Scottish Funding Council
Promoting further and higher education

Developing Human Skills- Meta Skills and Graduate Attributes

Purpose

1.   This paper updates the Committee on recent and ongoing activity to enhance learners' meta-skills and graduate attributes, and seeks its advice on how this work might develop.

Background

2.   SFC and SDS are working together to ensure that Scotland's learners have the opportunity to develop those skills and attributes necessary to enable them to thrive in an ever-complex and uncertain world where advances in technology are driving economic change at a pace. Both organisations are committed to their vision of a 'Human Future' focused on maximising Scotland's human capital.

3.   In its *Strategic Framework*[1], SFC states that it will 'work more closely, and with greater synergy, with Skills Development Scotland and our tertiary institutions to develop a more dynamic, responsive skills ecosystem that helps to create an adaptive, resilient and future-proofed workforce.' And SDS asserts in *Scotland 2035: A Human Future*[2], it is committed to developing a 'joint understanding which will create the foundation of a shared vision for skills in 2035, so we can invest now in leveraging the innate human characteristics, or 'meta-skills' which will drive Scotland's future success'.

4.   By 'meta-skills' we mean those uniquely human skills – for example: creativity, curiosity, empathy, communication – which enable individuals to be adaptive and responsive to the changing requirements of the work place, regardless of context. Meta-skills are behavioural / cognitive skills, rather than competency-based skills and are developed through experience.

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[1] http://www.sfc.ac.uk/about-sfc/strategic-framework/strategic-framework.aspx
[2] https://www.skillsdevelopmentscotland.co.uk/a-human-future-strategic-plan/scotland-2035-a-human-future/

SDS and meta-skills

5.   SDS has been working to create a meta-skills framework, highlighting those skills considered to be important for individuals to develop across their learner journey. This framework attempts to formalise a standardised approach from early years/primary school to upskilling and reskilling within employment, and including both FE and HE provision, (see the **Annex A**).

6.   At present, SDS is focussing on approaches to developing and assessing meta-skills in the workplace and have developed a Strategy for Future Standards and Frameworks in Scottish apprenticeships which proposes a layered model of standards with meta-skills at the core of each layer. The focus of this work is to build high performing workplaces and employees by incorporating meta-skills into experiential learning in the workplace. Further phases of iterative development will follow, until the optimum model is reached.

SFC and meta-skills

7.   SFC's most recent mapping exercise identified how Curriculum for Excellence Level 3/4 'experiences' (expected to be reached between S1-S3) related to the meta skills identified by the framework. The exercise identified that some key meta-skills were lacking in the CfE framework (Leading, Adapting and Initiative). The mapping also showed, however, a particular strength of CfE in developing meta-skills under the pillar of Innovation, particularly under the themes of *Critical thinking* and *Sense making*.

8.   SFC will continue to explore how the proposed meta-skills framework maps on to the different stages of individual's learning experiences, and through this, identify areas where support to develop programme activity may be needed.

Graduate attributes, qualities and skills

9.   QAA Scotland chose Graduate Skills as the subject of its 2019 'Focus On' project, a series of sector wide developmental activities, resources and events. *Focus On Graduate Skills*[3] draws together common themes identified from across the sector through the current cycle of Enhancement-led Institutional Reviews (ELIR).

10. Following consultation with institutions and student associations three priority areas for the Focus On project were identified:

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[3] https://www.qaa.ac.uk/scotland/focus-on/graduate-skills

- *Readiness for Employment*: how can we most effectively embed skills inside and outside the curriculum, including digital skills, for graduates from all disciplines?

- *Equality and Diversity:* how can we support students from all backgrounds and characteristics to develop skills that will help them to secure and sustain success in the workplace?

- *Global Perspective:* how do we ensure that all Scottish graduates are enabled to live and work in a global society, and that the Scottish sector is informed by global developments?

11. *Focus On Graduate Skills* builds on the previous cross sector work included in the *Graduates for the 21st Century Enhancement Theme*[4] (G21C). A key outcome of this Theme has been a shared understanding of the attributes and qualities needed by 21st century graduates, (see **Annex B**). While each institution's articulation of its graduates' attributes will reflect its own distinct mission and ethos, a shared understanding of these common threads can read across the whole.

Questions to consider

12. What advice would members offer SFC and SDS to enhance the sectors' engagement with the development and integration of 'human skills' in the curriculum?

13. What challenges or opportunities are there for taking this work forward?

Further information

14. Contact: Pamela Forbes, Senior Policy/Analysis Officer, tel: 0131 313 6545, email: pforbes@sfc.ac.uk.

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[4] https://www.enhancementthemes.ac.uk/completed-enhancement-themes/graduates-for-the-21st-century

Annex A

SDS Meta-skills Framework

Skills for the future: Meta-skills

Timeless, higher order skills that support the development of additional skills and promote success in whatever context the future brings

Self management
Taking responsibility for your own behaviour and wellbeing

Social intelligence
Awareness of others' feelings, needs, and concerns in order to effectively navigate and negotiate complex social relationships and environments

Innovation
The ability to define and create significant positive change

Focussing
The ability to manage cognitive load by filtering and sorting information in order to maintain a sense of focus in an age of information overload and constant change

— Sorting
— Attention
— Filtering

Communicating
The ability to openly and honestly share information in a way that creates mutual understanding about others' thoughts, intentions and ideas

— Receiving information
— Listening
— Giving information
— Storytelling

Curiosity
The desire to know or learn something in order to inspire new ideas and concepts

— Observation
— Questioning
— Information sourcing
— Problem recognition

Integrity
Acting in an honest and consistent manner based on a strong sense of self and personal values

— Self awareness
— Ethics
— Self control

Feeling
Considering impact on other people by being able to take a range of different thoughts, feelings and perspectives into account

— Empathy
— Social conscience

Creativity
The ability to imagine and think of new ways of addressing problems, answering questions or expressing meaning

— Imagination
— Idea generation
— Visualising
— Maker mentality

Adapting
The ability and interest to continue to enlarge knowledge, understanding and skills in order to remain adaptive and resilient as circumstances change

— Openness
— Critical reflection
— Adaptability
— Self-learning
— Resilience

Collaborating
The ability to work in coordination with others to convey information and tackle problems

— Relationship building
— Teamworking & collaboration
— Social perceptiveness
— Global & cross-cultural competence

Sense making
The ability to determine the deeper meaning or significance of what is being expressed and to recognise wider themes and patterns in information

— Pattern recognition
— Holistic thinking
— Synthesis
— Opportunity recognition
— Analysis

Initiative
Readiness to get started and act on opportunities built on a foundation of self belief

— Courage
— Independent thinking
— Risk taking
— Decision making
— Self belief
— Self motivation
— Responsibility
— Enterprising

Leading
The ability to lead others by inspiring them with a clear vision and motivating them to realise a vision

— Inspiring others
— Influencing
— Motivating others
— Developing others
— Change catalyst

Critical thinking
The ability to evaluate and draw conclusions from information in order to solve complex problems and make decisions

— Deconstruction
— Logical thinking
— Judgement
— Computational thinking

Annex B

Graduate attributes in Scottish Higher Education Institutions

- **Lifelong learning:** equipping students with the ability and interest to continue to enlarge their knowledge, understanding and skills throughout their working lives.

- **Research, scholarship and enquiry**: providing students with a sound grasp of how new understanding is generated in a given field or subject area through experiment and empirical investigation, and the ability to apply a systematic and critical assessment of complex problems and issues.

- **Employability and career development**: developing students' knowledge, skills and qualities relevant to chosen career paths and to those paths which may open up in the future, enabling each to succeed in a rapidly changing workplace.

- **Global citizenship**: encouraging a capacity to thrive in a globalised society and economy, and an awareness of cultures beyond and different to one's own.

- **Communication and information literacy**: cultivating students' abilities to communicate effectively their knowledge, understanding and skills, in a range of settings, and using a variety of media; and formulating, evaluating and applying evidence-based solutions and arguments.

- **Ethical, social and professional understanding**: nurturing a reflective awareness of ethical dimensions, and responsibilities to others, in work and everyday life.

- **Personal and intellectual autonomy:** developing a capacity to think independently, exercise personal judgment and take initiatives.

- **Collaboration, teamwork and leadership:** cultivate skills for working in teams and groups, and leading where appropriate.