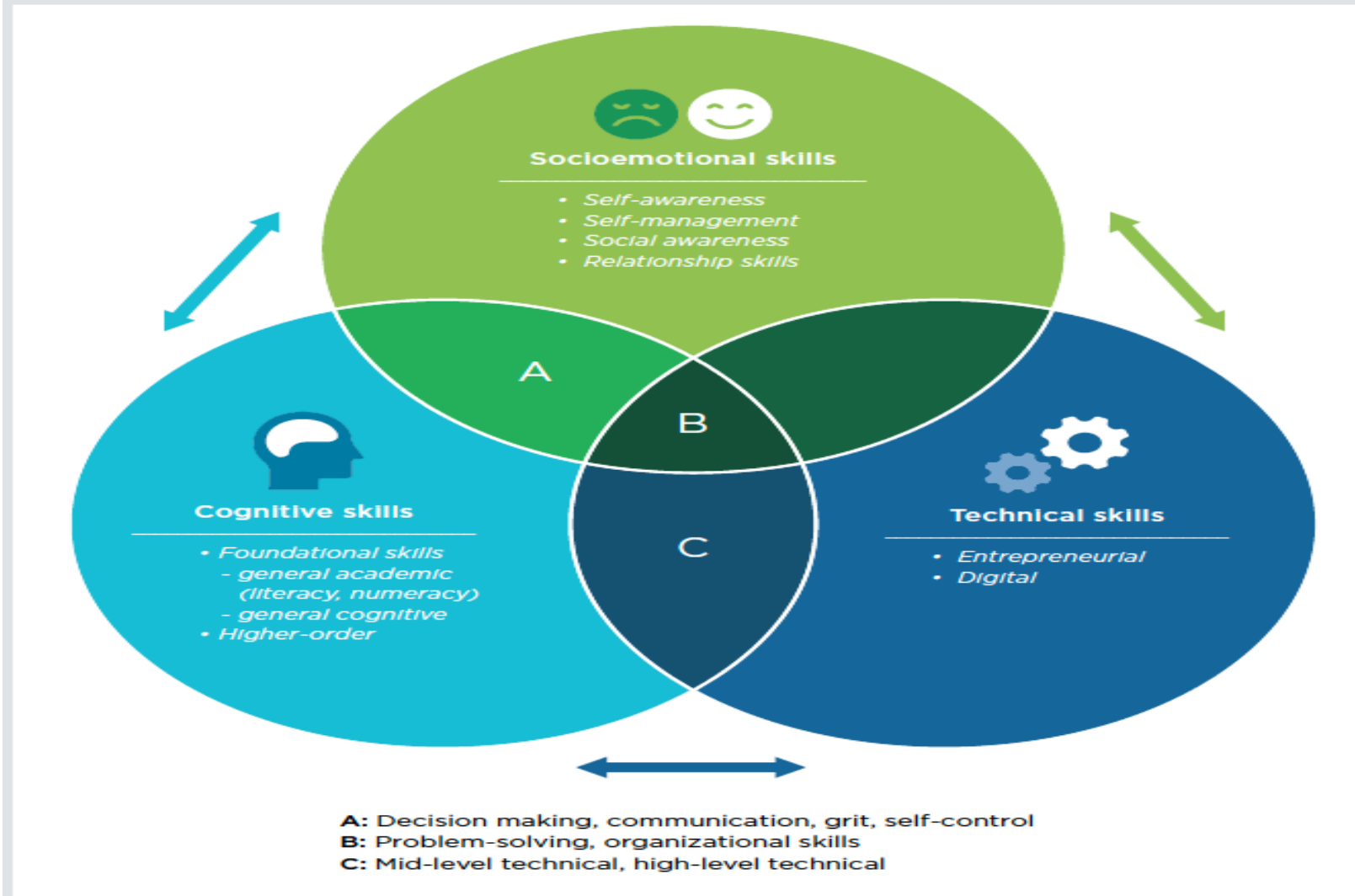
- Get the basics right before turning to broader skills
- Reproduce content knowledge
- Content is confined to narrow disciplines
- Teach the techniques to solve the problem
- Knowledge of routine cognitive skills is assessed
- Knowledge is stored up but not exploited

21st century: Knowledge Flows

- Flipped classroom frontloads challenge
- Learning pathways are multiple
- Content knowledge is ubiquitous
- Problem solving & decision-making
- Extrapolating knowledge to new situations
- Contextual knowledge is crucial
- Routine cognitive skills are digitalised, automated, outsourced
- Knowledge is energised and enriched by constant collaboration



Figure S3.1 Cognitive, socioemotional, and technical skills interact



Source: WDR 2018 team.

A consensus?

Kereluik et al provides a plausible way forward based on their meta review of the f
For main domains of learning for a solid foundation

Domain One: Core Knowledge

- Content knowledge
- Subject/disciplinary knowledge

Domain Two: Values and Social Cohesion

- Global Awareness
- Learning to live together and in the world
- Equity and social justice

Domain Three: Transversal skills

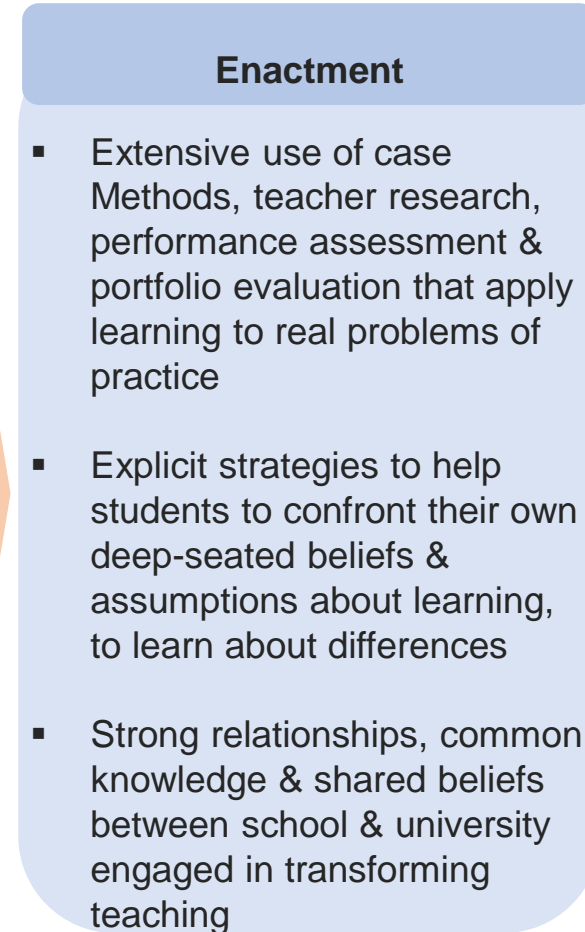
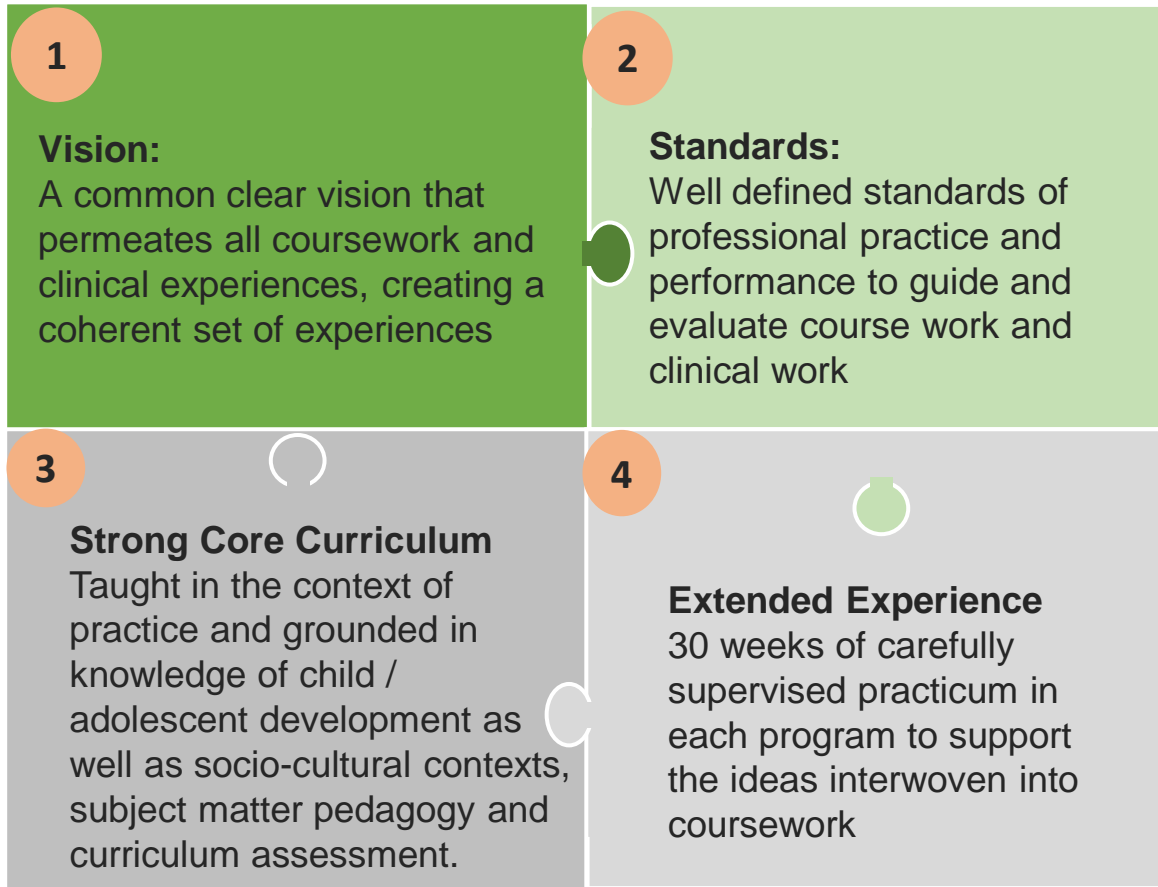
- Critical thinking
- Collaboration
- Communication

Domain Four: Critical Digital literacy skills

- Searching from multiple sources
- organising

Constructing a future Teacher Education agenda¹

Strong Preparation – develops adaptive expertise



Content:

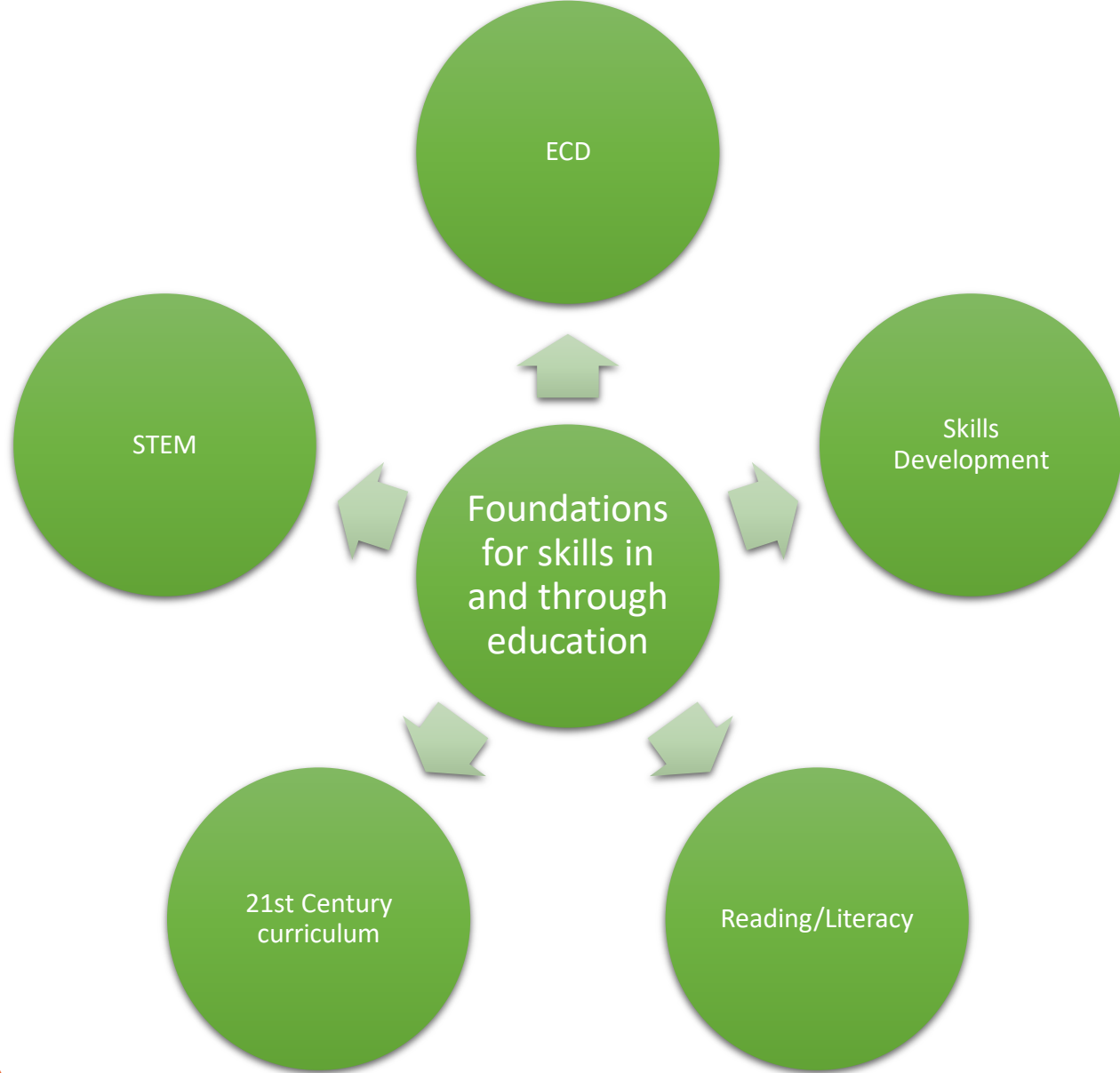
- Content knowledge is still important – teacher education still needs to prioritise content knowledge
- But need to ensure that other domains discussed above are a key component of teacher professional development. In particular the skills relating to collaboration, values, social cohesion

Modality

- Lifelong learning stronger and more effective partnership
- Between schools
- Between teacher education providers and schools
- And between schools and resources banks
- Integrating initial, induction, and ongoing professional development – a seamless continuum of professional development
- Moving more professional development to schools and encouraging and incentivizing school to school professional development

Maximizing use of technologies for professional development

- Mobile phones
- Peer to peer online discussion forums
- Online resource banks
- Create teacher and principal learning communities



Key takeaways 1

ECD

- Inequalities in ECD
- Policy – both in concept and scope and implementation
- Coordination across and between government departments and provider - link TVET and ECD centres
- Professionalising the sector – HHR plan – training workforce/providers
- leadership
- Clarity about the diverse and differentiated need across the age years of the child
-

Reading

- Inequality
- Problem of lack of reading competence
- Develop a structured national reading agenda
- Teacher development African language teaching in ITE
- Balancing the standardised approach with one that is culturally and linguistically sensitive
- Nurture a reading culture locally

Key takeaways 2

STEM

- Keep successful interventions on the go – Dianledi
- Teacher – multiple
- Prioritise STEM and ensure it is not displaced

Skills Pathway

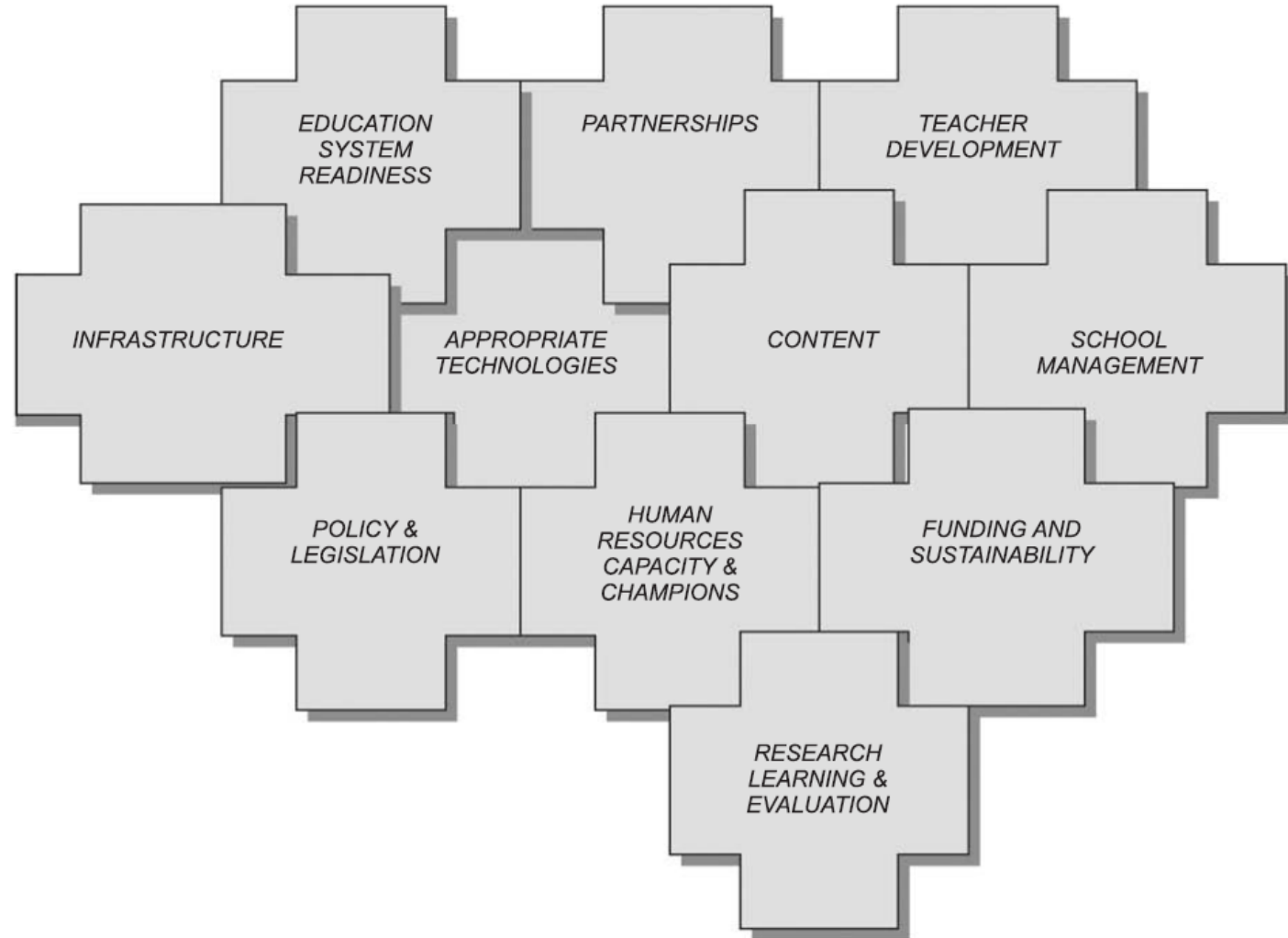
- Problem primarily of implementation – focus on the implementation plan of WPPSET
- link schools Post school skills training
- Address the status and conduct research on technical school
- Placement
- Reviews NQF level 4 vocational qualification – deal with clarity about all the qualification even the new ones proposed.
- 3 stream – address challenges
- Address the institutional configuration of the provision of skills focus in schooling and post schooling

Key takeaways 3

Competencies

- An integrated knowledge, skills, dispositions approach and meta learning
- Clarification of status of policies, and ideas e.g. 4iR
- Clarify new subjects such as coding
- develop a broad based understanding of 21st century competences
- Teachers and teacher development

A holistic approach and framing to the problem



Principles

Generally, albeit stated differently, each area notes the difficulty of realising a commitment to equitable and quality education. Through the data cited and the argument advanced, the major claim is that from inclusive growth is underpinned by relevant and quality education system which can promote meaningful learning and address intergenerational inequality and poverty. But this require system changes.

Resilience and crises: Resilient, equitable and quality education systems

All these issues are made more intense during times of COVID and crises in general. In this respect we need to consider some key issues across all the five dimensions

Three issues amongst many to consider in the social compact?

- What skills and competences are we talking in the context of crisis and pandemics
- How do we care for the vulnerable and young during crises
- What support teacher need for adjusting to new modulates of teaching as well as their own well being

Agree what the foundations are/the vision

- address some of the key conceptual issues
 - why only reading
 - reading wars
 - why science
 - ignorance of the affective and social dimensions
- Unpacking what is knowledge, skills and disposition for skills development

Review/change policy at several levels

- Technical root and branch review
- Conceptual clarity
- intertextuality of policy and interlinkages
- policy implementation

Focus on the professional and professionalisation: teacher

- Knowledge, skills and dispositions
- Initial and continuing education
- Communities of practice

Managing the change process

The role of the state

- Coordination between and within
- Labyrinth structure and maze
- multiple drives of change

Developing mechanisms of key changes

- function shift

Monitoring/knowledge generation

- Monitoring and data
- Engaging with reform
- Building the knowledge base and the research capacity for engaging with the themes of this HDRC

4 immediate actions

- i. Align actors around a common vision – to make the system ready and work for developing the skills all learners will need for the future
- ii. Determine the priority investment – the cognitive and the affective
- iii. Invest in teacher and educator to support them to deliver the skill needed
- iv. Invest in building the evidence base of what work, under what conditions, and for whom



THANK YOU



COMMENTS/QUESTIONS





Thank you



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