

# DF<sup>2</sup> – Designing Futures Framework for Student Development

University of Galway Graduate Attribute Domain	Designing Futures Domain	Associated Construct	Learning Outcomes/Opportunities
Knowledge - Academic achievement and expertise.	Within DF there are a range of various transdisciplinary and interdisciplinary learning opportunities	Excellence – University of Galway strategy UNSDG – 3, 4, 8, 9, 11, 12 and 13	For up to date listing of Designing Futures Modules See <a href="https://www.universityofgalway.ie/designingfutures/personalisedstudentjourney/transdisciplinarymodules/">https://www.universityofgalway.ie/designingfutures/personalisedstudentjourney/transdisciplinarymodules/</a>
kills - Communication skills in a variety of contexts, styles & media	Communication	Networking Listening Trust Collaboration Communicate Deliberately (Schmutte & Yu Harte, 2019) Remote Collaboration Elevator Pitch as part of building Personal brand Learn to paraphrase Identify who audience is for presentation and key messages they want to hear Adapt language to sector i.e. language required for health science is different to engineering etc.	<ul style="list-style-type: none"> <li>• Asking questions and actively listening</li> <li>• Clearly and concisely articulating ideas or messages</li> <li>• Using and understanding nonverbal communication</li> <li>• Communicating via multiple modes (digitally, orally, etc.)</li> <li>• Empathizing with audiences and adapting messages accordingly</li> </ul> (Centre for Curriculum Redesign, 2019))
	Empathy	Learn from Others (Schmutte & Yu Harte, 2019) <i>Be curious on how other people think</i> <i>Authentic listening</i> <i>Open-Mindedness</i> Be influenced by other peoples thoughts and feeling	<ul style="list-style-type: none"> <li>• The understanding of another person's emotions, experiences and values, and the provision of appropriate responses</li> <li>• Awareness of another person's emotions, experiences and values</li> <li>• Understanding another person's emotions and experiences, and the ability to proactively take their perspective</li> </ul>

			<ul style="list-style-type: none"> <li>• Responsiveness to another person's emotions and experiences, being conscious that group belonging influences one's attitude</li> </ul> <p>(Sala et al, 2020, p.20)</p>
Skills - Ability to make sense of complex information from a variety of sources	Critical Thinking	<p>Problem Solving Analytical Thinking Attention to Detail &amp; Synthesize Information Move between the concrete and abstract (Schmutte &amp; Yu Harte, 2019)</p> <p>Understand links between ideas Identify inconsistencies Reflect on justification of own assumptions</p>	<ul style="list-style-type: none"> <li>• Assessment of information and arguments to support reasoned conclusions and develop innovative solutions</li> <li>• Awareness of potential biases in the data and one's personal limitations, while collecting valid and reliable information and ideas from diverse and reputable sources</li> <li>• Comparing, analysing, assessing, and synthesising data, information, ideas, and media messages in order to draw logical conclusions</li> <li>• Developing creative ideas, synthesising and combining concepts and information from different sources in view of solving problems</li> </ul> <p>(Sala et al, 2020, p.20)</p>
	Business Acumen	<p>Commercial Awareness Customer Service Be able to see the bigger picture Understand frameworks and ecosystems patterns Understand performance drivers and value of metrics</p>	<ul style="list-style-type: none"> <li>• Creative problem solving</li> <li>• Strategic thinking</li> <li>• Networking</li> <li>• Team working</li> </ul> <p>(IBEC, 2018, p. 11)</p>
	Digital Skills	<p>Data Analysis &amp; visualisation Security implications MS Office Applications</p>	<ul style="list-style-type: none"> <li>• Information and data literacy</li> <li>• Communication and collaboration</li> <li>• Digital content creation:</li> <li>• Safety</li> <li>• Problem solving</li> </ul> <p>(Vuorikari et al. 2022, p.4)</p>

Skills - Creative, enterprising and resourceful	Creativity	<p>Creative Agency Experiment Rapidly (Schmutte &amp; Yu Harte, 2019)</p> <p>Crafting, delivering and presenting solutions Ambitious for change Use of lateral thinking especially in STEAM</p>	<ul style="list-style-type: none"> <li>Find sources of creative inspiration not obviously related to a given problem</li> <li>Effectively work on a problem that does not have an obvious solution</li> <li>Change the definition of a problem you are working on</li> <li>Shape or change your external environment to help you be more creative</li> <li>Share your work with others before it is finished</li> <li>Try and approach to a problem that many not be the final or best solution</li> <li>Continue work on a problem after experiencing a significant failure</li> <li>Help others be more creative</li> <li>Identify and implement ways to enhance your own creativity</li> <li>Explicitly define or describe your creative process</li> <li>Solve problems in ways that others would consider creative</li> </ul> <p>(Royalty et al. 2014, p.90)</p>
	Entrepreneurial Thinking	<p>Spotting Opportunities Design work (Schmutte &amp; Yu Harte, 2019)</p> <p>Sell ideas to others Mobilise people and resources</p>	<ul style="list-style-type: none"> <li>Identify and seize opportunities to create value by exploring the social, cultural and economic landscape</li> <li>Identify needs and challenges that need to be met</li> <li>Establish new connections and bring together scattered elements of the landscape to create opportunities to create value</li> </ul> <p>(Bacigalupo et al, 2016, p.12)</p>
	Innovative Thinking	<p>Vision Build and craft intentionally (Schmutte &amp; Yu Harte, 2019)</p> <p>Demonstrate originality and find new ways to express ideas Collaborate with others and use skills to turn ideas into reality</p>	<ul style="list-style-type: none"> <li>Imagine the future</li> <li>Develop a vision to turn ideas into action</li> <li>Visualise future scenarios to help guide effort and action</li> <li>Judge what value is in social, cultural and economic terms</li> <li>Recognise the potential an idea has for creating value and identify suitable ways of making the most out of it</li> </ul> <p>(Bacigalupo et al, 2016, p.12)</p>

Skills - Teamwork. Collaboration, and effective leadership	Leadership	Interpersonal & Intra-personnel competencies Comfortable with risk taking Risk mitigation Solicit buy in from stakeholders	<ul style="list-style-type: none"> <li>• Determining challenges and setting goals</li> <li>• Managing power ethically</li> <li>• Thinking strategically to best utilize resources (people and material)</li> <li>• Evaluating team outcomes and adapting accordingly</li> <li>• Respectfully collaborating with others</li> <li>• Contributing to the broader group or community</li> <li>• Sharing one's vision and inspiring others</li> </ul> <p><i>(Centre for Curriculum Redesign)</i></p>
	Teamwork	Reliability Interpersonal skill Collaboration Communication planning Appreciate Team dynamics	<ul style="list-style-type: none"> <li>• Taking and sharing responsibility with others</li> <li>• Utilizing each individual's unique skills and perspectives</li> <li>• Navigating and resolving interpersonal conflict</li> <li>• Giving and receiving constructive feedback</li> <li>• Empathizing with and actively supporting team members</li> </ul> <p><i>(Centre for Curriculum Redesign)</i></p>
	Project Management	Taking the Initiative Planning and Management Goal setting Time Management Organisation & Planning Effective Status reporting to all stakeholders Resource planning Draft project plans with key milestones, dependencies etc	<ul style="list-style-type: none"> <li>• Initiate processes that create value</li> <li>• Take up challenges</li> <li>• Act and work independently to achieve goals, stick to intentions and carry out planned tasks</li> <li>• Set long-, medium- and short-term goals</li> <li>• Define priorities and action plans</li> <li>• Adapt to unforeseen changes</li> </ul> <p><i>(Bacigalupo et al, 2016, p.13)</i></p>
	Negotiation	Collaboration Conflict Resolution Active listening	<ul style="list-style-type: none"> <li>• Engagement in group activity and teamwork acknowledging and respecting others</li> <li>• Intention to contribute to the common good and awareness that others may have different cultural affiliations, backgrounds, beliefs, values, opinions or personal circumstances</li> <li>• Understanding the importance of trust, respect for human dignity and equality, coping with conflicts and negotiating disagreements to build and sustain fair and respectful relationships</li> </ul>

			<ul style="list-style-type: none"> <li>Fair sharing of tasks, resources and responsibility within a group taking into account its specific aim; eliciting the expression of different views and adopting a systemic approach</li> </ul> <p><i>(Sala et al, 2020, p.20)</i></p>
Disposition - Personal Commitment to Lifelong Learning	Self-Awareness	Intrapersonal skills: how you are perceived by others Values, interests and traits Wellbeing	<ul style="list-style-type: none"> <li>Understanding and regulation personal emotions, thoughts, and behaviour, including stress responses</li> <li>Nurturing optimism, hope, resilience, self-efficacy and a sense of purpose to support learning and action</li> <li>Pursuit of life satisfaction, care of physical, mental and social health and adoption of a sustainable lifestyle</li> <li>Awareness that individual behaviour, personal characteristics and social and environmental factors influence health and wellbeing</li> <li>Understanding potential risks for wellbeing and using reliable information and services for health and social protection</li> <li>Adoption of a sustainable lifestyle that respects the environment, and the physical and mental wellbeing of self and others, while seeking and offering social support.</li> </ul> <p><i>(Sala et al, 2020, p.20)</i></p>
	Resilience	Motivation Perseverance Positive Attitude Ability to bounce back and reflect on learnings Learn from mistakes Apply previous strategies that were successful	<ul style="list-style-type: none"> <li>Be determined to turn ideas into action and satisfy your need to achieve</li> <li>Be prepared to be patient and keep trying to achieve your long-term individual or group aims</li> <li>Be resilient under pressure, adversity, and temporary failure</li> </ul> <p><i>(Bacigalupo et al, 2016, p.12)</i></p>
	Adaptability	Flexibility Versatility Resourcefulness	<ul style="list-style-type: none"> <li>Ability to manage transitions and uncertainty, and to face challenges</li> <li>Readiness to review opinions and courses of action in the face of new evidence</li> </ul>

			<ul style="list-style-type: none"> <li>• Understanding and adopting new ideas, approaches, tools, and actions in response to changing contexts</li> <li>• Managing transitions in personal life, social participation, work and learning pathways, while making conscious choices and setting goals</li> </ul> <p><i>(Sala et al, 2020, p.20)</i></p>
	Curiosity	Openness (University of Galway Strategy) Research Skills Growth Mindset	<ul style="list-style-type: none"> <li>• Seeking to understand deeply</li> <li>• Seeking out novelty and trying new things</li> <li>• Seeking different perspectives to broaden understanding</li> <li>• Actively pursuing one's own interests and passions</li> </ul> <p><i>(Centre for Curriculum Redesign)</i></p>
	Confidence	Self-Awareness Self-Efficacy Identify gaps or barriers to building confidence Develop self-agency	<ul style="list-style-type: none"> <li>• Believe in yourself and keep developing</li> <li>• Reflect on your needs, aspirations and wants in the short, medium and long term</li> <li>• Identify and assess your individual and group strengths and weaknesses</li> <li>• Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures</li> </ul> <p><i>(Bacigalupo et al, 2016, p.12)</i></p>
Disposition - Personal Commitment to Lifelong Learning	Lifelong Learning	Managing Learning Awareness of Learning Needs Setting Learning Goals	<ul style="list-style-type: none"> <li>• The planning, organising, monitoring and reviewing of one's own learning</li> <li>• Awareness of one's own learning interests, processes and preferred strategies, including learning needs and required support</li> <li>• Planning and implementing learning goals, strategies, resources and processes</li> <li>• Reflecting on and assessing purposes, processes and outcomes of learning and knowledge construction, establishing relationships across domains</li> </ul> <p><i>(Sala et al, 2020, p.20)</i></p>

Disposition - Valuing of ethical and professional standards, integrity, responsibility and good citizenship	Ethical awareness	Respect for others/diversity (University of Galway Strategy) Inclusive attitude Work Ethic	<ul style="list-style-type: none"> <li>Identifying and describing ethical concepts</li> <li>Making ethical decisions and taking ethical actions</li> <li>Understanding the ethical perspectives of others</li> <li>Understanding and assessing values, (civil) rights, and responsibilities</li> </ul> <i>(Centre for Curriculum Redesign)</i>
Disposition - Appreciation of the importance of place, identity and culture in a global context	Global Citizenship	Ethical & Sustainable thinking Sustainability (University of Galway Strategy) Cultural Awareness	<ul style="list-style-type: none"> <li>Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment</li> <li>Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen</li> <li>Act responsibly</li> </ul> <i>(Bacigalupo et al, 2016, p.12)</i>

## Core Reference Materials

Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016) *EntreComp: The Entrepreneurship Competence Framework*. Available at: <https://eige.europa.eu/resources/lfna27939enn.pdf>

Center for Curriculum Redesign (2019) *Compentencies/Subcompetencies framework*. Available at: <https://curriculumredesign.org/framework/>

IBEC (2018) *Future ready: improving graduate employability skills*. Available at: <https://www.ibec.ie/influencing-for-business/labour-market-and-skills/future-ready-improving-graduate-employability-skills>

Royalty, A., Oishi, L.N., Roth, B. (2014). *Acting with Creative Confidence: Developing a Creative Agency Assessment Tool*. In: Leifer, L., Plattner, H., Meinel, C. (eds) *Design Thinking Research. Understanding Innovation*. Springer, Cham. [https://doi.org/10.1007/978-3-319-01303-9\\_6](https://doi.org/10.1007/978-3-319-01303-9_6)

Sala, A., Punie, Y., Garkov, V. and Cabrera Giraldez, M. (2020) *LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence*. Available at: <https://publications.jrc.ec.europa.eu/repository/handle/JRC120911>

Schmutte, K., Yu Harte, S. (2019) *DPA: Design Project Abilities*. Available at: [https://uploads-ssl.webflow.com/5ce2702e0b5f0b6f9126872e/5ced60e52345647448e38d31\\_DPA\\_Resource1\\_AbilitiesBookandProjectTimeline.pdf](https://uploads-ssl.webflow.com/5ce2702e0b5f0b6f9126872e/5ced60e52345647448e38d31_DPA_Resource1_AbilitiesBookandProjectTimeline.pdf)

Vuorikari, R., Kluzer, S., Punie, Y. (2022) *DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes*. Available at: <https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>