



# FUTURE OF SKILLS

EMPLOYMENT IN 2030

# Future Skills - research programme

- Pearson – NESTA – Oxford Martin School
- Most comprehensive research project on this topic to date
- Better predicts how major societal and economic trends—and the interactions between them will affect the future of work
- Moves the conversation about the future of work past the negativity about automation



**Robots Aren't Replacing Most Humans Anytime Soon**

# Methodology

Global Trend Analysis

To ensure the successful delivery of results from a cost efficient platform

Expert insight workshops

Delivering accurate learner outcomes by putting technology at the heart of data capture

Predicting job demand

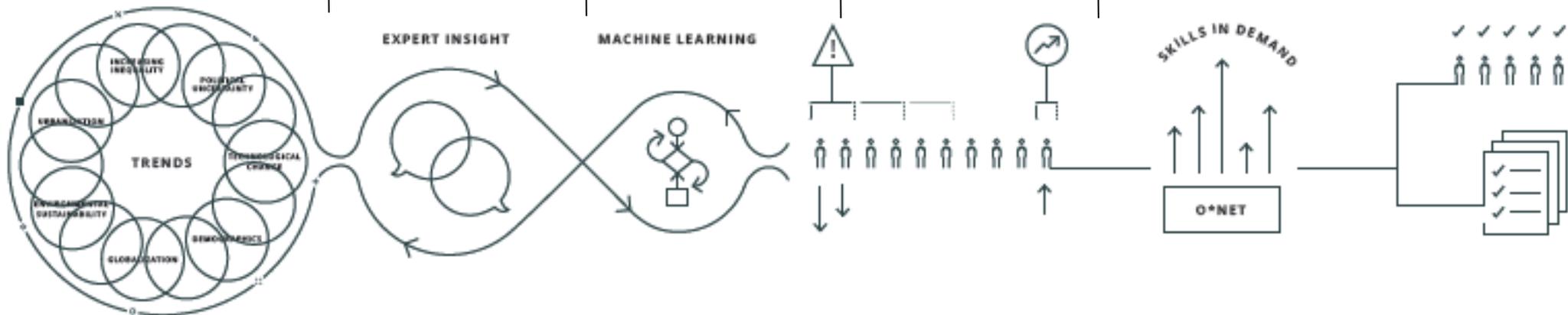
To use the Pearson values to drive performance & development of ourselves and one another

Predicting skills

To deliver continual improvement in all aspects of our business

Education and training policy and practice

Right result, on time, every time



Global



Trends

# Results

- One-fifth of the workforce are in occupations that are likely shrink
  - Manufacturing production, administrative and sales occupations are expected to become less important in the workforce
- One-tenth of the workforce are in occupations that are likely to grow
  - Agriculture, skilled trades and construction occupations – opportunities throughout the skills ladder
  - Elementary services and hospitality are likely to continue to grow in importance
  - Education, health care and public sector could grow due to an ageing population and an appetite for lifelong learning
  - Creative, digital, design and engineering occupations have bright outlooks and are strongly complimented by digital technology

## THE TOP 10 OCCUPATIONS PREDICTED TO EXPERIENCE INCREASED DEMAND THROUGH 2030

### UK

- 1 Natural And Social Science Professionals
- 2 Food Preparation And Hospitality Trades
- 3 Teaching And Educational Professionals
- 4 Sports And Fitness Occupations
- 5 Managers And Proprietors In Hospitality And Leisure Services
- 6 Engineering Professionals
- 7 Health And Social Services Managers And Directors
- 8 Public Services And Other Associate Professionals
- 9 Artistic, Literary And Media Occupations
- 10 Health Associate Professionals

### USA

- 1 Preschool, Primary, Secondary, And Special Education School Teachers
- 2 Animal Care And Service Workers
- 3 Lawyers, Judges, And Related Workers
- 4 Postsecondary Teachers
- 5 Engineers
- 6 Personal Appearance Workers
- 7 Social Scientists And Related Workers
- 8 Counselors, Social Workers, And Other Community And Social Service Specialists
- 9 Librarians, Curators, And Archivists
- 10 Entertainers And Performers, Sports And Related Workers

## THE TOP 10 SKILLS, ABILITIES, AND KNOWLEDGE ASSOCIATED WITH RISING OCCUPATIONS

### UK

- 1 Fluency of Ideas
- 2 Judgement and Decision Making
- 3 Originality
- 4 Active Learning
- 5 Systems Evaluation
- 6 Learning Strategies
- 7 Complex Problem Solving
- 8 Critical Thinking
- 9 Systems Analysis
- 10 Deductive Reasoning

### USA

- 1 Learning Strategies
- 2 Psychology
- 3 Instructing
- 4 Social Perceptiveness
- 5 Sociology and Anthropology
- 6 Education and Training
- 7 Coordination
- 8 Originality
- 9 Fluency of Ideas
- 10 Active Learning

# Results

- The identification of the bundles of skills, abilities and knowledge areas that are most likely to be important in the future
- Confirm the importance of 21<sup>st</sup> Century skills; a combination of interpersonal and cognitive skills
- Occupations and their skill requirements are not set in stone. Occupations can be re-designed to pair uniquely human skills with the productivity gains from technology
- Boost demand for jobs; occupation redesign coupled with workforce re-training could promote growth in these occupations
- Provides information that educators, employers and governments can use for strategic and policy making purposes

# Action for policy makers

- Identifying the skills investments that will have the greatest impact on occupational demand
- Facilitate the regular review of professional standards to support occupation redesign – bringing educators and employers together
- Capture data on occupational trends and demands
- Develop policies to facilitate the introduction of human skills in teaching and learning in TVET
- Establish culture for lifelong learning; the single degree will not be everlasting

# Action for educators

- Adapting faster to the changing needs of the labour markets
- Offer more flexible and adaptive pathways
  - Retraining courses
  - Short intensive courses so they can be transferred and applied in employment more rapidly
  - Digital badges
- 21<sup>st</sup> Century skills - education systems will need to support better understanding, teaching practice, and assessment of the granular skills that will be in greater demand
- Retooling teachers to develop pedagogies to support dynamic knowledge and skills development

# Action for employers

- Redesigning roles to balance technology and human resources
- Proactively redesign the jobs most at risk
- Define the skills, knowledge and types of abilities which will experience both growth and decline
- Determine at the occupational level, which human capital investments will most likely to boost future demand.
- Moving beyond the degree as a the primary signal of employability and increase the recognition of TVET

# Conclusion

- Technological change – threat but also it amplifies human performance in some occupations – gives rise to entirely new occupations and sectors
- Investment in skills must be at the centre of any long-term strategy for structural change
- Precondition for this is good information on skills needs; try to generate predictions for occupational growth
- Without it policy makers are flying blind
- Focus on the skills opportunities and boosting growth rather than just the risks and dangers
- Ensure that TVET systems are agile enough to respond appropriately



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